



Best Practice Handbook on Sustainable Protection of Cultural Heritage - case studies



Best Practice Handbook on Sustainable Protection of Cultural Heritage – – case studies



Project UNINET: University Network for Cultural Heritage – Integrated Protection, Management and Use

Co-funded by the Erasmus+ Programme of the European Union

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Free copy



Erasmus+

Best Practice Handbook on Sustainable Protection of Cultural Heritage

CASE STUDIES – – EXAMPLES OF BEST PRACTICE

Table of contents

Palazzo Coppini, Museo Fondazione Del Bianco	5
Rocca Fregoso Sant’Agata Feltria, Rimini (IT)	70
Portovenere, Cinque Terre, and the Islands (Palmaria, Tino and Tinetto), Italy ...	99
Kalwaria Zebrzydowska: the Mannerist Architectural and Park Landscape	
Complex and Pilgrimage Park, Poland	101
Bergpark Wilhelmshöhe, Germany	103
The Area of the Prespes Lakes: Megali and Mikri Prespa which includes Byzantine	
and post-Byzantine monuments, Greece	105
The case study of Göbekli Tepe, Turkey	107
Ancient Convent of Saint Francis - Bagnacavallo	129
Assessment of the value of the historical city of Zamość as the basis of the	
protection programme	141
Territory and cultural heritage in a sample area of medieval Italy:	
the Vallombrosan monasticism and the Casentino between the 11th	
and 13th c.	161
From Light Archaeology to Public Archaeology. Between research, scientific	
communication and social sharing, in the Casentino dei Conti Guidi.	
The 'Bridge in Time': a case study	171
Aspra Spitia, Boeotia, Central Greece: A Historical Urban Landscape Protection	
in Quest of a New Framework.....	182
Conservation documentation of Opinogora Historic Park in Poland	186

**CASE STUDIES -
- EXAMPLES OF BEST PRACTICE**

Corinna Del Bianco

PhD Arch.

Founder and Board Member, Fondazione Romualdo Del Bianco with its International Institute Life Beyond Tourism

Palazzo Coppini, Museo Fondazione Del Bianco

I. Characteristics of architectural monument

I. General information about the monument/location, address, function, owner, area, etc.

Palazzo Coppini is a building located in Florence in the heart of its historical city centre, declared in 1982 a UNESCO World Heritage Site. Palazzo Coppini is located in *via del Giglio 10*, in the triangle made by the Cappelle Medicee and the San Lorenzo Basilica, the Santa Maria Del Fiore Cathedral and Santa Maria Novella Basilica.

Since 1974, the building is owned by the COMI spa, a Florentine hotel company. The building hosts the Museum Fondazione Del Bianco, a vital part of the COMI spa which in 1991 conceived, founded and supported the Fondazione Romualdo Del Bianco®- Life Beyond Tourism® as its research and study centre dedicated to the themes of travel, heritage and dialogue among cultures. Since 2007 the Fondazione Romualdo Del Bianco® has been developing the Life Beyond Tourism® project that since 2018 has become the Life Beyond Tourism Movement. Life Beyond Tourism focuses on the opportunities of dialogue generated by the encounters favoured by travelling in World Heritage Sites.

The Fondazione Romualdo Del Bianco in its decades of activity developed a strong network of universities, governmental and non-governmental organizations and institutions in 111 countries in 5 continents.

In 2013 the company decided to restore the building, previously used as offices, changing its function to luxury apartments for tourists to be added to its touristic activity. However, after the reconstruction work started, Paolo Del Bianco, at that time President of the Company and also President of the Fondazione Romualdo Del Bianco®, decided to convert it to a place for encounters, a place that could become the *home* of the foundation.

The building changed its function and became the Museum Fondazione Del Bianco¹, displaying the collections of gifts personally donated to the foundation.

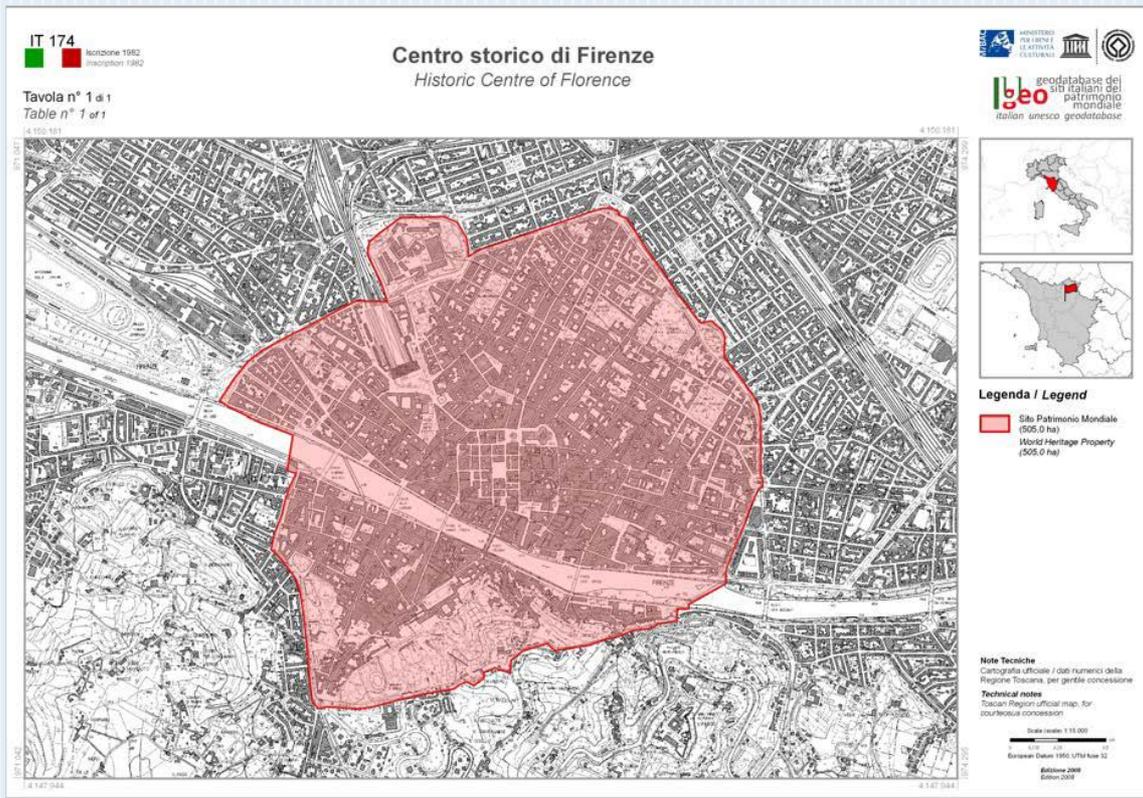


Figure I. Location of the building within the Florentine UNESCO World Heritage Site. Background map by UNESCO office of the Municipality of Florence.²

¹ www.museofondazionebianco.org

² <http://www.firenzepatrimoniomondiale.it>



Figure 2. View from the street *Via del Giglio 10* towards the inner courtyard

2. Brief history of the monument

Palazzo Coppini, in which the collections of the Museum Fondazione Del Bianco are hosted, is located on *via del Giglio*, a street connecting two important Florentine religious centres: San Lorenzo and Santa Maria Novella Basilicas.

The architectural characteristics of the building evolved in time and can be summarized according to four historical periods: the first Medieval volume (1), the widening of the planimetry and structural changes of 1500 (2), the end of 1800 – beginning of the 1900 changes consisting in an extension of the volumes and in a complete stylistic change and modernization (3), the 2013 restoration and use change from offices to Museum (4).

The first period can not be exactly dated, but it is clearly present and visible in the Medieval tower that was then incorporated within the Renaissance expansion of the building. This Medieval tower, with its structure and vertical distribution is clearly detectable in the wall thickness and in the the systems for water collection and storage. At the Medieval time a Florentine house was characterised by the tower typology, because of an unstable political situation that lead families to protect themselves within fortified houses. For security reasons ground floor entrance doors were avoided and the entrance door was located at the first floor, reachable through a removable ladder. These are all visible elements within the tower of Palazzo Coppini.

Florence was a fortified city and *via del Giglio* street was designed where the former city circle walls of the 1173-1176 were located. The street has always been an important axe as it connects San Lorenzo Basilica with Santa Maria Novella Basilica. During the present research, it was hypothesized and discussed with experts that the façade wall, at its ground level, due to its considerable depth (around 1,2 m), most probably was part of the 1173-1176 city walls. The consistent depth of the wall does not have a structural reason as it is just at the ground floor and on the street façade.

The Renaissance building construction cannot be exactly dated, however the first testimony of the presence of the building dates back to 1497. The building, as we see it now, represents an example of the Renaissance houses typology, for its distribution, functions and spaces incorporating the Medieval structure. Many are the elements of Renaissance architecture among which the noble floor, the symmetry of the openings and the courtyard, located on the back of the plot, as well as an underground level where the cellars were located, a ground floor hosting the kitchen, a bathroom, one of the wells, the cistern, food storage, a noble floor dedicated to the family life and its social activity.

The Renaissance building was originally constructed as an important family house characterized by a courtyard with arcades, a noble staircase leading to the main floor, a helical stone staircase, two fireplaces in the main rooms of the first and second floors and *serena* stone elements and finishing.

During the nineteenth-century a further complete renovation was carried out with introduction of steel for structural elements (such as a staircase connecting the first to the second floor) and use of *serena*³ stone for the interiors such as an elegant fountain in the courtyard and the original wooden doors with their decorated handles.

The ownership history is also articulated and can be traced from the Pelli family archives on. In the period from 1527 to 1649, the property of the house changed several families (Cantellini, Rigogli, Buini, Galli) and in 1657 the monks of the San Marco monastery bought it and it became a care home for women in distress. In 1783 the property goes back to families and is used again as a house by the Aldobrandini, the Strada and the Coppini Moro families who rent it. It is from the latter family that the building took its name even though it owned the building just from 1881 until 1922 when again a series of other families owned it such as the Roi, De Pazzi, Gori and Rivetti.

In November 1966 a flood deeply damaged Florence and also the Palazzo Coppini when it was owned by the Rivetti family. The damage was consistent: the structure was compromised, walls were rotten and started their decay and all the furniture of the ground

³ Very uniform traditional gray sandstone, traditionally used for architectural frameworks, columns, stairs and pavements in Tuscany region. This stone is typical of Renaissance architecture.

floor was completely damaged⁴. The history of this building, beside few exceptions and the present property, is linked to the wool production Florentine families, therefore the *palazzo* comprised also a commercial space related to the production of wool and fabrics in addition to the domestic spaces located at the first, second and third floors.

In 1969 the Rivetti family sold the building, still with the flood damages, to Paolo Orvieto that kept the ownership until 1974 when he sold the property to Romualdo Del Bianco that with his son, Paolo Del Bianco, established there the offices of the business dedicated to the family touristic activity.



Figure 3. The street front of the building in 1910-1911. Source Alinari Archive.



Figure 4a, 4b. The façade from the street front. Photograph by Lubos Hazuka 4c. The street front.

⁴ Part of the original doors and window frames were then recovered by the COMI spa company.



Figure 5. Detail of the wooden door decorations.



Figures 6, 7. Details of the door handles of the noble floor.

3. Technical and architectural characteristic of the monument

The building, born in the Medieval time and developed in the Renaissance period is made of three floors above ground and one basement. The façade on the street presents five openings per floor, with the main entrance at the ground level as the central one.

Entering the building a corridor distributes two rooms, one on the left and one on the right, and ends in the wide central hall characterised by a *colonnade* that gives access to the

restrooms, the vertical circulation (stairs and elevator), the courtyard and a back room with a coffered ceiling facing the courtyard.

In between the ground and the first floor there is a mezzanine reachable both from the main staircase and from a secondary helical stone staircase. At the first floor, the noble floor, the building presents two main representative rooms on the street side and three smaller ones facing the internal court. A perimetric terrace, that is also hosting the elevator landing, connects the latter three. These two floors above ground host the collections of the Museum Fondazione Del Bianco.

At the second floor the offices of the COMI spa and of the Fondazione Romualdo Del Bianco are located. Two corridors distribute the floor, one is perpendicular to the façade and the second one is parallel to the courtyard. Five office rooms overlook the courtyard and other two face the main street. From this floor, accessible both from the stairs and the elevator, it is possible to access the third floor through a smaller staircase. The third floor faces the courtyard and hosts two office rooms and one restroom.

The more representative and architecturally valuable rooms are those facing the street at the ground, first and second floor, each one presenting details and finishing of the Renaissance period that are recognizable in most of the important buildings of the Florentine UNESCO World Heritage Site. The courtyard is also representing the Renaissance life within the houses in its functions, architectural finishing and decorations. The courtyard is characterized by three important elements in *serena* stone: a decorative circular well located in the north-east corner, the portal connecting to the *portico* of the main hall and the fountain located within a niche. The pavement of the courtyard, in slabs of *serena* stone, is still the Renaissance original one.

The Medieval structure is visible in the walls thickness and in the presence of a tower, core of the building, located on the courtyard side. In the Medieval time the building used two systems for water collection and storage: one cistern located in the courtyard, probably to collect rainwater, and one well beside the tower where now the elevator is located.

The constructions of the 15th and 16th centuries widened the volume of the Medieval building designing the architecture that is now mainly visible.

The building was aligned to the new street front and was designed with a *portico* on the back made of two arcades standing on columns in traditional *serena* stone topped with decorated capitals. At that time a new mezzanine floor was created that was connected to the ground floor with a rare stone helical staircase. The rooms facing the street were designed with the windows opening on the street side, and their ceilings were built at the ground level with lunette vaults that lean on decorated elements in *serena* stone, while at the first floor with a coffered ceilings standing on decorated brackets. The same stone is employed in the stairs treads below the windows. These *serena* stone elements are replicated at the first and

second floor in the rooms facing the street. In these frontal rooms two decorated fireplaces are also located, one per each floor. The one at the noble floor is characterised by the decoration of a rampant lion, interpreted also as a dragon, engraved on the *serena* stone. The *serena* stone balustrade of the noble stairwell at the first floor has a “Medieval taste”⁵.



Figure 8, 8b, 9. Entrance to the mezzanine and floor solution to preserve the *serena* stone arch without compromising it with the new intervention.

From 1800 to 1900 approximately, the building, for economical and socio-cultural aesthetic reasons was transformed again, widening the volumes with the addition of the neighbouring building. In this way Palazzo Coppini gained space for apartments at the first floor and for

⁵ Information taken from the studies and analysis of Prof. Silvano Fei “Il Palazzo Coppini a Firenze”.

commercial activities at the ground floor where the colonnade is closed with a glass cover obtaining a wide unique space. During these important transformation work some slabs were rebuilt and some pavements were substituted and a new staircase with steel structure to support the slab, was introduced between the first and the second floor.

The 1966 flood compromised the structure and the finishing of the building that was then stabilized with minor interventions during the 1980s and 1990s and then completely restored in 2013 bringing spaces back to their original volumes.



Figure 10. View of the central hall Maurizio Bossi, looking towards the courtyard.



Figure 11. View of the central hall Maurizio Bossi looking towards the street.



Figure 12. View of the Maurizio Bossi central hall looking towards the Tsuji room.



Figure 13. The main staircase in serena stone.



Figure 14. The Tsuji room located at the ground floor by the courtyard.



Figures 15, 16, 17. Details of elements in *serena* stone



Figure 18. Detail of the pavement of the courtyard in *serena* stone.



Figure 19. Elevation of main room of the Noble floor (Komech room) with the fireplace.



Figure 20. Detail of the reinforcement of the fireplace cantilever.



Figure 21. Detail of the rampant lion/dragon of the fireplace of the main room of the Noble floor (Komech room).



Figure 22, 23. Details of the Komech room original ceiling.



Figures 24, 25. Elevations of the main room of the Noble floor (Komech room).



Figure 26. The Medieval tower.



Figure 27. The new terrace at the first floor with pavement in glass hosting the elevator first floor landing.



Figure 28. View of the courtyard from the first floor.



Figure 29. View of the courtyard South-East façade.



Figure 30. View of the courtyard South-East façade and the window-door with *serena* stone framework of the Tsuji room.

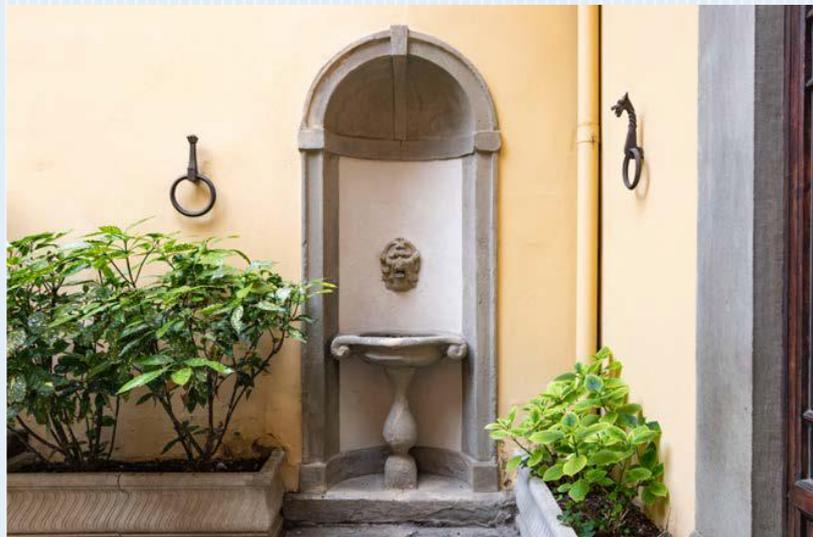


Figure 31. The fountain in *serena* stone.



Figure 32. Detail of the *serena* stone fountain.



Figures 33, 34, 35, 36. Details of the courtyard elements in wrought iron.



Figure 37. The glass ceiling and pavement. Photograph taken at the ground floor with the entrance of the Palazzo on the back.

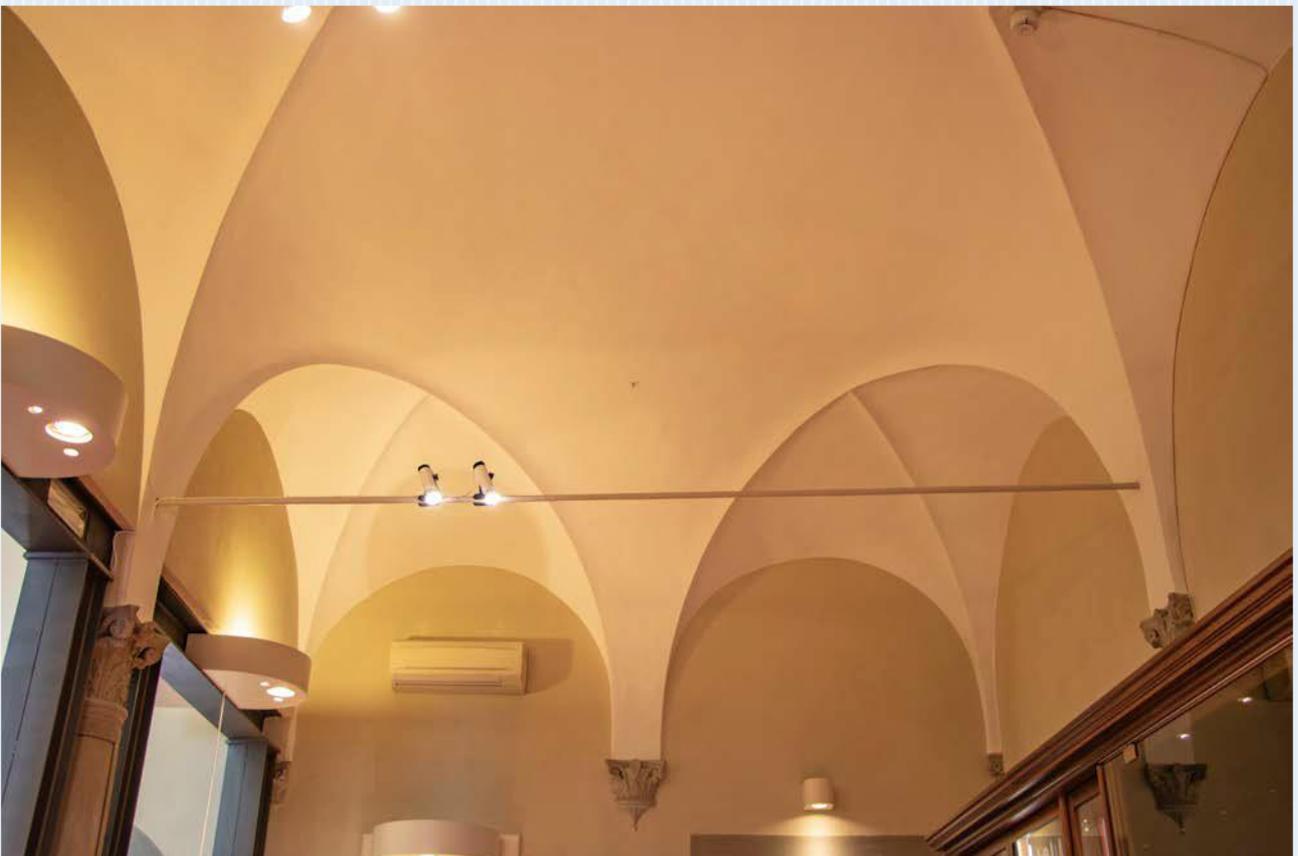


Figure 38. Lunette vaults ceiling of the central hall Maurizio Bossi. Picture taken at the ground floor with the entrance of the Palazzo on the back

4. Assessment of the values of the monument / why is protected as a monument

Palazzo Coppini is a historical building that lived the superposition of three stages of development and it is living now the fourth one. The first stage is the Medieval construction, the second one is the 15th century *palace* and the third one consisted in the 19th century additions and renovations. After 2013 the requalification and valorisation of the historical building was enhanced by dedicating the ground and noble floors to a museum of expressions of friendship received in the last three decades from the friends of the Fondazione Romualdo Del Bianco during its activity of dialogue among cultures.

The building stands in the heart of the 505 ha Florentine UNESCO World Heritage Site, inscribed in the World Heritage List in 1982 for the criteria (i), (ii), (iii), (iv), (vi).

The building is a concrete testimonial of the local past and guarantees a continuity for an outstanding tradition perpetuating the historical image of the city and highlighting in particular the criterion (ii), (iii), (iv).

As for the Criterion (ii) “Since the Quattrocento, Florence has exerted a predominant influence on the development of architecture and the monumental arts – first in Italy, and throughout Europe: the artistic principles of the Renaissance were defined there from the beginning of the 15th century by Brunelleschi, Donatello and Masaccio. [...]”

As for Criterion (iii): “The Historic Centre of Florence attests in an exceptional manner, and by its unique coherence, to its power as a merchant-city of the Middle Ages and of the Renaissance. From its past, Florence had preserved entire streets, fortified palaces (Palazzo Spini, Palazzo del Podestà, Palazzo della Signoria), lodges (Loggia del Bigallo, Loggia dei Lanzi, Loggia degli Innocenti and del Mercato Nuovo), fountains, a marvellous 14th-century bridge lined with shops, the Ponte Vecchio. [...]”

As for Criterion (iv): “Florence, a first-rate economic and political power in Europe from the 14th to the 17th century, was covered during that period with prestigious buildings which translated the munificence of the bankers and the princes [...]”⁶

5. Assessment of the integrity and authenticity

The *palazzo* was recently restored with a conservative restoration. In time, the property and uses varied since the 15th century, and consequently also its internal divisions, however, it was restored and modified in respect of its integrity and today it is an example of the history of the Florentine Renaissance *palazzo*.

⁶ <https://whc.unesco.org/en/list/174/>

The authenticity of its forms and design, of the materials and substance along with its location within the UNESCO World Heritage Site are attributes that maintain the Florentine community tradition, sense of the place and cultural continuity.

6. Technical condition assessment of the monument /conservation and protection needs

During the 2013 extensive restoration, a comprehensive work of conservation and protection was made to re-establish a good state of maintenance and improvement of the architectural monument. The restoration work was carried out by a construction company specialized in artistic and monuments restoration.

After the 1966 flood the building's structure was compromised and needed reinforcement. The walls of the underground were wet and the columns of the ground floor needed a consolidation intervention. In the 1980s the first reinforcement of the colonnade was carried out choosing to wrap the columns in steel bands, then in the 1990s the second operation was carried out introducing the steel hoops to reinforce the arches of the old *portico*.

During the 2013 works it was discovered that the ancient drain rainwater under-floor, passing from the courtyard water sump, going from the centre of the court to the street municipal water collection system, was broken in one point and was the cause of the wet walls at the basement. This drainage system, following the local constructive ancient technique, was composed of terracotta elements one inserted into the other. The break may have been caused by the deterioration of the material in time or by some movement due to the flood or to some earthquake shock that may have occurred. This damage, because of the water flux underneath the pavement, was also causing a void underneath the column closer to the courtyard that had evident cracks. In 2013 the drainage system was substituted and the cracks on the columns were filled with coloured plaster injections.



Figure 39. The first steel reinforcement wrapping the columns and the steel hoops intervention of the 90s.

7. Existing programme of protection, use, valorisation, adaptation, modernisation

During the 2013 restoration the building was strongly valorised. Palazzo Coppini was born as a house, then became partially a commercial space, then offices. With the restoration wanted and carried out by Paolo Del Bianco, the architectural monument was highly protected both in its structural elements and architectural value and its function was ennobled.

One example of the interventions valorising the existing architectural elements of the building has been the enhancement of the helical stone staircase that connects the ground floor to the mezzanine. The staircase, rare in its kind for its shape, technique and quality, remained for decades an element hidden and difficult to enhance and communicate due to its location, currently before the ladies' bathrooms.

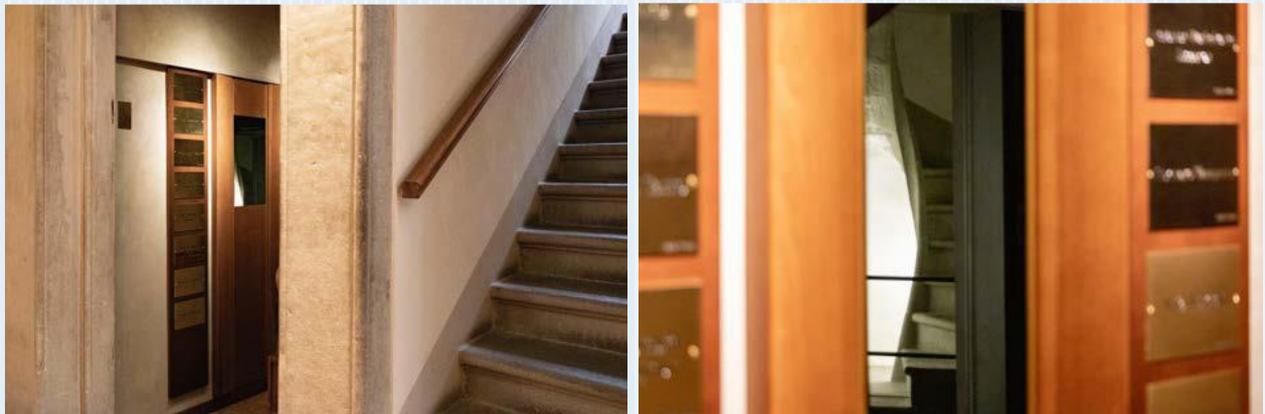
This type of staircase is considered a “secret staircase” and it was used to connect very private spaces for the landlord use. In the case of Palazzo Coppini, where the ground floor was mainly used for commercial activities, the staircase could have been used to connect the mezzanine which function was probably to store precious goods, money or important documents. The mezzanine consisted in one unique room and the staircase was not used too often which is visible from the well-preserved original chiselling.

With the 2013 intervention, the staircase was brought to light creating a passage in the structure, resorting through an extra metal hoop and through a system of mirrors that make it visible from the central hall. The visitor is therefore led to notice the architectural element and therefore is able to appreciate its features.

The building is then valorised with the cultural program hosted by the Museum Fondazione Del Bianco and it is an always active and lived place hosting also the company offices, meetings and educational activities.

Palazzo Coppini is always under the control of a technical office for its maintenance and the Museum has its own committee for the preservation and display of its collections.

The furniture is specially designed for the display of the collections' items and tailored to the building, respecting its architecture and valorising it also through the lightening system.



Figures 40, 41. The helical staircase visible from the main hall through the mirror game. View from the main hall and detail of the mirror reflection.



Figures 42, 43, 44. The helical staircase visible from the main hall through the mirror game. On the left the view from the corridor after the first mirror reflecting the staircase in the second mirror, in the centre the view of the staircase sided by the steel hoop, on the right a bottom up detail.

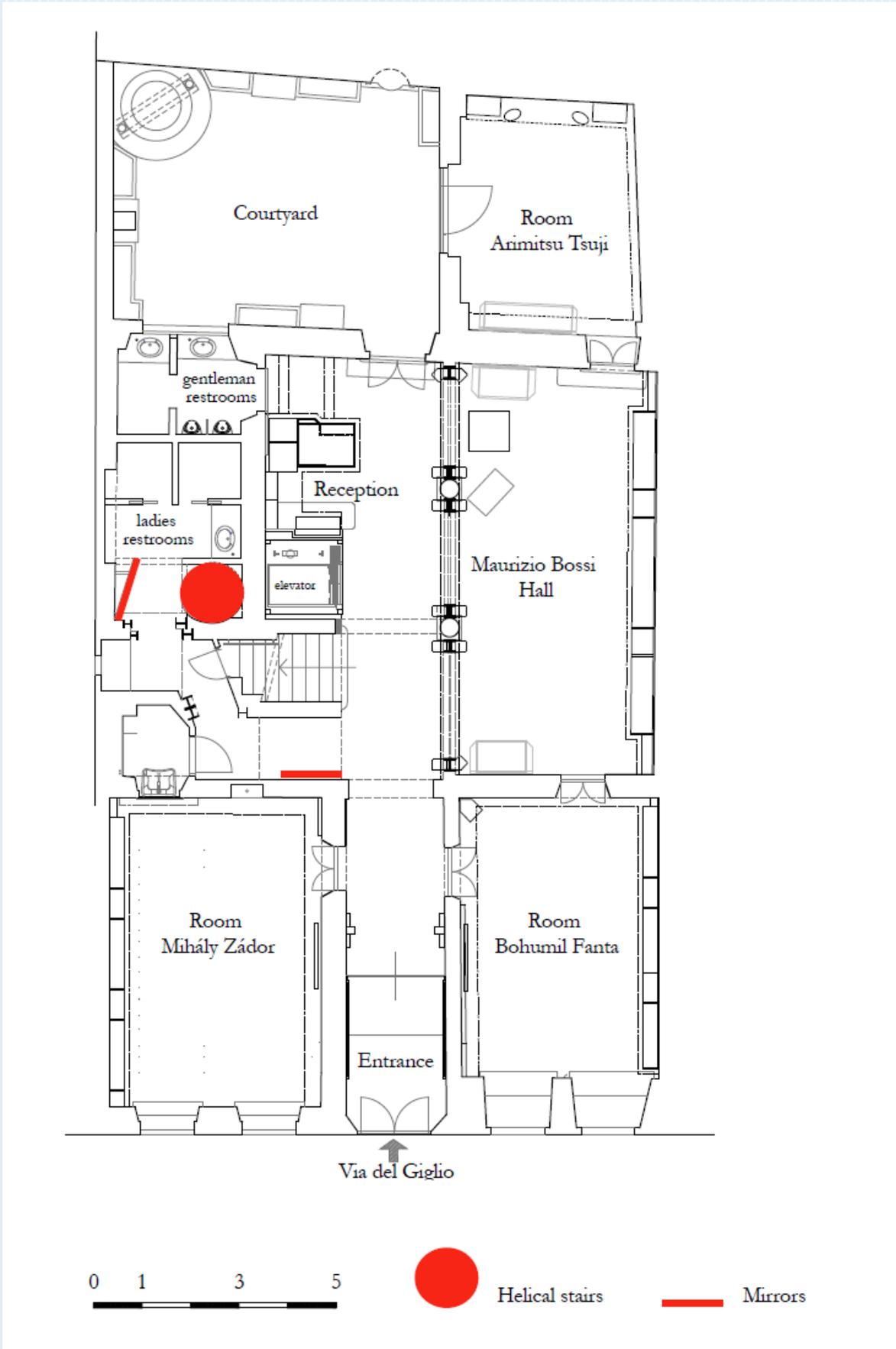


Figure 45. Schematic plan of the ground floor of the mirrors and staircase disposition in red.

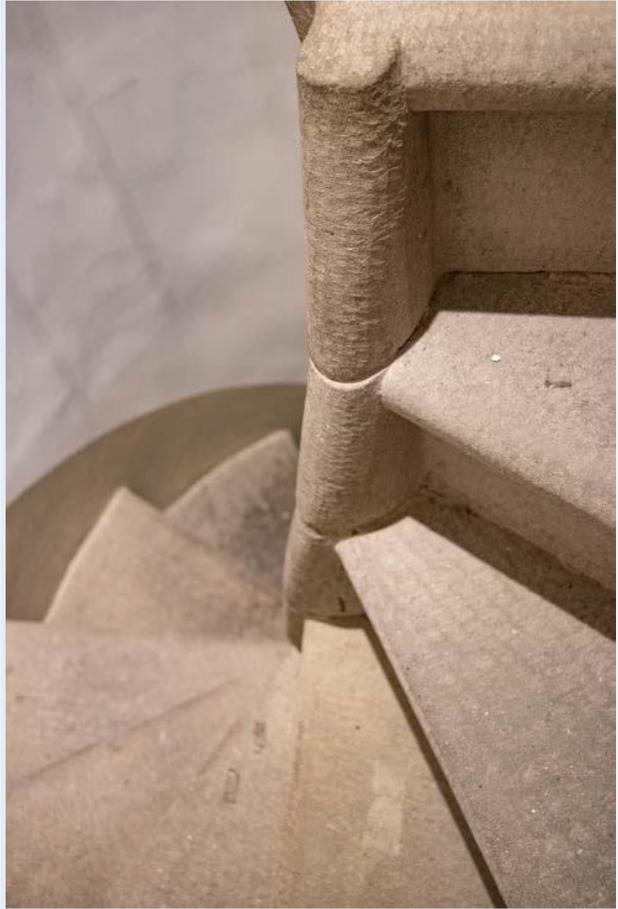


Figure 46, 47, 48. Detail, top and side view of the stone helical staircase.



Figure 49, 50, 51. Views of the nineteenth century staircase.



Figure 52. The “repentance” of the project: this angle is the result of the changing of destination from the 2009 project to the 2013. This is underlined by the writing on the wall.

II. Characteristics of the protection of the monument

I. Legal status of the monument/formal and practical protection system

Being part of the UNESCO World Heritage Site, the area is regulated both by the national and municipal provisions and by the World Heritage Management Plan provided by the UNESCO office.

No further conservation-specific legal prescription is applied to the building.

2. Protection of values, authenticity and integrity, technical condition

The building is an architectural artefact that represents the development of the city of Florence over time. In this building typical local construction techniques and building materials and decorations are found. For example the *serena* stone, the decorations of doors and windows, the rare helical staircase, the vaulted and coffered ceilings, the paving in sandstone and terracotta, the columns decorated with capitals, until the internal distribution of the building that can narrate the everyday life of Florentine families over time. The building is a testimony of the past, both for its tangible and intangible qualities, and represents a continuity in its development due to the family-run activity carried out in it throughout the history.

3. Programme (proposal) of protection and conservation

After the interventions carried out in 2013, now, if necessary, the building is subject to routine maintenance. The management includes an internal technical office that led the 2013 restoration and checks and designs the necessary protection and conservation interventions.

As already mentioned in the history of the building, the flood of the 1966 highly damaged the structure and the general conditions of the monument. When in 1974 Romualdo Del Bianco bought the building, its conditions were critical both from structural and from finishing points of view. The new owner carried out an overall first renovation to be able to use the building for offices purposes that followed by minor structural reinforcements during the 80s and 90s.

The 2013 restoration gave back a new life to the building, preserving and enhancing its historical value. In the sample of the comparative photographic analysis attached to this chapter (figures 4, 5, 6) it is possible to appreciate the transformation of the building spaces and structural reinforcements between 1974 and 2019.

The works were carried out by the company COMI spa, owner of the building since 1974 and at first were meant to change the use of the building from offices to touristic residence creating 10 apartments in the three floors⁷. In this change of destination it was necessary to insert an elevator to allow the new use and to fulfil the needs of the regulation for the architectural barriers. The project included mainly the creation of drywalls for partitions, of new restrooms with their pavements and finishing, of openings (doors) within structural walls, of countertops in plasterboards and the total makeover of the elevator, the technical equipment such as plumbing, heating, air conditioning and electrical systems. Finally, it provided the works of completion such as wall finishing, lightning system and furniture.

However, when the restauration started in 2013, the President of the COMI spa realised that the valorisation of Palazzo Coppini would have been threatened by that project and use, therefore he avoided a further fragmentation of the building that would have limited its free fruition and would have compromised also the conservation of its architecture, as more invasive adaptations were needed to transform it into an accommodation facility. For this reason the decision came to keep it as a historical building open to public and to valorize it exposing the objects donated to the Fondazione Romualdo Del Bianco within one of its kind museum.

Consequently the project changed and the elevator was the only element kept from the previous 2009 project. This decision allowed a better conservation, enhancement and use of the historical building as otherwise the wide spaces would have been divided into smaller ones and the fruition of the high volumes of the rooms of the ground and first floors would have been lost.

The new project focused on the maximization of the preservation of the existing structure, architecture and decorations. Just the partitions related to the new restrooms were done, however these were few and in drywalls, therefore their impact on the overall architectural features of the building were minor and not structurally relevant. However, consistent works were done at all the levels of the building to enhance and give more splendour and visibility to the historical details of the *palazzo*. Below the summary of the main 2013 interventions follows.

At the ground floor:

- new terracotta flooring
- washing and cleaning of the *serena* stone elements: stairs, columns, capitals, courtyard circular decorative well and fountain, opening frames
- painting of the lunette vaults and of all the vertical and horizontal elements with white plaster

⁷ The project and permission was registered in 2009.

- removal of the wooden mezzanine, addition for augmenting the office surface in one of the ground floor rooms facing the street
- addition of two restrooms to the already existing two and renovation of all their finishing
- creation of structural reinforcement for the new distribution of restrooms and for the enhancement of the original helical stone staircase

At the first floor:

- realization of a new slab in glass on steel structure to serve the elevator that obliged to renounce to the existing skylight
- painting and recovery of the coffered ceiling
- washing and cleaning of the *serena* stone elements: stairs, columns, capitals, opening frames, monumental fireplace
- painting of all the vertical and horizontal elements with interior white plaster

At the second floor:

- reconstruction of the slabs and of its pavements
- creation of openings for allowing the new vertical distribution
- At the third floor:
- creation of a new restroom with all its finishing with the creation of a drywall

At the roof level:

- the roof was redone in most of its parts as it was in very bad conservation status. It was rebuilt keeping the original characteristics

Basement:

- insertion and renovation of the boiler and technical equipment room moving its entrance and creating a structural reinforcement to consolidate the new opening.

Furthermore, all the technical equipment and the furnishings were newly designed and they were studied in order to integrate with the existing architecture without disrupting it and to maximise their performance for maintenance and use. For example, the furniture at the ground floor, where the collections are displayed, is designed in order to preserve the items and the furniture itself in case of flood or clogging of the rainwater manhole located in the courtyard.

The restoration gave birth to seven meeting rooms in addition to the foyer and the courtyard at the ground and first floors named each one after an expert of the Foundation, that passed away and highly contributed to the internationalization and to the activity of dialogue among cultures. The rooms of the *palazzo* are named after Bohumil Fanta, Mihály Zádor, Arimitsu Tsuji, Maurizio Bossi, Arest Beglaryan, Aleksej Komech, Aleksej Shkaev, Oleksandr Rovenko while the courtyard bears the name of Ekaterina Genieva.

The memory of people who have contributed to the dialogue among cultures mission of the Foundation is highly valued and is a constantly growing process: in time other architectural elements were dedicated to other close friends of the foundation and are remembered with golden plaques located on the walls.

The meeting rooms are fully equipped for meetings and vary both in size and in their potential arrangements – theatre, boardroom or classroom – with an overall seating capacity of 150 people and they are fitted with a full range of state-of-the-art equipment – LCD screens, Wi-Fi systems, electronic device-friendly environments.

The rooms are hosting the collections of the museum in the cabinets arranged along the perimeter walls. For security reasons all cabinets are alarmed.

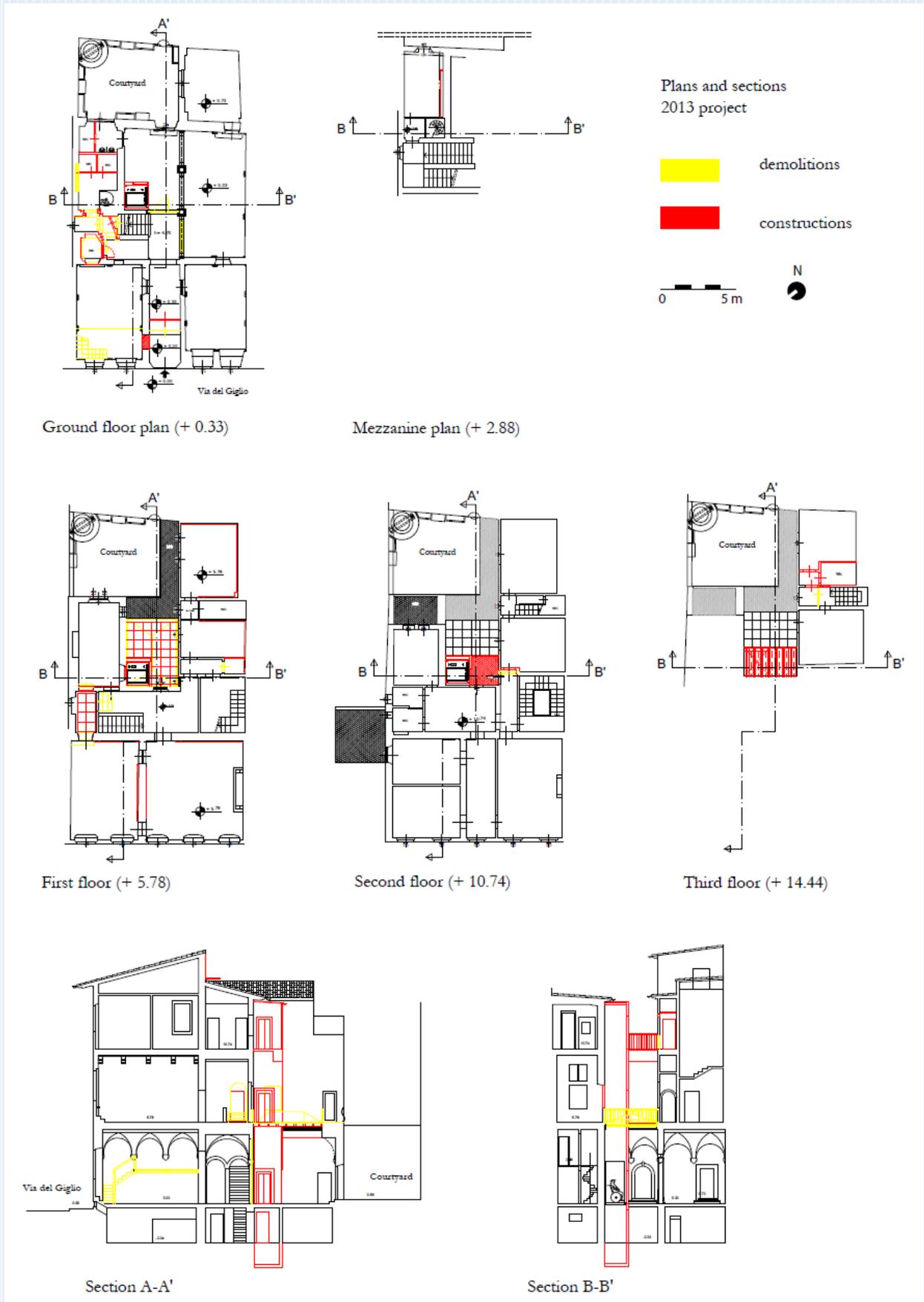


Figure 53. Plans and sections of the 2013 project with in red the constructions and in yellow the demolitions.



Figure 54. 2009 unrealised project of apartments for tourists with in red the constructions and in yellow the demolitions.



Figure 56. Sample of the comparative photographic analysis 1974 – 2019: the entrance.

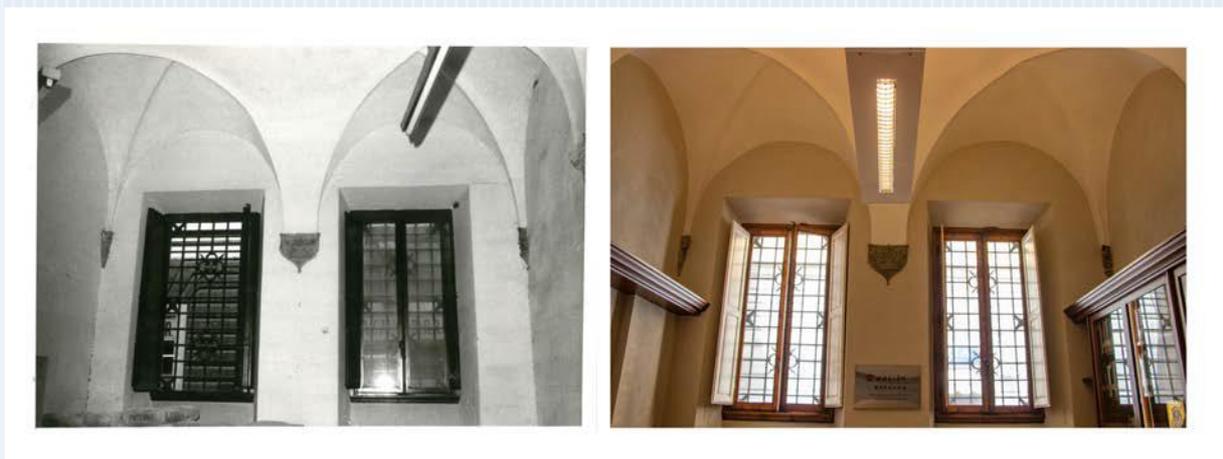


Figure 57. Sample of the comparative photographic analysis 1974 – 2019: the structure of the colonnade.



Figure 58. Sample of the comparative photographic analysis 1974 – 2019: the main hall at the ground floor.



Figure 59. Comparative photographic analysis 1974 – 2019: view of the entrance space towards the street



Figure 60. Comparative photographic analysis 1974 – 2019: the structure of the colonnade



Figure 61. Comparative photographic analysis 1974 – 2019: the main hall at the ground floor



Figure 62. Comparative photographic analysis 1974 – 2019: the main hall at the ground floor

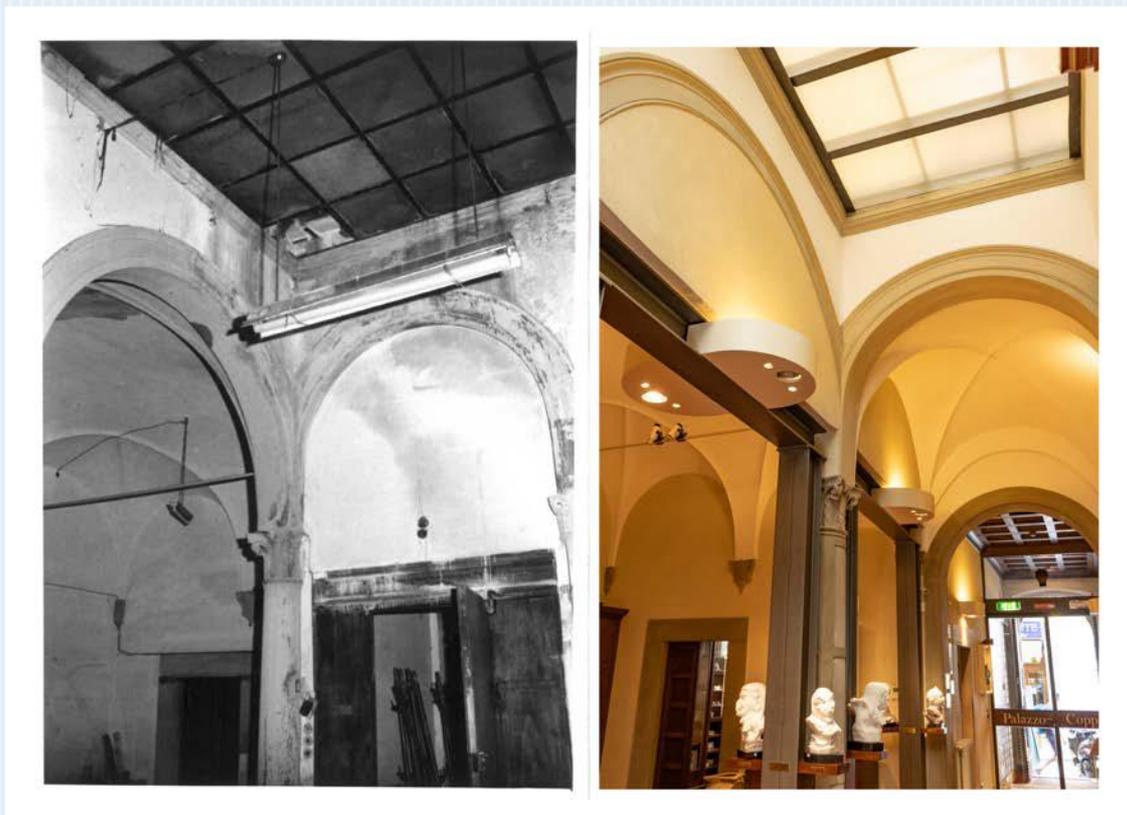


Figure 63. Comparative photographic analysis 1974 – 2019: the main hall at the ground floor



Figure 64. Comparative photographic analysis 1974 – 2019: the skylight



Figure 65. Comparative photographic analysis 1974 – 2019: portal of Tsuji room from the courtyard



Figure 66. Comparative photographic analysis 1974 – 2019: door and frame towards the courtyard



Figure 67. Comparative photographic analysis 1974 – 2019: courtyard



Figure 68. Comparative photographic analysis 1974 – 2019: decorative pit and courtyard



Figure 69. Comparative photographic analysis 1974 – 2019: courtyard entrance



Figure 70. Comparative photographic analysis 1974 – 2019: fountain and corner facing the entrance



Figure 71. Comparative photographic analysis 1974 – 2019: coffered ceiling, Komech room (1st floor)



Figure 72. Comparative photographic analysis 1974 – 2019: Komech room (1st floor)



Figure 73. Comparative photographic analysis 1974 – 2019: Rovenko room (1st floor)



Figure 74. Comparative photographic analysis 1974 – 2019: structural lesions on the internal façade of the court



Figure 75. Comparative photographic analysis 1974 – 2019: structural lesions on the internal façade of the court

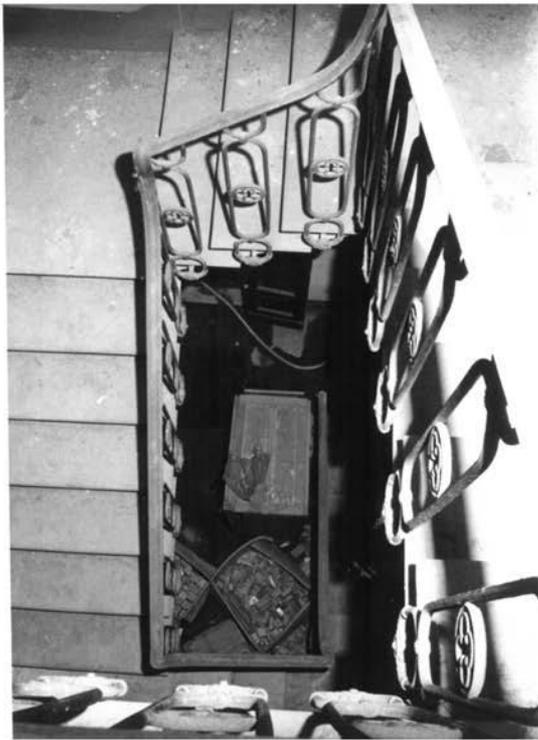


Figure 76. Comparative photographic analysis 1974 – 2019: 1800 staircase (2nd to 3rd floor)



Figure 77. Comparative photographic analysis 1974 – 2019: internal façade of the court



Figure 78. Comparative photographic analysis 1974 – 2019: internal façade of the court



Figure 79. Comparative photographic analysis 1974 – 2019: main noble staircase



Figure 80. Comparative photographic analysis 1974 – 2019: main noble staircase

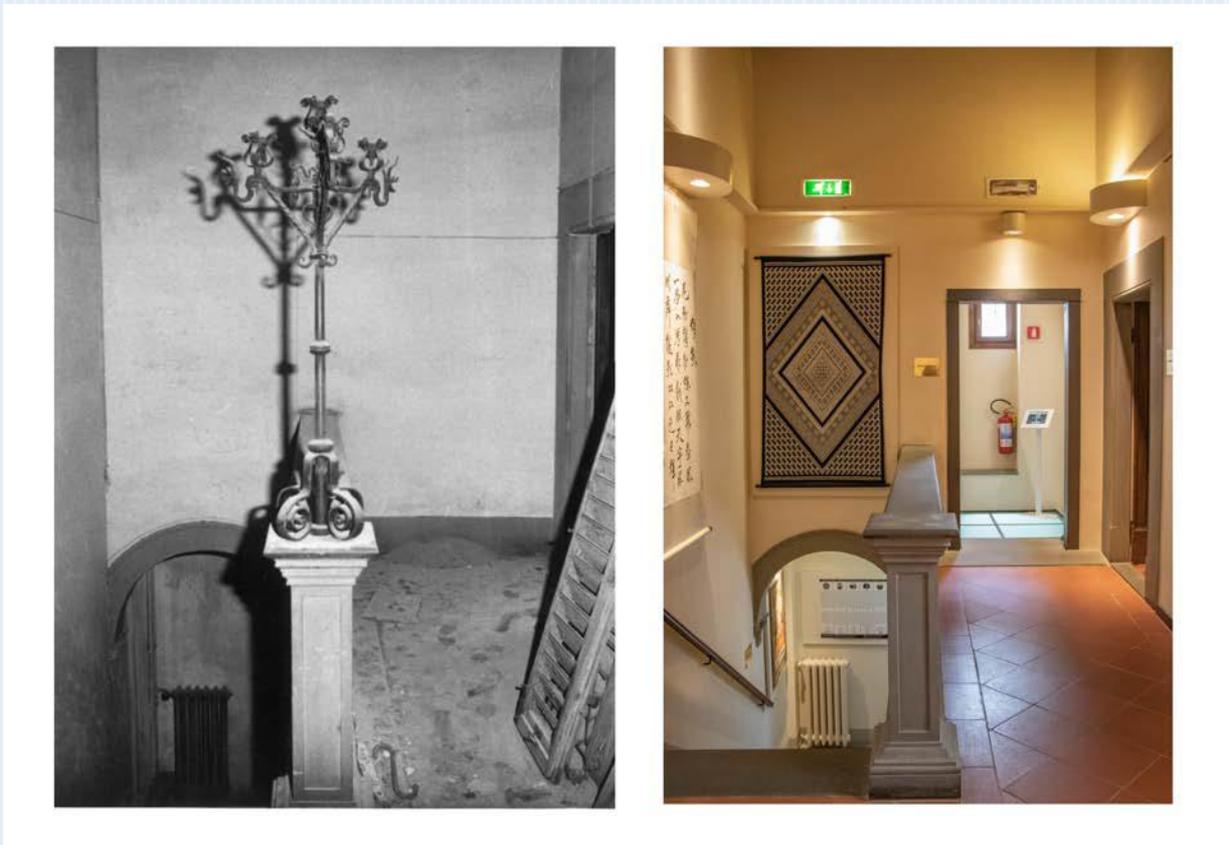


Figure 81. Comparative photographic analysis 1974 – 2019: staircase arrival to the second floor

III. Characteristics of the use of the monument

I. Description of the primary functions and use

The building is hosting two main functions: museum at the ground and first level and the headquarters of the company COMI spa and of the Fondazione Del Bianco with offices at the second and third level. Technical equipment and storage are located in the basement.

2. Programme (existing) of use, adaptation, modernization/presentation and critical evaluation

The Museum conserves, communicates and exhibits the Fondazione Romualdo Del Bianco® private collection of gifts received while traveling or delivered personally, which is rendered available to the public for study, education and enjoyment purposes. It consists of several areas of culture, inherent traditions and uses originating from more than 111 countries that share the commitment of the Foundation to the promotion of communication among peoples.

It is a place of encounters, where meetings, courses, exhibitions are hosted, a practical application of intercultural dialogue, a witness of the activity of creation of opportunities of intercultural dialogue that the Fondazione Romualdo Del Bianco has developed since 1991. The collections have a great value as they are symbols of gratitude and appreciation of the Foundation on behalf of individuals, public and private institutions. It is for this reason that this collection can be considered unique and inestimable due to the fact that it stands out as a token of humanity and an almost familiar authenticity that has no parallel in any other city collections.

It is a testimony of the success of the activity of the Foundation with the people and institutions of more than 111 countries, promoting peace and friendship through intercultural dialogue, in respect of each one's own expression of culture, arts, music, usages and customs.

Great sculptors, painters, artists of all kinds are present in the museum. Items are collected, catalogued and exposed to open up traditions and customs from all over the world.

The collections of the Museum gather all these signs of friendship, sharing them with all the visitors of the building. The collections are organized in 4 sections: artistic handicraft (1), sculpture (2), masks of the Noh Theatre (3), library (4) .

Artistic handicraft

The Museum showcases hundreds of different objects coming from all over the world and with very different economical value. However they are all exhibited with equal importance due to the fact that the principle of the exposition is to highlight the donation act rather than the preciousness of the object. In this section one can find lacquers from more than five different countries, variegated in their shapes and surfaces, coloured crystals, shaped metals and woods, variegated porcelains and precious fabrics of skilfully worked silk and wool, all works that reflect and bear witness to the cultures of origin and all, without exclusion, expressing affection and profound humanity.



Figure 82. Detail of the representation of the bridal couple from Japan.



Figure 83. Detail of pieces of the artistic handcraft collections.

Sculpture

The rooms display important sculptures by international masters such as Stephan Dousa, from Poland, of whom are exhibited the works specifically dedicated to people and events related to the Foundation; Jadwiga Janus, also from Poland; Ermir Grezda, from Albania, with his resin sculptures; the famous Jo Oda, from Japan, with polished steel works; Amanda Hatton, from the United States; Dino and Sirio De Ranieri, with their Carrara marble sculptures, in particular the collection in the Central Hall, so-called “exaggerated portraits”. These sculptures represent in a caricatural way the different states of mind common to all the humanity. This work of art was then named by Maurizio Bossi that was giving a definition and a match to all the sculptures naming these combinations the *Human Family*. Other smaller and larger works are displayed in the showcases located in the various rooms and all of them represent a personal and emotional involvement of those who conceived and donated them.

Among the sculptors on display, special mention is deserved by Keiso Mori, Japanese of origin, who having been hosted for a period of learning in Tuscany, left two busts, now placed in the Komech room, portraying Antonietta and Romualdo Del Bianco, whom he knew well.



Figure 843. Detail of the “Human Family” sculptures series by Dino De Ranieri located in the central hall Maurizio Bossi who finely made the description and definition of the “Human family” characters’ sculptures, and in the middle the architectural model of the Brunelleschi’s dome of Florence by Roberto Corazzi.

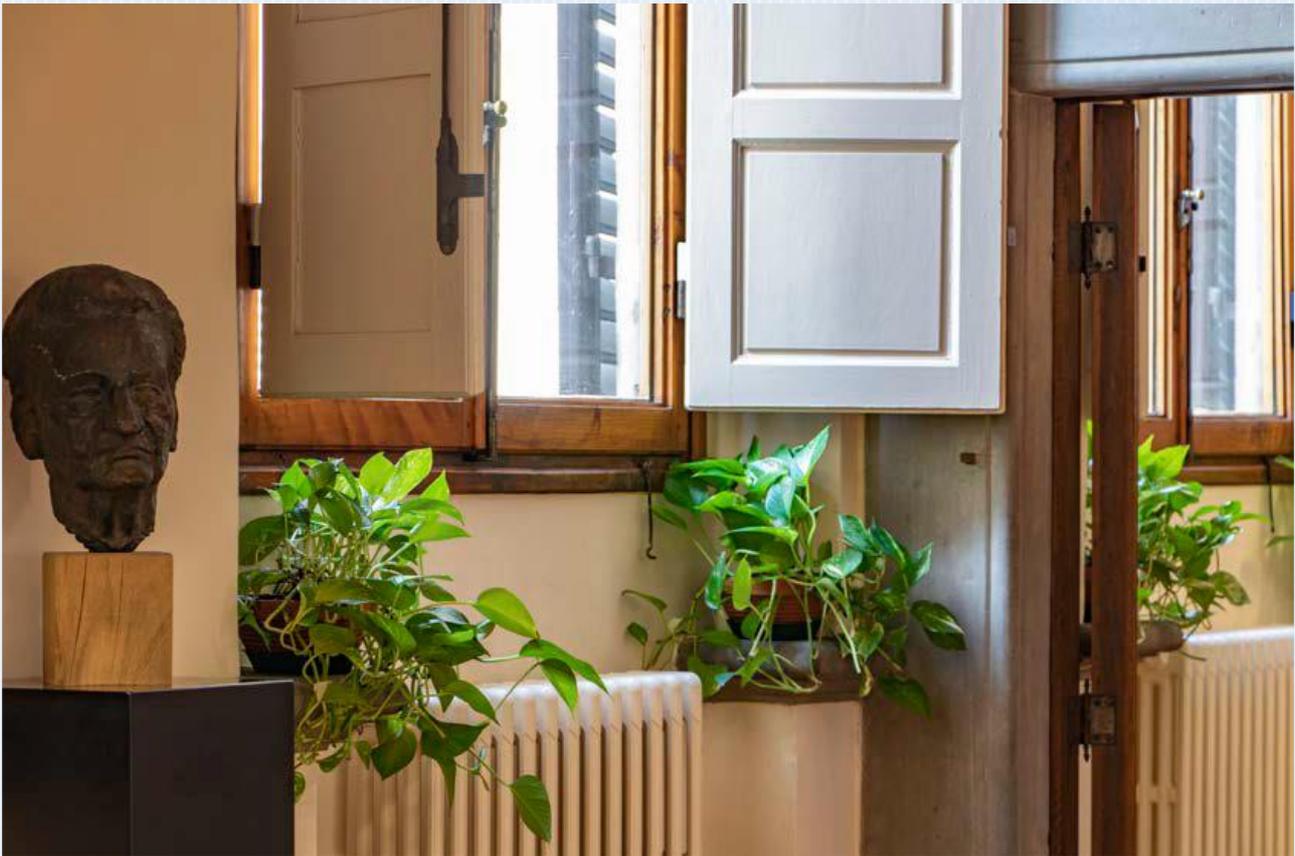


Figure 85. One of the Keiso Mori's sculptures located in Komech Room representing Antonietta Del Bianco

Masks of the Noh Theatre

They say that for an actor of Nō Theater, to wear an ancient mask made by a great master and worn before him by another famous actor of the Edo Period (1603-1868) is a magical experience that flows almost into mysticism. The actor transforms performing his part: he becomes part of the mask, and the mask enters into him, guiding him in the movements and in the part that he is playing at that moment.

The Nō Theatre was born in Japan around the 14th century as a form of theatre exclusively dedicated to the military class of the Samurai and nobility. Nō means "ability" and is still played by professional actors who devote their entire lives to perfecting their repertoires.

Homophonous, executed with very slow and measured movements, but with sudden accelerations, Nō is characterized by decorated and wealthy costumes and by the fact that actors always recite with their faces covered by masks carrying only apparently fixed expressions, which in reality change dramatically with the inclination of the face of the actor according to the movements.

The mask serves to represent various types of character linked to emotions, age and expressions of both men and women, malignant and benign spirits.

The masks are handmade, usually in cypress wood, and finely carved and lacquered; the most famous ones are signed and dated, bearing inscriptions and seals engraved on the back that indicate the period and the author. Male faces with marked traits, female faces and faces of demons are depicted with great accuracy; the Museum of Palazzo Coppini preserves several examples of masks of the laboratory of the Wachi family in Kyoto.



Figure 86. Location of the Noh theatre masks. The room is also hosting two kids' kimonos, one for a girl and one for a boy. These kimonos were donated to the kids of the Del Bianco family.



Figure 87. Detail of the Noh theatre masks.



Figure 88. Detail of the girl kimono.



Figure 89. Detail of the boy kimono.

Library

The books make up a library with over 7000 books written in 52 languages and 11 alphabets from all over the world and focusing largely on the tangible and intangible world heritage.

The library is open to public and the database is available online⁸ for the extended research. In the database most of the books are catalogued with the image record of the dedication of the Foundation friend who donated it.

⁸ <http://www.museofondazioneedelbianco.org/en/collections/the-library/>

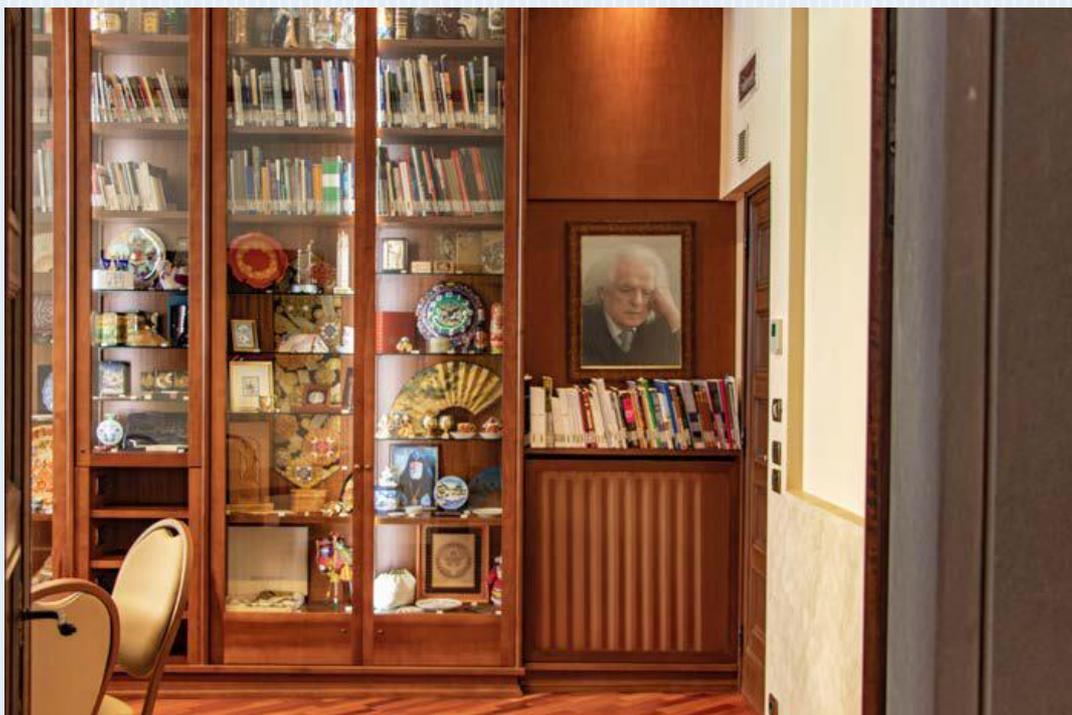


Figure 90. View from the passage of the Komech room to the Beglaryan room at the noble floor.

3. Tourism, presentation, information/present state and potential

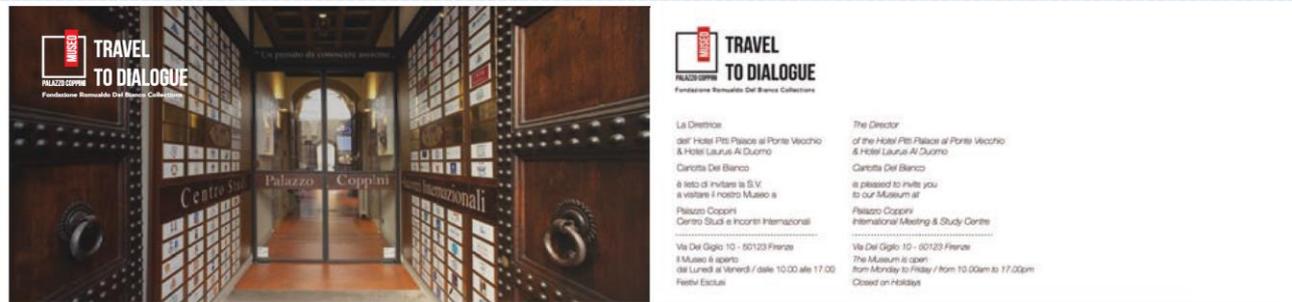
The museum is also open to public, residents and travellers, for free. To strengthen the connection with travellers, since 2013, the Centro Congressi al Duomo Hotels are promoting the visits to the museum, with its history, architectural features, collections meanings and aims with a panel exhibition in both the Hotels of the Centro Congressi al Duomo, Hotel Laurus al Duomo and Hotel Pitti Palace al Ponte Vecchio.

The building is then advertised with its activities on web pages (www.palazzocoppini.it, www.museofondazioneedelbianco.org, www.centrocongressialduomo.com, www.fondazione-delbianco.org, www.lifebeyondtourism.org) and on the related social networks.

Since 2019 the museum has a dedicated bus stop in the nearby square *Piazza Madonna degli Aldobrandini*.

A full schedule of scientific encounters is hosted within the halls of the Museum. International experts of all the fields participate to the cultural and training programs promoted by the Fondazione Romualdo Del Bianco and coordinated by the International Institute Life Beyond Tourism. Among these meetings, the ICOMOS International Scientific Committees encounters, the training courses, for trainers and for students, organized by the International Institute and the General Assembly of the International Experts of the Foundation and

International Symposium that every year gathers around 300 participants from 50 countries in Florence.



Figures 91, 921. Front and back of the invitation to all the guests of the Centro Congressi al Duomo to visit the Museum Fondazione Del Bianco.

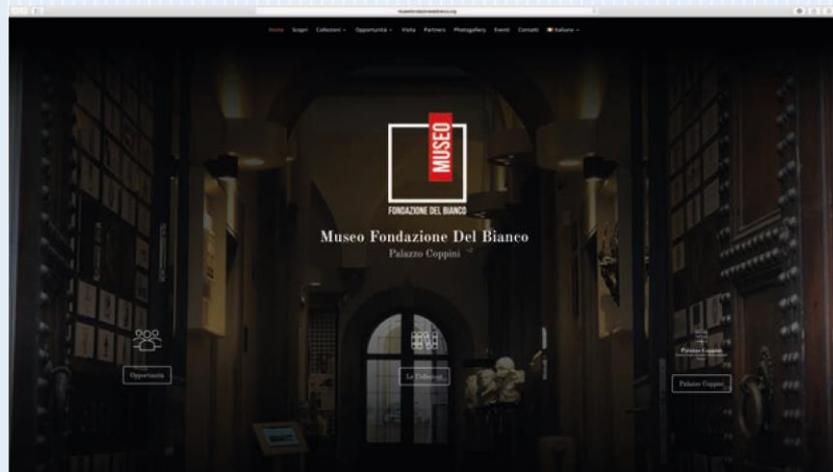


Figure 93. Screenshot of the museum landing page www.museofondazioneidelbianco.org.



Figure 94. Screenshot of the Palazzo Coppini landing page www.palazzocoppini.org.



Figure 99. Bus stop dedicated to the Museum in Piazza Madonna degli Aldobrandini.



Figure 100. Training for Trainers Life Beyond Tourism Intensive Course in Komech Room, February 2018. Photograph Paige Mayer.



Figure 101. Training for Trainers Life Beyond Tourism delivery of the certificates.
Photograph by Lisa Ciardi.



Figure 102. Tribute Ceremony to Georgia, in the framework of the 21st General Assembly of International Experts of the Fondazione Romualdo Del Bianco and international Symposium Heritage as a Builder of Peace. March 1st 2019, Maurizio Bossi Hall. Photograph by Lisa Ciardi.



Figure 103. Training for Trainers Life Beyond Tourism group picture of the trainers 2018/2019. July 2018, Komech Room. Photograph by the staff.



Figure 104. Training for Trainers Life Beyond Tourism group picture of the trainers 2017/2018. October 2017, Beglaryan Room. Photograph by the staff.



Figure 105. ICOMOS International Scientific Committee Theory and Philosophy meeting. March 2019, Komech Room.



Figure 106. Life Beyond Tourism Workshop. February 2015, Zador Room. Photograph by the staff.



Figure 107. Symposium Heritage as a Builder of Peace. March 2019, Beglaryan Room.



Figure 108. Symposium Heritage as a Builder of Peace. March 2019, Fanta Room.

IV. Characteristics of the management of the monument

I. Description of management of the monument/ownership, structure, staff, etc.

Palazzo Coppini is owned by the company COMI spa that supports the Museum activity and safeguards and enhances the Foundation's collections. The building is rentable for scientific events, meetings, exhibitions and any type of cultural or commercial activity that needs a meeting place.

The Museum is open to public for visits upon reservation, from 10 am until 1 pm from Monday to Friday and offers the possibility of free guided tours. Furthermore, those who need to consult a book from the library can do it within the rooms of the *palazzo* by previous request. At the moment, the financing of all the activities performed within it is private.

2. Monitoring/indicators

Collections are kept safe by a complete alarm system that safeguard the objects, books and art pieces from being damaged or stolen. Everybody who enters in the building is registered,

especially the occasional visitors, with a presence sheet indicating time of entrance and exit. The collections are monitored by a special committee of the Fondazione Romualdo Del Bianco.

The structure is monitored in all its parts by the technical office that is responsible for the maintenance of the physical conditions of the building. All the technical equipment is controlled and its status is verified according to national regulations while the architectural maintenance is up to the property's common sense.

The COMI spa company is certified in accordance with ISO 9001: 2015 and has adopted the model of Legislative Decree 231/2001 ([Code of Ethics and General Part](#), [Quality Policy](#)).

All the staff is trained to welcome our guests in the spirit of Life Beyond Tourism® according to the international quality standards of Accessible Hospitality and according to the Certification Life Beyond Tourism® for Intercultural Dialogue DTC-LBT:2018. It has an average of 800 hours of training per year on topics related to welcoming and reception, communication, social marketing and current legislation (SGSL Legislative Decree 81/08, Privacy, Quality Management System ISO 9001: 2015).

V. Conclusions

Palazzo Coppini is a historical building inserted in the Florentine World Heritage Site. It is owned and managed privately by the company COMI spa and it hosts the collections of the Fondazione Del Bianco Museum. The collections are composed of signs of honour, books, art and crafts pieces, sculptures, paintings, costumes, decorated bottles and many other types of items that were donated to the Fondazione Romualdo Del Bianco, a private Florentine foundation, since the beginning of its activity (1991) dedicated to the creation of opportunities of dialogue among cultures.

When the property bought the building in 1974, it was in conditions of very strong decay worsened by the effects of the 1966 flood that affected the city.

During the 45-years-time of the property important works were carried out, especially during the most recent restauration in 2013 that gave back to the historical building its dignity and value.

During the restauration works the property was covering all the costs and because of the absence of specific regulations on the building it was completely free in its choices in terms of conservation, management and use. The property acted with a project that enhanced the historical aspect of the building, going against its economic interests that it would have had

transforming the building for other purposes (the initial project was to convert it in apartments for tourists).

Choosing to valorise the architectural elements of Palazzo Coppini, in several cases brought to structural solutions economically less convenient but more integrated in the building architecture and able to valorise them (for example the stone helical staircase).

The Museum Fondazione Del Bianco is a tool to enhance, communicate and promote, on the one hand, the activity of dialogue among cultures of the Fondazione Romualdo Del Bianco with all its friends and experts and, on the other, the historical building rendering it accessible and open.

The management and communication both of the palace and of the museum in their online and printed tools render this cultural and architectural reality an excellence of the Florentine territory for its fruition, conservation, communication, protection, management and use.

Images credits

Photographs by Corinna Del Bianco except where otherwise specified.

2009 - 2013 projects' drawings by Giuseppe Deieso.

1974 photographs by Paolo Del Bianco.

Acknowledgements

This work was reviewed by Professor Luigi Zangheri, Emeritus President of the Academy of the Art of Drawing of Florence, to whom goes a sincere thanks for his contribution.

This work is based on the research made in 1991 by Prof. Silvano Fei who was extremely kind to review this paper and to give his suggestions.

The work was realized thanks also to Dr. Petra Brezackova who made a deep archive analysis on the history of the building.

UNIBO best practice: the case of Rocca Fregoso

Rocca Fregoso⁹ Sant'Agata Feltria, Rimini (IT)



Figure 1 - View of the Rocca Fregoso from Mont'Ercole. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

Brief description:

The fortress of Sant'Agata Feltria was built about the XI century by the Cavalca family, Counts of Bertinoro, on the crag known as Sasso del Lupo (Wolf Rock), located in the north-western part of the town of Sant'Agata Feltria. Its historic name, "Petra anellaria", derives from the circular shape of the rock on which it stands. It was restored and fortified by Francesco di Giorgio Martini in 1474. From 1506 to 1660 it was a fief of the illustrious Campofregoso family of Genoa; they transformed it into an aristocratic residence suitable for their elegant court. In 1660 Sant'Agata and the fortress returned under the dominion of the Church and the fortress continues to be used as a residence at least until 1781, when it was transformed into a convent. For the last two centuries the fortress has been used as a Convent of the Friars Minor Conventual, as a high school, as a prison, as a Magistrate's court and finally as a civilian residence.

The architectural complex is the result of the diachronic amalgamation of five buildings around a small internal courtyard. Today the fortress is mutilated due to the collapse of the upper part of the

⁹ The best practice description has been authored by Andrea Ugolini, Alice Panciroli, Angela Santangelo and Simona Tondelli.

Mastio Maggiore. A series of restoration works was conducted from 1974 to the last one in 2005 and today it is run by the Pro-loco Association and it is the home of the "Rocca delle Fiabe" permanent museum.

I. Characteristics of architectural monument

I.1. General information about the monument

Located in the upper Valmarecchia on the border between Romagna, Marche and Tuscany, the fortress of Sant'Agata Feltria, also known as Rocca Fregoso, stands isolated, on top of a sandstone boulder dominating the homonymous village which defends it with a circuit of houses. The municipality of Sant'Agata Feltria is a small hilltop village of above 2100 inhabitants located in the south-western part of the province of Rimini, in the Emilia-Romagna region, Italy. It's interesting knowing that the municipality of Sant'Agata Feltria, together with other six municipalities, belonged to the Marche region (province of Pesaro and Urbino) until August 15th 2009, when it was seconded because of the implementation of the outcome of a referendum carried out on 17 and 18 December 2006.

The Rocca Fregoso rises above a sandstone cliff with a circular shape, which gave to the fortress its historic name 'Petra anellaria' (in English 'ring-shaped stone'). The walls of the boulder are overhanging for three quarters of its perimeter, in particular in the extremity North-West, where the fortress protrudes from the end of the 60s. The maximum height difference of the building compared to the foot of the cliff is about 30 meters and the actual main entrance to the fortress is located at the end of via Vittorio Emanuele II, 47866 Sant'Agata Feltria (RN).

The complex of the fortress covers an area of about 300 sqm and it is the result of the amalgamation of six main bodies around a small internal courtyard. The six bodies are clearly identifiable from the reading of the graphic relief of the building, from the variations of the constructive techniques and the materials referable to the succession of super-elevations and adaptations over the centuries.



Figure 2 - Location and cadastral map. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

Today the Rocca Fregoso is a property of the municipality of Sant'Agata Feltria, but it is run by the Pro-Loce association of the village, which is a volunteering association with the aim of improving attractiveness and tourism in Sant'Agata Feltria.

After changing designation of use several times (especially during the last two centuries) and after important renovation works carried out from 1963 to 2007, the Rocca Fregoso is used today as a museum of fairy tales known as 'La Rocca delle Fiabe' ('the Fortress of fairy tails'). Once inside the fortress, both adults and children can discover the fables world through guided tours of by following the exhibition routes.



Figure 3 - View of the Rocca Fregoso. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

1.2. Brief history of the monument

The fortress of Sant'Agata Feltria was probably built around the IX century by the Cavalca family of the Counts of Bertinoro, who at the time dominated the territory by ecclesiastical investiture. Although the origins of Sant'Agata date back to at least the 9th century, the first mention of a castle, at the time called Petra Anellaria, was provided by the declaration of

Pope Honoris II (April 30, 1125) regarding the transfer of the church of Montefeltro from the diocese of Ravenna to the direct dependence of the Holy See.

With the extinction of the Cavalca family, Counts of Bertinoro, Sant'Agata and its fortress passed in 1177 to the Camaldolese monks of S.Ercole and then became part of the homonymous rectorate. From 1315 to the half of the 1400s the village, and the fortress with it, passed in the possessions of a series of families: the Faggiolani, the Guidi, the Tarlati, the Brancaleoni and the Malatesta families. It was under this last family, to whom the regency of Sant'Agata was conferred by Pope Martin V in 1430, that the primitive fortress underwent its first radical transformations, such as the construction of the polygonal tower and the connecting body adjacent to the main entrance of the fortress.

The battle of Cesano (August 14, 1462) marked the definitive defeat of Sigismondo Malatesta by Federico da Montefeltro, Duke of Urbino; thanks to this episode the village of Sant'Agata and its fortress returned under the direct rule of the Church in 1464 and they were given in vicariate by Pius II to Federico da Montefeltro. The fortress of Sant'Agata then assumed an extraordinary strategic importance, becoming of the most advanced point of the northern defensive system of the Duchy of Urbino. In fact, the work of reshaping and enlarging the pre-existing structures ordered by Duke Federico dates back to this phase, and it is presumable that the works were supervised by the famous military architect of Siena Francesco di Giorgio Martini, as probably confirmed by some details and constructive solutions, in particular the keeled conformation of the south-east tower. It was the first change from a bulwark of war to a princely residence that would become with the Fregoso family.

In the meantime, Agostino Giovanni Fregoso from Genoa took refuge with the Montefeltro family to escape an atmosphere of hostility created in his city. Federico understood the importance of subjecting himself to the friendship of a family so important as to grant Agostino Fregoso the marriage of his daughter Gentile Feltria, who brought as a dowry twelve castles and twelve territories including Sant'Agata Feltria. The dynasty of the Fregoso, from whom the fortress took the name 'Rocca Fregoso', guarded the castle from the end of 1500 to 1660, when it came back under the dominion of the Church. During this long period the building underwent further restructuring and enlargement: the complex, having lost its strategic importance for the changed political equilibrium, was transformed into a residential building, definitively losing its military aspect. The fortress was gradually enlarged, raised by at least two levels above the fifteenth-century battlements for the creation of the main floor; the same internal distribution was totally redefined with the addition of a new body of stairs and embellished with works of art, as it is possible to see from the little remains, such as the beautiful coffered ceilings on the first floor, the large Renaissance fireplaces, the octagonal chapel with sixteenth-century frescoes.

Even if the fortress passed under the dominion of the Church in 1660, it has continued to be used as a residence until 1781, when it was transformed into a convent. On this occasion it was built the church dedicated to San Francesco della Rosa against the fortress and a connecting body between the fortress and the new religious building was built, thus concealing the fifteenth-century rescue tunnel inside the fairing strut.

In the following two centuries the fortress has been used as a convent of the Friars Minor Conventual, high school, house the Magistrate's Court and accommodation for poor families. From 1878 to 1885 three restoration sites were documented to repair injuries and deformations of the building following the movement of the rock on which it rests. The roofs were rebuilt, iron tie rods were installed to consolidate deformed walls, consolidated and reconstructed masonry with injuries and fractures; the base masonry was made of Peticara stone squared ex novo.



Figure 4 - The Church of San Francesco della Rosa. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

During the First World War the fortress was used as a military prison. An earthquake in 1919 damaged the village and the building, which had already been compromised by the instability of the ground floor. From 1931 to 1933 the top of the small polygonal tower on the S-W façade was rebuilt and a reinforced concrete curb was installed. New tie rods were also installed to secure the fortress.

In 1944 the fortress was the seat of the German military command, which damaged the structures of the roof, then of the Allies. After the Second World War the fortress was used a council house. In 1951, after heavy rains, the northern spur begins to detach itself

from the foundation rock. Ten years later, it finally detached and collapsed on the houses below. The fortress remained cantilevered and it was abandoned. From 1963 to 1965, the rock and the fortress were consolidated by means of cement injections, tie rods and the creation of a shelf on which the building was embossed.

In 1977, after restoration work, a museum was set up to collect documents from the historical archive of the Rectorate of Sant'Agata, furniture and rare objects of the early '900; a collection of graphic works ranging from manuscripts, ex libris, advertising lithographs, precious original prints by Italian and European authors.

From 1991 to 1999 there were eight executive stages of consolidation and restoration work on the fortress and the annexed church of San Francesco della Rosa. The complex was also damaged by the 1997 earthquake.

From 2005 to 2014, restoration and consolidation works were planned and carried out on internal and external walls, plasters, floors, vaults and frescoes; excavations were carried out in the underground rooms and an adequate fire-fighting system was put in place. The restoration works allowed the definitive use of the fortress as an exhibition space: today it is the permanent home of the Museum of fairy tales.

1.3. Technical and architectural characteristic of the monument

The fortress stands on a shoe base originally made of grey sandstone blocks and partly lined with slabs of Perticara stone from the restoration of the late nineteenth century.

The walls, both of the fortress and of the adjacent church of San Francesco della Rosa, are made of blocks of various nature (mainly sandstone) and origin (and therefore characteristic resistance), placed according to predominantly parallel planes. The mortars used for the design of the joints do not have homogeneous characteristics, even if most of them are made up of a mixture of lime and aggregates obtained by grinding local stone material. The thickness of the walls varies from a minimum of 0.50m to a maximum of 3m, suggesting the use of multiple construction techniques. The fortress is crowned by a series of brickwork corbels above which a wall with a thickness varying from 0.50 to 0.70 m is made of quarry and river stone.

The building is divided into five levels: the basement, the mezzanine, the first floor, the second floor (or floor of the mouthfuls) and the attic floor.

The basement (or cellar floor) consists of two tanks and four rooms. All the rooms are partially plastered and without flooring, covered by barrel vaults with a lowered arch, made of both stone and brick.

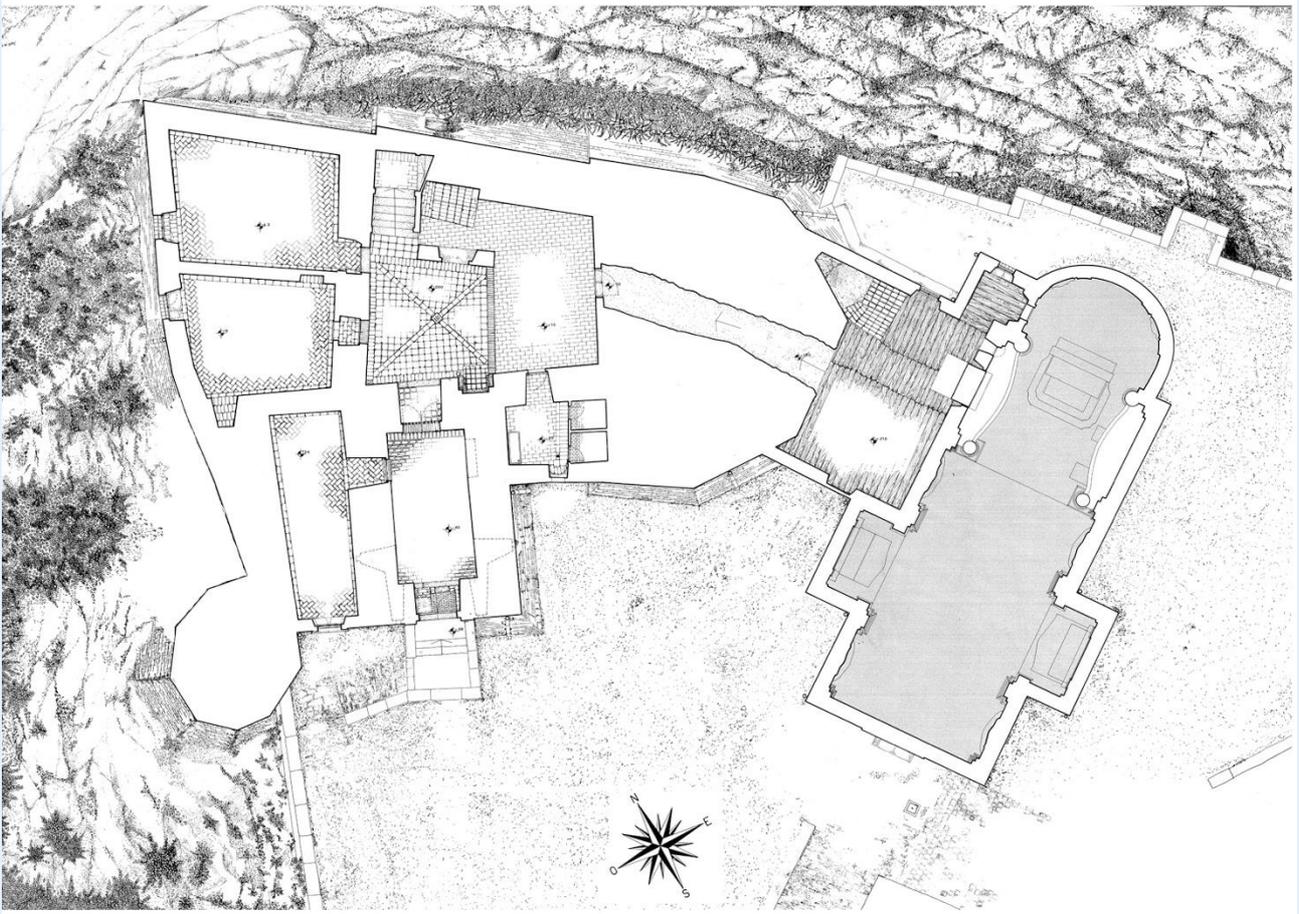


Figure 6 - Dimensioned plan of the ground floor. Source: courtesy of prof. Andrea Ugolini (CC BY-NC-SA)



Figure 7 - Dimensioned plan of the first floor. Source: courtesy of prof. Andrea Ugolini (CC BY-NC-SA)

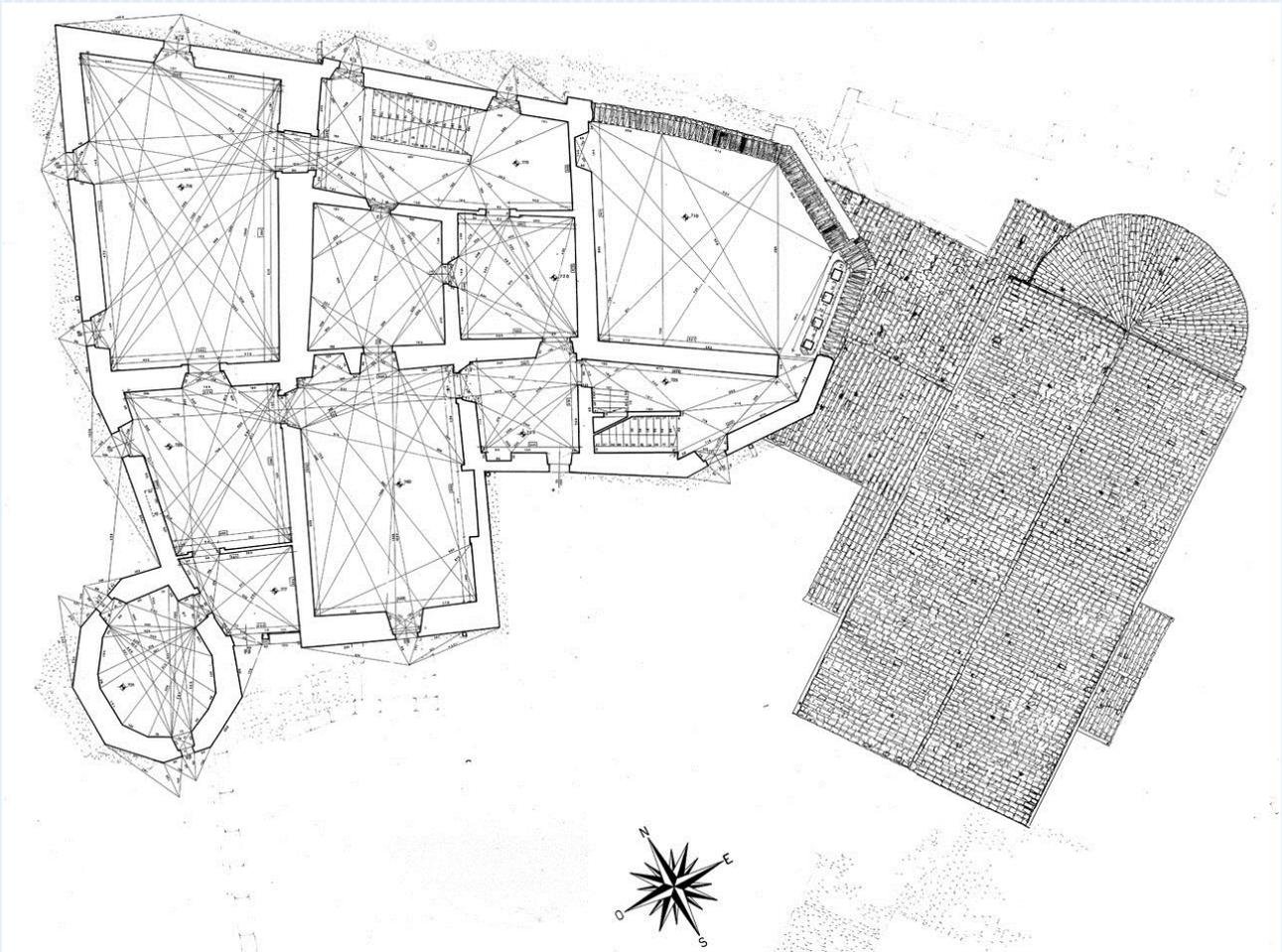


Figure 8 - Dimensioned plan of the second floor. Source: courtesy of prof. Andrea Ugolini (CC BY_NC-SA)

1.4. Assessment of the values of the monument

At the monument was first affixed an architectural constraint in 1918 by the Superintendence for Architectural and Landscape Heritage of the Marche Region through the royal decree of August 8th, 1918 (under the national regulations of L. 364/1909, art. 2). By affixing the constraint of national architectural heritage, the Superintendence has recognized an important historical, cultural and artistic value to the fortress of Sant'Agata Feltria.

The building was acknowledged as a monument worthy of protection and transmission to future generations as one of the most interesting Renaissance fortifications in the March region. The fortress, with its strategic position for the defence of the Duchy of Urbino from the Malatesta militias, is also an interesting example of a military building transformed into a noble residence, as documented by frescoes, coffered ceilings and rich sandstone portals. Moreover, the complex is located on a cliff, in a dominant position with respect to the medieval village, and in the middle of a landscape with great historical and environmental value.

With the updating of the national legislation on the protection of cultural heritage (L. 1089/1939, art. 4) a new constraint confirming the previous one was assigned to the fortress of Sant'Agata Feltria, through the declaratory of the 17th of December of 1975.

The Fortress is therefore protected and archived among the assets of the Italian Cultural Heritage, which is under the responsibility of the Italian Ministry of Cultural Heritage (Ministero dei Beni e delle Attività Culturali - MiBAC).

1.5. Assessment of the integrity and authenticity

The authenticity of a cultural property is guaranteed when its cultural values are truthfully and credibly expressed through a variety of attributes. In the case of Rocca Fregoso, we can state that is guaranteed almost entirely the authenticity of form/design, materials/substance and location, while the use/function has changed many times from the original and the current one is completely different. The protection of the constructive and material authenticity was strictly pursued during the maintenance, conservation and preservation works of the last three decades; this has also determined the choice of the new intended use of the monument. Today, the protection of authenticity is still one of the objectives of the protection system of the monument.

For what concerns the value of integrity, intended as wholeness and intactness of the cultural heritage, we can say that the fortress has preserved the significant features of the fabric in good conditions, and the impact of deterioration processes are under control. The consolidation and restoration work carried out from 1964 to 2014 allowed the formal and material survival of the asset. The works of 1964 have secured the northern part of the building after the detachment of part of the rock on which the fortress is based. The maintenance work carried out in 1977 allowed the fortress to be opened to the public for the first time and used as an exhibition space. But above all, the most important works were those carried out fragmentarily from 1997 to April. These works have involved the installation of anti-seismic devices, of new electrical and fire-fighting systems and the restoration of external walls and internal details (plaster, floors, frescoes and portals). All the above-mentioned works allowed the partial conservation of the original shape and ancient structures.



Figure 9 - View of the tower door of the fortress. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)



Figure 10 – Restoration project of the facade. Source: courtesy of prof. Andrea Ugolini (CC BY_NC-SA)

1.6. Technical condition assessment of the monument/ conservation and protection needs

As stated in art. 29 of the Legislative Decree no. 42 of 22 January 2004 (the Italian Code of Cultural Heritage and Landscape), “the conservation of cultural heritage is ensured through a coherent, coordinated and planned activity of study, prevention, maintenance and restoration”.

The main risk factors of the fortress of Sant’Agata Feltria are related to the seismic nature of the region, so it is essential a periodical check of the efficiency of the anti-seismic devices installed during the previous consolidation work. The material integrity of the building and its functional efficiency must be ensured by a periodic maintenance of the structures, starting from the efficiency check of the roofs, floors and vaults, as well as of the rainwater drainage systems and, in general, of the windows. The quality of the local stone walls, once protected by plasters that today are absent, also requires constant attention to their state of preservation. Constant maintenance must also be performed on the fire-fighting structures (the building has wooden floors) and on the electrical system network. The dimensional and planimetric characteristics of the fortress, in the absence of fire-fighting stairs, also requires a limited access of visitors to ensure their rapid escape in case of danger. As is well known

nowadays, the preservation of an ancient building is ensured only by constant vigilance, compatible use and, above all, care.

1.7. Existing programme of protection/ conservation, use, adaptation/ modernization

On the occasion of the 2004-2007 and 2010-2014 restoration works, two maintenance plans were drawn up, complementary to the executive projects, as required by the Italian regulations for public works. The plans provide operational indications only for the above-mentioned works and for the new elements inserted. These indications consist of a user guide (especially for plant networks), a maintenance manual (indicates minimum performance levels) and a maintenance program. These documents provide timetables for inspection and monitoring activities, suggest the types of works to be carried out for the preservation of the building, give criteria for identifying priorities for intervention, identify the type of technical skills that the operator called to work must have (i.e. if it is required a simple bricklayer, a specialist bricklayer or a restorer), clarify whether the works to be carried out can also be carried out by non-technical staff.

If the maintenance plans clarify how, what and when acting for the survival of the heritage, the protection of the building is guaranteed by the Italian regulation regarding the Cultural Heritage and Landscape (legislative decree no. 42 of 2004).

Interventions on public cultural heritage, such as the fortress of Fregoso, in fact, cannot be carried out by state administrations, regions, other local authorities, and any other public body or institution, without the authorization of the Ministry of Cultural Heritage (Article 21 of Legislative Decree 42/2004).

Damaging or destroying a cultural heritage is therefore very difficult and dangerous for the criminal consequences of these actions.

Moreover, it is not permitted under Italian law to use a cultural building heritage for purposes incompatible with its artistic or historical character or with uses that may preclude its conservation.

Finally, the preservation of the cultural heritage is ensured by a consistent, coordinated and planned study activity, prevention, maintenance and restoration.

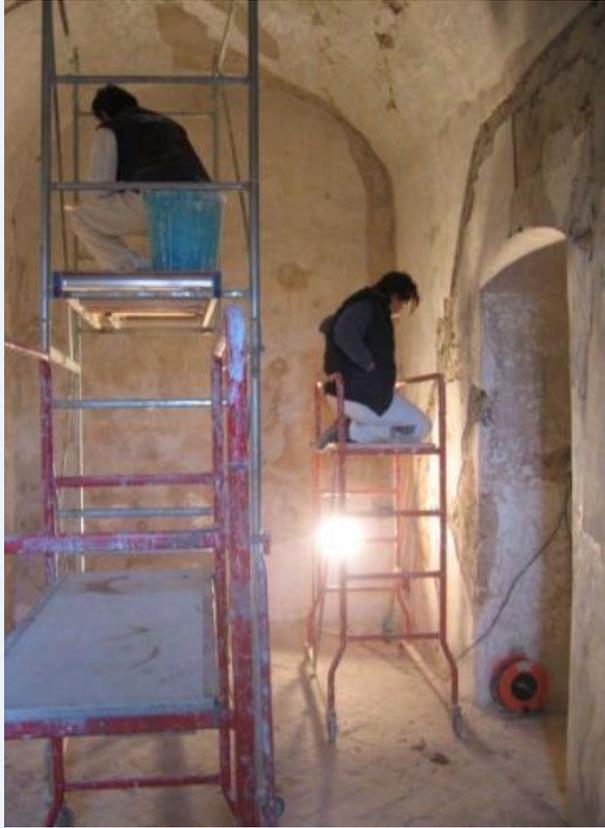


Figure 11 – Plasters restoration. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)



Figure 12 – Fresco of the high altar of the Chapel of Simonetto Fregoso after restoration works. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)



Figure 13 – Atrium after restoration works. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)



Figure 14 – Inner courtyard after restoration works. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

Summary and conclusions

The first historical information about a fortified building in Sant'Agata Feltria dates back to the 11th century. The fortress we see today is the result of diachronic transformations dating from the fifteenth, sixteenth and eighteenth centuries. In the 18th century, the church of S. Francesco della Rosa was built against it. The building has been restored several times since the 19th century. The last works were completed in 2014.

The fortress preserves mighty sandstone walls, bearing vaults and wooden floors from different eras: this one has five levels beyond the roof. Inside there are sandstone portals, a monumental staircase and a chapel with frescoes.

Its formal and material integrity allows us to say that rocca Fregosos keeps intact all its historical and artistic values and authenticity: this is therefore one of the most significant examples of military architecture of the Renaissance of the Marche.

The Fortress is therefore protected and archived among the assets of the Italian Cultural Heritage, which is under the responsibility of the Italian Ministry of Cultural Heritage.

Since 2004, the complex has been equipped with two maintenance plans that should guarantee the conservation of this cultural asset. To date, all maintenance and restoration work has been financed by regional and state funds.

2. Characteristics of the protection of the monument

2.1. Legal status of the monument/ formal and practical protection system

The monument is formally protected by the architectural constraint assigned to the building by the Italian minister of Cultural Heritage (head of the homonymous ministry, in Italian “Ministero dei Beni e delle Attività Culturali” - MiBAC), or by the General-Director of the MiBAC for him, through the “declaration of significant public interest”.

In particular, the Rocca Fregoso have been assigned the architectural constraint first through a royal decree dated 8th May 1918 (in accordance with the Italian law on ‘proprieties with historical, archaeological, palaeontological and artistic interest’ no. 364 of 1909) and then with a provision dated 17th December 1975, following the legislative update in terms of protection of cultural heritage that took place with the legislative decree no. 42 of 2004 (D.Lgs. 42/2004), better known as the “Code of Cultural Heritage and Landscape”. The constraint on the Rocca Fregoso is in force in accordance with article 2 of the Italian Code of Cultural Heritage and Landscape and subsequent amendments, which states “Cultural property are immovable and movable objects which, in accordance with Articles 10 and 11,

present artistic, historical, archaeological, ethno-anthropological, archival and bibliographic interest and others things identified by law as testimonies of the value of civilization”.

In particular, the Rocca Fregoso can be identified among the properties of the Emilia-Romagna’s cultural heritage, by the ID number 8361. It is also possible to pinpoint the monument through interactive maps (<https://www.patrimonioculturale-er.it/webgis/>) and download the complete card which states the following brief description:

Complex type: individual good
Goods present: Fortress/Castle (XV Century)
Main building category: Fortifications
Main building type: Fortress/Castle

The formal and practical protection system is directly given by the Code of Cultural Heritage and Landscape. In fact, in the abovementioned code, the affixing of the architectural constraint on a building imposes rules of protection and valorisation; allows the payment of economic and fiscal benefits; and provides for the imposition of administrative and criminal sanctions on offenders.

In particular, the measures of protection and conservation are established by the Code of Cultural Heritage and Landscape (D.Lgs. 42/2004). The Chapter III of the Code is about protection and conservation of the Italian cultural heritage. It’s divided in 3 sections: (I) protection measures, (II) conservation measures and (III) other measures. The most relevant statements and constraints for the protection of an architectural property such as Rocca Fregoso are the following:

Chapter III_Protection and conservation

Section I_Protection measures

- Article 20_ Forbidden interventions

1. Cultural goods may not be destroyed, degraded, damaged or used for purposes incompatible with their historical or artistic character or such as to prejudice their preservation.

(...)

- Article 21_ Interventions subject to authorisation

1. They shall be subject to authorisation by the Ministry:

(a) the removal or demolition, including subsequent reconstitution, of cultural objects;

(...)

Section II_Conservation measures

- Article 29_ Conservation:

1. *The conservation of the cultural heritage is ensured through a coherent, coordinated and planned activity of study, prevention, maintenance and restoration.*
 2. *Prevention is defined as the set of activities suitable for limiting the risk situations connected with the cultural good in its context.*
 3. *Maintenance is defined as all the activities and interventions designed to control the condition of the cultural object and to maintain the integrity, functional efficiency and identity of the object and its parts.*
 4. *Restoration means the direct intervention on the asset through a series of operations aimed at the material integrity and recovery of the asset itself, the protection and transmission of its cultural values. In the case of real estate located in areas declared to be at seismic risk under current legislation, the restoration includes the intervention of structural improvement.*
- (...)

2.2. Formal requirements regarding protection of the monument /formulated by authorities or specialists

In the document for the protection of the Fortress, dated 17th December 1975, there are no precise prescriptions on the criteria of conservation and restoration, nor on the use of the building. The document contains, however, precise references to the Law of protection on Cultural Heritage already mentioned (D.Lgs. 42/2004).

The only formal requirements formulated by specialists are contained in the building maintenance and management plans drawn up for the 2004-2007 and 2010-2014 works. (see Chapter 1.7)

2.3. Protection of values, authenticity and integrity, technical condition

As part of the architectural heritage of Italy, the Rocca Fregoso can be considered, at a national level, a property that is – to cite the 4th criteria for the assessment of Outstanding Universal Value for the UNESCO’s World Heritage List - “an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history” (Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO, 2017, page 26). The historical, cultural, artistic and architectural values recognized at the national level to the fortress are protected by the presence of the architectural constraint. The constraint (as seen in section 1.7) implies specific forms of protection and conservation of the whole monument and of its values with it.

The same thing can be applied to the protection of the values of authenticity, integrity and technical conditions of the monument. As stated in section 1.6, the fortress of Sant’Agata Feltria preserves today its authentic form and design, as well as the location and most of the

original materials. These values have been firmly protected during the last restoration works, but not during the whole life of the building. In fact, many works of enlargement and sometime of demolition have been performed during the centuries. Moreover, the different uses and owners of the building, which has been changed many and many times during the fortress' lifetime, have brought to some problems mainly linked to integrity (for instance during the Nazi occupation of the fortress). On the other hand, the many changes of use and owners have not compromised the authenticity of the building, to which has been recognized its historical value also due to the historic overlaps that have create an outstanding example of palimpsest. The integrity of the building has been restored after the collapse of the foundation boulder in the northern part in 1961, a series of restoration works has allowed the structure to be go back to its formal integrity.

The consolidation and restoration work carried out since the 1990s has not compromised the original technical conditions of the building. In fact, the works were carried out using traditional techniques and materials and, only if it was necessary, contemporary technologies were used in relation to their sustainability and compatibility with the old building.

2.4. Indications resulting from values assessment, authenticity and integrity assessment, technical condition assessment

Overall, the monument preserves its historical and artistic values thanks to the quality of the restoration work carried out in the 20th and early 21st centuries, which have been conducted in accordance with the local technical traditions and materials. Innovative technologies have been used, only if necessary, always verifying their suitability and sustainability. This makes it possible to affirm that the values of material and formal authenticity of the cultural property are high.

The transformation of the building's use from a fortress to a residence, which has taken place over the centuries, is still legible today. The history of the fortress is still "readable" on its walls since the palimpsest has been respected through the centuries. We can thus say that its formal and material integrity makes it one of the most interesting and best-preserved fifteenth-century buildings in the Marche region.

The survival of an ancient building, as is well known, is guaranteed only by its continuous and compatible use. We can therefore argue that the current destination of the fortress as a fairy tale museum appears compatible with the quality of the building's spaces but also with its tangible and intangible values, as demonstrated by the success of people visiting the museum throughout the years.

2.5. Proposal of a programme of protection and conservation

As mentioned above, there are already two maintenance plans for the fortress, but they should also be updated in relation to the use of the building as a museum.

In terms of conservation of the cultural heritage, we believe that it is essential:

- a) to monitor the anti-seismic devices installed since the 1990s and the material consistency of the wooden floors, since the building is located in an area with a high seismic risk;
- b) to constant monitor the tightness of the roofing membranes and rainwater drainage systems, as well as of door and window frames;
- c) to maintain the building's finishes: ceilings, antique floors, stone frames and mouldings, frescoes and plasters;
- d) to pay particular attention to the hydraulic and electrical, video and audio systems. The fire-fighting system is also very important and requires periodic checks.

In relation to the use of the fortress, in the absence of a second fire-fighting ladder, it is necessary to respect a limited access of visitors. The constant vigilance, care and compatible use are the best practices to ensure the preservation of an ancient building.

Today the fortress has been given to the Pro-Loce Association by the Municipality of Sant'Agata Feltria. The new protection and conservation programme will therefore have to take this aspect into account, especially in relation to the inspection and monitoring activities of the asset, as well as to their frequency. We believe that both six-monthly and annual monitoring is desirable: in fact, their frequency will allow to promptly identify situations of danger and provide for them immediately. As has been known for some time, timely maintenance works ensure the longevity of monuments and the greatest possible care in the surveillance of buildings, avoids larger interventions.

The new programme will have to be managed in agreement between the Municipality and Pro-Loce, even if the Municipality will have direct responsibility for the property. In fact, the owner body, by law, where to relate with the bodies responsible for the protection of cultural heritage, i.e. with the competent Superintendence of the Ministry of Cultural Heritage.

Summary and conclusions

The Fregoso Fortress of Sant'Agata Feltria is protected by the Italian State since 1918. Today, the fifteenth century complex is subject to the provisions of the Code of Cultural Heritage and Landscape (Legislative Decree 42/2004 et seq.). In the specific act for the protection of the Fortress, dated 17th December 1975, there are no precise prescriptions on the criteria of conservation and restoration, nor on the use of the building.

As part of the architectural heritage of Italy, the Rocca Fregoso can be considered, at a national level, “an architectural, technological ensemble and landscape which illustrates (a) significant stage(s) in Italian history”. The restoration works carried out since the 1990s have not compromised the original technical conditions of the building: these were carried out using traditional techniques and materials and, only if it was necessary, contemporary technologies were used sustainably and compatibly with the old building.

The transformations of the building's use from a fortress to a residence, which has taken place over the centuries, are still legible today and the current destination of the fortress as a fairy tale museum appears compatible with the quality of the building's spaces.

On the 2004-2007 and 2010-2014 restoration works, two maintenance plans were drawn up.

Today the fortress is managed by the Pro-Loco Association by the Municipality of Sant'Agata Feltria. The new use of the building needs an update of the current protection and conservation programme. This one will have to reinforce the inspection and monitoring activities of the asset, as well as their frequency. The new programme will have to be managed in agreement between the Municipality and Pro-Loco relating with the Superintendence of the Ministry of Cultural Heritage competent for this area.

3. Characteristics of the use of the monument

3.1. Description of the primary functions and use

During all its whole lifetime, the fortress of Sant'Agata Feltria has had a large number of functions, even very different from each other: medieval bastion of war, private residence, convent, high school, house of the Magistrate's Court, accommodation for poor families, military prison, seat of the German military command, council house and finally exhibition space.

The Rocca Fregoso maintains today the exhibition function it has assumed since 1977 by housing a permanent museum. In fact, the Rocca Fregoso is better known nowadays as the Rocca delle Fiabe (Fortress of Fairy Tales) housing the homonymous museum.

The museum, conceived by Professor Antonio Faeti (former Full Professor of Children's Literature at the University of Bologna), represents a new and unique enterprise in the national panorama, since it assigns to the fairy tale - and with it, to children's literature - its own place, of high importance both real and symbolic, proposing itself as a "bulwark", an academy in which the fairy tale can be studied, defended, safeguarded, interpreted.

The ancient main entrance to the fortress is used nowadays to enter the museum. On the mezzanine floor there are the ticket office, the direction office and the book shop. On the first and second floors there are four dedicated rooms in which four main themes are developed. They are populated by books, videos, extracts, writings, themed animations, including multimedia. In addition to the handcrafted creations, ultra-modern techniques have been used to create a pleasant balance between tradition and innovation.

3.2. Existing programme of use, adaptation, modernization/ presentation and critical evaluation

The decision of using the fortress as a museum is a direct consequence of the latest restoration works carried out from 1999 to 2014. The architects in charge of the restoration, Andrea Ugolini and Paola Benzi, considered the current status of ceilings and bearing structures and decided that, instead of disrupting the external appearance of the fortress in favour of important structural interventions, a possible solution was to adapt the use to the load-bearing capacities. The exhibition function connected with fairy tales (and not, for instance, with heavy industrial or war machineries) allowed the use of the rooms with their original features, with the only precaution of limiting the maximum number of people allowed in each room at the same time. It should be noted that only the usability and use of the building will ensure its preservation over time.

Not only restoration and consolidation works were conducted to the fortress. Of course, the building was adapted and modernized to host a contemporary museum according to the current regulations in terms of security measures and efficiency. During the last decades a series of works have involved the electrical plant network and the fire-fighting system network. What is still missing to the building is the heating system, but this was a balanced choice considering that in winter the village is not a touristic destination while in summer it is not necessary to heat the building. According to the final report on the works of "Restoration and functional recovery of the Rocca Fregoso di Sant'Agata Feltria" (2010), the building, which by its very nature is to be considered a "museum of itself", can continue to carry out exhibition tasks, even if within the limits of use allowed by the size of the rooms and the permissible operating overloads for the existing load-bearing structures.

3.3. Tourism, presentation, information/ present state and potential

Tourism in Sant'Agata Feltria is promoted by the Pro-Loco Association of the city, which has its tourist office in Piazza Garibaldi, the main square of the ancient village. The Pro-Loco association is running not only the museum of fairy tales but also a series of events and fairs attracting tourists in the village, such as the famous Fair of White Truffle.

The museum of Rocca delle Fiabe (Fortress of Fairy Tales) is open to the public from Wednesday to Sunday, 10-12 in the morning and 15-18 in the afternoon. Admission charges are applied. The visits, which normally are carried out with the help of a guide, begin by express indication of Professor Faeti and his collaborators, from the second floor of the building, from the highest point and continue to descend. The guided tour starts from an introductory room with four video projectors that present topical moments of the entire fairy tale world; in the same room are installed portraits of fairy-tellers of all ages made and donated by the Professor to the association Pro loco for "La Rocca delle Fiabe".

The following rooms hosts the four main themes of the fairy tales museum:

1. the persecuted girls: shoes and slippers;
2. the Lonely Castellan;
3. The Enchanted Traveller;
4. Children in the Forest.



Figure 15 – View from the permanent exhibition of the museum. Source: courtesy of Pro-loco of Sant’Agata Feltria.



Figure 16 – View from the permanent exhibition of the museum. Source: courtesy of Pro-loco of Sant’Agata Feltria.



Figure 17 – View from the permanent exhibition of the museum. Source: courtesy of prof. Andrea Ugolini (CC BY 4.0)

3.4. Proposal programme of use, adaptation, modernisation

After the completion of the last restoration works in 2014, the fortress was expected to be used as follows:

- Basement Plan: archaeological route to be set up
- Raised Floor: Management; Ticket office, Book-Shop.
- First Floor: Exhibitions and frescoed chapel of Sant'Agata.
- Second Floor: Exhibitions
- Attic: Not usable

Today, the archaeological route on the basement plan is not set up yet and it should certainly be realized. A proposal for future programme of use is for sure connected with the historical and architectural value of the building, which needs to be valorised, for instance by establish not only exhibitions connected to the fairy tales but also with the history of the monument.

Summary and conclusions

During all its whole lifetime, the fortress of Sant'Agata Feltria has had a large number of functions, even very different from each other: medieval bastion of war, private residence, convent, high school, house the Magistrate's Court, accommodation for poor families, military prison, seat of the German military command, council house and finally exhibition space. Nowadays the Rocca Fregoso is better known as the Rocca delle Fiabe (Fortress of Fairy Tales) housing the homonymous museum.

The museum has been conceived by Professor Antonio Faeti (former Full Professor of University of Bologna) and represents a new and unique enterprise in the national panorama. According to the final report on the works of Restoration of the Rocca Fregoso di Sant'Agata Feltria (2010), the building, which by its very nature is to be considered a "museum of itself", can continue to carry out exhibition tasks. The Pro-Loce association is running the museum of fairy tales and organize the visits. The guided tour starts introducing topical moments of the entire fairy tale world and continue in the building where are show the four main themes of the fairy tales museum (the persecuted girls; the Lonely Castellan; The Enchanted Traveller). The Pro-loce is planning to build new themed halls shortly. Today, the archaeological route on the basement plan is not set up yet and it should certainly be realized.

It is proposed to enrich the visit of the fortified complex with the preparation of a section on the history of the fortress and its contiguous historical landscape over the centuries.

4. Characteristics of the management of the monument

4.1. Description of management of the monument/ ownership, structure, staff, etc.

Currently, the fortress is property of the municipality of Sant'Agata Feltria, but since 2013 it has been managed by the Pro-Loce Association. The Pro-Loce of Sant'Agata Feltria is a volunteering association with the aim of improving attractiveness and tourism in the village. In fact, they are in charge of the main events and fairs of the village, as well as the managing of other activities related to trekking, food, architectural tours, local shopping and so on.

The municipality of Sant'Agata Feltria, since it has become the owner of the fortress after the Second World War, has always pursued the restoration and the restitution of the monument to the citizens. After the serious damage suffered by the building with the detachment of the foundation rock, from 1963 to 2005 various restoration works were commissioned. The permanent museum inside the fortress opened its door in 1974 hosting with continuity cultural exhibitions of historical-scientific-artistic character of considerable value.

4.2. Financing/ current state, need, possibilities

The ordinary management of the Rocca Fregoso is financed by the income from the museum established in it, and by the Pro-loco in charge of the daily management. The main restoration and consolidation work carried out in the last decades, on the other hand, were mainly financed by the municipality of Sant'Agata Feltria.

The funding for the works of restoration and maintenance of the 90s came instead from regional or national funds. In particular:

- Works from 1991 to 2001: regional funds mostly to encourage tourism and security of the cultural heritage after the earthquake of 1997 in the Marche region.
- Works of 2004-2014: national funds coming from the allocation of the related share of the funds from the Italian personal income tax (IRPEF).

4.3. Threats

The location of the fortress on the top of a sandstone boulder, the wear and tear of the construction materials used, the construction techniques of the time and the different intended use with which it was born, make the fortress a building that must be continuously controlled and maintained.

The management of the fortress, in addition to the running of the museum, includes a plan for the ordinary and extraordinary maintenance of the building, in relation to the possible threats connected with its age, with the current use and with natural occurrences.

4.4. Monitoring/ indicators

To date, no monitoring programme or plan has been provided for the fortress of Sant'Agata Feltria. However, the Municipality of Sant'Agata Feltria is constantly committed to find resources for maintenance in general and for the expansion of the museum project in terms of promotion, dissemination.

Summary and conclusions

The fortress is property of the municipality of Sant'Agata Feltria, but since 2013 it has been managed by the Pro-Loce Association. The Pro-Loce of Sant'Agata Feltria is a volunteering association with the aim of improving attractiveness and tourism in the village. In fact, they are in charge of the main events and fairs of the village, as well as the managing of other activities related to trekking, food, architectural tours, local shopping and so on.

The management of the fortress, in addition to the running of the museum, includes a plan for the ordinary and extraordinary maintenance of the building, in relation to the possible threats connected with its age, with the current use and with natural occurrences.

The ordinary management of the Rocca Fregoso is financed by the income from the museum established in it, and by the Pro-loce in charge of the daily management. The main restoration and consolidation work carried out in the last decades, on the other hand, were mainly financed by the municipality of Sant'Agata Feltria.

References

Benzi P., “Contributi di ricerca per la catalogazione di complessi fortificati del Montefeltro e della Massa Trabaria. La Rocca di Sant’Agata Feltria”, in Cruciani Fabozzi G. and Ugolini A., (eds) *Nuovi rilievi di complessi fortificati del Montefeltro e della Massa Trabaria*, Italian Institute of Castles, section of Cagli, Pesaro 1994.

Conti G., “La rocca di S. Agata Feltria alla luce dei trattati di Francesco di Giorgio”, in *Romagna arte e storia*, IX, no. 27, Editrice Romagna Arte e Storia, Rimini 1989, pp. 37-50.

Dall’Ara F., *Sant’Agata Feltria*, Libreria Editrice Pellegrini Arezzo 1980

Domininci L., *S. Agata Feltria illustrata: Appendice: Casteldelci, La faggiola d’Uguccione e la Fonte di Dante*, Rist. anast, 1° ed Pesaro 1959, Provincia di Pesaro e Urbino, 1994. pp. 254-263.

“La Rocca di S.Agata Feltria: dal restauro al recupero funzionale”, in *Castella Marchiae*, Magazine of the Italian Institute of Castles, no.1, Arti Grafiche Stibu, Urbania 1997, pp. 24-32

“La torre portaia della rocca di Sant’Agata Feltria. Nuove acquisizioni e progetto”, in *Restauro archeologico*, 2-3, Firenze 2007, pp. 27-30.

Legislative decree of 22 January 2004, no. 42. Italian Code of cultural heritage and landscape. Available at: <https://www.gazzettaufficiale.it/anteprema/codici/beniCulturali>

Palloni D., “Le fasi costruttive della Rocca di Sant’Agata Feltria. Osservazioni e ipotesi”, in Dino Palloni, *I Castelli*, antologia di scritti (edited by Andrea Ugolini e Chiara Mariotti), Altralea Edizioni Firenze 2017, pp 188-195.

Scheda "Sant'Agata" in (eds) Domenico Berardi, Antonio Cassi Ramelli, Marina Foschi, Ferruccio Montevecchi, Gaetano Ravaldini, Sergio Venturi, *Rocche e castelli di Romagna*, University press Bologna, Imola, 2001, pp. 294-299.

UNESCO, “Operational Guidelines for the Implementation of the World Heritage Convention”, 2017. Available at: <https://whc.unesco.org/en/guidelines/>

Volpe G., *Rocche e fortificazioni nel Ducato di Urbino, Fossombrone, Regione Marche, Comitato per le celebrazioni Federiciane*, 1982 sp.

http://www.roccadellefiabe.it/rocca_fregoso.php

<http://www.prolocosantagatafeltria.com/homepage.php>

<https://www.studiospira.it/index.php/it/lavori/item/403-rocca-fregosio-s-agata-feltria-pu>

Portovenere, Cinque Terre, and the Islands (Palmaria, Tino and Tinetto), Italy

Brief description: The Ligurian coast between Cinque Terre and Portovenere is a cultural landscape of great scenic and cultural value. The layout and disposition of the small towns and the shaping of the surrounding landscape, overcoming the disadvantages of a steep, uneven terrain, encapsulate the continuous history of human settlement in this region over the past millennium.

Location: Province of La Spezia, Liguria Region, Italy 🇮🇹

Date of Inscription: 1997

Criteria: (ii)(iv)(v)

Property: 4,689.25 ha

Ref: 826



PROTECTION:

Individual buildings, urban ensembles and archaeological remains within the nominated area are protected under the provisions of the basic Italian cultural property protection, the

Decreto Legislativo 42/2004, Codice dei Beni Culturali e del Paesaggio (legislative Decree 42/2004 Cultural Properties and Landscape Code): a provision of law which establishes that any activity within the site must be authorized by the relevant Soprintendenza (peripheral office of the Ministry for Cultural Heritage and Activities).

In addition, the entire area of the municipalities of Cinque Terre and Portovenere falls under the provisions of the Cultural Heritage and Landscape Code as protected landscape. As a result, all interventions require the approval of the relevant authorities responsible for landscape and heritage protection and planning (Municipalities, Provinces, Regions and the Soprintendenze). Additionally, a Regional Coordination Landscape Plan is in force since 1990 for the entire region, operating at the territorial, local, and detailed level, defining levels of

possible interventions related to the landscape features of each identified area. Finally, each of the municipal administrations has its own master plan which, according to the regional urban law (L.R. 36/1997), must contain measures that consider the landscape qualities.

The property enjoys the existence of several other provisions of law dedicated to its protection implemented by ad hoc authorities:

The Regional Law No. 12/1995 designated the area as part of the Regional Natural Park of Cinque Terre (Parco Regionale Naturale delle Cinque Terre); this brought with it compliance with the provisions of the national Law No. 394/1991 on protected areas, which imposes stringent controls over all forms of activity within the designated park.

Following the inscription in the World Heritage List, in December 1997 the Protected Marine Area was established and, in 1999, the Regional Natural Park was transformed into a National Park (President of the Republic's Decree 6.10.1999).

The territory of the Islands of Palmaria, Tino and Tinetto, the marine area in the southwest direction of these isles (marine protected area) and a significant section of the land surface which includes the medieval village of Porto Venere, have been included in the Regional Park of Porto Venere.

The town of Porto Venere is subject to the detailed plan of the historic centre approved in 1992, which foresees some particular recovering strategies.

Currently, a number of plans and safeguard regulations concur to ensure the management of the property, particularly the two park plans elaborated according to the existing provision of law for the National Park of Cinque Terre and the Regional Park of Porto Venere (l.r. 30/2001). A first Plan for the Cinque Terre Park was adopted in 2002 and introduced some specific restrictive regulations to protect the site. The Plan must be regularly reviewed and updated.

The introduction of the Regulation of the Cinque Terre Marine Protected Area in 2005 aims at the protection of the sea area.

The Plan for Porto Venere Regional Park defines different restricting regimes for use according to the features of the territory so as to ensure the retention of the values of property. The property includes some "Sites of EC Interest" that have been designed to guarantee the maintenance of the conservation of the landscape and the local flora and fauna. Protected buildings such as the churches of St Peter in Portovenere and St Venerius (Tine) and the Castle in Portovenere are the subject of systematic restoration campaigns by the peripheral offices of the Ministry of Culture. There are also regular maintenance programmes for all the protected monuments.

There are strict limitations on the establishment of tourist facilities. Measures have been envisaged to support the maintenance of the terraces and of the landscape as well as farming activities, however these apply on a voluntary basis. Maintaining the terraces remains the responsibility of individual farmers and landowners.

Source: <https://whc.unesco.org/en/list/826>

Kalwaria Zebrzydowska: the Mannerist Architectural and Park Landscape Complex and Pilgrimage Park, Poland

Brief description: Kalwaria Zebrzydowska is a breathtaking cultural landscape of great spiritual significance. Its natural setting – in which a series of symbolic places of worship relating to the Passion of Jesus Christ and the life of the Virgin Mary was laid out at the beginning of the 17th century – has remained virtually unchanged. It is still today a place of pilgrimage.



Location: Lesser Poland

(Malopolska).Voivodship
(formerly Bielsko-Biala),

Poland 

Date of Inscription: 1999

Criteria: (ii)(iv)

Property: 380 ha

Buffer zone: 2,600 ha

Ref: 905

PROTECTION:

The property is subject to the highest level of legal protection in Poland at the national level under the provisions of heritage protection (through its entry in the National Heritage Register, and Monument of History status), nature conservation, and spatial planning laws. The system of legal protection is complemented by local government rulings recorded in local planning legislation regarding spatial development, adopted after prior public consultations.

Guardianship and management of the sacred part of the complex, with its churches, chapels, pilgrimage paths, and some forest areas, are the responsibility of its owner, the Order of Friars Minor. The remaining area of the property – the cultural landscape of forests and the agricultural and residential plots – has a complex ownership structure. Renovation and conservation interventions require prior approval of the planned procedures and a relevant permit from the regional conservation services. Monitoring of the condition of the architectural fabric and the landscaped spaces has been carried out systematically for years. Some of the sanctuary's structures are monitored constantly to combat the risks of fire, theft, and vandalism.

Due to the fact that a significant part of the sacred complex's surroundings is owned by individual persons, it is essential to build local awareness and responsibility for the cultural heritage of the property, particularly as related to building and investment activities located within the boundaries of the property. Cooperation is an essential factor in ensuring the protection and peaceful coexistence of the sacred complex, visited by millions of pilgrims, with the secular local community.

In addition, a holistic approach to the protection of the Calvary's cultural landscape is necessary, as is the integration of conservation activities with the general management of the entire area of the property and its buffer zone. Systematic conservation work and constant monitoring of the condition of individual elements of the spatial layout, and their mutual relationships, are important components of these activities.

Source: <https://whc.unesco.org/en/list/905>

Bergpark Wilhelmshöhe, Germany

Brief description: Descending a long hill dominated by a giant statue of Hercules, the monumental water displays of Wilhelmshöhe were begun by Landgrave Carl of Hesse-Kassel in 1689 around an east-west axis and were developed further into the 19th century. Reservoirs and channels behind the Hercules Monument supply water to a complex system of hydro-pneumatic devices that supply the site's large Baroque water theatre, grotto, fountains and 350-metre long Grand Cascade. Beyond this, channels and waterways wind across the axis, feeding a series of dramatic waterfalls and wild rapids, the geyser-like Grand Fountain which leaps 50m high, the lake and secluded ponds that enliven the Romantic garden created in the 18th century by Carl's great-grandson, Elector Wilhelm I. The great size of the park and its waterworks along with the towering Hercules statue constitute an expression of the ideals of absolutist Monarchy while the ensemble is a remarkable testimony to the aesthetics of the Baroque and Romantic periods.

Location: Germany 

Date of Inscription: 2013

Criteria: (iii)(iv)

Property: 558.7 ha

Buffer zone: 2,665.7 ha

Ref: 1413



PROTECTION:

The property is protected by laws of the Federal Republic of Germany including the Regional Planning Act, Town and Country Planning Code, Federal Nature Conservation Act, the Environmental Impact Assessment Act, and the Federal Forest Act, as well as

by the laws of the Federal State of Hesse including the Act on the Protection of Cultural

Monuments, the Hessian State Planning Act, Hessian Forest Act, the Hessian Act on the Implementation of the Federal Nature Conservation Act, and the Hessian building regulations. The property is protected in its entirety by the Hessian Act on the Protection of Cultural Monuments. The property is managed under the direction of a Steering Committee comprising representatives of the Hessian Ministry of Higher Education, Research and Arts, the City of Kassel, the Museumslandschaft and Kassel County and served by a Steering Board, which is a panel of experts that appoints specialised task groups as required to work with the World Heritage Hesse Staff Unit within the Hessian State Office for the Preservation of Historical Monuments. The woods and open spaces of the water catchment areas of the Habichtswald are managed by the Hessen-Forst State Forestry Administration, Wolfhagen forestry office.

The Bergpark is considered as a protected complex in the Regional Plan North Hesse 2009, and as having recreational value within a pristine environment. According to the City of Kassel's Urban Development Concept (2006) the traffic situation around the Bergpark will be improved, Wilhelmshöher Allee's periphery will be finalised as a boulevard and certain roads through the park will be closed.

Source: <https://whc.unesco.org/en/list/1413/>

The Area of the Prespes Lakes: Megali and Mikri Prespa which includes Byzantine and post-Byzantine monuments, Greece

TENTATIVE LIST

Brief description: The Prespa National Park (PNP) is situated in Northwest Greece, in the Region of West Macedonia; it covers an area of 327km² and is part of the Transboundary Prespa Park, which is shared between Greece, Albania and FYROM. The PNP consists of the lakes, Megali and Mikri Prespa, and the lake basin which extends to the tops of the surrounding mountains. The two lakes are separated by a narrow isthmus called “Koula”. Mikri Prespa has a maximum depth of 8.4 m and covers an area of 47.7 km², of which 43.5 km² belong to Greece and 3.9 km² to Albania. Megali Prespa is 55m deep and covers an area of 259.4 km² which is divided between Greece, Albania and FYROM. The PNP has approximately 1,500 inhabitants.

The region of Prespa preserves various monuments and many remains of settlements created through the long-term human presence in the area. The archaeological data show that people have lived in the Prespa valley for over four thousand years, but documented human presence does not emerge until the 2nd century BC. Inscriptions found on the island of Agios Achilleios, dated to the Hellenistic era, refer to Julius Crispus and the independent city of Lyca. In Classical times the Prespa region formed part of ancient Lynceus, and the lakes were called Little and Great Brygeis. In 148 BC Prespa became part of the Roman Province of Upper Macedonia. In the Early Christian period it belonged to Macedonia Deutera as a part of Illyricum Prefecture. In the late 8th and early 9th century AD the region belonged to the Theme of Thessaloniki. In the 10th century, Agios Achilleios became the first seat of Czar Samuel Comitopoulos' government. He founded the basilica of Agios Achilleios, in which he placed the relics of Saint Achilleios. In 1018 the Byzantine Emperor Basil II reconquered the territory, built two fortresses, Vasilida and Konstantion, and established the seat of the Archbishop of Ohrid. In 1072 the Almani and Franks passed through Prespa and ravaged the church of St Achilleios. In the 12th century Prespa was referred to as Province of Prespes in the chrysobull of Alexios III Angelus. For a while, the region of Prespa remained under the control of the Despot of Epirus, Michael II Angelus, before passing into the rule of the Emperor of Nicaea, Michael VIII Palaeologus. During the 14th century Prespa was incorporated into the kingdom of Stephen Dusan and was conquered in circa 1386 by the Ottomans. The region remained under their rule for 526 years.



Location: Greece 🇬🇷

Date of submission:

16/01/2014

Criteria: (ii)(iv)(vii)(ix)(x)

Category: Mixed

Submitted by:

Permanent Delegation of
Greece to UNESCO

State, Province or

Region:

Region of West Macedonia,
Regional Unit of Florina

Ref.: 5864

PROTECTION:

As a dynamic natural ecosystem, the PNP is evolving, but nevertheless conserves unique characteristics and ecological values including important habitats and rich biodiversity, as well as its cultural heritage, such as traditional villages and human activities and remarkable Byzantine monuments. The absence of human activity during the second half of the 20th century has contributed to the preservation of both the natural and cultural heritage. Present human activities are mild and nearly 70% of professional activities are in the primary sector, e.g. bean cultivation, fishing and livestock farming.

The PNP is a protected area according to national, European and international environmental legislation. The most important legal tools for the protection of the PNP are:

- Common Ministerial Decision 28651/FEK 302'D declaring Prespa a National Park.
- The EU Birds Directive 79/409 and EU Habitats Directive 92/43 for the recognition of Prespa both as SPA/SCI areas of the Natura 2000 network.
- The Ramsar Convention for the recognition of Lake Mikri Prespa as a Wetland of International Importance.

Cultural heritage in the PNP is protected mainly by

- Archaeological Law 3028/2002 "On the protection of antiquities and cultural heritage in general".

Byzantine and post-Byzantine monuments are protected, restored and conserved by the Ministry of Culture and Sports. On the island of Agios Germanos, a two-storey restored building of the early 20th century, on the edge of the village, functions as a centre for archaeological exploration in the region and will serve as a museum for the Byzantine collection.

Source: <https://whc.unesco.org/en/tentativelists/5864/>

The protection of archaeological heritage

The case study of Göbekli Tepe, Turkey

I Characteristics of the archaeological site Göbekli Tepe

Göbekli Tepe, an artificial ‘hill sanctuary’, is one of the earliest existing examples of man-made megalithic structures built in the 10th / 9th centuries BCE¹⁰ for ritual purposes. This site is located in southeastern Anatolia/Turkey, in Upper Mesopotamia, just east of the village Örencik and northeast of Şanlıurfa, at a distance of 2.5 and 15 km, respectively, and at a height of 770 m above sea level (figs. 1 and 2).¹¹ The archaeological site is composed of the limestone structures on the mound (tell) and a star-shaped limestone plateau, which also provided the building material. The area comprises approximately 126 ha.¹²

As it is a necessary requirement for inscription on the UNESCO World Heritage List, part of the site was designated as a so-called buffer zone, which provides a layer of protection to the place. The buffer zone includes the surrounding area of the mound and the limestone plateau, and has been established—where possible—according to the natural topography of the site, its viewpoints, as well as to additional, non-monumental structures that have an associated historic significance. The buffer zone extends to an area of 461 ha.¹³

¹⁰ DAI 2017, p. 17.

¹¹ DAI et al. (2017) Nomination for Inclusion on the World Heritage List'. UNESCO World Heritage Center. <https://whc.unesco.org/document/160483>. Available online [accessed 9 September 2019], p. 6, henceforth DAI et al. 2017.

¹² DAI et al., 2017, p. 4.

¹³ DAI et al., 2017, p. 4.



Fig. 1 Map indicating the location of Göbekli Tepe (Wikimedia commons: Smithsonian Institution, US government, accessed 1 September 2021).



Fig. 2 The area surrounding Göbekli Tepe (Wikimedia commons, 2012, Zhengan, accessed 1 September 2021).

The nominated property covers an area of 126 ha, within which the mound has a diameter of 300 m and a total area of 9 ha, including the limestone plateau.¹⁴ This area has already been declared a 1st Degree Archaeological Conservation Area. The Buffer Zone has been declared by the Şanlıurfa Regional Council for Conservation for Cultural Properties as a 3rd Degree Archaeological Conservation Area.¹⁵

History and development

The archaeological site is a regional landmark and is located in the so-called Fertile Crescent between the Euphrates and Tigris Rivers and in proximity to the Taurus Mountains (fig. 3). Views from the mound reach the Karacadağ and the Taurus Mountains.

The 15-meter-high mound, with a diameter of roughly 300 m¹⁶, was built as part of a ritual centre in the Early Neolithic Age (10th/9th millennium BCE) by groups of complex hunter-gatherers¹⁷. It is assumed that the site held a significant position at the time within a supraregional network of other Early Neolithic sites.¹⁸ The archaeological evidence of the site points to a public ceremonial function of the structures, perhaps connected to funerary rituals.¹⁹ However, close to the site, more recent excavations have revealed structures linked to domestic buildings.²⁰

The first mention of this site as an archaeologically significant place was in 1963 in a survey carried out by the University of Istanbul and the University of Chicago, and in 1980, Peter Benedict also referred to it as a site with the remains of human activity and the presence of two cemeteries on top of the mound.²¹ Only in 1994 did the research by archaeologist Klaus Schmidt lead to the definite and significant discovery of the monumental prehistoric remains. Excavation started on some of these limestone structures, with their characteristic T-shaped pillars, in 1995, and was carried out by Klaus Schmidt, together with the support of the local museum in Şanlıurfa and the DAI (*Deutsches Archäologisches Institut*, the German Archaeological Institute).²² Up until then, the site remained in a rather untouched state due to its physical inaccessibility, excluding some agricultural work that had disturbed the uppermost layer of the site. Due to surface finds, activity dating back to the Early Neolithic Age could be ascertained. The results from research using geomagnetic surveys and ground-

¹⁴ DAI et al., 2017, p. 4.

¹⁵ DAI et al., 2017, p. 4.

¹⁶ DAI et al., 2017, p. 14.

¹⁷ DAI et al., 2017, p. 6.

¹⁸ DAI et al., 2017, p. 17.

¹⁹ DAI et al., 2017, p. 19.

²⁰ DAI et al., 2017, p. 19.

²¹ DAI et al., 2017, p. 19.

²² DAI et al., 2017, p. 21.

penetrating radar indicated that a further ten Early Neolithic buildings are present in addition to the eight structures that have already been excavated (buildings A – H) (fig. 4).



Fig. 3 Göbekli Tepe is located in the so-called Fertile Crescent between the Euphrates and Tigris Rivers (Wikimedia commons: NormanEinstein).



Fig. 4 Main excavation area, aerial view (Wikimedia commons, 2019, DAI and E.Küçük, accessed 1 September 2021)

Layers III – I

Prior to the erection of the structures present in Layer III (during the Paleolithic Period), the area was most likely used by humans as a gathering site.

Building activities span a period of roughly 1,500 years, and during this time period structures were constantly being built, rebuilt and used, only to then be buried. The Neolithic structures are made of the local limestone, with traces of quarrying activities from that time on them. Two distinct periods of building activity—Layer III and Layer II—have been determined. Differing architectural traditions are an indicator, as well as the results gained from carbon dating.

The oldest layer dates between 9,600 and 8,700 BCE (Layer III) and is referred to as Early Pre-Pottery Neolithic (PPNA).²³ The monumental architectural structures of Layer III are round-oval buildings that are between 10 and 30 m wide, with large monolithic T-shaped stone pillars reaching a height of up to 4 m: in between these pillars we find benches and

²³ DAI et al., 2017, p. 19.

walls.²⁴ The largest and best-conserved structure is building D. Two pillars form the centre of a circle with 11 excavated pillars; they are engraved with images depicting different animals, such as birds, foxes and snakes, but also gazelles or donkeys can be discerned (fig. 5).²⁵ The two central pillars are characterised by an anthropomorphic appearance, with the horizontal element representing a head and the vertical part the torso and legs, and are consequently referred to as the 'pillar-statues'.²⁶ The pillars rest on a bedrock foundation with indentations of 20 cm to accommodate them, and in one case the foundation is decorated with a duck frieze. It is inconclusive as to whether these structures were originally covered by a roof or were intended to be hypaethral.²⁷

The more recent Layer II dates from 8,700 to 8,200 BCE (PPNB). They superimpose some structures of Layer III. These buildings are rectangular and smaller, measuring 3x4 m and no more than 2 m in height, and are often merely two stone pillars.²⁸ Many of these structures have a terrazzo floor, and some of the rooms do not feature a pillar.

After the 'life-cycle' of the structures had terminated, they were backfilled with rubble, ground-stone fragments and parts of human and animal bones.²⁹ The presence of human activity during the Roman era is attested by traces of limestone quarrying, and later activity by two graves that are assumed to be Islamic.³⁰ What is called Layer I is a product of erosion processes and a plough horizon due to the area having been employed for agriculture in the past centuries.

Associated buildings

In addition to the structures on the mound, some features are present on the nearby limestone plateaus, including a system of channels and cisterns (not yet confirmed whether they were contemporary with structures on the mound). Furthermore, there are traces of Neolithic quarrying activity in the form of unfinished pillars and the remains of a circular area worked into the bedrock with two pedestals intended for the installation of pillars.³¹ Specific areas have been interpreted as being connected to the production of terrazzo floors, along with other surface features, attesting to a variety of different activities. Flint stone finds indicate the presence of flint and ground stone workshops.³² In addition, the quarry was also employed during the Roman era.

²⁴ DAI et al., 2017, p. 21.

²⁵ DAI et al., 2017, p. 23.

²⁶ DAI et al., 2017, p. 23.

²⁷ DAI et al., 2017, p. 23.

²⁸ DAI et al., 2017, p. 22.

²⁹ DAI et al., 2017, p. 37.

³⁰ DAI et al., 2017, p. 37.

³¹ DAI et al., 2017, p. 25.

³² DAI et al., 2017, p. 48.



Fig. 5 The T-shaped pillars are made of limestone and are engraved. Many of them depict animals, like birds, foxes and boars (Leo Schmidt, 2013).

For a site to be included on the World Heritage List, it needs to demonstrate its so-called OUV, or Outstanding Universal Value. Concerning the values of a site, it needs to fulfil at least one criterion that justifies its inscription. One criterion alone does not suffice in the case criteria (vi). Of a total of ten criteria, six relate to cultural heritage, and the remaining four to natural heritage.

Values

In 2018, Göbekli Tepe was listed as a UNESCO World Heritage Site under the criteria (i), (ii) and (iv). According to the inscription, its values are:

‘Criterion (i) represents a masterpiece of human creative genius.

A unique point about Göbekli Tepe concerns the societies that built the earliest monumental structures. We know from contemporaneous domestic (settlement) sites, for example in the Tigris basin (e.g. Gusir Höyük, Halan Çemi, Hasankeyf Höyük, Körtik Tepe), that PPNA (9600-8700 BC) communities were relatively small groups, numbering perhaps no more than 100-150 people. Although living in what might be loosely termed first sedentary villages, these communities were still entirely dependent on hunting and gathering as their means of subsistence; there were still no domesticated crops or animals, albeit that they were cultivating stands of wild wheat. First evidence for domesticates in the region is dated to the PPNB, thus roughly contemporaneous with the abandonment of the site. Therefore, the people that built Göbekli Tepe were living through one of the most momentous transitions in human history, one which took us from hunter-gatherer subsistence to (modern) farming lifeways.

At the time of the site’s discovery it was considered inconceivable that PPNA groups could accomplish such architectural feats as now present themselves in the excavation trenches at Göbekli Tepe. These discoveries have sent tremors through the Neolithic research community, raising many new questions about PPNA societies, including issues of social hierarchies, territoriality, division of labour, craft specialisation, and gender roles, to name but a few. The infrastructure required for creation of large scale sculptural and architectural monuments, the ability to act in large groups, and the ritual impulses and beliefs that would have incited all these activities show us that the people of the period lived in a complex social life and could organize for a specific purpose. Therefore, it is held that the cults and related monumental architecture of Göbekli Tepe represent a masterpiece of human creative genius at a crucial time in world history.

Criterion (ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.

Many of the stones and T-pillars found at the property carry carved and engraved imagery. Depictions include many different species of wild animals, birds and insects, as well as human representations, all providing unique insights into the beliefs and worldview of the people in the 10th and 9th millennia BC. However, the depictions on the stones are not mere representations of creatures encountered in the landscape around Göbekli Tepe some 11,000 years ago (e.g. snakes, foxes, wild boar, aurochs, leopards, cranes and ducks). Rather, they appear to tell stories, perhaps relating ancient dramas that had previously been passed on verbally from generation to generation and at Göbekli Tepe for the first time perpetuated in stone. These stories might even include narratives of foundation myths, thus underlining origins and identities of communities at a time of increasing population sizes and growing social networks associated with progressive Neolithisation. Archaeological evidence from numerous other sites in Upper Mesopotamia and adjacent regions testifies to the interchange of this specific set of human values over a substantial geographical area, perhaps even suggesting the existence of a common cultic heritage and/or community. Indeed, this cultural interchange is also visible in other areas of material culture, including architecture and technological (tool-making) traditions.

[...]

Criterion (iv): It is an outstanding example of a type of architectural ensemble which illustrates a significant stage in human history.

Göbekli Tepe is home to the world's first human-built monumental (megalithic) buildings. In contrast to earlier periods of human history, when images (carvings, paintings etc.) were applied to surfaces in natural environments (caves, rock shelters etc.), for example at the famous Upper Palaeolithic decorated cave sites in France (32.000-30.000 BP), at Göbekli [sic!] Tepe these images were applied to elements within a (planned) built environment, often referred to as the 'world's first temples'. The monolithic (up to 5 metre high) T-shaped pillars, significant components of these buildings, were carved from the adjacent limestone plateau and attest to new levels of architectural and engineering technology. As such, they testify to the presence of specialized craftsmen, and possibly to the emergence of more hierarchical forms of human society which must have differed from preceding – more egalitarian – traditional (Palaeolithic) hunter-gatherer societies. The anthropomorphic T-shaped pillars are believed to be representations of ancestors, perhaps even incipient deities. Therefore, Göbekli Tepe is a unique site, it marking the very beginnings of our modern lifeways and still prevailing worldview'.³³

³³ DAI et al., 2017, pp. 42 – 46.

Integrity

As a further requirement for the inscription of a site onto the World Heritage List it needs to show its *integrity*, meaning it must show the extent to which it is intact and whole, whether or not it has an appropriate size to be able to represent the attributes that show its significance and how much of an impact any kind of developments or forms of deterioration have on the site. Göbleki Tepe is in a fair to good state of conservation and can demonstrate its completeness with all necessary elements: the excavated buildings A–H, the neighbouring limestone plateau with traces of Neolithic (and later Roman) quarrying activities and other activities connected to the construction of the site.³⁴

Authenticity

World Heritage Sites require a statement of authenticity, which is divided into different attributes. Of these attributes, the following have been identified for this site:

Form and Design: The site shows a high degree of authenticity concerning its form and design, as the stone elements have remained covered from the moment of their ‘use-lives’ until their excavation, thus remaining as in the moment of burial.³⁵

Materials and Substance: No additions have been made to the structures, and the material remains unchanged.³⁶

Location and Setting: Despite changes in the vegetation and environment during the period between the Early Neolithic and the present, the setting can be considered intact because of the unchanged views of the landscape and the site.³⁷

Spirit and Feeling: Most prominently is the site’s *sense of place*, which is characterised by a certain level of remoteness and quietness and a lack of buildings or facilities that would hinder the view of the surrounding landscape.³⁸ All of these features add to the recreational value of Göbleki Tepe.³⁹

³⁴ DAI et al., 2017, p. 46.

³⁵ DAI et al., 2017, p. 51.

³⁶ DAI et al., 2017, p. 51.

³⁷ DAI et al., 2017, p. 51.

³⁸ DAI et al., 2017, p. 51.

³⁹ Schmidt, Merbach and Pant, 2014, p.47.

Management Plan

The final condition for a site to become World Heritage is an adequate management plan that determines how the OUV of a place is to be preserved. A management plan⁴⁰ needs to consist of planning, implementation, periodic monitoring, assessment and feedback, altogether forming a cycle of planning. The Action Plan is divided into eight separate long-term goals in the areas of conservation, research, tourism, community involvement and management. Concerning the conservation of the site specifically, several aims have been established, including determining a conservation programme and developing a landscape design that preserves and improves the cultural significance of the site. A management plan was first drawn up in 2013, and after a revision process it was finalised in 2017. A site manager was engaged in 2014.

Legal status and practical issues of protection

According to the prerequisites for the inscription of a site on the World Heritage List, it needs to be shown that there is an appropriate legislative, institutional or regulatory system in place for its protection. The institutional protection system can be substituted with or supported by a traditional one.

The nominated site enjoys protection as a 1st Degree Archaeological Protection Area under the ‘Law on the Conservation of Cultural and Natural Property’ (2863) from 23 July 1983, which was amended on 23 July 2004 under law no. 5226.⁴¹ This area is owned by the state, and no works are allowed unless sanctioned by the Regional Council in charge. Therefore, the site has extensive statutory protection. The site is further protected due to being owned by the state and under land-use planning controls. As for 1st Degree Archaeological Sites, the law stipulates that they should be conserved, allowing only scientific research (including excavation) to take place and prohibiting any form of construction work. Furthermore, Planning Law no. 3194 from 1985 is the legal framework that concerns planning and development on a local and regional level.⁴²

Göbekli Tepe was designated as a 1st Degree Archaeological Site on 27 September 2005 with decision no. 422 of the Diyarbakir Regional Council.⁴³ It is therefore to be conserved as is, while allowing for any kind of scientific research that could help further its protection. Despite this protection, touristic facilities such as toilets, a car park or a ticket office can be erected provided that they are approved by the Şanlıurfa Regional Conservation Council for

⁴⁰ Schmidt, Merbach and Pant, 2014, Göbekli Tepe. Site Management Plan.

⁴¹ Schmidt, Merbach and Pant, 2014, p. 23.

⁴² N.A., (2016) Göbekli Tepe Supplementary Information 2018_1572_2237'. 2018. UNESCO World Heritage Center. <https://whc.unesco.org/document/160840>. Available online [accessed 9 September 2019], p. 30.

⁴³ Schmidt, Merbach and Pant, 2014, p. 23.

the Protection of Cultural Properties. The 3rd Degree Archaeological Conservation Area designated on 23 February 2016 with decision no. 1940 protects the artificial mound of the tell and its vicinity.⁴⁴

Conservation state

In the case of Göbekli Tepe, one of the most significant aspects is that despite the excavation work that has been conducted since 1995, less than 10% of the site has been excavated so far. This 10% extends over areas of approximately 50 m x 70 m at the Southeast Hollow, 70 m x 10 m at the Southwest Mound, 40 m x 30 m at the Northwest Mound and 40 m x 20 m at the Northwest Hollow.⁴⁵ The aim is to keep the excavation to a necessary limit, and to maintain the topographical features of the site whilst enabling research into the significance of the place.

Several on-site assessment reports were compiled concerning the condition of the archaeological remains. Since 2011, the Global Heritage Fund (GHF)⁴⁶ has examined the conservation state, and another investigation was carried out in 2016 by the Büro für Restaurierungsberatung⁴⁷ (Office for Conservation Advice) in Bonn. The conclusion of these assessments was that a systematic conservation approach is needed to preserve the archaeological features.

Due to the remoteness and difficulties in physical access, the site has been somewhat undisturbed. Damage to the site can, however, be attributed to events occurring in prehistoric times: the central pillars of two individual buildings were shattered some time after the buildings had been backfilled. It is assumed that this took place at a moment when either the buildings could still be seen, or the exact location of the pillars was still known.

Buildings A – H have been reported to be in a good to fair state of conservation. The limestone pillars are especially well preserved. Those areas that were closer to the soil surface and thus exposed to agricultural activities have suffered some damage. Worked stone objects that were removed to facilitate farming on the land still exist, as they were often placed at the edges of the site.

⁴⁴ Schmidt, Merbach and Pant, 2014, p. 23.

⁴⁵ Schmidt, Merbach and Pant, 2014, p. 51.

⁴⁶ Global Heritage Fund. 2011. 'GHF Göbekli Tepe Project Prospectus. Sanliurfa, Turkey'.

<http://globalheritagefund.org/docs/GHFGobekliTepeProjectProspectus102011.pdf>. Available online [accessed 8 September 2019].

———. 2012. 'Göbekli Tepe, Turkey. 2012 Project Progress Report'.

http://globalheritagefund.org/docs/http://ghn.globalheritagefund.com/uploads/documents/document_2224.pdf.pdf. Available online [accessed 8 September 2019].

Global Heritage Fund, John Hurd, and Dan Thompson. 2011. 'Göbekli Tepe, Turkey. Preliminary Site Conservation Inspection and First Mortar and Plaster Documentation Report'. http://ghn.globalheritagefund.com/uploads/documents/document_2018.pdf. Available online [accessed 8 September 2019].

⁴⁷ DAI et al., 2017, p. 65.

A deposit of lime sinter is present on the stone surfaces. This sinter has formed over time due to the dissolution of small amounts of limestone, which is then deposited on the surfaces.⁴⁸ Although the sinter formation is considered to be an irreversible and natural process that in this case visually impacts the limestone, it does not have a damaging effect on the fabric. Also, the excavated stones show deposits of greyish-brown dust, which alter the colour of the light-coloured limestones, aesthetically affecting the appearance of the structures.⁴⁹ Worked stones, though, do not show significant signs of structural damage, except for some cracks. Some of the pillars and benches are broken.⁵⁰ It is not clear whether these breaks are the result of intentional human actions, seismic activity or subsidence. As such, they do not pose the threat of further damage.

In 2011, the Global Heritage Fund (GHF; specifically John Hurd) investigated the earthen mortars present at the site. The examination showed that different earthen mortars were employed, which vary in composition, colour and granulometry.⁵¹ This can be attributed to a variety of factors, such as different building stages or different requirements for the strength of the earthen mortar. In addition, the earthen mortars show varying degrees of deterioration, which may be the result of different properties or different lengths of exposure. The principle factors of deterioration at the site are precipitation, fluctuation of relative humidity and temperature (day and night), freezing and thawing as well as wind.⁵² Distinct signs of the activity of masonry bees in the earthen plaster have also been observed.⁵³ GHF pointed out that the effects of climate change particularly need to be taken into consideration at this site, with its now exposed water-sensitive earthen plasters, as one strong rainfall could have devastating effects.

The main damage at Göbekli Tepe is due to the erosion of earthen mortars at the large stone monoliths. The prehistoric dry walls begin to deteriorate as soon as they have been excavated due to fluctuations in relative humidity and temperature, wind erosion and precipitation.⁵⁴ The dry walls at the site are very sensitive once their backfill material has been removed, as the backfill had provided a stable climatic and static environment. In the places that were excavated at the beginning of the works, the earthen mortar is eroded to a depth of up to 30 mm. The terrazzo floors have been rapidly eroding since excavation, with a leaching of the (marly) mortar matrix resulting in the loosening of the stone components.⁵⁵

⁴⁸ Clare and Kinzel, 2017, p. 12.

⁴⁹ Clare and Kinzel, 2017, p. 9.

⁵⁰ Clare and Kinzel, 2017, p. 11.

⁵¹ GHF, Hurd and Thompson, 2011, p. 4.

⁵² Clare and Kinzel, 2017, p. 13.

⁵³ GHF, Hurd and Thompson, 2011, p. 5.

⁵⁴ Clare and Kinzel, 2017, p. 13.

⁵⁵ GHF, Hurd and Thompson, 2011, p. 10.

II Preventive measures

Research

An underground archaeological site presents a particularly challenging situation in terms of research: to obtain a certain type of information, the site will have to be uncovered and excavated. Any kind of exposure, however, constitutes in itself a threat to the fabric, both during the process of excavation and later, when it is an open excavated site. In the past, large areas of archaeological sites have been excavated for the purpose of research, but also for the enjoyment of and with the vision to educate visitors. The available research methods have developed considerably over time, necessitating less invasive approaches, and therefore decreasing the damage done to a site. In recent times, however, a shift has taken place. With a larger interest in the preservation of the archaeological site itself, the importance of minimising the physical impact on the fabric of a site has also increased.

With the aim to lessen the physical impact at Göbekli Tepe, excavation has been limited to the minimal necessary to obtain insights into the site's use-life, and research included the use of invasive and non-invasive methods; the latter included geomagnetic surveys, 3D-laser scanning and ground-penetrating radar to investigate the presence of further structures underground.



Fig. 6 Replicas of the stone pillars of building D are exhibited at the Şanlıurfa Museum (Wikimedia commons, Dosseman, accessed 1 September 2021).

Informational conservation

Informational conservation has been identified by Muñoz-Viñas as an additional type of conservation.⁵⁶ With this he intends any type of recording or reproduction of the features of an object or site. At Göbekli Tepe, for instance, pillars of building D has been reproduced, and these replicas forms part of the exhibition at the Şanlıurfa Museum (fig. 6). The aim here is to convey an idea of the dimensions of the structure, as visitors are prohibited from entering the Neolithic structures. However, informational conservation does not guarantee the preservation of an object or site, but it should be regarded as a potential support for it.

Preventive measures on site

The responsibility for conservation and maintenance lies with the Turkish Ministry of Culture and Tourism (MoCT). With the beginning of excavation work, any sort of site disturbance, such as farming or uncontrolled ingress, was averted, followed by the archaeological site becoming nationalised.

A monitoring system has been implemented by the DAI and the MoCT to regularly assess all elements of the site and their states of conservation. As part of a monitoring measure, the GHF proposed horizontally inserting carbon or synthetic polymer rods into the mortar used for repointing work.⁵⁷ Upon regular visual inspection, exposed rods are clearly visible, indicating a new cycle of repair and maintenance work.

During the excavation work that has occurred since the mid-1990s, temporary measures have been carried out to protect structures from collapse, such as the T-shaped pillars being fitted with wooden shores and reinforced with steel cables.⁵⁸ The pillars were protected, where necessary, with plastic foil fixed onto a timber structure, especially in the cases where remains of clay were still present or where the stone showed cracks, which are particularly affected by the ingress of water and possible subsequent freezing.⁵⁹

Other temporary, individual coverings were also installed over the walls, pillars and terrazzo floors. Walls were protected from rain by the building of dry and loose stone walls in front of them, some of which were additionally endowed with wooden casings covered with plastic foils.⁶⁰ Stone walls were also protected with sandbags. Terrazzo floors were covered with a layer of sterile soil.⁶¹

⁵⁶ Muñoz Viñas, 2005, p. 23.

⁵⁷ GHF, Hurd and Thompson, 2011, p. 21.

⁵⁸ GHF, 2011, p. 7.

⁵⁹ GHF, 2012, p. 6.

⁶⁰ GHF, 2012, p. 6.

⁶¹ GHF, 2012, p. 7.

Despite their effectiveness, some temporary measures impacted the site visually. It has been observed that the materials employed for these temporary measures are in need of repair or replacement. This demonstrates that even if measures are conceived to be of a temporary nature, they still need to be subject to continued monitoring to assure that they do not cause unintentional damage to the historic fabric.

The entire site was fitted with a fence to facilitate controlled access and to avoid vandalism and looting.⁶² The fence is slightly longer than originally envisioned, so that the length of nearly 6 km has less visual impact on the site when seen from inside the site looking towards the surrounding area. Protection of the site is enforced by security guards and CCTV.⁶³

Coverings, shelters and enclosures

Preventive conservation measures at a site can be the above-mentioned reburial of a site or the installation of specific elements like walls, but they can also be the introduction of sheltering or enclosing structures.

Protective measures can be of temporary nature and may be built to fit individual archaeological features (fig. 7). A provisional shelter had been erected in the southeastern part of the site to prevent erosion processes, and temporary roofs were made out of a modular metal system (fig. 8).⁶⁴ In 2013, the temporary structures were substituted with a more extensive wooden and felted roof, guaranteeing not only an improved protection of the excavated areas, but also better and contact-free access for visitors.⁶⁵

The Global Heritage Fund assessed the site in 2011. Concerning the protective shelters, it proposed a number of requirements. The most significant feature of the site is the T-shaped pillars. The shelters should be designed to allow for protection against rain and snow, while at the same time providing stabilisation for several pillars by securing them to the structure with cables.⁶⁶ However, this necessitated a strong roof carried by appropriate pillars that should not visually impact the circular structure of the excavated site. Thus, the adequate location, as stressed by the Global Heritage Fund in a report, would be behind or between the stone walls of the enclosures. Furthermore, the shelter should ideally be flexible in the sense that it can be expanded when additional areas are excavated, not only in width but also height. The shelters also have to fulfil another requirement, which is to have minimal physical impact on the archaeology of the site. Therefore, visitor walkways should be hung from the roof to avoid physical contact with the ground, lighting should be directed to

⁶² GHF, 2012, p. 7.

⁶³ GHF, 2012, p. 7.

⁶⁴ DAI et al., 2017, p. 66.

⁶⁵ DAI et al., 2017, p. 66.

⁶⁶ GHF, 2011, p. 12.

maintain the sense of the place and cupolas should be endowed with reflective surfaces to allow for light.⁶⁷



Fig. 7 As a temporary measure, protective coverings were installed on different elements of the site (Leo Schmidt, 2013).

In the GHF report of 2011, it was pointed out that the design of the protective roof should address the climatic conditions of the site, namely the lively winds that bring with them considerable dust that would consequently be deposited on the roof. Therefore, the roof material should be made of a fabric that would not facilitate the deposition of dust or accentuate it to the extent of becoming unsightly. In addition, collected dust could hinder necessary drainage. In light of scientific research involving micro chemical analysis, it should be considered that the introduction of concrete for the foundation of the posts could negatively impact the chemical integrity of the site. To that effect, a separating material

⁶⁷ GHF, 2011, p. 12.

(‘cordon sanitaire’) should be placed between the concrete foundations and the surrounding fabric of the site.⁶⁸



Fig. 8 A temporary protective roof was made out of a modular metal system (Wikimedia commons, Rolfcosar, 2010, accessed 1 September 2021).

There are two permanent shelter structures at the site. For the design of these structures, the following parameters were taken into consideration: appropriate protection from weathering and minimal interference with archaeological fabric in the form of the foundations, pillars and supports. In addition, the design of the shelter had to comply with the contemporary standards of architecture, maintain the authenticity and integrity of the site, require little maintenance and respect the contours of the topography of the site with its inherent colours.⁶⁹

The first permanent shelter was constructed at the main excavation area at the Southeast Hollow, and the second permanent shelter at the northwest area of the site. Their function is to protect the site from weathering (rain, wind, direct sun, etc.), but they also control movement at the site. The first shelter is endowed with pathways leading visitors around the excavated area whilst also providing larger platforms for better viewing of the site and for the continuing work of archaeologists and conservators. It was also devised to provide a laboratory environment to facilitate fieldwork, excavations and necessary conservation and consolidation work. With this approach, not only is the work of archaeologists and conservators better communicated to visitors, but the interventions are much more transparent.

⁶⁸ GHF, Hurd and Thompson, 2011, p. 19.

⁶⁹ N.A., 2018, p. 32.

Protection through involvement of local community

The involvement of the local community has been obtained through providing work for locals in the research and excavation work.⁷⁰ In addition, public lectures are given concerning the on-going work at the site. Further activities includes training and capacity building measures, development of handicrafts, educational programmes in heritage for the local young people.⁷¹

III Remedial conservation

Generally, in remedial conservation some guiding principles have emerged, and are briefly outlined below. In scientifically guided and accompanied conservation work these guidelines are well observed: Reversibility, visibility, retreatability, compatibility of materials, minimal intervention and testing of methods and materials. A detailed description is provided in the section on protection of archaeological heritage sites.

For Göbekli Tepe, it has been proposed by the GHF that to prepare the earth for pointing work, a quantity of glass microspheres should be added.⁷² Not only would this act as an indicator medium to distinguish the integrated parts from the historic ones, but it would also improve the compressive strength of the new mortar. IN addition, the GHF proposed placing test walls in different places for conservation work for at least an entire year in order to take into consideration seasonal changes in temperature and relative humidity.⁷³

Remedial measures at the site

Just two years after excavation work had commenced at the site, the first conservation work was undertaken. In the following years, more work was carried out. In 2009, fragments of the central pillar of building C were reattached, and the pillars in building D stabilised. One large pillar in enclosure C had fractured and was restored by fixing the fragments with stainless steel pegs and epoxy resin. As has been observed in the GHF report of 2011, a repair with epoxy resin that is exposed to the elements needs to be further addressed in order to avoid moisture from entering the edges of the fracture and causing the repair material to swell.⁷⁴ To achieve this, a protective hydrophilic plaster should be applied to the cracked area as a temporary measure.

⁷⁰ Schmidt, Merbach and Pant, 2014, pp. 75.

⁷¹ GHF, 2011, pp. 13.

⁷² GHF, Hurd and Thompson, 2011, p. 21.

⁷³ GHF, 2012, p. 9.

⁷⁴ GHF, 2011, p. 7.

The GHF pointed out that conservation work had not been able to keep up with the excavation activities, and thus it needed to be addressed more comprehensively. They indicated that this should involve the local people and should include the training necessary for the conservation work.⁷⁵ While the past conservation work addressed immediate needs, a more long-term approach was established with the WHS nomination of the site and the drawing up of a comprehensive (conservation) management plan. This plan strives to balance conservation efforts, tourism and site presentation, as well as the scientific use of the site. Presently, the DAI is responsible for regular maintenance and smaller restoration works. They have also implemented an action plan for conservation work for the years between 2017 and 2021, setting priorities for necessary interventions.⁷⁶ When this project terminates, a new one is expected to commence.

To prevent further decay of the terrazzo floors, it was proposed to backfill it with sand or sieved earth after the floor has been covered with a geotextile membrane.⁷⁷ The prehistoric dry walls could also be backfilled, repointed and recapped.

To augment the readability of the stone elements, one proposal suggested reassembling the fragmented stone elements and fixing the cracks.⁷⁸ In the case that they are the result of intentional damage, one may need to consider leaving them as they were found in order to demonstrate past human actions at the site, thus forming part of the presentation of the site.

IV Conclusion

An archaeological site yields insight and understanding of past peoples, their lives and their environment. Its use is not only limited to scientific research, but it is also an educational tool and it carries touristic value. The possibilities that the research provides through excavating it, however, need to be carefully considered, including the acceptable damage of the excavation itself, and the threats that prolonged exposure of the fabric poses to the site.

The protection of archaeological heritage does not only encompass the interventions into the fabric of a site, but it also needs to address a variety of different measures that contribute to its sustainability. To protect a site from the adverse effects of its environment, effective preventive measures need to be installed that form part of a comprehensive risk management assessment and mitigation plan. Specifically, archaeological heritage is susceptible to rapid deterioration during and after excavation, thus any excavation work needs to be preceded by a careful assessment of potential risks during and after excavation. Planning for an excavation, therefore, should take into consideration the available resources

⁷⁵ GHF, 2011, p. 7.

⁷⁶ Clare and Kinzel, 2017.

⁷⁷ Clare and Kinzel, 2017, p. 17.

⁷⁸ Clare and Kinzel, 2017, p. 15.

for the protection of a site, including the possibility to rebury a site or to erect protective shelters or enclosures around it.

Furthermore, sustainable protection needs to address conservation in the sense of a community-oriented approach that instils a sense of stewardship in the community. In this type of approach, local communities are involved in a site's protection through education, training in conservation and any other possible activities that would allow them to gain an income from the site.

The research aim in archaeology is contradictory to those of conservation, but careful planning and collaboration between the relevant disciplines can help to mediate between them and to lessen the adverse effects of poorly planned excavations, whilst also including elements of value-based and people-oriented approaches in the conservation of a site.

Bibliography

Clare, L. and M. Kinzel, DAI (2017) Göbekli Tepe Masterplan 2017–2018, in Göbekli Tepe_ Supplementary Information 2018_1572_2237'. 2018. UNESCO World Heritage Center. Available online at <https://whc.unesco.org/document/160840>. (accessed 9 September 2019).

DAI, F. Pirson, R. Eichmann, Turkish Ministry of Culture and Tourism, Y. Inan, D. Mert, S. Duzcu, Sanliurfa Museum, Göbekli Tepe Site Management (2017) Nomination for Inclusion on the World Heritage List'. UNESCO World Heritage Center. Available online at <https://whc.unesco.org/document/160483> (accessed 9 September 2019).

Feilden, B. (2003) Conservation of historic buildings. Third Edition. London and others: Routledge.

Global Heritage Fund (2011) GHF Göbelki Tepe Project Prospectus. Sanliurfa, Turkey. Available online at <http://globalheritagefund.org/docs/GHFGobekliTepeProjectProspectus102011.pdf>. (accessed 8 September 2019).

Global Heritage Fund (2012) Göbekli Tepe, Turkey. 2012 Project Progress Report. Available online at http://globalheritagefund.org/docs/http://ghn.globalheritagefund.com/uploads/documents/document_2224.pdf.pdf. (accessed 8 September 2019).

Global Heritage Fund, John Hurd, and Dan Thompson (2011) Göbekli Tepe, Turkey. Preliminary Site Conservation Inspection and First Mortar and Plaster Documentation Report. Available online at http://ghn.globalheritagefund.com/uploads/documents/document_2018.pdf. (accessed 8 September 2019).

ICCROM (2016) A guide to risk management of cultural heritage. Available online at https://www.iccrom.org/wp-content/uploads/Guide-to-Risk-Management_English.pdf (accessed 12 October 2019).

N.A., (2018) Göbekli Tepe Supplementary Information 2018_1572_2237'. 2018. UNESCO World Heritage Center. <https://whc.unesco.org/document/160840>. Available online (accessed 9 September 2019), p. 30.

Muñoz Viñas, S. (2005) Contemporary theory of conservation. Oxford: Elsevier Butterworth.

Schmidt, Leo, A. Merbach, and S. Pant (2017) Göbekli Tepe. Site Management Plan. Available online at <https://whc.unesco.org/document/160481>. (accessed 9 September 2019).

Waller, R. R. (1995) Risk management applied to preventive conservation. Available online at <http://museum-sos.org/docs/WallerSPNHC1995.pdf> (accessed 9 September 2019).

Waller, R.R. (2013) Risk management applied to preventive conservation, in Staniforth, S. (ed.) Historical perspectives on preventive conservation. *Readings in conservation*. Los Angeles: The Getty Conservation Institute, pp. 317 – 327.

Cinzia Cortesi
Fondazione Flaminia

Ancient Convent
of Saint Francis - Bagnacavallo



I. Characteristics of architectural monument

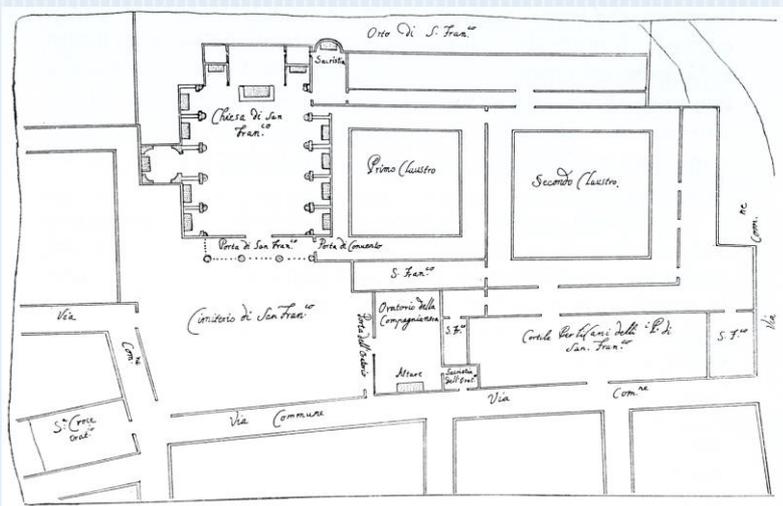
I.1 General information about the monument

The Ancient Convent of Saint Francis is located in the heart of Bagnacavallo, a beautiful and picturesque art town in Romagna. The ancient town's centre, a unique example in the district, is still intact with its medieval plan, the peculiar structure of curved alleyways, its long and beautiful porticos and a great number of noble palaces and religious buildings.

Inside this suggestive frame, the former Convent of Saint Francis is surely the most spectacular monument in town, not only for its beauty but also for the enormous proportion of the building, a lot way bigger than any other in the background. Walking through the streets of Bagnacavallo one can always see the characteristic bell tower of the monument, which stands high and straight in the south-east side of the town.

The former Convent, owned by the Municipality, is located between via Cadorna, via De Amicis and Piazza Carducci and nowadays it's a multifunctional pole which contains a suggestive hotel, a sumptuous hall called Sala Oriani, a big squared cloister in the middle, the many spaces in the first floor, mainly used for temporary art exhibitions and the recently restored Sala delle Capriate on the second floor of the building.

I.2 Brief history of the monument



Planimetry of the Church and Convent of Saint Francis in 1672

The first Franciscan settlement in Bagnacavallo is dated around 1260-70 and the first edification of a convent for the Minor Friars is attributed to Bulgarello Bulgarelli and Bono

della Penna. We don't have many information about this first building probably because it was already rebuilt in 1452 by Sebastiano Pepoli, who added a second cloister to the structure.

Other completion works will bring the building to his first final physiognomy between the XVI and XVII century. In 1688 the convent suffered serious damages after the destructive earthquake that struck almost the entire peninsula and which forced the Franciscan community, with the help of the population of Bagnacavallo, to rebuilt the monument. The works were entrusted to the architect Gioacchino Tomba who designed the ultimate structure in 1777.

Not even twenty years later began another chapter of the history of Saint Francis: in 1796 the Napoleonic troops conquered the dukedoms of Parma, Modena and the territory of the Pontifical Legations: Bologna, Ferrara and Ravenna. With the French government all the religious orders and brotherhoods were suppressed and the the former religious buildings became property of the State. On July 3rd 1798 the Great Council of the Cisalpine Republic decreed that those buildings must be made available to the community and used as spaces of public utility such as prisons, courts, offices of the National Guards, schools, postal offices and military housing.

All the libraries of the suppressed convents of Bagnacavallo were brought in some locals of Saint Francis in order to give to the entire community the possibility to benefit by that treasure, creating one the first public library inside the convent.

During the passage between the Cisalpine Republic and the Italian Republic the monastic buildings of Bagnacavallo were assigned to the Municipality for civil and military uses. In the second decade of the XIX century some locals of the Convent were given back to the Minor Friars until 1868 when the building was finally sold to the Municipality.

During the second world war Saint Francis became one of the refuge identified by the City Administration for the recovery of the population in case of aerial or terrestrial bombardment. The Refuge of Saint Francis was located in the dungeons of the Convent.

After the conflict Saint Francis was so damaged that the Genio Civile of Ravenna imposed the eviction for public security.

In 1970 the critical condition of the building forced the Administration and the Superintendence to remove dozens of frescos still on site in order to saving them.

Finally, starting from 1980, Superintendence and Region, began a series of consolidation and restoring works: part of the roof was rebuilt, the restoration of the Sala Oriani (former dining hall of the Minor Friars) and the monumental staircase and the construction of a

reinforcement structure outside the building. Other important works were made in 2000 thanks to the sums allocated on the occasion of the Jubilee for social and cultural projects.

In 2012 the City Administration, with the purpose to promote and value the freshly restored building, has decided to hold the architectural competition “POLO SUD - La trama urbana tra Antico Convento di San Francesco e Palazzo Abbondanza come varco d’accesso al Centro Storico”. The choice to focus the attention in the former convent was largely due to the results of the Urban Laboratory “QUI C’ENTRO - spazio alle idee dei cittadini per nuove funzioni, servizi e attività condivise”.



Insight of the Church of Saint Francis after the war



First meeting of the urban laboratory in 2011

1.3 Technical and architectural characteristic of the monument

The building was rebuilt many times during centuries and the structure that we see today is the result of the last re-edification of the second half of the XVIII century.

The Ancient Convent of Saint Francis, with a structure that recalls analog buildings, rises to the side of the Church of Saint Francis and it's built around a central and extended cloister surrounded by a covered walkway articulated in a series of round arches.

The many locals inside the building are ranged around the cloister: first of all the beautiful and sumptuous Sala Oriani, (former refectory of the Minor Friars), a local of big dimension

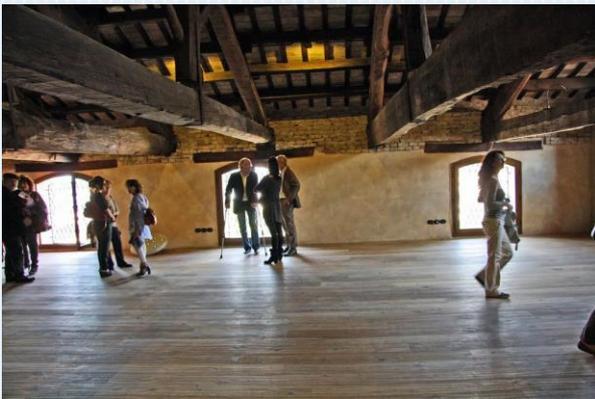
with a rectangular plant surrounded by precious wooden stalls and a rich decorative apparatus of paintings (all original and restored), the monumental staircase which brings the visitors to the locals of the first floor, only partially restored and used for temporary art exhibitions, the suggestive Sala delle Capriate on the second floor of the building that show a beautiful exposed wooden beams.



Cloister of the former Convent of Saint Francis today



Sala Oriani



Sala delle Capriate



Monumental staircase



Part of the first floor during an Art Exhibition in 2009

I.4 Assessment of the values of the monument

The Ancient convent of Saint Francis is one of the most important historical buildings of Bagnacavallo and the more ancient conventual structure in town. For more than 700 years, the building has been a religious, intellectual and political center, especially after the French invasion, when the building opened some of its spaces to the citizens for public uses.

For its particular history, inextricably connected to the history of the town and the people who lived there during many centuries, Saint Francis holds at the same time an historical value, because it was witness of the historic changes that succeeded during centuries; a socio-cultural value, because it has been a space destined to the entire community for instruction, political and civil functions and, during the second world war, for the safety of citizens; an artistic value, because it's a demonstration of a particular style, deeply connected with the town where it is built.

I.5 Technical condition assessment of the monument

Even though the Ancient Convent of Saint Francis has been restored several times, the architectural structure of the monument derived by the last reconstruction of the XVIII century is still intact. The ground floor is completely restored and practicable, hosting the hotel, the cloister open for different events and festivals during the year and the former refectory now called Sala Oriani, restored in the '80 and used mainly for conferences; the first floor, on the other hand, it's not restored yet although is used, on special occasions, for

hosting temporary art exhibition. At last, Sala delle Capriate is situated on the second floor, exactly above Sala Oriani and it's the most recently restored local used mainly for laboratories.

1.6 Existing programme of protection

The unique structure of the historical center of Bagnacavallo, which also contains the former convent located in the south-east side, had led the city administration, starting in 1980, to activate social and cultural initiative for its enhance and to promote the active participation of citizens.

From 1980 every urban intervention inside the perimeter of the historical center makes reference to the PPCS (Piano Particolareggiato del Centro Storico), drafted with great far-sightedness in that period and the first attempt to draw a specific discipline for regulating interventions on historical buildings. The PPCS highlights the specific characteristics of each building and protect their original features in order to maintain intact the peculiarity of the historical center.

2. Characteristics of the protection of the monument

2.1 Legal status of the monument

The Ancient Convent of Saint Francis is a building bound by the legislative decree n. 42/2004 "Codice dei beni culturali e del paesaggio, pursuant to art. 10 of the law 6 July 2002, n.137" and officially registered in foglio 71, mappale 261 of NCEU Ravenna, Section of Bagnacavallo.

The Municipality owned a large part of the building and the city administration has set herself its harnessing as a priority, in order to promote e develop cultural and touristic policies of the city.

2.2 Formal requirements regarding the protection of the monument

The former convent is recognized as Cultural Heritage according to the art. 2 of the legislative decree 42/2004 which says that "Cultural property consists of immovable and movable things which, pursuant to articles 10 and 11, present artistic, historical, archaeological, ethno- anthropological, archival and bibliographical interest, and of any other thing identified by law or in accordance with the law as testifying to the values of civilisation".

Being identified as cultural property impose the obligation of protection and safeguarding of the monument.

2.3 Protection of values, authenticity and integrity, technical condition

While the protection of the integrity and authenticity of a monument is strictly connected with the safeguard of its technical condition, the protection of the values is instead protected by ensuring the continuity of the functions that are connected to the values.

The building has always been a multi-functional center: when it was a convent and so the residence of the Minor Friars it used to contains lots of different locals destined to a plurality of functions, in conformity with every other conventual structure. When the Minor Friars were removed and the building became property of the Municipality it maintained this peculiar characteristic of being a polyfunctional container.

As well as it was in the past, the Ancient Convent still is nowadays a complex of structures with different functions in conformity with the values of the building: it still maintains its accommodation function thanks to the hotel, it still is an aggregation center for the many events that are hosts inside the building.



The cloister of Saint Francis during the feast of San Michele

2.4 Indications resulting from values assessment, authenticity, and integrity assessment, technical condition assessment

Although the last assessment made by the studies of the architects who has worked for the architectural competition “POLO SUD - La trama urbana tra Antico Convento di San Francesco e Palazzo Abbondanza come varco d’accesso al Centro Storico” in 2012 agreed to allocate a large part of the monument to for a permanent museum, the Municipality considered a better option to maintain the function of tourism accommodation in a perspective of development of the city.

Although the hotel function have brought many tourists in town so have given people the possibility to enjoy the beautiful building, we also believe that the cultural aspect of the former convent can be improved and enhanced dedicating more spaces to those particular aspects.

2.5 Programme (proposal) of protection and conservation

Even though the majority of the convent as found a practical destination in the last few years, there are still plenty of spaces and locals which are not used. In line with what we’ve said earlier, these spaces could be used for create permanent spaces to dedicate to artistic and cultural functions.

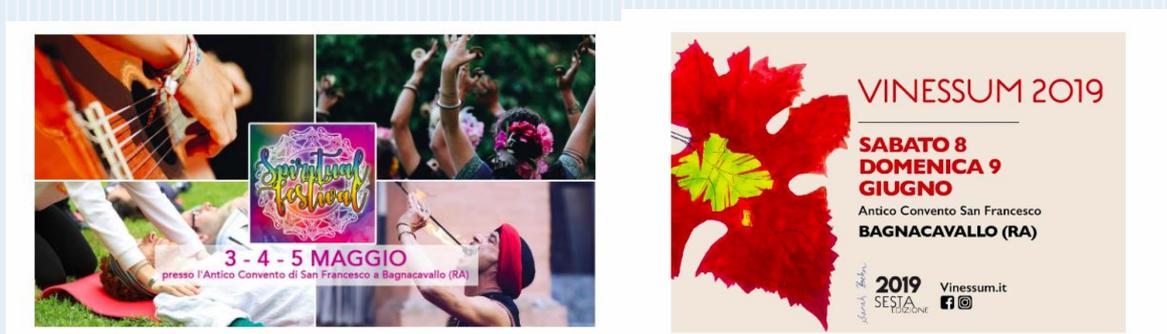
3. Characteristics of the use of the monument

3.1 Description of the primary function and use

As we have already anticipated in the past paragraphs, the Ancient Convent San Francesco is today a multi-functional complex because it hosts many locals intended for different uses. A large part of the structure is now occupied by a tourist accommodation which has 8 comfortable and renewed rooms and 11 multiple rooms with bunk beds, for total sleeping accommodation for 80 guests. The hotel bar located near the cloister is open to everyone, not only the customers of the hotel, which guarantee to every citizen the possibility to freely enjoy the space of the building.

During the year and especially in summer, the big open cloister houses a rich and varied type of events: in particular, from June to September the convent offers a review of events called “Quel che passa il convento” every Tuesday and Friday evenings; every September for a week Bagnacavallo celebrates the Patron of the city with a series of beautiful events spread

all around the city and in particular concentrated inside the convent: jests at night, contemporary art exhibitions and installations and markets.



Some of the events that take place in Saint Francis during the year

During the year the Ancient Convent is also used for ceremonies, meetings, conferences, summer camps, live music and other cultural and artistic events.

3.2 Programme (existing) of use, adaptation, modernisation

To operate in such a great building as the Ancient Convent of Saint Francis is not only a recovery operation: the spaces can become places for cultural production too. The coexistence of the accommodation structure and spaces destined to events of any kind combine two different and, simultaneously, fundamental vocation of the building: a center for cultural production and a space that offer the possibility to benefit of cultural products.

This multiple functions of the building contribute to make it a very dynamic reality, not close in itself and its own wall but open to the citizens and the tourists, capable to dialogue with the surrounding area by being the main hosting place for any kind of events, from conventions to festivals and laboratory.

3.3 Tourism, presentation, information / present state and potential

In the last few years, in conjunction with the renovated importance of the convent, point of reference and container of the main events in town as well as accommodation structure, this building has started to become a center of attraction for the people of the surrounding area and for tourists: in 2017 the hotel (opened only in 2016) has registered 2.200 presences and has doubled the following year. This positive feedback lead us to think that maybe, in only few years, the former convent could become a real point of reference for the people of Province and could bring more prestige to the entire city of Bagnacavallo.

3.4 Programme (proposal) of use, adaptation, modernization

Looking back at the many projects that have been developed during the architectural competition in 2012, the aspect that was mostly studied was the relocation in Saint Francis of a some functions now hosted in the city museum, the Museo delle Cappuccine. This same subject had also been highlighted in 2011 during the Urban Laboratory “Qui C’entro” which indicate an interest from the locals about this theme.

Unfortunately, despite the general interest, none of the function hosted by the museum has been rilocated in Saint Francis yet. We think that this aspect should be discussed again with another project that also take in consideration this important topic.

4. Characteristics of the management of the monument

4.1 Description of management of the monument

The Convent is property of the Municipality and the hotel is managed by two young entrepreneurs, Fulvia Damiani e Paolo Camprini.

4.2 Financing / current state, need, possibilities

We don't own this kind of information.

4.3 Threats

The huge dimensions and the variety of spaces placed inside the convent represent, at the same time, the greater resource and biggest threat of the building. In order to keep in function the convent is required a great investment, both financial and human resource. The presence of the hotel guarantee a proper use and maintenance of a large part of the monument as well as the presence of a bar, which is part of the hotel but open to whomever wants to pay a visit, guarantee the constant presence of people and contribute to build a sentiment of proximity between the citizens and the building.

However, the destination of the convent is not definitive: the management of the hotel is given by the municipality to the managers for a limited period of time and the destiny of the convent is not yet well defined.

4.4 Monitoring / indicators

We don't have complete information about the number of visitors that came in the Ancient Convent because almost every event is free entry, that makes impossible to take count of the people. The only information we have is the number of people who stayed in the hotel, which have been more than 6000 in the last two years.

Bogusław Szmygin

Joanna Juszczak

Lublin University of Technology

Assessment of the value of the historical city of Zamość as the basis of the protection programme

Introduction

The historical centre of Zamość is one of the most valuable historical cities in Poland. The unique value of Zamość was confirmed by its inscription on the UNESCO World Heritage List in 1992. The historic value of Zamość justifies its special protection. Intensive conservation work has been carried out for decades. Thanks to numerous restoration, preservation and maintenance works we are now able to admire the beauty of its monuments and perfect spatial harmony. But this is not the end of planned work. Zamość Old Town is a historical part of a vibrant city and therefore needs to evolve constantly in order to satisfy the contemporary requirements of urban population. Therefore the city authorities and conservation services are constantly establishing the boundary between the protection program and the program of modern use. These activities are based on a precise analysis of the historic values of Zamość.

In order to plan a comprehensive program for the protection of Zamość, the Management Plan of the historical center was developed for the first time. The basis of this plan is the analysis of the value of Zamość. For this purpose, the Smart Value method, developed by the research team of the Lublin University of Technology, was used, which takes into account the requirements of the UNESCO World Heritage System. This method enables specification of material carriers of monumental values of the city. At the same time, it will allow indicating the limits of possible interference resulting from contemporary interventions and use. In addition to this, the outcome of this thorough analysis will be of great use in taking decisions on further actions and investments, which is particularly important with monuments so heterogeneous as a historical city center.

In the Smart Value method, the determination of value is made on the basis of the components of the historical city. On this basis, a programme for the protection of these values is defined.

I. Old Town in Zamość - Characteristics of Components

The area of the protected Old Town in Zamość encompasses 75 hectares. It lies within the Renaissance fortifications created by Bernardo Morando with the surrounding 19th century fortifications. Thus, the protected area gathers the whole substance of the Old Town (from various periods and falling into different forms of protection) as well as the spatial plan and fortifications (original and newly reconstructed). The building substance is not homogeneous. It has various chronology, forms, legal forms of protection and practically all of it has been remodeled and reconstructed many times.

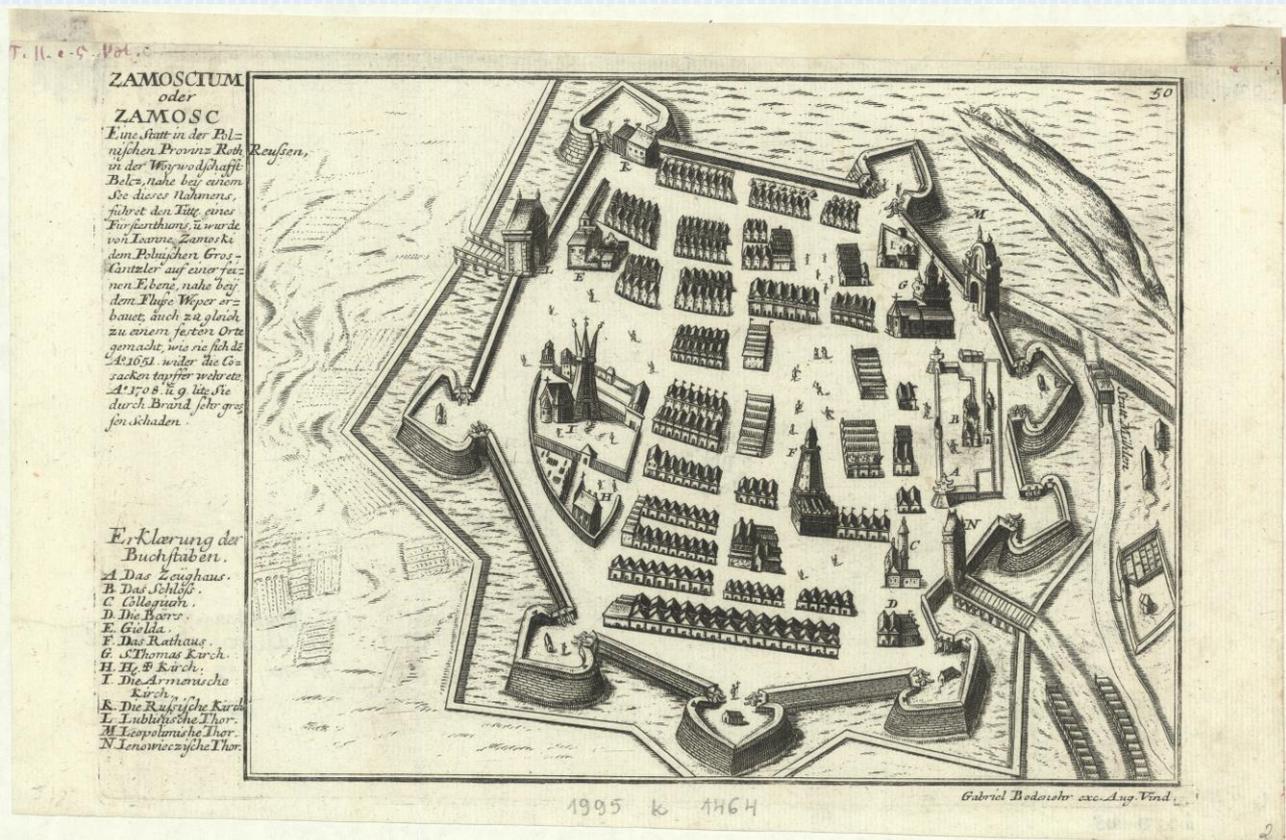


Fig. 1 Zamość city plan

The spatial plan of the Old Town represents in a unique way the original functional idea. The town consists of two zones: a smaller one from the West – the residential area of the tenant and a bigger one from the East – urban space. The area nowadays has the shape of an irregular of a septagon. Scientists suggest, that this form is the result of gradual planning of the town and it represents a combination of a regular hexagon of urban substance with a square residence, resembling the style of Pietro Cataneo.

The frontiers of the Old Town are outlined by the surrounding bastion fortification or their historical layout (if the structure did not survive until today). The design of this type of fortification was connected with the reach of the flank canister shots measuring 200m, which

determined the maximal distance between the bastions surrounding the historical town. The bigger the urban area, the more bastions built.

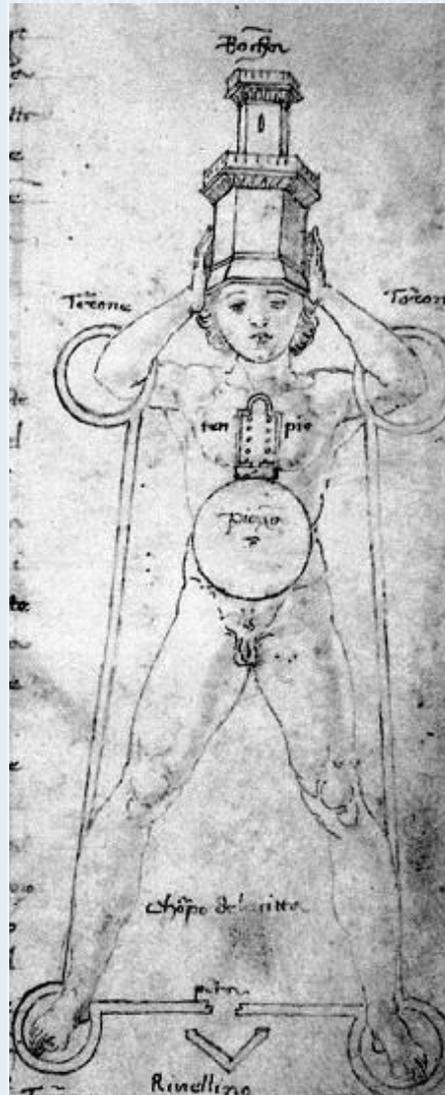


Fig. 2 Symbolic city scheme by Francesco di Giorgio Martin

Construction of the first fortifications on the turn of the 16th century can be divided into three stages: building of the roundels and defensive walls of the palace, raising of makeshift mounds to protect the town, erection of bastion fortifications with brick reinforced slopes. The period of intense changes in the architecture of fortifications was the Austrian and Russian partition of Poland, when at the beginning of the 19th century the fortress was profoundly reconstructed according to the projects of Malletski.

Moats were cleared, defensive walls were renovated, ravelins protecting the gate, Rotunda, earth cavaliers at necks of bastions IV, VI and VII and casemates in the rear portions of bastions V and VI as well as counter-guards in front of the bastions were erected. The defensive walls were broadened to 25-30 meters at the base and reinforced by installing shooting galleries at the superior portion of the slopes. In order to connect the fortress with

the moats porters were built in the defensive walls between the bastions VII and I, I and II, III and IV, IV and V. At that time, the New Lublin Gate and the New Lviv Gate were erected. The old gates lost their original function and were adapted for prisons. The third gate – Szczebrzeszyn Gate was also rebuilt, but its function remained the same. Within 1200 m radius all civil structures were liquidated. Instead two mighty, bricked cavaliers were raised at the necks of the bastions VI and VII to serve as cannon battery and barracks. Important changes occurred in the outskirts (Carnot wall was raised). In the years 1836-37 four caponiers were constructed on the axis of the defensive walls IV-V, V-VI, VI-VII and VII-I. The construction works were of interest for the commander-in-chief Grand Duke Konstantin Pavlovich of Russia, who expressed his gratitude and acclamation for the engineers, during his visit in the fortress in 1823 (which by that time had for 2 years belonged to the state, not the tenant).

As result of a modernization, the fortress changed its character into strictly military: it became a huge barrack and prison (civil population was moved to Nowa Osada). Churches, the Academy and the Palace were changed into warehouses, barracks and lazaret. Many edifices received a stern, classic form (i.e. the tenements in the Great Square lost their attic adornments).

However, already in the 1850's the fortifications were seen as the old-fashioned, due to the fast development of artillery (among others introduction of rifled cannons). Therefore, tsar Alexander II signed on 21st of November 1866 the decision to liquidate the fortress as not fulfilling the standards of defense.

The liquidation consisted in blowing-up parts of the fortification, tearing down the walls into the moats to level them. Most of the buildings (gates, cavaliers and Rotunda) remained intact. Lower portions of the walls and bastions, that remained under the rubbles, became later the foundation of reconstruction.

After restoration of Poland's sovereignty, in the interwar period works were initiated to adapt and revitalize the area of the fortress and in the periods 1977-1984, 2007-2009 and 2011-2014 works such as reconstructions of the retaining structures were carried out. The objects of the complex of the Zamość Fortress, which we can visit nowadays, are the result of several centuries of extension, modification as well as decay and reconstruction in 19th and 20th century. The scale of the modern works, which to great extent are reconstructions, is shown on the aerial photo underneath, taken in 1927. It presents the cavaliers of the bastions VI and VII, although the bastions themselves as well as the walls connecting them are almost completely gone. Their contour can be recognized in the terrain formation but this shape cannot be compared with the present one. At present, the most important elements of the fortress are: VII Bastion with the cavalier and the defense wall, VI Bastion and the cavalier, The Szczebrzeszyn Gate, the Old Lviv Gate, the New Lviv Gate, The Old Lublin Gate, Kojec, the New Lublin Gate, the Rotunda and the Arsenal.



Fig. 3 Aerial photo of Zamość

The city planning of the complex has a chess-like grid of streets, which has not been significantly changed. The grid has two main clear axes of the Renaissance pattern:

- The main axis directed at the Palace, connecting it with the city, crossing the center of the Great Square (at present Grodzka Street)
- The orthogonal axis, also crossing the center of the Great Square, connecting three markets *at present Bernard Morando Street).

The additional axis is what is today Akademicka Street, situated in front of the Palace, connecting the Zamojski Academy and the Cathedral (former Collegiate church).

An important part of the urban space is constituted by three squares, whose origins go back to the initial urban plan of the town:

- I. The Great Square measuring 100 x 100 meters with arcade frontage. It was a central point of the town, with the City Hall situated on it.

2. The Salt Market – with arcades on the eastern and northern frontage. A building erected in the 2nd half of the 19th century interferes with the area of this square. The name derives from the salt imported from Wieliczka and Ruthenia, stored on the Square in the first years after the foundation of the town.
3. The Water Market – initially had the contour of a 50-meter sided square and Morando Street crossed it. Today, it is somewhat disfigured: the former eastern frontage does not exist and the western one has been moved. At present, a fountain occupies its central part; the surrounding tenements were created on the turn of the 19th century.

Within the Old Town we can also identify the area in front of the Palace (ancient weapon square) and the area in front of the former entry gates.

This spatial arrangement can be interpreted according to Francesco di Gogio Martini's approach - that the layout of the city refers to human body as the most perfect creation. This reference should be understood abstractly not literally and highlights the organic not formal relations. Thus it alludes to Vitruvius's concept. The terrain (its elevation, soil fertility, aqueducts or access to building materials) is the city's starting point. Some researchers believe that city plan of Zamość is based on Martini's concept: head - the Zamoyski Palace, abdomen - Great Market, heart - Cathedral, extremity - bastions/gates.

Old Town's compact design is largely composed by 3- or 2- store brick buildings with few one-store buildings. The façade is colorful and diverse. The complete color range can be seen - warm and cool colors, pastel colors in different shades. The roofs are mainly covered with galvanized steel. The brick buildings that replaced the temporary wooden ones at the beginning of the city construction process, were mostly one-stored (or 1-2-stored), with their ridge to the road (this very form is present at the bukowiński painting and Zamość city plans from XVII century).

As the city developed along with the architectural skills the buildings got higher until their present cubature. The modern buildings composition is well preserved and recognizable (some parts do not exist anymore: two in north-west part of the city, few lateral parts which became monastery buildings during Baroque and the inner working parts and fortification.)

According to the initial plans of Jan Zamoyski, all the tenement houses should be built correspondingly to Bernardo Morando's layout in order to ensure the order, aesthetic and regular structure of public space - which is characteristic for Renaissance architecture.

The most characteristic buildings of Zamość are ones close to the Great Market Square - on streets: Ormiańska 22 - Pod Madonna lub Sołtanowska, 24 - Pod Małżeństwem lub Szafirowa , 26 - Pod Aniołem, Pod Lwami lub Bartoszewiczów, 28 - Rudomiczowska and 30 - Wilczkowska. All of them were built in the first half of the 17th century perhaps replacing previous wooden ones. Excluding number 22 (2-store), they are 3-store buildings with

characteristic rich decorations that are kept in Mannerist and early-Baroque style among which are: low-reliefs, flower and fruit friezes under the windows, ornamental framing of and the most unique element - attics.

The architecture of Zamość Old Town is rich in elements of particular meaning. These include, among others: Zamojski Palace, Zamojski Academy, Kolegia, Cerkiew (Orthodox church), fortress infrastructure. They reflect their multifunctionality and at the same time highlight the completeness of the conceptual program adopted while planning the city. Initially Zamość was combining various functions: living, defensive, judiciary and executive, was serving as a monarch residency but also center of education and trade and was a place where various religions and cultures met.

One of the most recognizable building in Zamość is the Zamoyski Palace. It was built in the early phase of the creation of the city - in years 1579-1586 according to Bernardo Morando's project. Originally it consisted of a palace located in the front and two tenement houses in the back (for founder's wife and her servants). This part was risen in years 1581-1583. It had rectangular shape, was 60 meters long, 2-stores with tower with a gallery and double-leaf staircase at Grand Market side. Previously the armory/arsenal was a part of Palace building complex, which nowadays consists of: Palace (3-stores), 2 pavilions (2-stores), 2 stables and 3 rear houses, one of which located in the back was connected with the palace by the closed galleries. It has thus regular and axial structure. Palace, pavilions and the rear houses form a U-shaped building symmetrically to the main axis which corresponds with the longitudinal, eastern-western axis of the city. The façade is homogeneously gray with no decoration. The current function of the building - it is the seat of the Regional and District Court whereas the rear houses serve as municipal flats. It has been considerably rebuilt and deprived of decorative elements during its transformation into Russian fortress. Its by-gone beauty can be admired on available engravings.



Fig. 4 Main market of Zamość

Another landmark building, in both its form and function is the splendid Town Hall. It was designed in 1591 by Bernard Morando in Renaissance and baroque style. In years 1639-1651 it has been thoroughly rebuilt. Both the corpus and the tower were put up, the arcade was expanded. The building is based on a rectangular, 3-stores corpus and arched stairs (1767-1770) leading to main entrance on the second floor.

An the top of the Town Hall we see 6-stores, quadrangular tower with helmet-like end and a light post. The Town Hall is built of red bricks with galvanized iron roof. Inner ceilings and stairs are made of iron and concrete. The ceilings on second and third floor are flat whereas the hallway and stairway have cross vaults. The front elevation is 7-axial, back elevation is 8-axial and the lateral ones are 4-axial. Nowadays the building fulfills the administrative and tourist role. The building was reconstructed in the interwar period and thus obtained its present shape. The Town Hall and the stairs have been renovated in recent years.

The Zamojski Academy is another example of exceptional architecture, which unfortunately lost its original form and function. Its present form was developed during the reconstructional works in eighteen and nineteen century as well as the maintenance works early in the 20th century. It is a 2-stores brick building on a square plan, with square courtyard, with a 4-pitched roof, 13-axial façade with a broad ryzalit and a stair-shaped gable. The Academy constructed in Jan Zamoyski's day was located in the same place, but was significantly smaller and design on a rectangular plan. Three wings of the building were added in seventeenth century and ornamented with attics. In the mid 18-th century the Academy was modernized by the zamoyski architect Andrzej Bem - it became four-wing building and the attics were replaced by the high mansard roof according to the late Baroque styling. After

the Academy's dissolution in 1784 the building was adapted to its new role: military barracks: the arcades in the courtyard were walled up, the mansard roofs replaced by pyramidal two-pitched roofs and the window frames knocked down. The ornaments and architectural details were removed and the previous internal division of the building changed. The Zamojski Academy was the third (along with Cracow Academy and Vilnius Academy) university in Poland. It was founded by Jan Zamoyski who continued to develop the university by establishing the school, library, printery and publishing house. It functioned in years 1595 to 1784. The presence of the university considerably increased the importance and role of Zamość both regionally and nationally. Nowadays it serves as a general educational liceum and Lifelong Learning Centre. Due to planned investments its structure may be changed - it will get high, mansard roof covered with ceramic roofing tiles instead of previous sheet iron. The colors of the elevation will also be changed.



Fig. 5 Academy of Zamość

In 18th century the porch and a ridge turret were built. In the first half of 19th century it shared the fate of most buildings in Zamość - was rebuilt and lost its masterful decor. The brick church is oriented, with basilica-type layout, 3 naves and two rows of chapels and a polygonally enclosed presbytery. The sacristy is on one side, the beautifully ornamented Zamoyski chapel on the other. The church preserved its rich furnishing (i.a. Church organs, altars from 17th-19th century), many epitaphs and gravestones (i.a. Jan Zamoyski's gravestone from around 1618, Szymon Szymonowic's epitaph). Next to the Cathedral there is a stone,

tower-like and 4-stores bell tower which replaced (in the second half of the 18th century) previous, wooden one. In 1828 it was firstly lowered and then in 1930-31 overbuilt. It is crowned with a two-stage helmet, ball and a cross. The elevation is bossaged with broad pilasters and panels. There are 3 bells: “Jan” - 1662, “Wawrzyniec” - 1715 and “Tomasz” - 1721.

In Zamość we can also find the old Greek-Catholic Orthodox church, which currently became the Nikolai Roman Catholic Church. Built in 1589-1604 firstly as a wooden and then in 1618-31 (J. Jaroszewicz, J.Wolff) as a brick building, the church was renovated after a conflagration in the second half of 18th century. The sanctuary is oriented, bricked, with 1 nave on a longitudinal plan. The characteristic elevation has a prominent entablature, pilasters, semicircular windows and 2 towers over the anticum: 3-stores tower and octagonal tower with a light post.

Another important religious building is the Franciscan Temple. Built in years 1637-65 replaced the market owned by Bernardo Morando. Over the centuries it was rebuilt several times (i.a in 1672 after the fire). In years 1820-40 the inner structure was changed, in 1887 the gables were demolished and the main nave was lowered. The church is oriented build on a Latin cruciform plan. The unchanged part of the church (to the middle of the main nave) has a basilica form with 3 naves and 2-stores cellar. The main façade is 5-axial whereas the lateral ones are 6-axial. The elevation divided by niches, with a high socle and prominent entablature. Nowadays it combines 2 functions: sacral and educational (classrooms and sports hall are on the first floor). The reconstruction works aiming at restoring the original from will begin shortly.

In the proximity of the Franciscan Temple there is the Cloister of Fatebenefratelli - “Podkarpie”. It was founded by Jan Jakub Zamoyski and built in years 1756-73. In 1784 the Fatebenefratelli shared the fate of Capuchin Poor Clares, Franciscans and Order of Friars Minor - the cloister was closed. The name “Podkarpie” comes from the name of the inn (“Pod Karpem” - “Karp” stands for carp) that used to located in the building. The cloister was situated in a south-eastern part of this four-winged and 1-stored edifice. The north-eastern part, that was built later is a 2-stores, rectangular facility with a basement, attic and courtyard in the middle. Currently it has both living and economical function.

The old Poor Clares Church is a small, 1-nave, Baroque church. Founded by Anna Zamoyska, wife of Marcin Zamoyski in 1696, designed by J.M. Link. It adjoins the big, 3-winged Cloister built in years 1769-1774 founded by the Seventh Entailer Jan Jakub Zamoyski. After the monastery was dissolved the building has been passed to Franciscans and then to Daughters of Charity. The Church’s function changed over the course of time: in 1817 is served as a military hospital, in the period between the wars as a police station, after the Second World War as a orphanage and nowadays the building houses the Karol Szymanowski National Music School of 1st and 2nd degree.

One of the most interesting elements of Zamość architecture are the market remains, which was constructed in the first phase of creating of the city. Today there are the cellars of Franciscan Church. The Market was called Morandowska due to the fact that its owner was at the same time the city constructor. It was a kind of inn for arriving merchants. It consisted of a two-stories house, stable and farm buildings. The name “gielda” (“guild”) derives from “gildia” meaning the association of rich merchants which had its headquarters in that building. The building was erected in 1598. In 1625 the Second Entailer Tomasz Zamoyski bought it, demolished the facilities and handed the ground to Franciscans for erection of the church.

There are a lot of facilities that served sanitary functions, i.a wells, canals and a cistern. The first mentions about wells in Zamość date back to year 1581. In 17th century the wells were located in the yard of Zamoyski Academy, on every market, Fatebenefratelli cloister, in the yard of Zamoyski Palace and Chancel of Franciscans Church. After dissolving of the fortress new wells appeared - on Great Market Square and Salt Square. The only preserved remains of former wells can still be found in the former prison building. It was a brick wall, 2 meters broad, 10.4 meters deep. It was built probably in 19th century with prison buildings in order to provide water for the arrestees. Here we can also find an underground tank for rainwater (cistern from the 17th century) with canals which might have been a part of vast system of water supply. It was particularly important for the city's hygiene and protection against fires. Stored water allowed frequent street cleaning (at that time the city lacked sufficient sewage system and the wastes were flooding the streets).

Old Town in Zamość also comprises buildings that were not included into the original city plan, for instance “Generałówka” - urban, neo-Renaissance Palace raised in years 1878-82, in line with Władysław Siennicki design, built for then-Chief of Zamość garrison. Currently the the building is in a very poor condition. In an adjacent tenement house Rosa Luxemburg was born. Another interesting building is called the “Central House” (“Centralka”) - tenement house built in 1911-12 with a Secession-styled elevation. It was the very first electrified building in Zamość. It stands out in the city panorama due to its considerable height.

From the description given above we can distinguish few spatial dominants which remained noticeable from the beginning of the city foundation. These are: Town Hall with its tower, The Cathedral (a former collegiate church), the Cathedral Bell Tower, slightly less visible Saint Catherine Church and invisible in the picture - Saint Nikolai Church. Former buildings: Palace Tower (non-existent), the top of Franciscans Church (considerably lowered and rebuilt in the 19th century; its reconstruction is planned), Armenian Church (non-existent).



Fig. 6 Aerial photo of Zamość 2011

2. Value Assessment of Zamość - Smart Value Methodology

Smart Value is a form of comprehensive analysis of historical value and method enabling precise indication of value carriers. It represents a comprehensive and systematic approach to monument's value analysis, including all points of described in *Operational Guidelines* obliging in protection of World Heritage sites.

The SMART Value analysis assumptions can be divided into two levels. Firstly, overall value of the historical site (without any indication for its protection) needs to be defined, within a defined benchmark group. The evaluation itself consists of comparing a certain monument to selected set of objects (chosen as a reference group on the basis of the established criteria). Thus established value is relevant, as it is performed only with limited comparative group. We treat selected features as values and selected sites as valuable (as far as chosen group and comparative criteria are concerned).

Secondly, the monument's value needs to be analyzed (evaluation of the value of individual elements, by defining the value's attributes). The main goal of this action is finding the value carriers (defined on the first level). The attributes might be material and intangible. The external comparative analysis is not required.

This part of monument's value analysis is particularly important when the interference in the monument is required, in order to determine which elements and to what extent need to be protected.

Taking all conditions mentioned above, the Smart Value Evaluation comprises:

Level 1:

1. Analysis and profile of chosen site which enable to specify the elements in regard to which comparative group will be selected
2. Selecting the comparative group (as a comparative reference)
3. Choosing the evaluation criteria - verification of the features that are crucial for the evaluation
4. Value evaluation (considering the criteria and comparative group)

Level 2:

1. Selecting the value's attributes
2. Evaluation of authenticity and integrity
3. Analysis of possible value change in case of modification of monument's elements
4. Formulation of guidelines for protection of particular site

Accordingly to the methodology described above, we present the analysis of Zamość Old Town in order to find the features which will determine the comparative group. Selected features are:

Analysis Range:	Whole Europe
Date of construction or significant redevelopment:	15 th -17 th century (first half of the 18 th century)
Function of the historical site :	City/ living
Architectural and urban form:	Deriving from the Renaissance (Renaissance concept of the ideal city)
“Material” Characterization of the historical site:	Brick buildings

Based on this characterization the comparative group, which would be a comparative context for Zamość Old Town was found. 20 cities were selected. 7 are currently inscribed on the UNESCO World Heritage List; these are: in Italy - Sabbioneta, Mantua, Pienza, Ferrara and Palmanova, in France - Neuf-Brisach and in Malta - La Valletta. Next two cities are in a comparative group for Palmanova: in Finland - Hamina and in the Netherlands - Coevorden (Coevarden e Naardan). Other cities, which meet the criteria of comparative group:

- Italy: Livorno, Gattinara, Terra del Sole, Grosso
- France: Vitry-le-Francois, Bergues, Charleville, Nancy
- Germany: Mannheim, Karlsruhe, Freudenstadt
- Croatia: Karlovac
- Netherlands: Bourtange
- Ukraine: Zhovkva, Stanyslaviv

Thanks to comparative analysis and precise criteria following conclusions can be drawn:

“Establishing date” criterion - Old Town in Zamość is probably the first (excluding Italy) implementation of “Renaissance ideal city” on such a scale and on of the first that was constructed from scratch

“Functions of the historical site” criterion - the most unique feature of Old Town in the implementation of Renaissance ideas not only in regard of the city architecture but also in regard of ideological program. As a result the city combined residential (including estate of Monarch), legislative, financial, educative, religious and cultural functions.

“The spatial arrangement” criterion - Old Town in Zamość was one of the few cities settled on previously unoccupied terrain, founded in “cruda radice” instead of rearranging the already existent urban structures, which is absolutely unique.

“Ideological program” criterion - the initial ideas are still visible in the urban composition of the city, which is not a common feature.

At this point of analysis following values of the historical site were identified:

Urban and architectural value:

- One of the few cities founded in “cruda radice” (on the “raw roots”) accordingly to the “Renaissance ideal city” concept.
- Military - an example of 16th century Fortress which has been modified according to the latest military knowledge and functioned until 19th century.

Symbolic value:

- City structure as a reflection of the ideological program of Renaissance ideal city. Zamość as the “Pearl of the Renaissance” and “Padua of the North”
- Zamość Fortress - was never captured in a battle by foreign troops (it was only captured by Polish troops) - reason to be proud

Historic value:

- The city witnessed the local history, changes of the country’s borders, development of science and culture, revolutions in religion

Social value:

- History of the city, life of Jan Zamoyski and Zamoyski family as a carrier of positive Renaissance social patterns in following areas: education, science, social coexistence and tolerance
- Cultivation of city’s tradition: military (combat reenactment) and educational (Zamoyski Academy - even after the changes of its function it is still present in public

life. New revitalization program will help to adjust the building to new cultural and educational roles.

Taking into account all the mentioned above values, the superior value has been defined as follows: Old Town in Zamość is an outstanding example of Renaissance humanism ideas and development of the knowledge in planning and designing military buildings.

On the other hand, in the context of the city's recognition as a Historic Monument - it was proved that the city has historical, spatial, architectural and intangible values of a Renaissance city and of an outstanding achievement of European architecture of 16th century as well as the fortification group reflecting the evolution of military architecture from 16th to 19th century.

Having defined the values of monument it was possible to find its attributes, that is value carriers. It would not be possible without deeper analysis which specifies the carriers and the values they represent. On the other hand, breaking up the attributes into smaller parts and the evaluation of their authenticity and integrity enables the precise indication of value carriers. Analyzed attributes are: urban structure of the Renaissance city of Zamość, the fortifications, city localization, city surroundings, architecture - including form, function, panorama, views, public space, small architecture, surface, archaeological objects and intangible values.

3. Conclusions and Guidelines Resulting from Smart Value Analysis

Based on Smart Value analysis, it is possible to define the attributes and evaluate their authenticity and integrity. It enables choosing the ones that determine the value of Old Town and therefore need to be preserved. The most important are the original and authentic elements as well as the ones that are essential for monument's integrity. City development and growing needs of its inhabitants should not have negative influence on the value attributes of historic city of Zamość. That is why, the values determine the actual extent of intervention works. Without these attributes Old Town in Zamość might lose its value.

Having regard to individual attributes and their specific elements it is recommended:

- Urban layout:
 - preservation of present infrastructure (streets and squares), including their course and sizes of currently existing buildings
 - preservation of compositional axes, including: their original course and avoiding interference with new elements
 - preservation of lucidity of the authentic city borders

- Fortification:
 - preservation and emphasis of relatively few authentic fortification elements
- Environment:
 - the environment development within the borders of the buffer zone should enable the preservation of the site's value (including panoramas and views). Therefore, the buildings (heights and sizes) should be adopted in order to assure the city panorama.
- Panoramas and views
 - preservation of at least already existing panoramas and viewing axes or if possible restoration of the original, historic ones (by removing modern elements hindering the access to panoramas and viewing axes or by recreating the non-existent elements). Adding new viewing dominants is irrational - it would reduce the lucidity and diminish the overall value of Old Town in Zamość.
- Existent buildings

Functions:

- preservation of the city parts that represent the historical functions. The buildings should at least with their form represent their historical functions. Nevertheless, forcing the former functions is both impossible and pointless.

Architectonic form:

- In general the architectonic form should not be changed, unless it is justified in terms of value sustain and the process would not reduce the authenticity. The size of the building should be considered equally with panoramas and views - possible adjustments should not interfere with already existent panoramas and views. New dominants should not be created in order not to divert attention from old ones (it would be hard to explain that new dominants represent functions and values of the Renaissance concept).
- Having in mind that one of the most characteristic feature of the Renaissance concept was the harmony and stylistic unity of the city. Therefore, the reconstructive and modernization works should stick to these ideas and do not cause unnecessary confusion.

Interior design and furnishing

- making available all the interiors with original design and furnishing (with special reference to mobile monuments which are currently not available for visitors).

Architectural and landscape interiors

- Preservation of elements of small architecture in their historical form but keeping them from dominating the common space (with their size, colors, form and used materials)
 - Preservation of parks in order to define the borders of the city and fortifications, spatial arrangement, panoramas and views
- Archaeological sites
 - Further research and work on monuments in Zamość is required as well as education and promotion of their function and value

4. Program of Permitted transformations and Protection of the Historic City of Zamość

Having regard to attributes presented above that need to be preserved it is possible to set possible and acceptable intervention's extent. It will include all activities that will not influence the value, that is will not have negative impact on these attributes that are necessary for preservation of the value. Every investment or change of use might be assessed on the basis of its influence on the value of individual attributes and the results decide if they fall within the scope of acceptable interventions and transformations. The catalog of acceptable interventions is open.

For instance, it is possible to introduce a new building in place of the non-existent historical buildings as a complement to modern urban structure as well as historical spatial arrangement. However, it is form, design, size and used materials of individual project that will decide if the building can be introduced. Naturally, new buildings should allow the identification of already existing values and attributes, mentioned in previous parts of this article. At the same time, it should match with historically developed spatial arrangement, correspond aesthetically with architecture, preserve panoramas and views with its size and have functions that will not diminish the values of historical city center. Furthermore, new buildings should not introduce new spatial dominants in order not to interfere with the historical ones that reflect the ideas behind the city design. Without a doubt every investment idea should be examined individually as they may vary greatly from each other.

New buildings were introduced in the postwar period. In year 1956 new tenement house on Rynek 5 was built replacing the old, demolished one from 1830 (center of the photograph, with yellow elevation and attics ornamentation). This building became an integral part of the local landscape which might not be case of planned investments on Zamenhofa/Bazylińska Street (even though the authors claim it to be a “ a modern interpretation of Renaissance”).

The most important recommendation is the evaluation of possible consequences of restoration works on value attributes within a larger context of the historical site. Hence, the impact on the overall value of Old Town in Zamość should be considered not only from the point of view of individual monument but also its environment, views and panoramas.

- It is necessary that each restoration, renovation or modernization work is preceded by research on its potential influence (depending on the range of planned works on particular monument or part of historical site). In order to preserve the integrity of historical site the range of works should be evaluated with great care.
- With regard to planned investment concerning the Palace it is necessary to give this project priority and conduct public consultations as far as its new function is concerned. Furthermore, it is recommended to pursue the detailed examination on the historical, architectural and archaeological aspects of the building before the planned investment. Due to the fact that the investment may considerably change the form and design of the building it is necessary to bear in mind that the authenticity is a very important element of its value.
- It is advisable to further investigate the issue with the aim of improving knowledge relating to dating of objects that experienced considerable changes over the ages.
- In case of finding unidentified areas (e.g. underground tunnels and parts of fortification, cellars or potentially existing internal walls' ornamentation) further research is advisable.

Summarizing the analyses made, it is also possible to formulate recommendations on the monument's utilization (adaptations, new functions, tourism)

- Evaluation of undertaken actions with regard on their potential influence on various functions represented by the city. All works should include the necessity of preservation of the historical site value and its attributes.
- Currently, Old Town in Zamość is adopted for residential, administrative, sacral, educative, commercial and service, cultural and touristic (including the tourist information office) functions.

- In order to preserve the value it is advisable to maintain various functions of historical sites (residential, administrative, sacral, educative, commercial and service, cultural and touristic) primarily for the inhabitants. Replacing the residential function with commercial and touristic function might lead to loss of the importance of individual buildings. One can say, that on this relatively small area we observe a full array of functions characteristic for properly-functioning urban centers, which in case of Zamość results from the Renaissance concept of the city.
- Introduction of new functions is possible as long as it will not interfere with the value of historical site. From economical point of view, it is reasonable to develop the tourism services (restaurants, pubs, hotels, museums etc.) - however, it should not result in disappearance of current functions or bringing out the inhabitants of Old Town in Zamość.

Francesco Salvestrini
Università degli Studi di Firenze

**Territory and cultural heritage
in a sample area of medieval Italy:
the Vallombrosan monasticism and the Casentino
between the 11th and 13th c.**



Fig. 1. View of the Casentino landscape (Solano Valley)

The Casentino is a sub-region of central Italy and one of the four main valleys of the province of Arezzo. It is located in north-eastern Tuscany, close to the Apennines, not far from Umbria and Romagna. The territory of which it is composed is largely hilly and mountainous, between about 200 and over 1,600 m. above sea level (Monte Falterona), and is largely covered by forests of beech, chestnut fir and holm oak, which give rise to tree associations in some cases centuries. Part of its surface is now occupied by the National Park of the Casentino Forests, a historical-naturalistic heritage protected by UNESCO (Fig. 1).

The area is characterized by a considerable density of human settlements of classical and medieval origin, home to a large number of cultural heritage. These are mainly made up of castles (i.e. fortified settlements), rural communities, parish churches (churches in care of souls), chapels and monasteries, all placed in a social and cultural context characterized by deep and dating interaction between nuclei of anthropization and the natural environment.

The levels of population of the territory in the late antique and medieval ages were deeply influenced, as far as the structure of the primary sector, the other productive activities, the road network, the cultural connotations and the religious orientations were concerned, by the presence of some monasteries of the Benedictine tradition. Particularly important on these lands was the spread, from the first century XI, of two religious Orders reformed intended to mark the regular life of the entire Italian peninsula, namely the Benedictine congregation Camaldolese and Vallombrosana. Of these monastic families, widely distributed in various regions of central and Po Valley Italy, in Rome and Sardinia, the two mother houses, ie the centers of irradiation (Camaldoli and Vallombrosa) arose, in fact, on the western and northern reliefs of Casentino and Pratomagno contermina (Fig. 2).

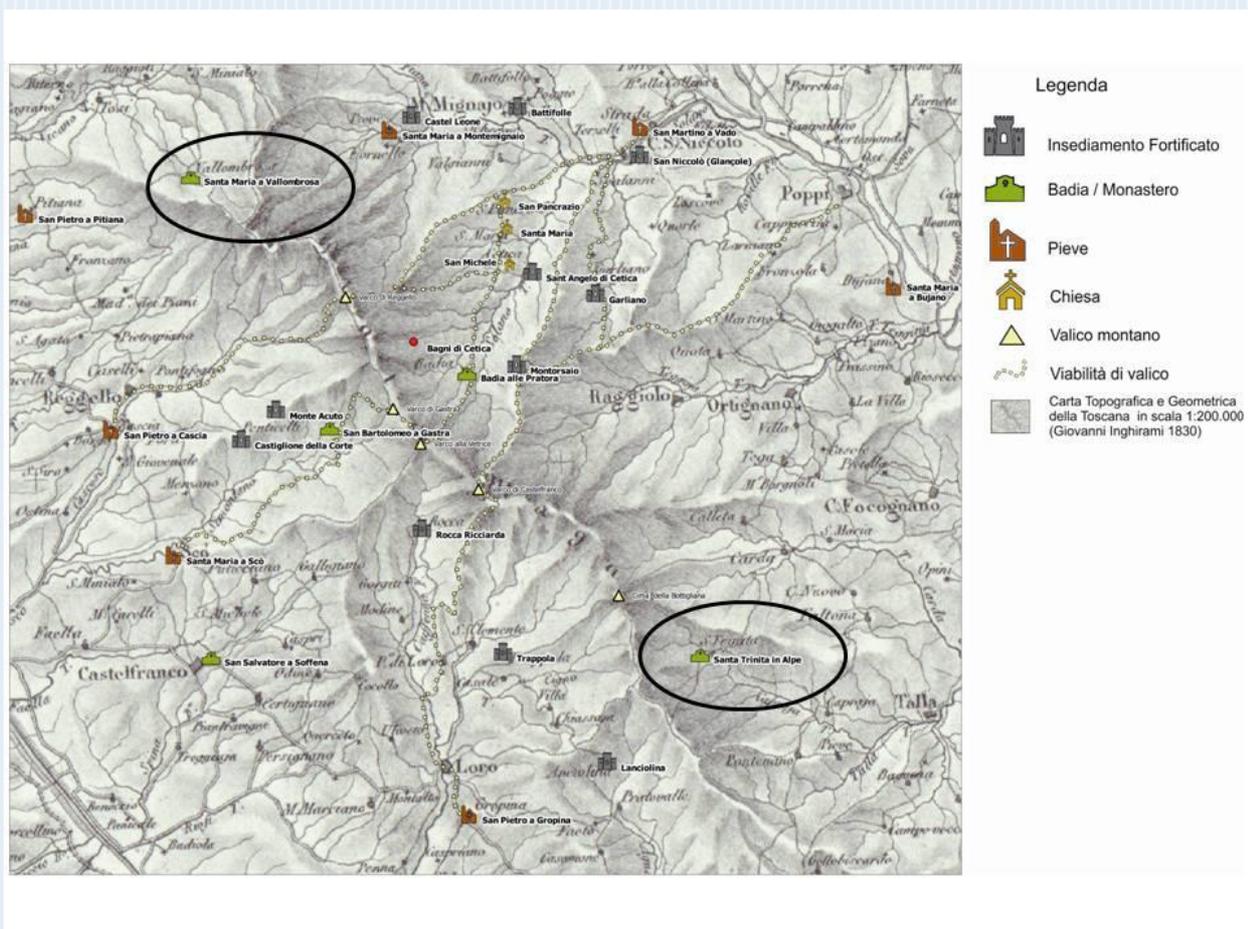


Fig. 2. Medieval settlement structure, between Casentino-Pratomagno. Location of the Monastery of Santa Maria a Vallombrosa and Santa Trinita in Alpe (elab. Annica Sahalin).

In the heart of the Casentino area, along the first large bend formed by the course of the river Arno, the settlements of the monks-heremites of Camaldoli were more widespread. However, if we consider the territory under examination in a broader sense, that is, including also the Pratomagno and the upper Valdarno upstream of Florence, and therefore the second bend of the largest Tuscan river, we can see how it is especially incisive the penetration of the cloisters affiliated to the obedience of Vallombrosa, on which in this place we will entertain more widely.

The reformed Benedictine order of Vallombrosa was originated by the monk Giovanni Gualberto (end of the X-1073 century). This character, perhaps coming from the small feudality of another Tuscan sub-region, that of Chianti, according to the hagiographic tradition took his vows at a young age against the will of his father, entering as professed in the prestigious bishop's monastery of San Miniato al Monte near Florence. Very soon he became the main point of reference for the monastic and ecclesiastical reform and the fight against the corruption of the clergy (represented above all by simony and nicolaism), and placed himself at the head of a small group of religious more faithful to him, he abandoned the cloister of his profession and gave birth to a new monastery called Vallis Ymbrosa (Rainy Valley) on the western edge of the Casentino territory (Fig. 3), animating a regular community that became an example and then institutional guide for dozens of other monastic foundations linked to it with the approval of the Apostolic See (Salvestrini 2008, pp. 9-11).



Fig. 3. Monastery of Vallombrosa (Municipality of Reggello-Florence). Overview of its architectural structure

In this communication we will examine the two main Vallombrosan foundations that insisted on the central area of Casentino and on the reliefs of Pratomagno, namely the Order's mother house (Vallombrosa, in fact) and the monastery of Santa Trinita in Alpe, presenting some characteristics to highlight their nature as historical-territorial goods, one of which still exists and in full operation (Vallombrosa), the other now reduced to a state of ruin, but subject to renewed archaeological, historical and tourist attention (Santa Trinita) (Fig. 4).



Fig. 4. Archaeological remains of the abbey of Santa Trinita in Alpe

As far as the monastery of Vallombrosa is concerned, we know that around 1037 its founder, fleeing from the monastery of San Miniato where a simonian abbot had been elected, arrived, together with a handful of followers and after a long peregrination, to the aforementioned Vallis Ymbrosa, a wooded and humid place at almost a thousand meters above sea level, where he found two hermits from the monastery of Settimo not far from Firenze. Here the young religious committed himself to the organization of a community governed by the principles of the Rule of St Benedict and with a strong emphasis on the choice of poverty (Salvestrini 1998, pp. 1-10).

As for the evolution of the abbey building, dedicated to the Virgin Mary, the hagiographic sources and the sporadic documentary evidence relating to the eleventh century speak of an original community of huts built on the land then granted to the monks by Itta (1039), abbess of the nearby monastery of St. Hilary in Alfiano, a cloister located on the right bank of the Arno linked to the stately consortium of the Counts Guidi. The original oratory officiated by the religious was a modest wooden building; and the bishop of Paderborn, legate of the emperor Corrado II (ca. 990-1039), who came to visit the community, could consecrate only the stone altar (Andreae Strumensis, p. 1086). There is sure news about

the presence of some masonry buildings only from 1058, when the first hagiographer of Giovanni Gualberto, Andrea di Strumi, remembers as Umberto di Silva Candida, cardinal reformer close to the positions of these protesting monks, "totum oratorium cum duobus altaribus consecravit".

The old canteen had not been demolished. Around it, however, had grown a larger hall, probably divided by a partition that separated the presbytery from the section reserved for the faithful (Vasaturo 1994, pp. 199-200). For this period we have only indirect evidence of the monastic complex. The fact that the customs of the Order, codified in the first century XII, contain in reference to the monks expressions such as: "ad sua vadant cubilia, in claustra revertentes, de calefactione, sonante horologi signum", suggests that these structures (cloister and dormitory, room for heating or calefactorium, clock with ringer) were already present in Vallombrosa. However, it should be noted that these texts referred to all the monasteries of the Vallombrosa family. Some indications could, therefore, have been taken from the endowments of the oldest and largest abbeys, such as San Michele Arcangelo in Passignano in Chianti, which entered into Vallombrosa obedience about one hundred and fifty years after its foundation, and it is not certain that all this also existed in the environments of Vallombrosa (Pirillo 2009).

During the thirteenth century, the usual practice of convening the general chapters of the Order at the parent company imposed to expand and make more appropriate the complex of its built spaces. It was Cardinal Ugolino d'Ostia, later elected pope with the name of Gregory IX, who in 1223 advised Abbot Benigno to build a larger church. Work began the following year and continued until 1230.

Epigraphic and documentary testimonies speak of the presence of a magister Petrus lombardus, superintendent of the building site. This confirms the use of qualified workers from northern Italy (Vasaturo 1994, p. 203). The Romanesque church then elevated was characterized by a Latin cross plan with a single nave, a protruding transept and semicircular apse, a conformation similar to that of other churches Vallombrosan (Moretti 1995). At the intersection of the nave with the transepts, a dome was set up, wrapped outside by an octagonal tiburium. The final structure of the bell tower had to be dated back to these years. The set of buildings, which had now assumed the appearance of a large monastery equipped with all the most typical spaces necessary for the life of a regular community, did not have to undergo major changes until the second half of the fifteenth century (Salvestrini 2011).

The landed patrimony of Vallombrosa only marginally affected the area of Casentino, since the religious preferred to extend their possessions towards the Valdarno and in the direction of Florence. However, the entire summit area of Pratomagno was affected by the presence of land linked to the great abbey, with particular reference to the mountain community of Montemignaio (Salvestrini 1998, pp. 53, 62, 112, 193, 241). It was precisely on these high ground areas that the monks concentrated a large part of their woodland area, which

reached such an extension that it was not easily controllable for them to re-survey. We find, in fact, that at the end of the fifteenth century - as reported in the Memorial of the Abbot General Biagio Milanese (such from 1480 to 1514; Salvestrini 2017) - he had committed himself to recovering many lands of the past belonging to the farm of Caliperti (Montemignai). The plots had been usurped by the settlers of the area, favored by the uncertainty of the borders and the fact that the monaci did not know the exact extent of their own estates.

The areas, mostly occupied by pastures and woodlands, were never significantly tilled. The monks preferred to keep the wood, mostly coppice governed, until it became one of the most important reserves of timber for construction both for the city of Florence, and - in modern times - for the construction of the port and shipyards of Livorno on the Tyrrhenian Sea (Salvestrini 2008, pp. 65-80, 129-148).

The second important abbey in the valley between Casentino and Pratomagno was Santa Trinita in Alpe a Fonte Benedetta (now in the municipality of Talla), a monastery dating back to the Ottonian era (10th century, Fatucchi 1997-98; Fatucchi 2011). The Romanesque church, as it still appears today, consists of a single hall, with a transept covered by a barrel vault and a large semicircular apse opened by a mullioned window. Of particular interest is the sandstone barrier that divided the church in the middle of the length of the nave. Under the presbytery is still visible a small room with two columns that is part of a crypt (Fig. 5).

The entrance of this cloister into the Vallombrosan Order was late and took place in a period - the first thirty years of the 15th century - particularly significant for the ancient Benedictine reform. In fact, during the period between the end of the Western Schism (election of Pope Martin V to the papal throne, dissolution of the Council of Constance, 1417-18) and the beginning of the long stay in Florence of Pope Eugene IV (approx. 1434-43), the monastic family headed by Vallombrosa, which had fallen considerably in terms of the number of religious and the number of houses that recognized themselves as congregated, experienced a fifteen-year period of relative pacification, as well as renewed internal cohesion, which we can see in some way symbolized by the new draft of the Life of the founder Giovanni Gualberto composed by Andrea da Genova in 1419 (Angelini 2011).

The Romanesque church, as it still appears today, consists of a single room, with a transept covered by a barrel vault and a large semicircular apse opened by a mullioned window. Of particular interest is the sandstone barrier that divided the church at the center of the nave. Under the presbytery is still visible a small room with two columns that was part of a crypt.



Fig. 5. View of the 16th century Vallombrosa Monastery

The passage of the ancient Casentino cenoby to Vallombrosan obedience was sanctioned by Pope Martin V. The latter with a bull dated 31 January 1426 (common style) joined this foundation to Vallombrosa along with its "limbs", ie the annexed churches and other dependencies. The act underlined, in a fairly stereotyped form, the decline of all these structures (*erant collapsa multipliciter et ad infimum statum deducta*), and enumerated, in particular, the dependent priories of San Donato in Alpe (San Donato Aretino), San Giorgio di Ganghereto, Sant'Andrea a Loro, San Donato in Vinca and a monastery of nuns in Terranova (Terranuova Bracciolini); without neglecting the *hospitalia, ecclesias, cappellas, oratoria, loca et membra suo ac omnia et singula bona mobilia et immobilia, iura et actiones*; not failing to specify the relative incomes, which amounted to a total of 1000 ducats of gold.

The pope declared that he had made this concession so that the monastery would be reformed and because in all the churches linked to it *divinus cultus ac regularis obser-vantia feliciter vigerent*. According to the document, the acquisition of the Holy Trinity was favoured by various circumstances. The cloister of Valle Benedetta was, in fact, linked to the Vallombrosan abbey of San Salvatore a Soffena, in Valdarno, whose community had perhaps been a tributary of that of the ancient Casentino monastery (Gaborit 1965, p. 183; Pincelli 2000, p. 80). In 1425 Pope Martin had given Santa Trinita to the prior of Soffena (Scarini 1985, p. 57). Perhaps it was he himself who pleaded for the cause of the annexation to the

Vallombrosian Order of a house - precisely the Holy Trinity - which in some way he considered already a sister of his own. In any case, with the acquisition of a new monastery in the diocese of Arezzo, the Vallombrosani came into possession of an ancient seat and a considerable network of dependencies that led them to act on both sides of the chain of Pratomagno (then more directly on the heart of Casentino) and to consolidate an already very strong influence on the religious life of local populations.

The monastery remained tied to Vallombrosian obedience until the nineteenth century, extending its landed heritage on the nearby hills of Monteacuto and Pontenano, as well as in the direction of the mountains of Loro and Mount Secchieta.

Between the 14th and 15th centuries, despite the demographic crisis and the transformation of the rural areas of Casentino, the ancient cloister still had a sufficient number of brethren, a patrimonial structure that was not completely compromised and the management of at least two welfare structures, among which was the Ponte di Arezzo hospital (Vasaturo 1994, p. 146). Still during the thirties of the seventeenth century, the time of the superior don Silvano di Giovanni Geri da Poppi, the rents appeared not to be negligible. In fact, in 1638 the institute housed almost 280 staias of wheat and other cereals and 18 staias of chestnuts, one of the most widespread products in the area.

Both Vallombrosa and Santa Trinita in Alpe (before and after its entry into the Vallombrosa family) acted as catalysts for economic activities and religious framework for a vast area around the course of the Arno. Not having to cope with a massive penetration of the mendicant Orders (especially the Friars Minor and Augustinian) into these sparsely populated lands far from the main cities, the two foundations remained among the most important points of reference for the devotion and social life of the local populations.

The great monastery of Vallombrosa has known a centuries-old settlement continuity, characterized by the presence of religious until the nineteenth century and its use as the seat of the Royal Institute of Forestry and Arboretums experimental Vallombrosa from 1869 to 1914 (Fig. 6).



Fig. 6. View of the Vallombrosa Monastery in the 18th century

During the seventies of the twentieth century and then on the occasion of the Jubilee of 2000, a comprehensive work of architectural restoration and decorative apparatus edited by the Superintendence of Environmental and Architectural Heritage of Florence has affected the entire abbey complex, which has been equipped with accommodation facilities to accommodate both the religious community (returned in possession of the structure, which however remained the property of the Italian state), and visitors, pilgrims and students of forestry sciences. The preservation of the building structures went hand in hand with the new use of the monumental environments, making the monastery an interesting case of interaction between the housing and liturgical functions of the monastic community and the use of some spaces for the stay and study of young people enrolled in the Department of Forestry Sciences of the University of Florence. In the sign of continuity between the religious community and the scientific community, therefore, the close relationship between man and the environment has always remained active, a relationship that has characterized the abbey throughout its long history.

Different but no less interesting was the story of the Abbey of Santa Trinita in Alpe, which, following some substantial changes in the local road layout during the modern age, was gradually abandoned during the seventeenth century and permanently at the beginning of the eighteenth. As a result of this choice made by the religious the building fell into neglect and was finally sold to private after the French suppression at the beginning of the nineteenth century. Today there are still some ruins that have deteriorated dramatically until 1969,

when the Superintendence for Environmental and Architectural Heritage of Arezzo has provided for a first restoration and consolidation of the surviving structures.

After a conference held in 2008 (The Abbey of Santa Trinita 2009) the site has aroused new interest and the remains of the walls have been included in some hiking trails that today are part of the activities of the Ecomuseo del Casentino. The growing attention of archaeologists and historians and local cultural institutions, who are also active in promoting a conscious tourism in the area, has fostered the preservation of the monument and the knowledge of it.

Reference bibliography

- L'abbazia di Santa Trinita 2009* = *Santa Trinita in Alpe monastero vallombrosano (secoli XV - XVII)*, in *L'abbazia di Santa Trinita in Alpe: storia, architettura, cultura*, «Annali Aretini», XVIII, 2011
- Andreae Strumensis = *Andreae Strumensis Vita s. Iohannis Gualberti* (BHL 4397), edidit F. Baethgen, in *MGH, Scriptores*, XXX/2, Lipsiæ, 1934, rist. anast. Stuttgart, 1976, pp. 1076-1104.
- Angelini 2011 = R. Angelini, *La «Vita sancti Iohannis Gualberti» di Andrea da Genova* (BHL 4402), Firenze, 2011.
- Fatucchi 1997-98 = A. Fatucchi, *Sulle origini dell'Abbazia di Santa Trinita in Alpe*, «Atti e Memorie dell'Accademia Petrarca di Lettere, Arti e Scienze», n.s. LIX-LX, 1997-98, pp. 559-580.
- Fatucchi 2011 = A. Fatucchi, *L'Abbazia di Santa Trinita in Alpe: storia, architettura e cultura*, «Annali Aretini», 18, 2011.
- Gaborit 1965 = M. J.-R. Gaborit, *Les plus anciens monastères de l'ordre de Vallombreuse (1037-1115). Étude archéologique*, «Mélanges d'Archéologie et d'Histoire, École Française de Rome», LXXVI, 1964, 2, pp. 451-490; LXXVII, 1965, pp. 179-208.
- Moretti 1995 = I. Moretti, *L'architettura vallombrosana delle origini*, in *I vallombrosani nella società italiana dei secoli XI e XII*, a cura di G. Monzio Compagnoni, Vallombrosa, 1995, pp. 239-257
- Pincelli 2000 = A. Pincelli, *Monasteri e Conventi del territorio aretino*, Firenze, 2000.
- Pirillo 2009 = *Passignano in Val di Pesa. Un monastero e la sua storia*, I. *Una signoria sulle anime, sugli uomini, sulle comunità (dalle origini al sec. XIV)*, a cura di P. Pirillo, Firenze, 2009.
- Salvestrini 1998 = F. Salvestrini, *Santa Maria di Vallombrosa. Patrimonio e vita economica di un grande monastero medievale*, Firenze, Olschki, 1998.
- Salvestrini 2008 = *Disciplina caritatis. Il monachesimo vallombrosano tra medioevo e prima età moderna*, Roma, 2008.
- Salvestrini 2011 = F. Salvestrini, *Eremitismo – cenobitismo. La realtà di Santa Maria di Vallombrosa in età medievale*, in *Architettura eremitica. Sistemi progettuali e paesaggi culturali*, a cura di S. Bertocci, S. Parrinello, Firenze, 2011, pp. 33-39.
- Salvestrini 2017 = F. Salvestrini, *Il carisma della magnificenza. L'abate vallombrosano Biagio Milanese e la tradizione benedettina nell'Italia del Rinascimento*, Roma, 2017.
- Scarini 1985 = A. Scarini, *Pievi romanche del Valdarno Superiore*, Cortona, 1985.
- Vasaturo 1994 = N. Vasaturo, *Vallombrosa. L'abbazia e la Congregazione. Note storiche*, a cura di G. Monzio Compagnoni, Vallombrosa, 1994.

From Light Archaeology to Public Archaeology.

**Between research, scientific communication and social sharing,
in the Casentino dei Conti Guidi.**

The 'Bridge in Time': a case study

I. Middle Ages, Casentino, Structures.

As part of the collaboration in Casentino (AR) between the Chair of Medieval Archaeology of the University of Florence and the Ecomuseo del Casentino (Union of Mountain Municipalities of Casentino - CRED service), the project "Il ponte del tempo. Medieval cultural landscapes", which had as its methodological experimental substance the combination of light archaeology and public archaeology and, as an object of study, the material development in the territory of the seignior of the Counts Guidi between the eleventh and fourteenth centuries. The reading of the historical landscape of the Solano valley, which in its development has been strongly characterized by the close relationship between people, environment and exploitation of natural resources over time, has been intertwined with the memory and recovery of the memory of the material and immaterial references of the current inhabitants of the territory and their direct involvement in the planned activities (Figs. 16-17 and 19, 21 and 22).

The restoration and safety of the ancient bridge of Cetica (Municipality of Castel San Niccolò, AR), a particularly dear artifact to the community, seriously compromised and at risk of collapse, was an opportunity to develop an integrated research and development program, centered on the 'territorial system' represented by the bridge, from the mill and the Castle of Sant'Angelo, significant from the point of view of medieval history, as it preserves the archaeological evidence relating to important historiographical issues, such as the relationship between the owners of the castles, the Guidi, the historical road network and between these and the production structures of the territory. The project also aimed to study the 'material' aspects of the territory that from the Middle Ages to the present day, mark the landscape of the Solano Valley (Figs. 16-17 and 19, 21 and 22). The recovery of the historical spaces has taken place through the study of the territorial structures and of the manufactured articles of daily use recognized as 'significant' by the community, investigated with the methodologies of the light archaeology (that integrates to the archaeology system of the elevated and landscape archaeology on ap-posita archaeological base with targeted interventions of stratigraphic excavation) integrated to those of the public

archaeology (see above §3). The peculiarity of the project was therefore the way in which the forms of feudal settlement were studied in a concrete territorial case, the historical vicissitudes of the Signoria dei Guidi, with the value of a case-study representing widespread realities, combined with a dimension also cultivated in experimental forms of models between communication and indications of governance of the results of the research (such as the innovative methodologies adopted) tested as 'public archaeology' procedures and consolidated here (see §1.2).

2. Heritage, Participation.

Such cultural planning must have an overall vision of the territory and archaeology here is to be considered a resource for the knowledge of the environment in which we live, for its development and, at the same time, is an active component of the contemporary landscape. In other words, it is strategic to pay scientific and professional attention to the relationship between the products of research and the use of a selection of these. In order to do this, dialogue with local communities is fundamental, so that there is a recognition of value that constitutes the propellant capable of guaranteeing, over the long term, the conservation and protection of a Heritage that is perceived as its own and as a talent to be passed on, enhanced, to subsequent generations. It is one of the tasks of public archaeology, to anchor the cultural good in a way we could say consubstantial to public enjoyment (Fig. 1).



Fig. 1. The community and the system of Sant'Angelo a Cetica: the bridge, the mill and the castle

The fundamental element that guided the development of the project was the participatory component of the people who live in the area. The local community, already protagonist in the definition of a 'Community Map'⁷⁹ of the Upper Solano Valley, was also involved in the identification of a series of 'widespread worksites'⁸⁰ of the territory in order to recover, enhance and make known some material evidence that, together with the bridge of Sant'Angelo, would identify a network of references to identity, but also of emergencies of tourist and cultural interest (Fig. 2). Restoration of chapels, springs, washhouses, sections of pavement, reopening of ancient paths, are some of the sites completed that have made it possible to make known and recover small, but significant structures of the local heritage (Fig. 3) (Molducci 2019).



Fig. 2. Participatory route and Community map of the Solano Valley. The arrows indicate the 'widespread sites'.

⁷⁹ The Community Map is a tool with which the inhabitants of a given place have the opportunity to represent the heritage, the landscape, the knowledge in which they recognize themselves and want to pass on to the new generations. It highlights the way in which the local community sees, perceives, attributes value to its territory, to its memories, to its transformations, to its present reality and to how it would like it to be in the future. A new concept of territory is concretely explained, which is not only the place where people live and work, but which also preserves the history of the people who lived and transformed it in the past, the signs that have characterized it over time (Rossi, Mugnai 2015, 117-119; on the Community Maps see also <http://www.mappadicomunita.it/>).

⁸⁰ That is to say, sites for the recovery, restoration and enhancement of the widespread heritage of tourist and cultural interest, of small monuments that are configured as an identity reference of the individual nuclei that make up the scattered village, typical of this area of Pratomagno. The 'widespread worksites' organized in agreement with the public administration, have provided, during the work the presence of archaeologists, interested persons and volunteers from the local community who have assisted in the construction work carried out in different ways (municipal workers or with a call for tenders).



Fig. 3. 'Widespread worksites', for the recovery, restoration and enhancement of the territorially diffused heritage of tourist-cultural interest, carried out by small 'mixed' teams of specialists with the active participation of members of the local communities

The community has been involved in the knowledge of the results of the research in which it has been active through targeted communication interventions, involvement in specific archaeological activities and educational programs aimed at families, but especially at schools in the area still in progress. In this way, the meanings assumed socially and locally by the heritage have initiated processes of active conservation. The artifacts thus studied and discovered, in turn, refer to a knowledge and technical expertise characteristic of the area since the Middle Ages: the working of stone. This activity is still one of the main aspects of local economic development and is documented at the Museo della Pietra Lavorata di Strada in Casentino and at the educational information centre at the foot of the castle of S. Niccolò (Molducci, Rossi 2015; Bargiacchi et al. 2015; Vannini, Molducci 2009), opened thanks to the research carried out and to be considered important results of the project and which mark the territory (Fig. 4).



Fig. 4. Museum of worked stone - Interpretation Centre Ecomuseum of stone Castel San Niccolò-Strada. Educational and communication activities

3. Community Map.

Originally, the 'system', consisting of the Guidi, of the bridge, mill and castle of Sant'Angelo has strongly influenced the formation and perception of the landscape over time and has been reported by the population in the 'Community Map' as a 'significant' element of the territory of primary importance and at the same time has activated participation and widespread involvement in the process of historical knowledge of the territory.

A conceptual approach of this kind is well connected to light archaeology and to the main object of its research: the territory in its cultural and historical evolution. If in fact "the territory is the great accumulator of what remains of the activities carried out by man since time immemorial. It is a museum of cultural evolution" (Mannoni et al. 2001) and is known through the archaeological study of the relationship between people and the environment in ancient times and the relationships between people and the people in the context in which they lived (Barker 1986), with public archaeology the population compares and acquires the awareness that the territory, whatever it is, contains a widespread patrimony, rich in details and especially a dense network of relationships and interrelationships between the many elements that distinguish it, a set of invisible relationships between these elements (Bodei 2009). In the process of approaching the knowledge of things, but also in the course of their effective material construction, both individuals and society project affections and symbolic values. In fact, to different extents and with different degrees of awareness, each human

being pours loads of meaning on certain things, incorporating them into his own value horizon⁸¹.

This is the case of the Community Map of the Upper Solano Valley, the first example in Italy of a Community Map integrated with archaeological methods. The operational meetings were carried out by a working group composed of different types of inhabitants (young, old, old and new residents) which represented the central element of the whole process. The members of the group guaranteed the collection of information, but also acted as 'facilitators' with respect to the rest of the community, as well as carrying out the fundamental action of interpretation. The cultural boundaries that coincided here with that of the 'peoples' around whom the inhabitants were organised during the Middle Ages were highlighted. Through questionnaires, meetings in the hamlets and collective returns, a microcosm has re-emerged, made up of a close relationship with local resources (water and forest in the first place), migrations, occasions for festivities and meetings, and rituals. An important place, in this regard, has been given to the bridge of Sant'Angelo, the castle and the mill, but also to a series of minor testimonies (chapels, washhouses, springs, stretches of ancient roads) spread throughout the territory. The complex stratigraphic vision of the territory and its culture, together with the structural permanence of certain stretches, give us an image of great depth and richness of the places we live. And it is here that the community map is strongly intertwined with archaeology (Maggi 2009). The actual result and value of the map also consists in the actual use it will have within the context that produced it (Molducci 2019).

It is in fact on the result of the Community Map that a research program of light and public archaeology was set up, which included stratigraphic analyses of the elevations at the mill and at the propaedeutic bridge and in close relation with the restoration, territorial archaeology investigations that had as their object widespread emergencies in the context of the Solano Valley, while targeted excavation interventions were carried out in the castle of Sant'Angelo. A fundamental role in the identification of historical sites and their placement in the background of the landscape were the oral sources, narratives and stories of the inhabitants of the territory.

⁸¹ The transubstantiation of Objects into Things - cause, that is what we consider so important and involving as to mobilize us in its defense - implies the sedimentation of a plurality of senses, meanings and symbols ranging from the knowledge of the origins of the Things themselves, to their different uses in time and space, to the affections and thoughts that may have produced. The investigation of these aspects allows a generation to share the historical era of those who preceded it. Things are born and die, enter and leave our space-time horizon (Bodei 2009, p. 12).

4. 'Widespread worksites'.

One of the fundamental aspects that has developed is the relationship between research and local authorities - also through a dense network of agreements between the many public, private, local, central authorities progressively involved - in the management of the territory for the enhancement of cultural heritage in favor of local communities residents. On the basis of the types of investigation, analysis of archaeology of historical buildings on the structures of the mill and archaeology of the territory in the context of reference, centered on the three emergencies characterizing the 'Cetica system', roads, mills, castles, but in particular with the 'widespread construction sites', a fundamental collaboration has been established with the people who live in the area and know in depth aspects of everyday life in a historical and anthropological key through the involvement of voluntary associations and / or individual citizens concerned moved by interest in our work and the small monuments of their territory.

In parallel to the 'light' surveys, in order to reconstruct the historical and landscape context, the 'widespread sites' were experimented; common spaces for work, living together, moving (washhouses, boundary stones, paved) that for the individual hamlets of the upper course of the Solano play a function of self-representation of the population and sharing. The settlement character of the valley is constituted since the comital domination by small towns or scattered houses that are organized, over time, in particular for the exploitation of territorial resources. Among the various actors involved, the archaeologists have started the procedures for the supervision and documentation of the works and to direct the phase of restoration. The sites were open, with an activity of communication and teaching (to make known the procedures of archaeological documentation and tell the historical and cultural value of the artifacts).

In summary, the widespread sites have followed three methods of implementation:

- archaeological reconnaissance surveys integrated with didactic actions carried out by the university in collaboration with some inhabitants of the area;
- contract by the local authority, preceded by archaeological and communication surveys, to professionals for the recovery and conservative restoration of specific architectural works (for example, the chapels in La Porta and Barbiano, stone washhouses still in use by Valgianni and Le Lastre);
- operations of identification, cleaning and reopening of sections of ancient paths connecting with the villages, carried out in close collaboration between researchers, students and residents.

Finally, with the participation of the community, a series of panels was set up specifically dedicated to the various interested places in the area to indicate the interventions carried out and to disseminate information of a historical-territorial nature. All this confirmed the value of the 'small work' for the inhabitants and allowed to create more references for a guide (later on paper) for visitors from outside.

5. Ecomuseum, interaction.

In the last phases of the project, the activities carried out were directed towards the creation of the Museum of the worked stone. Interpretation Centre Ecomuseum of the Castel San Niccolò-Strada stone, which aims to study, document, interpret and pass on the varied heritage linked to the stone, in its material and immaterial components, present in the Solano valley and in Casentino in general, always on a broad territorial basis investigated with the 'light' approaches and 'public' forms of archaeology (for example through the recovery of 'non-expert' knowledge present in the territory through participatory methods for the definition of a community map). In complementary relationship with the museum, in the village below the castle of San Niccolò, there is also the "Centro Informativo Il Ponte del Tempo", former ecomuseum of the Castle Civilization, which hosts didactic-informative cards dedicated to the interventions made, as well as models and information panels. There are also a series of tools and stations to experience live the traditional chiselling of stone and be involved in order to learn, through the direct use of hands, techniques and tools at the origin of the same artifacts. In addition to this, there are specific workshops for the explanation of the realization of works such as the dry stone walls, the bridge and the castle (Molducci 2019, Bargiacchi et alii 2015).

The musealization described above is one of the main results. Next to it, tourist-territorial routes have been identified for the knowledge of the Solano Valley and the scientific publication of the results of the research. On the one hand, the research activity on the territory continues with the direct involvement of interested people and on the other hand, in collaboration with the Ecomuseum, territorial animations have been activated with themed workshops on stone, play and the promotion of knowledge of medieval culture (medieval dinner philologically correct). Periodic visits of archaeologists and environmental guides have been activated on the territory. The dissemination of the results of the archaeological survey of a territory, passing through the practical activity and the close relationship between research and teaching in schools was one of the special features of the project, which gave rise to thematic educational paths for schools and families, from the museum and the territory, included in the wider offer of CRED - Ecomuseo del Casentino in collaboration with the Spin-off Archaeological Laboratories St. Gallen.

6. Culture, Sharing.

One of the main results of the research was the recognition of the structuring of a valley economic system built by the Counts during the Middle Ages using water resources, with the construction of factories, the forest system and the one relating to the extraction and processing of stone. One of the main effects of the research could be to be able to support the stonemason's profession in the future and contribute to its conservation and qualification through the establishment of a specific school (Fig. 8). Vocational orientation and training can

certainly help to invert certain cultural schemes, even if they are increasingly obsolete, which would like to relegate the stonemason to a past that is no longer reproducible. In reality, the figure of the stonemason is very modern, just think of the construction sites related to the conservation and restoration of the huge architectural heritage and not local, which require more and more specialized and competent figures. The themes of confrontation and exchange with the world of design and art are undoubtedly themes to be explored also to get out of decorative and formal schemes that risk becoming obsolete. Respect, reciprocity and the will to get involved must, however, be able to materialize in effectively motivated subjects (Bargiacchi et alii 2015, Molducci, Rossi 2015, Molducci 2019).

This is perhaps one of the main results of the project, which was born with a view to sharing and enhancing research, the assumption that public archaeology corresponds, therefore, to a social responsibility of archaeology, in assuming a role that is not limited to study and research, but meets the needs of cultural growth and socio-economic development of a society.



Fig. 8. Stonecutters of Strada in Casentino. Section Museum of the worked stone. Activities, tools, works and history of the families dedicated to this: the Rialti, the Colozzi, the Carletti. Didactics with scapellini.

Bibliography

Bargiacchi 2009 = R. Bargiacchi, *I castelli dei conti Guidi in Casentino. Storia di un contesto archeologico*, in Cannacini 2009, 211-244

Bargiacchi et alii 2015 = R. Bargiacchi, A. Rossi, S. Mugnai, *Dalle cave agli scalpellini: le radici e il rilancio di un saper fare*, in Molducci, Rossi 2015, 145-149

Bianchi 2003 = G. Bianchi *Archeologia dell'architettura nei castelli della Toscana sud-occidentale (Val di Cornia-Bassa Val di Cecina. Secc. IX-XII)*, in SAMI, 2003, pp.567-575

Brogiolo, Cagnana 2012 = G.P. Brogiolo, A. Cagnana, *Archeologia dell'architettura-metodi e interpretazioni*, Firenze 2012

Cannacini 2009 = F. Cannacini (a cura di), *La lunga storia di una stirpe comitale. I conti Guidi tra Romagna e Toscana*, Atti del Convegno di studi (Modigliana-Poppi 2003), Firenze 2009

Manacorda 2014 = D. Manacorda, *L'Italia agli Italiani. Istruzioni e ostruzioni per il patrimonio culturale*, Bari 2014. Manacorda 2017 = D. Manacorda, *A proposito dei 40 anni di «Archeologia medievale» in Italia*, «Reti Medievali Rivista», 18(1), 3-12

Mannoni et alii 2001 = T. Mannoni, F. Bandini, S. Valeriani, *Dall'archeologia globale del territorio alla Carta archeologica numerica*, in R. Francovich, M. Pasquinucci, A. Pellicanò (a cura di), *La Carta Archeologica fra ricerca e pianificazione territoriale*, Atti del Seminario di Studi, Firenze 2001, 43-48

Molducci, Rossi 2015 = C. Molducci, A. Rossi (a cura di), *Il Ponte nel tempo: paesaggi culturali medievali*, Pratovecchio Stia 2015

Molducci, Bargiacchi 2015 = C. Molducci, R. Bargiacchi, *Una sperimentazione di archeologia pubblica: i cantieri diffusi*, in Molducci, Rossi 2015, 133-138

Molducci 2015 = C. Molducci, *Il sistema storico-paesaggistico di Sant'Angelo a Cetica*, in Molducci, Rossi 2015, 71-78

Molducci, Marcotulli, Bargiacchi 2015 = C. Molducci, C. Marcotulli, R. Bargiacchi, *Il ponte nel tempo, paesaggi medievali: dall'archeologia leggera a quella pubblica*, in Molducci, Rossi 2015, 13-18

Molducci 2019 = C. Molducci, *«Il Ponte del tempo. Paesaggi culturali medievali». Un progetto di archeologia pubblica e di comunità*, in Megale (a cura di), *Costruire il passato il Etruria. Il senso dell'archeologia nella società contemporanea*, Pisa 2019, pp.45-55

Niccolucci et alii 2000 = Niccolucci F. et alii, *PETRA: un sistema integrato per la gestione dei dati archeologici*, in 'Archeologia computazionale'. I Workshop Nazionale (Napoli-Firenze, 1999), "Archeologia e Calcolatori", 11/2000, pp. 49-67

Nucciotti 2016 = M. Nucciotti, *Una musealizzazione interattiva «unplugged»: archeologia pubblica alla rocca aldobrandesca di Arcidosso*, in A.M. Jasink, G. Dionisio (a cura di), *MUSINT 2. Nuove esperienze di ricerca e didattica nella museologia interattiva*, Firenze 2016, 85-100

Rauty 2003 = N. Rauty, *Documenti per la storia dei conti Guidi in Toscana. Le origini e i primi secoli. 887-1164*, Firenze, 2003

Rossi 2006 = A. Rossi, *Il Casentino, l'Ecomuseo della Vallata. Il paesaggio come strumento di comunicazione, partecipazione e di propagazione diretta di attività economiche, scientifiche e culturali*, in *Rural Med II. I Paesaggi della Ruralità Contemporeana, Atelier dei Paesaggi Mediterranei*, Pisa 2006

Rossi 2011 = A. Rossi, *La pratica partecipativa negli ecomusei italiani. Aspetti, strumenti e potenzialità*, in S. Vesco (a cura di), *Gli Ecomusei. La cultura locale come strumento di sviluppo*, Pistoia 2011, 105-123

Rossi 2012 = A. Rossi, *Da Nord a Sud della Valle. Un viaggio alla scoperta dei protagonisti, delle iniziative e delle progettualità dell'Ecomuseo del Casentino*, in L. Rombai, R. Stopani (a cura di), *Il Casentino. Territorio, storia e viaggi*, Firenze 2012, pagine?

Rossi 2015 = A. Rossi, *La comunicazione del patrimonio culturale: l'Ecomuseo e le sue articolazioni territoriali della valle del Solano. Tra memoria e futuro*, in Molducci, Rossi 2015, 151-164

Rossi, Mugnai 2007 = A. Rossi, S. Mugnai, *L'Ecomuseo del Casentino*, in D. Muscò (a cura di), *L'ecomuseo tra valori del territorio e patrimonio ambientale*, Siena 2007, 51-72

Rossi, Mugnai 2015 = A. Rossi, S. Mugnai, *Dalla memoria collettiva del paesaggio ai percorsi partecipati per la tutela e la valorizzazione del patrimonio*, in Molducci, Rossi 2015, 117-122

Vannini 2001 = G. Vannini (a cura di), *Fortuna e declino di una società feudale valdarnese. Il Poggio della Regina*, Firenze 2001

Vannini 2002 = G. Vannini, *Il Castello dei Guidi a Poggio della Regina e la curia del Castiglione. Archeologia di una società feudale appenninica*, G. Vannini (a cura di), *Fortuna e declino di una società feudale valdagnese. Il Poggio della regina*, Firenze 2002, 3-56

Vannini, Molducci 2009 = G. Vannini, C. Molducci, *I castelli dei Guidi fra Romagna e Toscana: i casi di Modigliana e Rome- na. Un progetto di archeologia territoriale*, in Canaccini 2009, 177-204

Vannini 2011 = G. Vannini *Università e società, ricerca e sviluppo. Verso un'Archeologia Pubblica in Toscana*, in G. Vannini (a cura di), *Archeologia Pubblica in Toscana*, Firenze 2011, 25-34

Vannini et alii 2012 = G. Vannini, C. Molducci, R. Bargiacchi, C. Marcotulli, *Castel San Niccolò (Ar). Castello di Sant'Angelo di Cetica: le indagini del 2010-2011*, *Notiziario della Soprintendenza per i Beni Archeologici della Toscana* 7/2011 [2012], 258-261

Vannini 2016 = G. Vannini, *Esperienze di Archeologia Pubblica in Giordania. Sulle tracce di una identità territoriale nel Medi- terraneo medievale*, in A. Chavarría Arnau, M. Jurko (a cura di), *Alla ricerca di un passato complesso. Contributi in onore di Gian Pietro Brogiolo per il suo settantesimo compleanno*, Zagreb 2016, 359-370

Vannini 2018 = G. Vannini, *For a conservation of the archaeological documentation*, in 'Animos labor nutrit', *Studia oferowane Profesorowi Andrzejowi Buko w siedemdziesiątą rocznicę urodzin*, Pod redakcją T. Nowakiewicza, M. Trzeciackiego, D. Błaszcyka, Warszawa, IAEPAN 2018, pp. 53-58

Volpe 2015 = G. Volpe, *Patrimonio al futuro. Un manifesto per i beni culturali e il paesaggio*, Milano 2015

Volpe 2016 = G. Volpe, *Un patrimonio italiano. Beni culturali, paesaggio e cittadini*, Novara 2016.

Nikolas Patsavos
Associate Professor of Architecture
University of Ioannina

Aspra Spitia, Boeotia, Central Greece: A Historical Urban Landscape Protection in Quest of a New Framework

The case study presented represents an interesting case, currently under discussion in order to be listed as a Cultural Landscape in Greece. The issues raised may be viewed also as a possible contribution to the overall theoretical and methodological, as well as institutional challenges characterising the introduction of the notion of “cultural landscapes” in face of the global priorities regarding sustainable development. Asrpa Spitia are listed in do.co.mo.mo international documentation fiches as one of the most exceptional industrial heritage modern heritage assets in Europe and Greece.

do _ co _ mo _ mo _

Minimum Documentation Fiche 2003

International working party for
documentation and conservation

of buildings, sites and neighbourhoods of the
modern movement

composed by national/regional working party of: Greece

0.1 Picture of building/site



depicted item: Aspra Spitia

source: Doxiadis Associates, “Aspra Spitia”, in *Architektoniki* 53, September-October 1965.

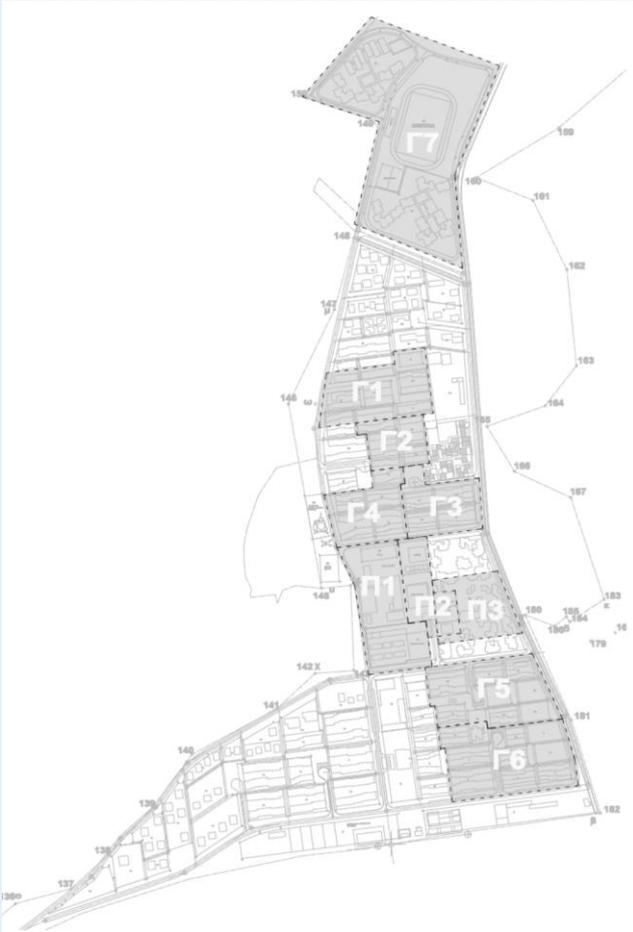
date: 1965

Aspra Spitia, Doxiadis' only European example of complete realisation of his ekistic theory, was originally planned and constructed between 1961 and 1964 for French aluminium company Pechiney and its Greek subsidiary Aluminium of Greece (AoG) at Distomitika, Boeotia, Greece. The settlement is a paradigmatic application of Doxiadis' anthropocentric attempt to revive the ancient Greek city in the context of radical critique to modern planning and architecture and the challenges of the future (Doxiadis, 1975).



General View of Aspra Spitia to the South seaside, View of the Settlement to the North Valley.
Ctrl_Space Lab archive, Photographer Drapaniotis Sofianos.

It was designed for a projected population of 5000, proposing 1100 dwellings for recruited aluminium plant workers, engineers and administrative staff. After the initial design and construction supervision by Doxiadis Associates (DA), two expansions-modifications followed. Architects Lebessis, Fotiades and Massourides worked on public space plans and dwellings designs. Doxiadis' invisible geometry, expressed with formal and material simplification, aimed to an unplanned organic settlement result and to activate familiarization actions through ephemeral structures on facades (DA, 1966). Thus, the dwelling districts would disrupt the sense of continuation of working in a mechanised factory, as typically experienced in uniform industrial settlements of the era. In contrast, the expansions introduced modern high-rise buildings drawing from and cultivating the Athenian suburban lifestyle.



It is not true that Aspra Spitia have not been developed at all throughout the fifty years following their construction. As also mentioned in the following section of this paper, architects Lebessis, Fotiades and Massourides have worked on two extensions-modifications of part of the settlement's ekistic units as well as its public space. Their work, symbolised by the emblematic residences Tower (hardly enjoying any relevance with Doxiadis' argument against high rise buildings though) have been emphatic in their attempt to provide Aspra Spitia residents, especially those in the higher ranks of the company, with a more appealing architectural profile clearly displaying their status in the public sphere in accordance to the latest housing complexes of the fashionable Athenian suburbs. Other minor interventions have been the field of the company's and the

residents' continuous care for the settlement, including an open competition among the residents for the redesigning of the park adjacent to the central square and the development of the coastal frontline as a leisure space open to the wider public.

At any case, the settlement and the factory it serves should be viewed as an interplaying assemblage, where both operate in conjunction, while also preserving their singularity. The settlement today is not fully occupied, while the adjacent aluminium factory owned by Mytilineos Group (MG) still operates. The concession agreement between the Greek Government and Pechiney specifies that the settlement's land may only be used for the purposes of the factory, excluding tourism and other irrelevant functions. The current condition calls for a redevelopment of the settlement's

Throughout the first decades of their 'life' especially, Aspra Spitia have been the conflictual ground expressing the local antagonisms between the western like and ultra-modern workers, engineers and administrative staff of Pechiney, originating from many other places apart from Boeotia, including France and Egyptian Greeks fleeing Cairo and Alexandria after Nasser's nationalisations. On the other hand, the late developments in the global market of aluminium and the technology applied, the fact that many of the company's staff in our days come from second or third generation people who have constructed their own private

houses around Aspra Spitia and the general rise on the aluminium industry know-how of the locals, a far smaller fraction of their original size is now being used.



What is currently needed is an urgent new concept relying on the inherent dynamics of the settlement which, in line with the contemporary context -the challenges and the opportunities it presents us with- will allow the further positive evolution of what now seems to exist more as managerial burden and less as a key asset for a new development strategy. Aspra Spitia, a modern monument of a creative active speculation on the future of our mechanised society, calls for a new codification of its logical structure custom-built on its intrinsic anthropocentric model and in direct contact with "the problems of the present".

Following the first fifty years of their systemic evolution, Aspra Spitia and AoG are now facing a series of challenges: a) The company, having lost its initial connection with Pechiney and due to its relatively small size and impact factor, is facing the risk of isolation, b) Technological, environmental and social concerns have been seriously negotiating the settlement's future sustainability, c) Deindustrialisation in the western world raises the question of a new industrial paradigm, allowing vertical and horizontal integrated development. Therefore Aspra Spitia are at risk of becoming an obsolete and unmanageable monument of 20th century industrial heritage. Their possible introduction in the context of cultural landscapes and historical urban landscapes could serve as an opportunity to recodify their historical identity by means of the contemporary challenges, opportunities and threats.



Katarzyna Palubska, Ph.D. Eng., Landscape Architect

ICOMOS – POLAND

**Conservation documentation
of Opinogora Historic Park in Poland**



The example is intended to present in a short form the stages of conservation documentation of the cultural landscape made in 2015-2016 by the team: Katarzyna Pałubska and Kamil Melaniuk (graphic design: Karolina Kolb-Sielecka and Łukasz Bylina), commissioned by the historical park manager - the Museum of Romanticism in Opinogóra. The main documentation presented in this case study contains 8 chapters, over 100 description pages, 20 drawings, 75 photographs and over 20 graphic (maps and diagrams) and descriptive attachments, e.g. an inventory table, dendrochronological table, etc.⁸²

The purpose of this example study was to prepare a study of cultural landscape together with conservation documentation - formulation of conservation guidelines and program recommendations for the project of revalorisation and development of the nineteenth century palace and park complex in Opinogóra in the field of landscape development, i.e. land, ponds and greenery.



Fig. 1. Axial view along ponds 1 and 2 towards the east (photo K. Pałubska, 2015)

Conservation analyses and guidelines were made on the basis of historical research and analyses. Archival research was carried out on the available archival materials and the conservation of earlier studies, archival plans for the farm, park and ponds in Opinogóra and publications available, among others, in: the archives of the Mazowiecki Conservator of

⁸² Melaniuk K., Palubska K., 2016, *Analysis and conservation guidelines for the project ... in the palace and park complex of the Museum of Romanticism in Opinogóra*. Restoration and design documentation for the Museum of Romanticism in Opinogóra. Unpublished manuscript.

Monuments - Delegation in Ciechanów, the archives of the Museum of Romanticism in Opinogóra, the Central Archives of Historical Records, the archives and library of the National Heritage Institute in Warsaw, the National Library in Warsaw, the Kórnik Library of the Polish Academy of Sciences (electronic), the University Library J. Giedroyc in Białystok (electronic), Public Library of the Capital City of Warsaw, Main Library of the Mazowieckie Voivodeship.

Some archival materials could not be reached despite the information indicated in the inventories. Most of the archival material stored in a Opinogóra Krasinski Library in Warsaw was burned down during World War II. However, in the archives of the National Heritage Institute and the archive of the Department of Architecture of the Warsaw University of Technology has been lost over the past few years, most of the materials of the original drawings, color photos and plans - which are identified entities have only photocopies or scans archives.

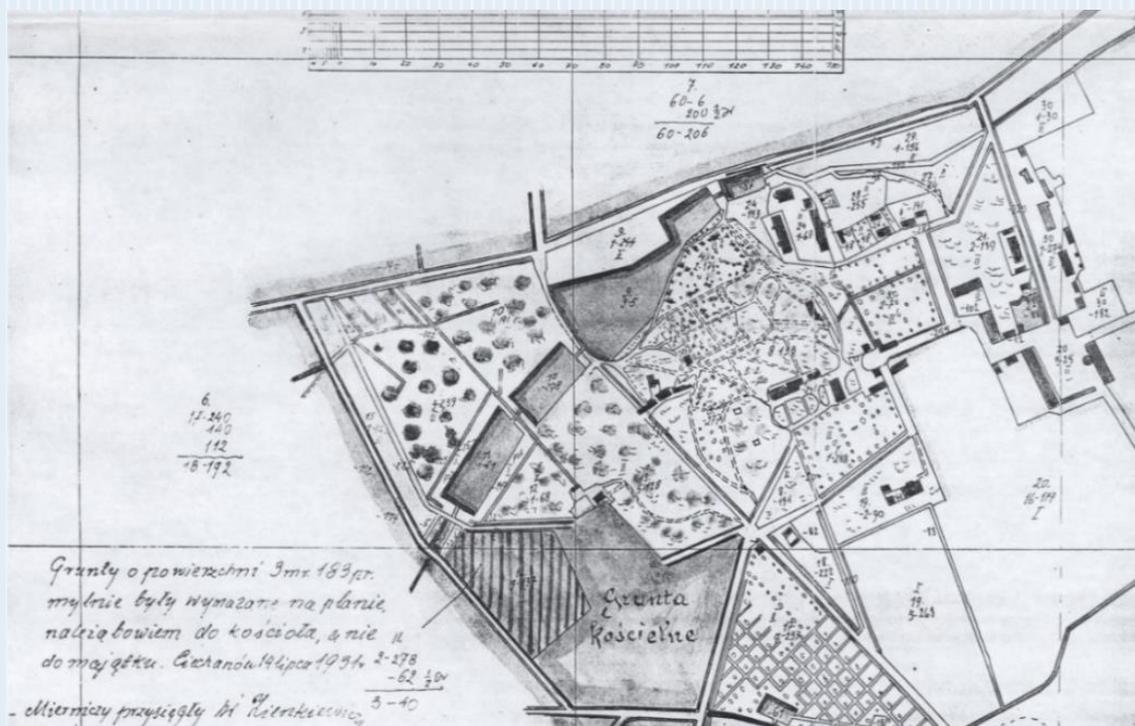


Fig. 2. Plan of goods from 1911 drawn up on the basis of the original measurement from 1868, used by a sworn measurer in 1931 (Museum of Romanticism in Opinogóra)

It in the development of topographic map archive of the 1st half. Of the 20th century and aerial photographs from the beginning of the XXI century come from online sources, also most of the quotes from newspapers from the XIX-XX century and gardening guides from the XIX century come from digital libraries with free access in Poland. The bill of quantities from 1868 and the plan of W. Kronenberg from 1892 available in the Register of Polish Gardens - Book No. I (1964) and Cekek's Files (NID archive) were considered to be

extremely important in recognizing the historic structure of the fragment of the site and changes that lasted until modern times. Valuable due to the documentary value defining the identified and planned changes that the park underwent throughout the 20th century are the studies of Zofia Jaskólska and prof. Longin Majdecki (an outstanding researcher of Polish historical gardens) with Stanisław Bolek from the 1960s, as well as a project to renovate the ponds of Winicjusz Miziołek from the 1970s. Serious changes introduced in the last 10 years at the Museum in Opinogóra have been identified thanks to studies and projects provided by the Museum of Romanticism and the Provincial Conservator of Monuments - a delegation in Ciechanów made mainly under the direction of Anna Śniegucka-Pawłowska in 1993-2010.

In total, 78 sources included in the bibliography at the end of the study, which were cited in footnotes in the text, were analysed.

Inventory of the area with greenery and field tests were presented in a descriptive and photographic form and plotted on the map and schematic drawings in the analytical part. The inventory and design part for the purposes of the study was prepared on the current master map from 2015 on a scale of 1: 500, the local spatial development plan from 2007, as well as excerpts and excerpts from land records.

The definitions included in the study are based on applicable Polish and international legislation, guidelines for conservation studies recommended by the Ministry of Culture and National Heritage, and commonly used definitions in the field of garden art.

It includes analyses of natural and historical values, changes in the compositional system and the immediate surroundings of the assumption, as well as analyses regarding the current utility program and legal and ownership conditions, thanks to which it was possible to determine the historic value of the area, assessment of the current state of preservation of the historic substance against the background of subsequent stages of development of the landscape assumption and proposals for conservation guidelines and development directions for the existing utility program.

Conservation guidelines resulting from the summary of the results of the conducted analyses present the basic directions and indications for developing the area of the park fragment being developed in terms of its purpose, functions, forms of conservation and natural protection, the composition system and the composition of plant systems and plantings.

Based on the guidelines and conservation zones set out in the study, it was possible to indicate the main project objectives, which consist of two basic activities in relation to the designed fragment of the assumption, i.e.

- revaluation of the park's historical composition through the extraction of preserved structures,
- required supplementation of elements of non-preserved compositions,

- adaptation of spaces with lower historical values by giving it a new purpose in the area of fulfilled recreational function, while respecting the existing historic substance.

The territorial scope of the analytical part concerned a broader approach to the entire historical assumption within the park boundaries set by Walerian Kronenberg, park designer at the end of the 19th century. Using the concept of "Park" as a proper name, the contemporary boundaries of the part in use of the Museum of Romanticism for which the project was made were suggested revalorisation and development in the next phase, not included in the example.

Time range. Historical records with archival material, which is made on the basis of the development stages of the change of composition of the palace park into phases of alternating compositional created dates back to the period from the beginning of the nineteenth century, 2015., As available from archival material. Historical research has allowed the identification of six stages of park decomposition and significant changes of owners. The zero stage was the period from before 1790, from which only modest written transmissions survived, while none of the available sources and the sparsely preserved spatial elements allowed to determine the then garden composition. Alternating steps of the palace-park in Opinogóra divided into the development phase:

PHASE 0: Krasieńscy hereditary eldership - before 1790 (no data on the park);

PHASE 1: Eldership of General Wincent Krasieński (1790-1819);

PHASE 2: Romantic assumption from the 19th century (1819-1892);

PHASE 3: Walerian Kronenberg's design - calligraphic garden (1892-1909);

PHASE 4: War turmoil and land reform (1909-1959);

PHASE 5: Museum of Romanticism - a romantic vision of revalorization of L.Majdecki (1959-2004);

PHASE 6: Modernization of the park - partially implemented project (2004-2015).

The outline of the cultural landscape conservation documentation contains 8 chapters: preliminary, identification, comparative, evaluating, postulating conservation guidelines, and the formal part containing the bibliographic list, photographic documentation, figures and annexes, maps and diagrams attached.

1. INTRODUCTION

- 1.1 Subject and basis of the study
- 1.2 Aim of the study
- 1.3 Scope of the study
- 1.4 Starting materials

2. INVENTORY AND ANALYSIS OF THE EXISTING CONDITION OF THE PALACE AND PARK ASSUMPTION

- 2.1 Location of the palace and park complex in the structure of the open landscape - current borders and area of the Park
 - 2.1.1. Inventory of the area with a dendrological table
 - 2.1.2. Analysis of the environment
- 2.2. Formal and legal analysis
 - 2.2.1. State of ownership and nature of possession
 - 2.2.2. Forms of legal protection and local spatial planning
- 2.3. Current features and uses
 - 2.3.1. General function and use
 - 2.3.2. Function and manner of land use
- 2.4. Landform
- 2.5. Surface water system
- 2.6. Vegetable cover
- 2.7. Local identity - details catalog
- 2.8. Diagram of division into contractual interiors

3. HISTORICAL SUMMARY AND DEVELOPMENT PHASES OF THE PARK COMPOSITION

- 3.1. The pedigree of landscape gardens in the 19th century
- 3.2. Composition rules for landscape parks from the 19th century
 - 3.2.1. Composition rules for calligraphic landscape parks
 - 3.2.2. Composition principles of Walerian Kronenberg's calligraphic parks
- 3.3. Development phases of the palace and park complex in Opinogóra
 - 3.3.1. PHASE 0: Krasińscy hereditary eldership - before 1790
 - 3.3.2. PHASE 1: Eldership of General Wincent Krasiński (1790-1819)
 - 3.3.3. PHASE 2: Romantic assumption from the 19th century (1819-1892)
 - 3.3.4. PHASE 3: Walerian Kronenberg's project - calligraphic park (1892-1909)
 - 3.3.5. PHASE 4: war turmoil and land reform (1909-1959)

3.3.6. PHASE 5: Museum of Romanticism - a romantic vision of revalorisation of L. Majdecki (1959-2004)

3.3.7. PHASE 6: Modernization of the park according to a new restoration project (2004-2015)

3.3.8. Comparative analysis of park development phases

4. HISTORICAL AND COMPOSITION STUDY FOR THE PROJECT WITH CONSERVATION GUIDELINES FOR THE STUDY AREA

4.1. Composition analysis

4.2. Analysis of the condition of the historical spatial arrangement

4.3. Valuation of a historical resource

4.4. General guidelines for conceptual design

4.4.1. Postulates regarding functions and usage

4.4.2. Demands regarding the regulation of the ownership situation

4.4.3. Postulates for securing the park

4.4.4. Demands regarding conservation protection

4.4.5. Postulates regarding recommended queries, research, design studies, implementation works and directions of activities

4.4.6. Postulates regarding the directions of conservation actions

4.5. Detailed guidelines for the Project

4.5.1. Guidelines for the park's historical composition

4.5.2. Water system guidelines

4.5.3. Guidelines for the communication system

4.5.4. Vegetation guidelines

4.5.5. Equipment guidelines

4.5.6. Guidelines for the location of the new application program

5. REFERENCES

6. PHOTOGRAPHIC DOCUMENTATION OF THE EXISTING STATE

7. LIST OF FIGURES

8. GRAPHIC AND DESCRIPTIVE ANNEXES

The introduction was intended to discuss the purpose and scope of the study, as well as the methods and professional vocabulary adopted, as well as to discuss the main archival sources identified during documentary and equine research before starting field research.

The next stage was to discuss the history of the foundation, its divisions, owners and causes of transformations, including damages. Discussing this chapter, it should be briefly noted that the palace and park complex in Opinogóra, Mazovia region in central Poland, from the mid-

seventeenth century belonged to the well-known and unique Krasiński family, becoming in the years 1819-1909 the seat of the family, and then the seat of the Opinogórska Ordination (1844 -1944), which was subject to the enfranchisement of peasants in 1868 - when the first model of the division of the Opinogórski farm was made. The ordinance was formally abolished by the land reform of 1944, which divided the area between small-farming and farm peasants. In 1945, about 2.5 hectares park with a small castle and the outbuilding covered legal protection (D. Sikora, Śniegucka A, 1993)⁸³. In the 1960s, the part of the State Agricultural Farm belonging to the park's original historical boundaries was intended for the Museum of Romanticism - one of the owners, Zygmunt Krasiński, was one of the most prominent Romanticists in Poland. The plots in the eastern part of the site were allocated to a school, and the land next to the church and cemetery was transferred to the parish. In 2015, according to an excerpt from the land registry of the Mazowieckie voivodship, "Park" in Opinogóra occupied an area of 22.3827 ha, whose perpetual usufructuary is still the Museum of Romanticism in Opinogóra.



Fig. 3. Opinogóra museum complex - view of the rebuilt manor house with an outbuilding, and the revalorized castle (<http://castlesandpalaces.com.pl/obiekt/zameczek-w-opinogorze/>)

⁸³ Sikora D., Śniegucka A, 1993. *Ewidencja zabytkowego założenia pałacowo-parkowego w Opinogórze*, in: MWKZ Archive

The palace and park complex was entered into the register of monuments No. A-58 on January 20, 1956 and May 22, 1975. The entry (within the boundaries of 38.9 ha) includes the following facilities: a palace, a castle in a romantic style according to the design of Viollet-le-Duc, a park from the 18th century recomposed by Kroneberg in 1895, a building with arcades in the top from the 19th century, foundations of the Krasieński court from the 18th century. The farm, Krasieński family church and adjacent cemetery were also entered separately in the register. Analyzes of the environment, functional and spatial division, ownership boundaries and local law provisions are presented on graphic diagrams.

Then, the reconstruction of the terrain and surface water system was carried out, indicating the most important 3 hills in the study area and a bead string of 5 ponds between them in the depression. An especially important element was the analysis of the vegetation, horizontal and vertical structure, age, condition of the original and sanitary condition of the greenery. The authors also prepared a catalog of historical and historicizing elements, which created the identity of the place and could be helpful in the phase of developing guidelines and the design part of the park's restoration.



Fig. 4. Historical and historicizing detail building the identity of the place. author: K.Pałubska / K.Melaniuk

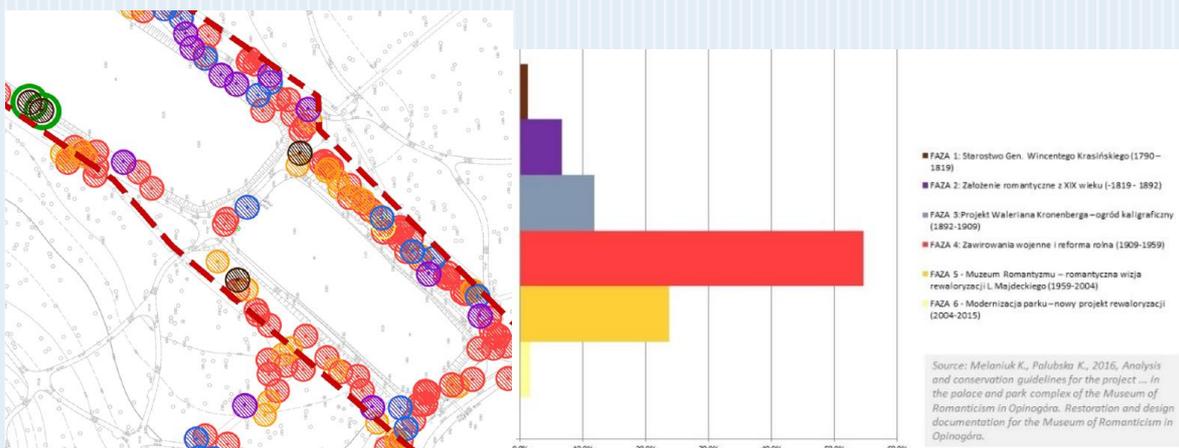


Fig. 5. An example of a fragment of the interior of the landscape pond 1-2 with dendrochronological analysis. Color gradation - darkest phase I, lightest phase 6. Green border - a natural monument.

The last stage was to divide the assumption into contractual landscape interiors, in accordance with the adopted methodology, which allows determining the condition of individual interiors and determining the leading conservation measures recommended for individual units.

The next stage, extremely important in the conservation documentation of the cultural landscape was a comparative analysis of the development of the assumption in relation to similar objects in Poland, in similar styles, the area of operation of the Krasiński family or designer Walerian Kronenberg.

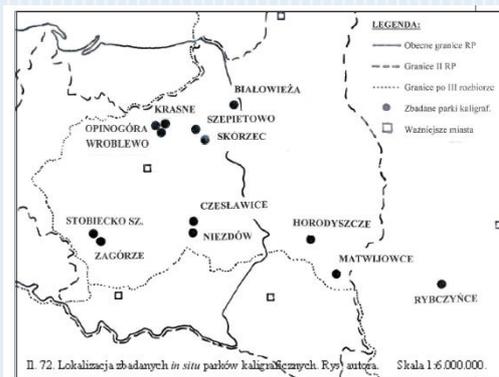


Fig. 6. Calligraphic parks designed by Walerian Kronenberg at the end of the 19th century (Baster P., 2011)

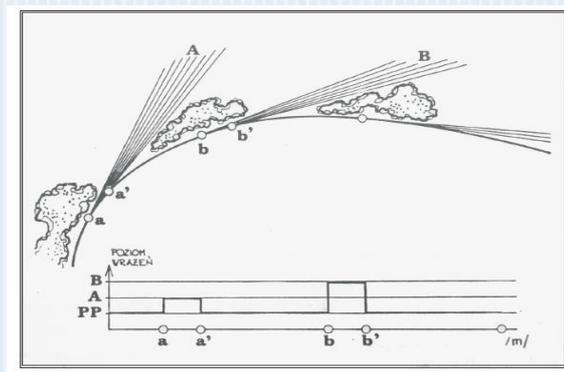


Fig. 7. Dynamic view relationships (Kulus W., 1990)



Fig. 8. Stone cascade in the Ujazdowski Park in Warsaw in a naturalistic style (<https://pusio-50.flog.pl/archiwum/albumy/66302/park-ujazdowski-warszawa/>)



Fig. 9. Ponds in the naturalistic - calligraphic park according to the design of W. Kronenberg in Białowieża (<http://parkowa.bialowieza.pl/13/Zdjecia-z-zewnatrz>).



Fig. 10. The original stone bridge in the Skaryszewski Park in calligraphic style (<http://www.ztp.waw.pl/media/2013/02/12/aneks.pdf>)

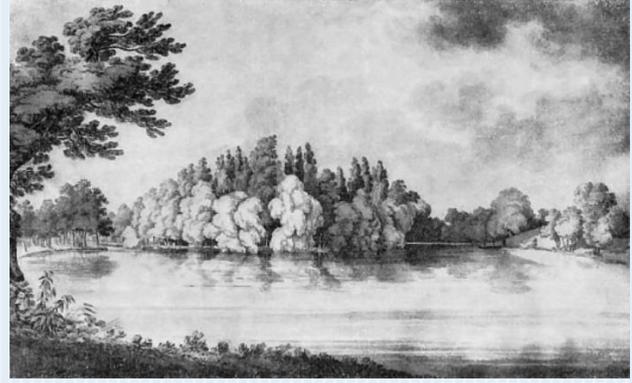


Fig. 11. Island of feelings in the Arkadia romantic park (http://www.pinakoteka.zascianek.pl/Vogel/Vogel_3.htm)



Fig. 12. Groups of trees with contrasting shapes and colors in the calligraphic park in Białowieża (http://www.ciekawepodlasie.pl/info.htm#80/pl/i/park_palacowy).

And also an analysis of the phases of the development of spatial and compositional changes of the park itself against the background of historical events of the region, in which 7 phases of park development were distinguished, choosing phases 3 and 5 as increasing the cultural values of the area, while phase 3 was recognized as the most important in shaping the landscape assumption.

The compositional layout in Walerian Kronenberg's calligraphic gardens was most often composed based on three basic elements: park interior layout, point system and view connections. The composition was based on simple arrangements, with the main axis tilted from the north-south direction.

In the Opinogóra assumption, the assumption was divided into two parts by the axis of the main north-south avenue and the axis of chain joints perpendicular to it. Both axes are still legible in the field and worth further exposure.

The view links between the park hills and the valley are also partly legible: connecting the conservatory with pond No. 4, the castle offers a partially obscured view of pond No. 3 and the zoo, and the palace has very poorly legible opening to the valley of ponds No. 3 and 4 with an interesting flower bed (like from the Czartoryska pattern book, 1808) at the wall and distant opening beyond the park - arable fields.

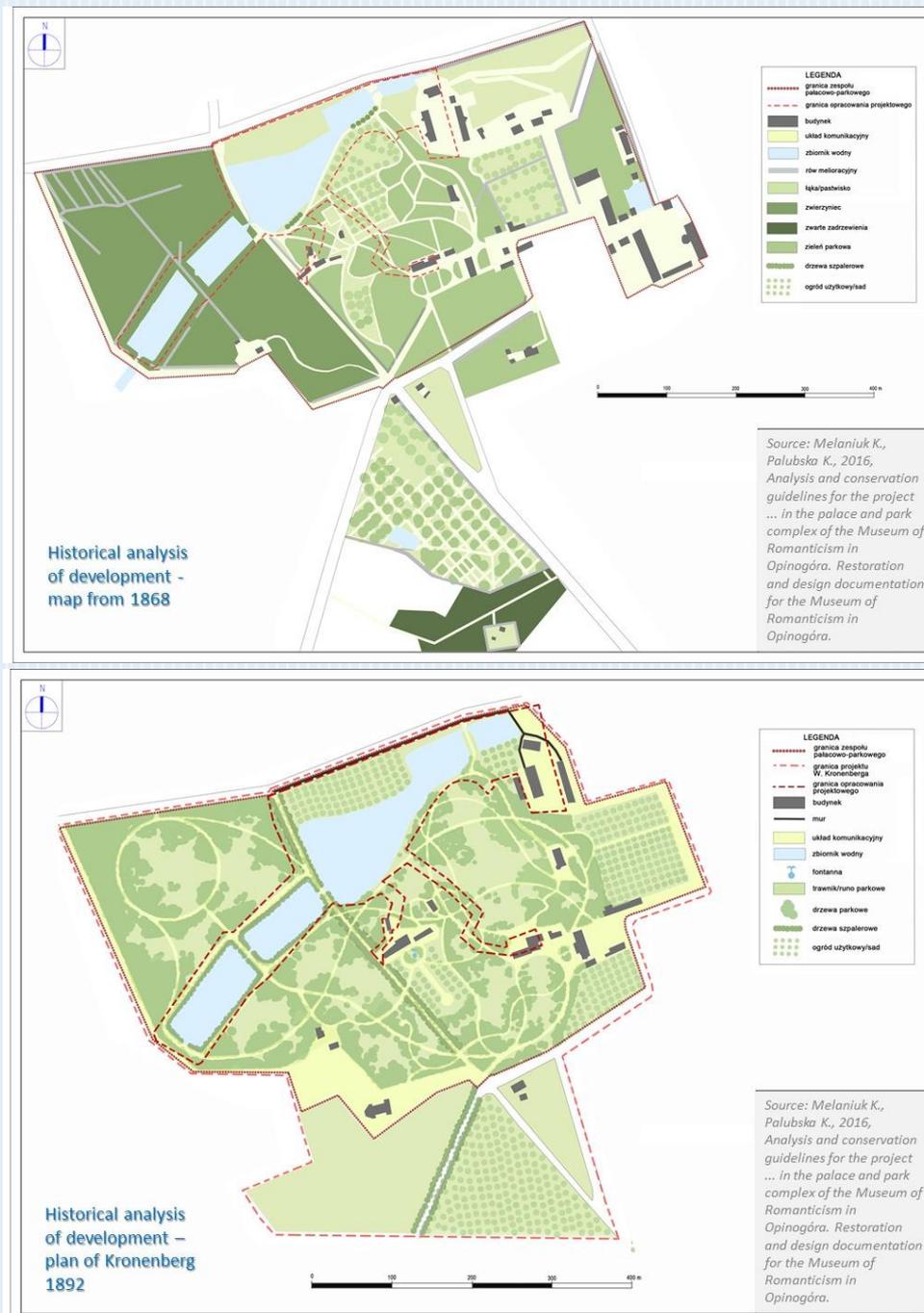


Fig. 13. A comparative analysis of the development phases of the historical park Opinogóra from 1868 and the project of W. Kronenberg from 1892 (author: K.Palubska, K. Kolb-Sielecka).

The largest changes have been made to the view connections in the park interiors connecting the architectural dominants in the park and the zoo, which, however, are not analysed because they are not the subject of the study and require more detailed observation studies. In the area, it was possible to identify a well-preserved view relation of the manor house with the castle, the cemetery with the conservatory, the wide opening from the main avenue to the conservatory, etc.

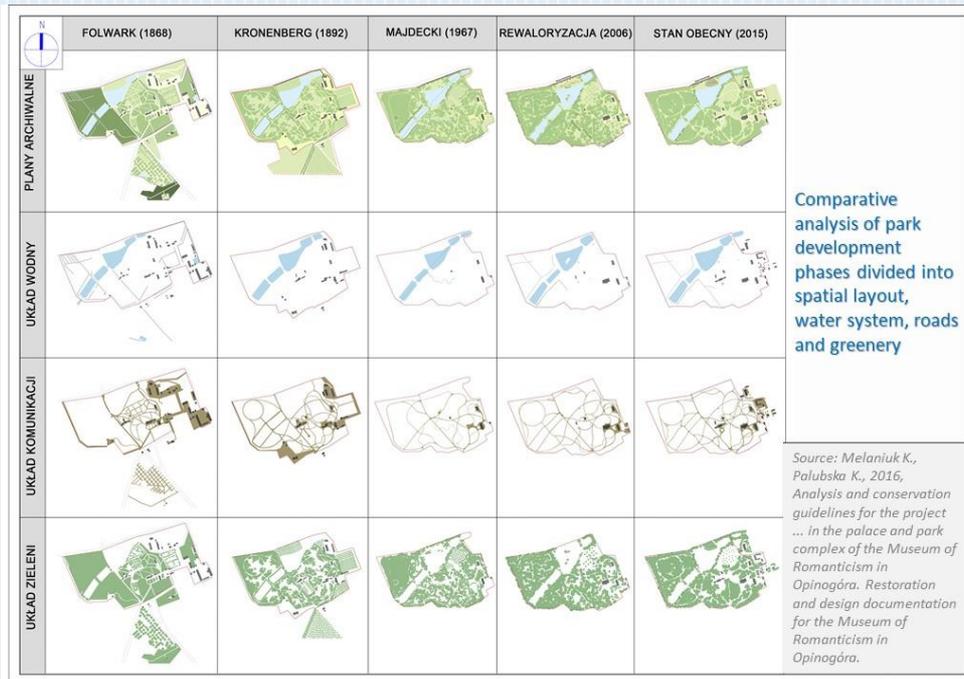


Fig. 14. An example of a comparative analysis of the development phases of the historic Park in Opinogóra; first line - archival plans, second - water layout, third - communication system, fourth - green layout, in years: 1868, 1892, 1967, 2006, 2015 (author: K.Palubska, K. Kolb-Sielecka).

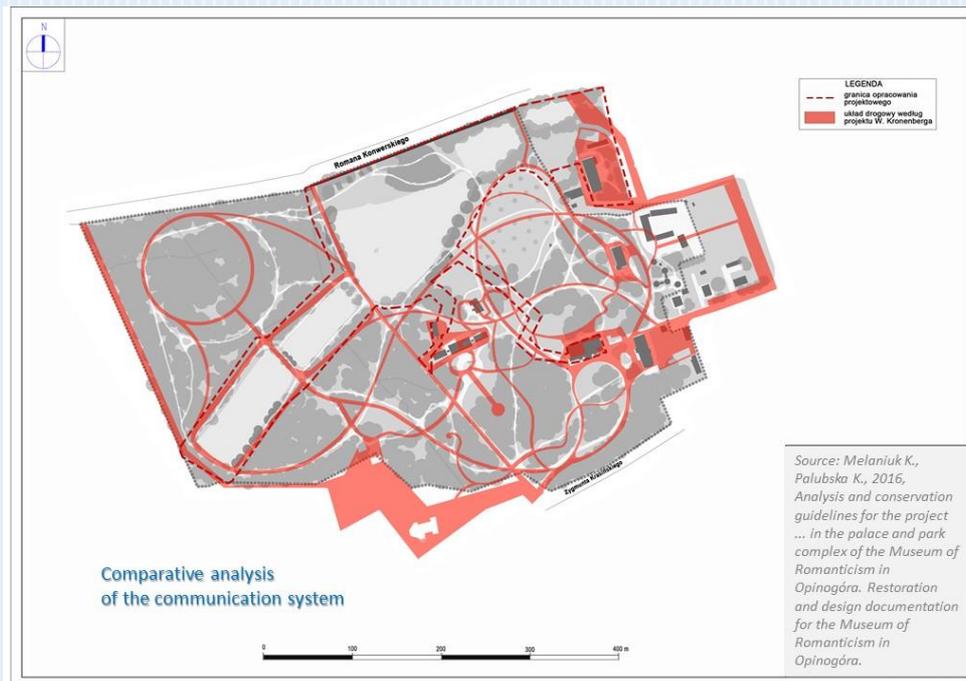


Fig. 15. A comparative analysis of the of the communication system in historic Park in Opinogóra, in red: 1892 - phase 3. (author: K.Palubska, K. Kolb-Sielecka).

Comparative analysis of the phases of composition development, but also in the stratification of the water system, communications and greenery have allowed a very detailed analysis of the direction of changes, its impact on degradation and the possibility of system corrections without losing the most valuable elements of the resource. The analysis also allowed to trace the designed axes, scenic openings, landscape interiors, dominants and accents of the composition, as well as changing exposure at close and distant both from the park to the surroundings, but also from roads to the park.



Fig. 16. A comparative analysis of the of the composition and view connection in historic Park in Opinogóra, first – historic composition, second nowadays composition (author: K.Palubska, K. Kolb-Sielecka).

CONCLUSIONS

As a result of analyses, it was established that the park has undergone several transformations (development phases) since the creation of the landscape park in the mid-nineteenth century. Walerian Kronenberg's project from the end of the 19th century in the naturalistic (calligraphic) style, which underwent significant transformations as a result of "spontaneous" gardening activities from the beginning to the mid-20th century, was considered the most important for shaping the park's composition. The activities of Franciszek Szanior, who probably took part in the transformation of the park at the turn of the 19th and 20th century, are also unknown. Descriptions and study analyzes from the 1960s indicate that the park, despite many neglects and numerous young self-seeding plants, still had the features and stand characteristic of the Kronenberg project. The restorative transformations of the 1960s, resulting from passing the assumption under the care of the newly created Museum of Romanticism, and assuming actions aimed at returning to the old style "in the spirit of romanticism", additionally disturbed the preserved calligraphic style arrangements.

Subsequent reevaluation carried out at the beginning of the In the 21st century, it assumed a return to the idea of beltway alleys "inspired" by Kronenberg's assumption with the introduction of elements characteristic of Longin Majdecki's revalorization project and the use of existing greenery systems (heavily transformed with self-seeding plants), which differed significantly from the principles of green composition in calligraphic gardens. Partial implementation of the design assumptions results in many changes compared to the original romantic assumption, the concept of W. Kronenberg, but also the project of revalorisation of L. Majdecki and bears the mark of "conservation creation".

GENERAL CONSERVATION GUIDELINES

The general guidelines in the study were based on field studies and existing archival materials, study studies and publications. The guidelines were the result of analyses carried out both on an overall scale for the entire landscape assumption together with the environment, as well as the result of detailed research and consultation.

The preserved terrain, the water system, the integrity of the park's boundaries and connections with the surroundings still indicate the readability of the composition in line with the idea of landscape parks from the 19th century. It is necessary to slow and deliberate actions aimed at reconstructing view links, park interiors and sequences of impressions resulting from mating the frames by replacing the aging copies of succession trees with new planned plantings.

The most important historic values:

- integrity and readability of most historical boundaries,
- clear spatial layout and landscape composition with the surroundings,
- residence of the eminent Polish writer: Zygmunt Krasiński,
- the work resulting from the project of the outstanding architect and planner of Polish gardens of the late nineteenth century - Walerian Kronenberg, and the result of revalorisation activities of the outstanding landscape architect - Longin Majdecki.

Renovation works in the area of the study should aim at a slow and planned transformation of the park in a calligraphic direction based on the historical plan of Walerian Kronenberg. The overall revalorisation of the assumption should strive to recreate the compositional consistency of the representative part of the park hills and the beast, after a previous detailed comparative dendrochronological analysis of the available inventory documentation from the 20th century with the current inventory.

Requests regarding the function and use

It is advisable to preserve the museum function accompanying the park assumption. From 1959, the Romantic Museum guarantees the maintenance of non-aggressive service functions related to the service of visitors and tourists. In the north-eastern part of the foundation, on a former farm, garden utility and fifth joint it is possible to introduce new functions of tourist services - parking, hotel, restaurant, etc., While recomposing existing development, which leads to the devastation of space and reduces the aesthetic value of this part of the park. This procedure will require the regulation of ownership and the inclusion of plots currently under the care of the municipality, school and private persons.

Postulates regarding the regulation of the ownership situation

It is recommended to strive for land consolidation within the historical foundation, which as a result of subsequent parceling led to diversification of ownership and possession of the nature in the north-east team. The area covered by the Kronenberg project should be considered as a reference point for the land consolidation process. However, given the wide range of spatial above postulate, as well as the scope of the project, in the first place should aim to include in the Park boundaries of plots located in the north-west corner of the park, and therefore associated with a pond No. 5 and the area of the former farm. Some of the plots located in this area, despite the fact that the Park is located outside the castle, is now

owned by the Museum (plot 38/1, 40, 41/5). Others require regulating the ownership and possession of the nature of plots numbered 41/3 (private property), 41/4 (owned by the community in the management of school), 45/1 (owned by province. Mazowieckie leased museum) and a fragment of cadastral plot 39 (property of the Treasury States) and merging them with the remaining grounds of the museum.

Postulates regarding securing the park

The scope of the planned investment being the subject of the Project going beyond the current Park fence. Archival documents (including the Kronenberg project) indicate the necessity of fencing the areas connected as part of the Project. On the one hand, it will ensure proper protection of the park against devastation, and on the other hand it will be one of the stages of restoring historical boundaries from the palace and park foundation. It is postulated to extend the park's fence in the section of the north-eastern border of the park, which currently does not have such safeguards and slowly devastates and introduces monitoring at the park fencing - especially on the area of the ponds 3 and 4. Park assumption due to its historic character, functions and planned investments should be closed at night (applies to all entrance gates and gates).

Postulates regarding conservation protection

The analysis of the boundaries of the entry in the register of monuments and conservation protection zones in the Local Rural Development Center indicates the necessity of:

- extension of the border of the entry to the register of monuments to the area of pond No. 5 with preserved farm buildings in the north-eastern part of the assumption (from available materials it appears that the boundaries of entry of the Park in the register of monuments by a judgment of January 21, 1956 appeared for the first time in graphic form on the drawing of the local spatial development plan currently in force on December 11, 2007)
- extending the conservation zone of the exhibition to include external visual links with the surroundings (the existing boundaries of the exhibition zone are protected only by a dynamic view from the road from Ciechanów to the towers of the Vieste castle)
- partial protection using the preservation zone in the Land Use Areas of the preserved tree shelter for access to the park. In the plan of W. Kroneberg (1892), the stone wall was also surrounded by pond No. 5 and the orchard at pond No. 5 - including it in the integral part of the park. The wall also gave off a closed courtyard connecting individual farm buildings in the north-eastern part of the foundation.

Postulates regarding the directions of conservation activities

The identification of areas with different protection principles and permissible interference can be presented in the model record in the form of contract interiors, taking into account protective measures to varying degrees that allow for interference.

The following treatments and conservation activities have been specified for contract interiors:

KONS - maintenance - technical measures ensuring the survival of historical interior matter, excluding changes in the shape and composition of the area, assuming the layout of the system, eg by removing contemporary buildings and objects that disfigure, for example, infrastructure facilities, modern fences. Interiors: ...

REV - revalorisation - works aimed at restoring the interior of its real values. Interiors:...

ADAP - adaptation - adaptation of the interior or objects located there to new functions. Interiors:...

REST - restoration - the hallmarking of the architectural form of a building or spatial arrangement of interiors to increase the didactic or aesthetic impact of the monument through supplements introduced in places of cavities, incorporated harmoniously to the whole and distinctly distinct from authentic parties. It may also be the unveiling of the object / area or its part from the later phases, provided that the removed items have a definitely lower value than the mined ones. Interiors: ...

INT - integration, merging and displaying the object or interior, starting from actions revealing to treatments that restore the unity of the devastated area, by complementing the evident deficiencies, i.e.: replenishing missing repetitive elements or incomplete elements, e.g. road layout, merging the composition, ordering the removal permanent objects transforming the composition system. Interiors: ...

RECOM - recomposition - restoring or marking the missing, and not fully known elements of the object / area, may consist in creating forms of new, continuing tradition forms of a given team. Interiors:....

REKN - reconstruction of both whole elements, if there are source premises or preserved relics, i.e. reconstruction of elements whose form is easy to restore by analogy, eg metal restrictions around lawns reconstruction of a set or elements based on similar known forms, eg bridges. Interiors: ...

KR - creation - activities within the area of modern development, consists in creating new forms of compositions harmonized with the historic park surroundings. Interiors:...

DETAILED CONSERVATION GUIDELINES

Guidelines on the historical composition of the park

- A reference to further restoration works aiming at the presentation of the park's composition to the design of Walerian Kronenberg from 1892, including the calligraphic layout of the roads, the naturalistic character of water reservoirs, characteristic for the style distribution of groups of trees and shrubs at the intersections and forks of roads and massifs on the outskirts of the park with designated openings on surrounding the open landscape with characteristic clumps of field.
- The compositional and spatial integration of the entire complex should be sought within the historical boundaries, including the north-eastern part of the park (pond No. 5 with a part of the former farm and old school) and highlighted by planting the dynamic dynamic link between the scenic part of the farm, gazebo and pond No. 3 , 4 and 5.
- Recreation of internal openings and connections of static (from viewpoints) and dynamic (from park avenues) characteristic for landscape gardens of the 19th century, including distant openings to ponds no. 3 and 4 from the palace and castle building through the main a park clearing.
- Underlining the viewing axis running through the no 1 and 2 joints and bridges, and joints No. 3, 4 and 5.
- Recreation of park interiors characteristic of the calligraphic style and characteristic features of the work of Walerian Kronenberg, incl. through the liquidation of the orchard, which was established a few years ago on the main park clearing.
- Reconstruction by appropriate selection of species of trees and shrubs of contrasts of form, color and light characteristic of calligraphic gardens.
- Emphasizing external view links to the surrounding open landscape with preserved mid-field clumps (very valuable elements not covered by conservation protection creating the context and background of all landscape assumptions, and currently unique in the developing areas subject to urbanization pressure - see the master plan provisions allocating these areas for development).

Guidelines for the water system

- Connection of ponds no. 3 and 4 into one naturalistic tank in accordance with the preserved historical plans from the nineteenth century (plan of the Opinogóra farm from 1868 and plan of W. Kronenberg from 1892/1895) - liquidation of the existing dyke.
- Formation of the line of water reservoirs of the ponds no. 3-4 and 5 in the naturalist style, characteristic for calligraphic parks with the introduction of water and fertile vegetation typical of the era, while allowing access to water through the free descent of the grass surface in the viewing area.
- It is recommended to protect the banks of the ponds from landsliding, washing and destruction, using permanent solutions and ensuring the occurrence of low-margin vegetation characteristic of landscape parks.
- It is recommended to natural and gentle shaping of the high banks of ponds No. 4 and No. 5, and their stabilization over the line of occurrence of coastal vegetation by introducing plantings of shrubs with an extensive root system.
- It is allowed to leave or possibly supplement boulders of various sizes in the estuary of a narrow stream connecting pond No. 5 with pond No. 4 to cover the concrete reinforcement of the culvert from the west, where stones and boulders should come from local sources (fieldstone), be stacked irregularly (naturalistically).
- It is recommended to clean the bottom of the ponds from organic stench leading to eutrophication and overgrowing of water reservoirs (undesirable manna mielec, proper rush), and the introduction of escarpment safeguards with planted vegetation (shore rush).
- It is allowed to introduce a naturalistic "artificial island" on the area of the largest pond No. 3 as part of conservation creations already in the 2006 revalorization project, but assuming that the island will have the vegetation characteristic of the flower bed (soft conical form with a possible small clearing in the middle) with the selection of vegetation used in the nineteenth-century landscape parks and not obscure the historical openings, axes and view links preserved for historical purposes.
- It is postulated to introduce, on the occasion of irrigation works around ponds, a greater "waviness" of the land characteristic of landscape assumptions with characteristic "concave park polders" and elevations concealing the communication system.

- It is necessary to modify the shape of ditches draining excess rainwater located in the central part of the park, on the west side of the central park alley and giving them the character of a more "natural" dry stream with an irregular river bed, which will increase the retention of rainwater in the Park.

Guidelines for vegetation

- Special care should be maintained and subjected to optimal conditions for further vegetation, the oldest ones bearing the features of planned or successive plantations in places similar to naturalistic plantings on W. Kronenberg's plan or characteristic of W. Kronenberg style (see park development stages, analysis dendrochronological and behavioral analysis).
- It is postulated to plant trees and shrubs in the places of losses of historical composition based on the Kronenberg plan, and a detailed inventory analysis carried out after the war and later, from which it appears that they contained preserved historical plantings from the turn of the 19th and 20th century - this analysis was not carried out the needs of the current order;
- Planned greenery compositions should in no way interfere with the historical arrangement of composition and view connections (existing and historical);
- One should aim at slowly exchanging plant material in line with the species selection and location characteristic for calligraphic parks according to Kronenberg's designs, placing masking greenery at the intersections and branches of park roads and creating massifs and backstage frames that open and view connections. It is possible to introduce lilacs at intersections of roads as an element characteristic for Krasinski gardens. Species characteristic for oak-hornbeam habitats (park part) and alluvial habitats (part in the immediate vicinity of ponds) should be used - it is recommended to avoid short-cut species and easily break down (poplars, ash-like clones, robinia) near pedestrian routes - bearing in mind the safety of park users. An exception to this rule are weeping willows, whose presence in the Park since the time of the romantic garden is confirmed by the source materials. It is recommended that they appear above the water, but in places far from walking paths.
- When selecting species of trees and shrubs, one should adhere to historical species and varieties of trees and shrubs native or introduced characteristic of the 19th century - it is unacceptable to use plants in varieties and species that do not exist in a given historical period.

- It is necessary to contemporary framing the external views of the park and the use of masking plantings in order to obscure the unsightly contemporary buildings adjacent directly to the park from the north and east.
- Due to the educational and popularizing nature of the Museum in Opinogóra, it is allowed to introduce markings at the oldest copies of trees informing about the selection of species in the 19th century.
- It is possible to recreate the usable part of the garden in places designated for such functions in the design of W. Kronenberg - it is recommended to introduce an educational garden for children and adolescents between the pond No. 3 and the border wall from the north, in the form of a garden vegetable and herbal with the orchard and vineyard zone (described in the source materials) - based on traditional plant species popular in manors and in 19th-century palaces.

REFERENCES

- [1] Baster P., 2011. *Polskie ogrody kaligraficzne*, AGH, Krakow. Print.
- [2] Dymek A., 2010. *Historical and conservation study with conservation guidelines for the re-development of the Krasinski's Garden*, National Center for Research and Documentation of Monuments, 2010, in: MWKZ Archive
- [3] Kulus W., 1990. *Walerian Kronenberg. Materiały do Słownika Twórców Architektury Krajobrazu w Polsce*, zeszyt I, SGGW, Warsaw. Print.
- [4] Majdecki L., 2007. *Historia ogrodów*, PWN, Warsaw. Print.
- [5] Melaniuk K., Palubska K., 2016, *Analysis and conservation guidelines for the project ... in the palace and park complex of the Museum of Romanticism in Opinogóra*. Restoration and design documentation for the Museum of Romanticism in Opinogóra. Unpublished manuscript.
- [6] Sikora D., Śniegucka A, 1993. *Ewidencja zabytkowego założenia pałacowo-parkowego w Opinogórze*, in: MWKZ Archive, Unpublished manuscript.

Best Practice Handbook on Sustainable Protection of Cultural Heritage – – case studies

**Developed within project UNINET: University Network for Cultural Heritage –
Integrated Protection, Management and Use**

Co-funded by the Erasmus+ Programme of the European Union

Key Action 2: Strategic Partnership Projects

Contract n° 2018-1-PL01-KA203-051085



**This work is licenced under a Creative Commons
Attribution-NonCommercial-ShareAlike 4.0 International
License.**