

# Liberation as a Method for Monument Valorisation: The Case of the Defence Heritage Restoration

Donatella R. Fiorino, Marzia Loddo

**Abstract**—The practice of freeing monuments from subsequent additions crosses the entire history of conservation and it is traditionally connected to the aim of valorisation, both for cultural and educational purpose and recently even for touristic exploitation.

Defence heritage has been widely interested by these cultural and technical moods from philological restoration to critic innovations. A renovated critical analysis of Italian episodes and in particular the Sardinian case of the area of San Pancrazio in Cagliari, constitute an important lesson about the limits of this practice and the uncertainty in terms of results, towards the definition of a sustainable good practice in the restoration of military architectures.

**Keywords**—Defensive architecture, Liberation, Valorisation for tourism, Historical restoration.

## I. INTRODUCTION

THIS present study offers a reflection on the historical use of the so-called “liberation restoring” (literal translation from the Italian “restauro di liberazione”), which consists in removing subsequent additions that lack artistic and historical value. The origin and the diffusion of this method has always been related to the specific aim of enhancing ancient monuments. Moreover, the study underlines the legacy this *modus operandi* has left in the current restoration, valorisation and renovation projects with regards to cultural heritage.

In particular, the “liberation restoring” has found a widespread application in the valorisation of defensive systems in general, and of military architecture in particular. The wide category of defence and military heritage includes medieval castles, urban walls and towers, coastal towers, up to Second World War Forts.

From the beginning and through the centuries, these architectures have been modified to be adapted to enemies’ weapons and assaults. Once decommissioned from their military purpose, they were considerably transformed through the superimposition of new architectonic stratifications.

The history of the restoration works on this heritage reveals several examples of unwarranted demolitions and transformations carried out to bring monuments back to a precise period, in order to enhance a specific original moment of construction, to the detriment of later stratifications and constructive phases.

Donatella Rita Fiorino is with the University of Cagliari, Department of Civil-Environmental Engineering and Architecture (DICAAR), Via Santa Croce, 67, 09124 Cagliari, Italy (phone: +39(0)70-675-5358; e-mail: donatella.fiorino@unica.it).

Marzia Loddo was with the University of Cagliari. She is now with the Department of Architecture and Urban Studies at the Polytechnic of Milan, Via Bonardi 9, Ed. 14 “Nave”, Ground floor, 20133 Milan, Italy (e-mail: marzia.loddo@polimi.it).

Furthermore, the analysis of recent restorations shows how valorisation and fruition attempts encouraged, also in recent times, the practice of “liberation restoring”. This happens because this method is the ideal way to highlight the more ancient (or more historically and culturally relevant) architectonical phases of defensive systems, thus improving also the touristic value of the monuments.

A wrong interpretation of the structures, the need to find sensational data at all costs, the forced use of fragments of art and history only for touristic exploitation, aimed at creating revenue, threaten to increase the practice of this kind of restoration, neutralizing its natural and correct context.

This research follows the creation, codification and operative history of the “liberation restoring”, while attempting to underline its original motives and the cultural distortions that led to subsequent uses of this method. In order to do so, some exemplary case studies concerning fortified structures in Italy were chosen.

The temporal continuity of this practice is particularly noteworthy and well known as well as the relationship between philological restoration and liberations in Italy during XIX and XX sec. The case study illustrated in this paper is a less known example, even if really significant in this context, that is the former prisons of San Pancrazio in Cagliari (Sardinia, Italy), where this method, used during the interventions at the beginning of the 20th century, was adopted again during the reconversion works that started in 1986, although lacking the ideals that originally inspired it. In this particular case in fact, the “liberation restoring” led to the creation of a completely new space, never existed before in the actual morphology, used now as an exhibition site.

This case study, which represents many other similar and not only Italian contexts, leads to a reflection on the historical and cultural implications of such interventions and on the legality of demolitions. Therefore, there is now an open debate on this type of restoration, which, as it often happens, is still widely practised, despite being theoretically antiquated.

## II. LIBERATION METHOD: THE RESTORATION OF DEFENSIVE ARCHITECTURE

### *A. Historical Methods for Valorisation: From Philological Renovations to Liberations*

The practice of freeing monuments from subsequent additions originates with the restoration concept and crosses the entire history of conservation. In fact, from the origins of stylistic restoration until the critical one, demolition has been considered the core issue among operative interventions, since it is the main instrument that allows to “reveal”.

Often in the past, but even today, the goal of restorers has always been to bring the monuments back to their original characteristics, which have been inevitable changed by the course of time. With their work, restorers aim to reveal something new, to raise the value of appreciation and interpretation of the historic architecture they are punctually intervening on, even at the cost of sacrificing recent material, or one with less historical, artistic and aesthetic interest.

The selective removal of incoherent and dangerous stratifications from historical monuments is already a common praxis of the philological restoration procedure and even more, in its historical interpretation.

Even Camillo Boito (1836-1914), who proclaimed the necessity of equally protecting monuments belonging from every era, made a distinction regarding fortified architecture. In fact, he was responsible for massive demolitions, such as the philological restoration of Porta Ticinese in Milan, Fig. 1.



Fig. 1 Milan, current and historical view of Porta Ticinese, strongly influenced by the “liberation restoring” of Camillo Boito

As is well known, the “liberation restoring” was codified in Italy by Gustavo Giovannoni (1873-1947), who listed it among the five modes of operation on cultural heritage. It consists of “[...] removing the superfluous and inorganic additions that alter the internal and external monument or obstruct its view”. Therefore, the restoration can intervene on “amorphous houses built against a clearly pre-existing monument or parts of it, which block or hide it”.

Giovannoni also acknowledges that the distinction between a stratification that is in itself a work of art and one that “barbarously destroys the static and aesthetic balance” relies merely on a subjective interpretation. Each person has his or her own evaluation scale and this could lead to mistakes, which is why it is necessary to face this issue using all the data and details we can acquire. The fact is that, in most cases, the “liberation restoring” process slowly turns into a complete reconstruction and reinstatement [1].

Lastly, Giovannoni warns restorers on the difference between “liberation restoring” and “isolation restoring”. The latter is defined as the practice of detaching the monument from the buildings that surround it in order to increase its value, thus radically changing its original environmental conditions, for instance creating vast squares and visual perspectives also in areas where spaces and views were previously restricted.

The practice of isolating a monument was strongly

supported by urbanisms from the second half of XIX century. The most famous case is probably the Plan for Florence designed by Giuseppe Poggi from 1865 with the demolition of the urban walls in order to build the new ring road and the conservation of some city towers, such as in Piazza Cavour, currently Piazza della Libertà, Fig. 2.



Fig. 2 Florence, Ancient city door in Piazza della Libertà, after the demolition of urban walls

Later, since the 1930s, the intervention on “amorphous houses built against a clearly pre-existing monument or parts of it” has been vastly adopted especially with regards to defensive structures. It is useful to recall some well-known examples, in order to define the extent of this cultural phenomenon.

In Trieste in the 1930s, the whole Castle of San Giusto was subjected to a full restoration, aimed at turning it into a centre for artistic and cultural activities, a folk and touristic entertainment area, as well as an appropriate space hosting some sections of the city museum. The restoration, directed by architect Ferdinando Forlati, was aimed at clearing the entire complex of the 18th and 19th century superstructures, bringing the original structures back to light, Fig. 3 [2].

In 1936, Angiolo Badiani (1877-1950) dismantled the former Fortress of Santa Barbara belonging to the Castello di Prato, that was consequently radically freed from all its subsequent additions, Fig. 4. The same Badiani, however, later admitted that demolition had been too extensive, leading to the loss of elements that were important for the history of the complex.

At Castel Nuovo (Naples), Riccardo Filangieri (1882-1959) restored the 15th century fortifications by demolishing all the elements outside the ramparts. He argued that materials had no value in themselves: the documentary importance of the stones was not in their physical consistency, but rather in their entire structure and ultimate function. Therefore, the replacement of a stone will never be a fabrication of history when it is made in the right matter, coherent with its original form, as [3]-[4].

Piero Sampaolesi (1904-1980), who strongly believed in the value of authentic material, worked on fortified buildings using “liberation restoring” as a method. Among his other interventions: the clearing of the western towers of Federico’s Castle in Prato, the liberation of the tower belonging to the Old Fortress in Livorno, the liberation and restoration of the Porta a Mare, the consolidation and liberation of the Martello

Tower in Portoferraio, the liberation of the structures built against the city walls of the citadel in Pisa, conducted in cooperation with Sergio Aussant [5].



Fig. 3 San Giusto Castle in Trieste: 1930s restoration works

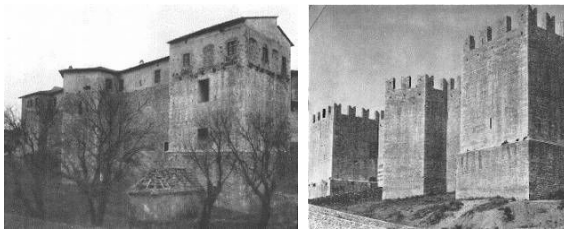


Fig. 4 Swabian Castle in Prato, before and after restoration works. Carried out by Giuseppe Agnello at the beginning of 19th century, following the method of liberation

#### *B. Tradition and Continuity of Liberation in the Valorisation of Monuments in Sardinia*

The protection of architectural heritage in Sardinia theoretically began with the establishment of the Regional Office for Monuments Conservation (1891) and continued through successive names (Monuments, Art Galleries and Antiques) up to today's Superintendencies. The first decades of their work did not allow identifying a uniform intervention strategy and were distinguished by the primary need to organize the knowledge of pre-existing architectures, often scattered across the region.

The first director of the Regional Office, Dionigi Scano (1867-1949), moved by the nationalist ideology, planned the search for ancient Romanesque-Pisan vestiges, which were considered the only real evidence of the Italian origins of Sardinian art. In doing so, he started a sequence of philological interventions of "revelation", which can be considered as precursors of the liberation practice.

In particular, turning to defence heritage, Dionigi Scano stated a series of philological restoration works on the pisan towers of the urban walls of Cagliari. Obliterated during the Spanish dominion, the Elephant and St. Pancrazio towers were brought back to their supposed original connotation, as can be seen in Fig. 5. With the same method, he restored the main Tower of Malaspina castle in Bosa.

During the XIX century, also in Sardinia, the urban Plans for the renovation of the main urban centres led to massive demolition of urban walls or to their transformation into modern boulevards. This is the case of the eastern walls of

Cagliari, changed in shape and pattern and converted into new outstanding boulevards, as required by the new desire of urban decorum, Figs. 6, 7.



Fig. 5 Cagliari, Elephant tower, before and after the liberation designed by Dionigi Scano

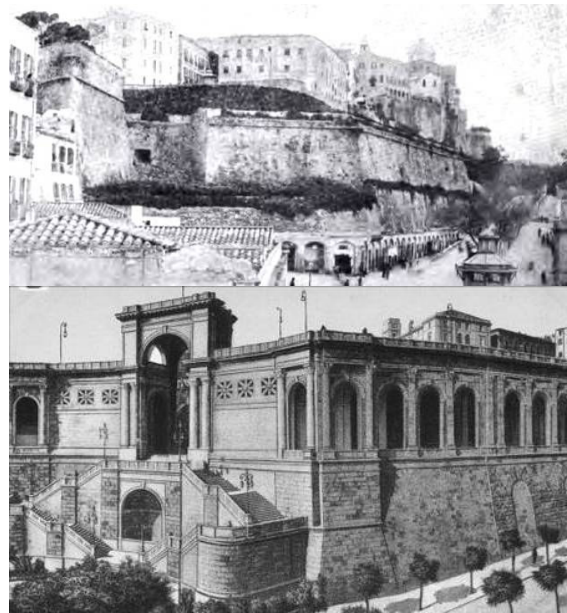


Fig. 6 Cagliari, southern bastions at the end of 19th century: structures built against the walls are clearly visible. They were later removed to build the Bastion of San Remy



Fig. 7 Cagliari, Works for the final settlement of the Terrapieno, functional since 1829



Fig. 8 Oristano, Mariano II tower, isolated during the XIX sec.



Fig. 9 Cagliari, Bastione dello Sperone next to the “Case Bandini” – Bandini Houses – that were demolished in the 1930s and the same Bastione dello Sperone in a sketch for the liberation project

Sometimes, the monumental city doors were preserved, included in new buildings or, more often, isolated with the aim of valorisation. This was the case of the Mariano II tower in

Oristano, Fig. 8.

In the same way, structures that were built against monuments or manufacts were repeatedly removed in order to improve the monumental impact of ancient bastions and to redraw urban landscape, Figs. 9, 10.

Still in more recent times this practice seems to be frequently adopted in valorisation projects concerning walls, marking a continuity with the traditional use of the liberation technique.

Therefore, “liberation restoring” was still used in 1970s and 1980s, combined with the emptying of buildings, like in the case of Castello di San Michele and the former prisons of San Pancrazio, both reconverted into exhibition and community centres. Only recently these interventions have been recognized as the “liberation restoring” and their outcome critically reviewed, as [6]-[8].



Fig. 10 Cagliari, Bastione dello Sperone, in a recent picture

### III. THE CASE OF THE FORMER PRISONS OF SAN PANCRAZIO IN CAGLIARI

#### A. San Pancrazio Area

San Pancrazio area got its name from the Pisan Tower of San Pancrazio, which was the northern entrance to the medieval walled city of Cagliari. The existence of this fortified nucleus was first mentioned in 1217, with reference to today's quarter of *Castello* – indicated in various documents with the name *Mons de Castro* or also *Castel di Castro* – founded by the Pisans on the hill which had probably housed the castrum of the Roman Carales, behind the pre-existing port settlement of Bagnaria.

Nowadays, San Pancrazio area includes the Tower and other architectures introduced from the 16<sup>th</sup> century, see Fig. 11 [9]. In particular, between 1491 and 1508, Viceroy Joan Dusay ordered the edification of a bastion in order to strengthen the north sector of the city, which could be easily attacked due to its morphology. Its design characteristics were not those of a real bastion, but instead a fortification designed in the transition period in which medieval and “modern” structures coexisted. For this reason, it was criticized by expert military builders of the time. The area was subsequently expanded and modified – by engineer Rocco Capellino from Cremona (1552-1572), first, and engineers Jacopo and Giorgio



Paleari Fratino from Ticino (1563-78), later - to perform the defence function in what had always been one of the more vulnerable points in the northern area of the *Castello* quarter.

Over time, the bastion of Dusay was filled with soil and fell into disuse until 1824, when engineer Giuseppe Sbressa and master Giovanni Mura built a second floor, onto the preexisted perimetral bastion walls, in order to house a prison hospital.

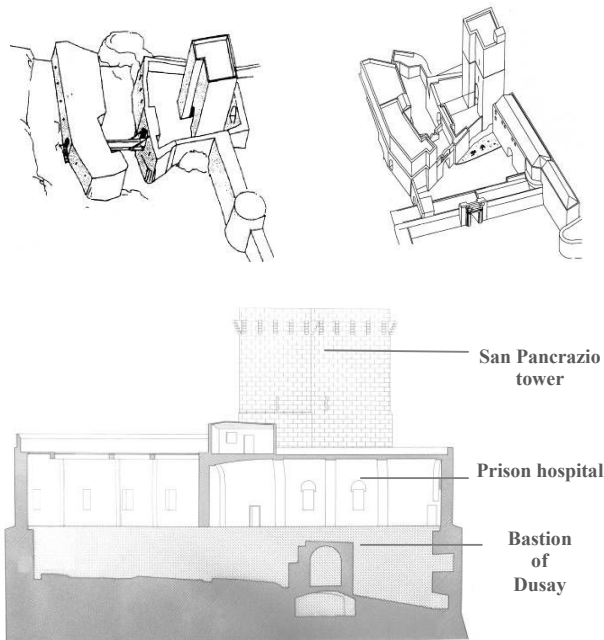


Fig. 11 Origin and transformation of San Pancrazio area

In those years Cagliari was dominated by the Piedmont Reign (1720 - 1861), which created new architectures to reinforce the *Castello* and other neighbouring districts.

From 1720 to the Italian Unification (1861), Cagliari was under the Savoy Reign. The rulers started a new season of transformations to the fortified city of Cagliari, mainly in the north part of the city (Royal Arsenal and public prison areas). Among the innovations: the creation of Porta Cristina, Porta of the Royal Arsenal and Porta d'Apremont – completed in 1741 and demolished in 1914 to allow the passage of the tram line, see Fig. 12 [10].

The prison was allocated inside San Pancrazio's tower (that had already been closed in the 16<sup>th</sup> century and used as a public prison) and its yard. Also, other sections of the prisons were located outside the perimeter wall, such as the juvenile detention centre in Piazza Arsenale, the Seziato building and the women's prison in Piazza Indipendenza.

The decommissioning of the military stronghold in 1866 marked the legitimization of significant demolitions of bastions and walls, which were considered an obstacle to the craved expansion and modernization of the city.

With the construction of the new Buoncammino's Prison – between 1887 and 1897 – the San Pancrazio area was freed from both prisons and military arsenal, which both passed with progressive assignments (documented from May 24,

1896), from Prison Administration to the Ministry of Education.

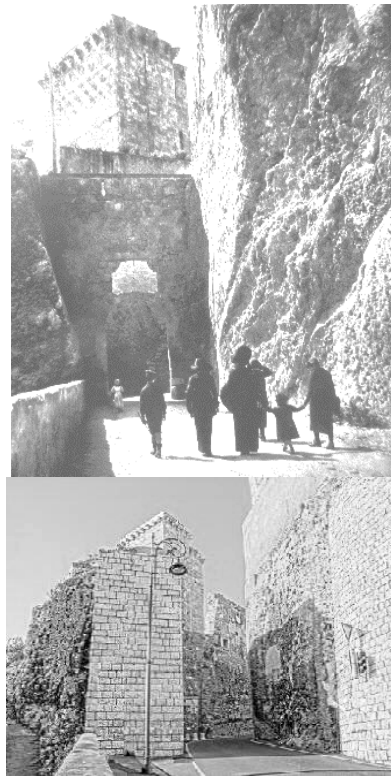


Fig. 12 The Porta d'Apremont and today's street after its demolition

#### *B. The Liberation Restoring by Dionigi Scano*

Since 1902, the Regional Office for the Preservation of Monuments of Sardinia and engineer Dionigi Scano (1867-1949) began an intense and brave campaign of philological renovations and restorations that lasted 8 years, aimed at freeing the Pisan tower and wall curtains, of which the signs are still visible on the walls, as illustrated in Fig. 13 [11]. These restorations included the demolition of the 16<sup>th</sup> century wall that had been covering the southern side of the Tower since it became a prison. Also, internal partition walls were demolished and wooden structures were reinstated. The tower structure almost went back to the original Pisan period again, see Fig. 14 [12].

The first plan to turn the bastion into a museum came from the Superintendent Raffaello Delogu (1909-1971), who intended to place a paint gallery and an exhibition of folk art in the former prison hospital.

Only between 1957-1979 architects Libero Cecchini and Piero Gazzola proposed an intervention to transform the Royal Arsenal area into the Citadel of Museums, which is still fully functional.

The Royal Arsenal area, which had been heavily bombed during the Second World War, has been of particular interest to the University of Cagliari that wanted to turn it into an Archaeological Museum, Art Gallery and Art Institute of Sardinia. The two architects planned to create a

small town area, called *Cittadella*, not just as a mere exhibition space, but also as a place where people could study in a library or attend seminars. With this in mind, they worked to allocate a place, hitherto a symbol of war, to culture.

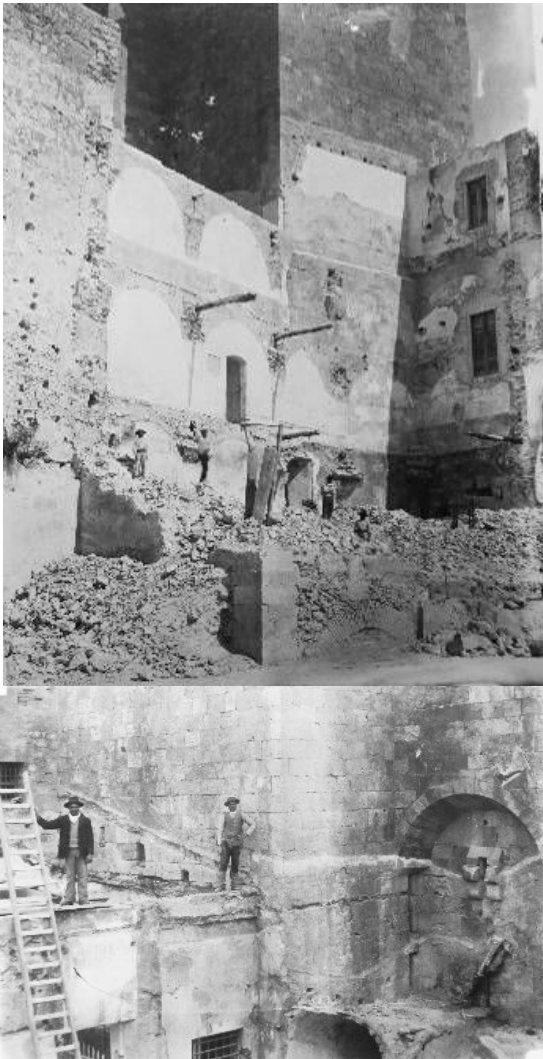


Fig. 13 Prisons demolition. The signs are still visible on the walls

The project, presented in December 1956, was based on the reuse of existing buildings along the perimeter of the San Pancrazio tenaille bastion, and on the edification of a new structure, an auditorium designed to be at the center of the square. The Auditorium was never realized in the middle of the square due to safety measures, but it was designed for the interior of the former prison of San Pancrazio, see Fig. 15 [13].

Only in October 1965, the project became executive thanks to the cooperation between the Italian State and the Region of Sardinia, who both financed its execution. During the construction, the pre-existing Savoy, Spanish and Pisan city walls were unearthed. In addition, Punic and Roman cisterns were found, Fig. 16 [14].

After the discovery of the pre-existing structures, a new approach to the design was necessary. The main problem was to incorporate the ancient walls in order to make them a part of the new complex. Most important of all was to protect them from atmospheric conditions and future degradation. The two architects' project succeed in accomplishing this task and even today part of the pre-existing walls are preserved in the museum spaces and can be seen along the museum itinerary.



Fig. 14 San Pancrazio Tower before and after the wall demolition

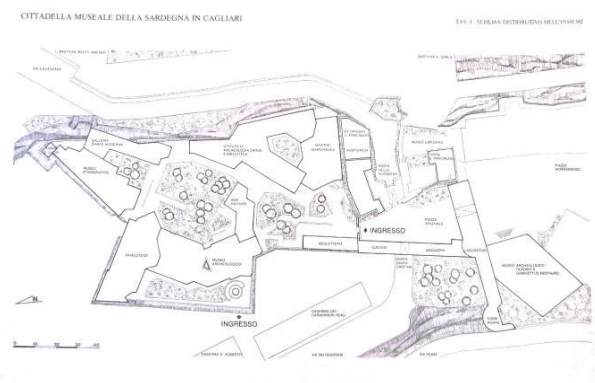


Fig. 15 *Cittadella* project by architects Cecchini and Gazzola

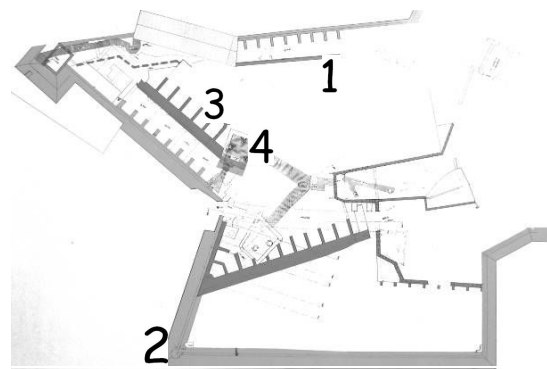


Fig. 16 Plan of the archaeological excavations carried out in 1966.

Here pictured: the structures from the 20th century (n°1), 18th century (n°2), 16th century (n°3) and before the 16th century (n°4)

*C. The Liberation Restoring by the Superintendency of Cagliari*

The restorations conducted from 1986 to 2006 by the Superintendency of Cagliari (B.A.A.A.S.) enabled the effective use of what is now called San Pancrazio Space (the former bastion of Dusay and prison hospital).

During the interventions the entire space below the 18th century prison was emptied from the soil (that had been added during the Spanish era), thus creating a new architectural volume of 780 square meters, as showed in Fig. 17.

Furthermore, in order to facilitate the soil removal, during the excavation the original access through the bastion was opened, specifically, a Catalan-Aragonese door - that had been closed around 1824-25 during the construction of the prison hospital - see Fig. 18 [15]. The street level lowered with time, in fact, today the door is at a height of about 4 meters. To allow the access a special staircase and an elevator have been designed, in line with the structure built inside.



Fig. 17 Longitudinal section of the San Pancrazio Space after the soil removal



Fig. 18 The Catalan-Aragonese door in 1955 and now

After the soil removal, the original constructive solution was discovered, perfectly preserved at the time of excavation. It was of a structure composed by parallel septums walls,

connected by vaults, which run along the perimeter of the bastion. The same type of structure can be found in the bastion of Maddalena in Alghero, built from the second half of the 16<sup>th</sup> century by the same authors of the San Pancrazio tenaille bastion, Rocco Capellino, Jacopo and Giorgio Paleari Fratino.

However, the subsequent 1980s restoration conducted by Superintendency hid the original structure creating a new architectural shape, completely different from the original, see Fig. 19 [16].

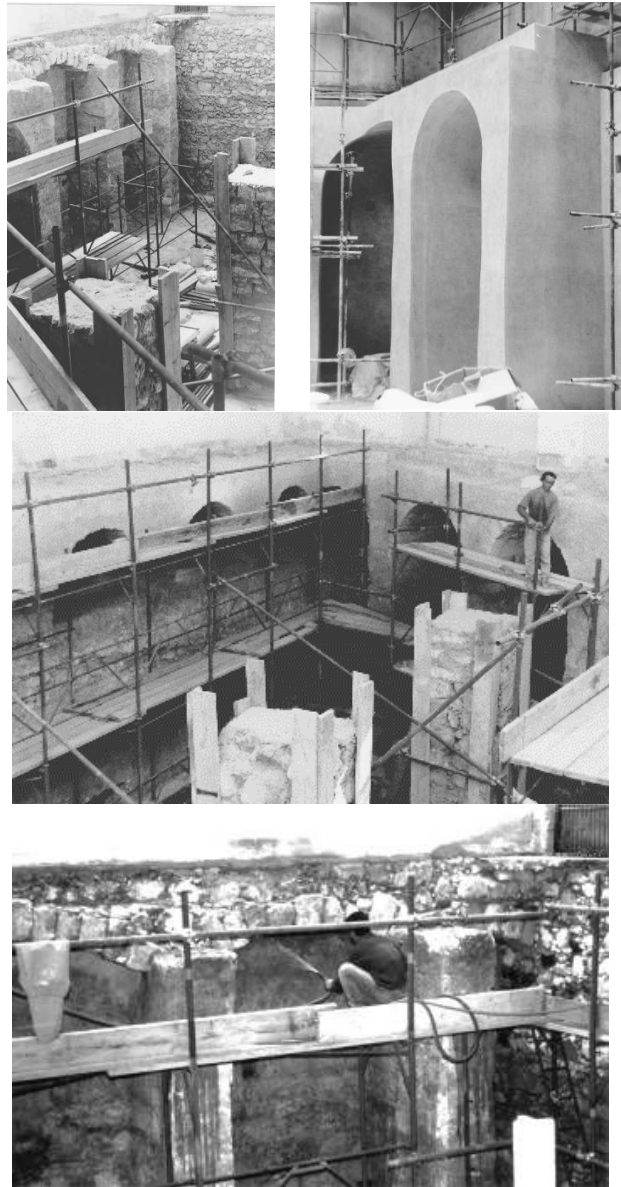


Fig. 19 The original constructive wall solution and the new architectural shape

The Superintendency interventions allowed obtaining a homogenous space that combined both the historical phases of architectural wall growth and the phases of its reuse in more recent times, when it was already past its original military



function.

A structure that allows the use of space and is easily distinguishable from the original building was created and mounted inside the new space consisting of steel load-bearing elements, with pillars, support beams and a secondary structure. The latter was made from beams of small cross-section, on which the steel purlins with regent function of the wooden floor were mounted.

The new structure is divided in two parts, as showed in Fig. 20. The first part, located on the east side of the building, is composed of three layers that develop vertically for a total of approximately 480 sqm of exhibition spaces, since each floor area is about 160 square meters. The second one, on the west side of the building, maintains the 19<sup>th</sup> century vaulted roof and consists of two levels for a total of 300 square meters.

All in all, these renovations allowed to recover the artefact in its more meaningful values and in the most ideal way according to exhibition requirements. As a matter of fact, the San Pancrazio Space is currently one of the exhibition sites of the Superintendency of Cagliari (BAPSAE).



Fig. 20 San Pancrazio Space, new exhibition site

#### IV. CONCLUSION

The “liberation restoring”, as evidenced in this dissertation,

has always been heavily fuelled by the desire of revealing something previously unknown about the monument. The contemporary society tends to turn every discovery into a media event, which is able to draw attention and trigger processes of great impact, not only cultural, but mainly in terms of economy and tourism. Therefore, monitoring this process is very important in order to preserve the historical architecture, especially the vulnerable global defensive heritage.

The decommission of many fortified structures facilitated their conversion into spaces for culture and tourism. However, to the detriment of the construction intermediate phases, which have been cancelled in order to reinstate the original morphology and lost military functions.

The well-known historical renovation examples and this particular Sardinian case constitute an important lesson about the limits of liberation restoring and the uncertainty in terms of results. Moreover, they extend the research scope to new guidelines on valorisation intervention and reconversion of the defence assets.

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#### REFERENCES

- [1] G. Giovannoni, “Restauro di Monumenti, conferenza di Gustavo Giovannoni”, Bollettino d'arte, Ed. Roma: Calzae, 1913.
- [2] M. Bini, C.M. Luschi, A. Bacci, “Il castello di Prato: strategie per un insediamento medioevale”, Ed. Firenze: Alinea, 2008.
- [3] G. A. Centauro, “Nuovi studi sul Castello di Prato: dal Castrum Pratii al Palatium Imperatoris”, Prato Storia e Arte, vol. 113, 2013, pp. 27-38.
- [4] R. Filangeri di Candida, “Critiche amene all'opera di Castel Nuovo, Questioni storiche e criteri di restauro”, Ed. Napoli: Industrie tipografiche ed affini, 1931.
- [5] A. Spinosa, “La ricerca applicata al restauro: l'esperienza di Piero Sanpaulesi”, unpublished phd thesis, University “Federico II” of Naples, Phd in Conservation of Architectural Heritage, XIX cycle.
- [6] D.R. Fiorino, “Stratigraphic evidence in the ancient urban walls of Cagliari (Sardinia-Italy)”, in C.A. Brebbia, C. Clark, *Defence Sites II Heritage and Future*, WIT Transactions on the Built Environment, Vol. 143, Southampton 2014, pp. 257-268.
- [7] D.R. Fiorino, “La stratigrafia urbana”, in C. Giannattasio, P. Scarpellini, *Proposte per Stampace*, ed. Gangemi, Roma 2009, pp. 69-74.
- [8] M. Loddo, “Conoscenza e interoperabilità per il riconoscimento e la tutela delle mura urbane di Cagliari”, unpublished MA degree dissertation, University of Cagliari, 2012.
- [9] R. Turtas, S. Casu, A. Dessi, “Le piazzeforti sarde durante il regno di Ferdinando il Cattolico (1479-1516)”, atti del XIV Congresso di Storia della Corona d'Aragona, Università degli Studi di Sassari, Sassari-Alghero, 19-24 maggio 1990.
- [10] Porta dell'Apremont, *Ritratto di una città, 1741*, Biblioteca Comunale di Cagliari.
- [11] AF-BAPSAE CA-OR, Cartella Cagliari, Torre di San Pancrazio-Restauro anni 1903/1910.
- [12] AF-BAPSAE CA-OR, Cartella Cagliari, Torre di San Pancrazio-Restauro anni 1903/1910, n°3918.
- [13] P. Gazzola, L. Cecchini, *La Cittadella Museale della Sardegna in Cagliari*, Università degli studi di Cagliari Ed. Cagliari 1979, tav.1.
- [14] P. Gazzola, L. Cecchini, *La Cittadella Museale della Sardegna in Cagliari*, Università degli studi di Cagliari Ed. Cagliari 1979.



- [15] Archivio Storico del Comune di Cagliari, Fondo Fotografico, Serie II Architettura, foto 0060-6-10.
- [16] AS-BAPSAE CA-OR, Cartella Cagliari Complesso di San Pancrazio, perizia n°33/92, del 10 agosto 1992.

**Donatella Rita Fiorino** is an Engineer, Ph.D. in Conservation of Architectural Heritage, Specialized in Restoration of Monuments, Architect for the Italian Ministry for Cultural Heritage and Tourism, currently she is Researcher Professor of Restoration at the University of Cagliari, Department of Civil-Environmental Engineering and Architecture (DICAAR), Cagliari.

**Marzia Loddo** is a Ph.D. student in Preservation of Architectural Heritage at Polytechnic of Milan. She graduated in Conservation of Architectural and Environmental Heritage at the Faculty of Architecture at University of Cagliari. Her MA thesis is about recognition and protection of the fortified city of Cagliari and the information systems for conservation and valorisation of cultural heritage. In March she completed a Master's degree in Management of artistic and cultural heritage at the International University of Languages and Media of Milan, for which she currently works as an exhibition coordinator.