

The Circular Destiny of Ruins — The Case of the Convent of San Michele in Borgo, Pisa

Andrea Crudeli

Adjunct Professor, PhD, University of Pisa, Italy
andrea.crudeli@phd.unipi.it

Keywords: Massimo Carmassi; restoration; adaptive reuse; building adaptation; heritage conservation

Introduction: The Ruin of San Michele in Borgo, Pisa

In the city of Pisa, the area behind the church of San Michele in Borgo is an urban space cursed by its ruined condition since 1943, when the cloister was bombed. San Michele in Borgo is one of the main Romanesque churches of Pisa, located in the heart of the city, and its façade overlooks Borgo Stretto, from which it takes the name. The first construction dates back to the eleventh century, with a settlement of the Benedictine monks, who built a church with a convent organized around a cloister. After multiple modifications during the same century, the appearance of the complex underwent drastic changes until the current Gothic façade was completed in 1304.¹ A century after the completion, the Benedictine monks left the convent, and the property was transferred to the Order of the Camaldolesi, who resided in the complex until the 18th century. In 1782, the order was suppressed, and the convent was vacated. Over the next century, the spaces surrounding the cloister were gradually bought by private owners, and the courtyard's void slowly transitioned into a private space for residential use. During World War II, the city of Pisa was heavily bombed by the Allies due to its strategic location and the presence of railway and communication infrastructures. The bombing raids started in August 1943 and continued intermittently until the end of the war in 1945. One of the most devastating bombing raids on Pisa took place on August 31st 1943, when the city was hit by over 2000 bombs, causing significant damage to historic buildings, including the convent of San Michele in Borgo. As a result, the cloister suffered significant destruction.² After the War, in 1947 the Municipality of Pisa adopted a reconstruction plan, a sort of preliminary town planning for a general reconstruction strategy of the city's wounds. The superintendent Piero Sanpaolesi,³ who was responsible for the architectural heritage of Pisa, decided on the demolition of the remains of the cloister. Except for the two lateral portions integrated into the body of the church, all other constructions were completely removed, resulting in a large empty space between Via degli Orafi and the church's apse.

After Prof. Sanpaolesi's urban clearance, the void left by the cloister became a public square, which soon began to be used spontaneously as parking area. The remnants of the cloister volumes, still exhibiting the original sixteenth-century stone-brick mixed walls, were still structurally connected with the apse. The issue of demolishing architecture from the past was particularly articulated during that historical period. The psychological trauma suffered by the local population after the

1 Gabriella Garzella and Maria Luisa Ceccarelli Lemut, *San Michele in borgo: mille anni di storia* (Ospedaletto: Pacini editore, 2016). The history of the church and the convent has been exhaustively studied by the two authors in this volume, from its foundation to recent events.

2 Emilio Tolaini, *Pisa: la città e la storia* (Pisa: ETS, 2007). The history of Pisa from its origins to the present day, including the WWII events, is exhaustively described in this book by the historian Emilio Tolaini.

3 Susanna Caccia Gherardini, *Memorie di un restauratore: Piero Sanpaolesi: scienza e arte del restauro* (Firenze: Didapress, 2019). Piero Sanpaolesi was an Italian engineer, architect, restorer, architectural historian and academic. This book explains how he's been a protagonist of the restoration culture of the second half of the twentieth century, especially in Pisa, experimenting new methodologies.



Fig. 1: The back of *San Michele in Borgo* after the bombings and the demolition of Prof. Sanpaolesi

bombings led to rapid decision-making processes, especially concerning the urban fabric. The citizenry was driven by a collective desire to forget the tragedies of the war, and replacing the ruins with new buildings was one of the solutions adopted. The area behind the church remained an illegal parking space, with the ruins untouched, until the beginning of the 1970s. At that time, the matter became a central topic in public debate, and the administration decided it was time to act. During the same period, municipalities across Italy established internal technical offices staffed with architects and engineers to address the increasing demand for public works. In 1974, architect Massimo Carmassi joined the Municipality of Pisa as the leading architect of the Ufficio Progetti (Project Office) and continued in this role until 1990. Even after leaving his official position, he still continued to work as an external architect for the municipality until 2001.

In 2021, the University of Pisa “discovered” the archive of the Municipality of Pisa and began a process of enhancing the value of the found materials, with particular interest in the projects of the Ufficio Progetti during the period it was led by Carmassi. This archive contains all the original

drawings of Carmassi's public works, including a series of unpublished design options developed for the ruins of San Michele in Borgo, from the initial sketches to the construction drawings. The archive had been abandoned in 1999 when the technicians shifted to digital tools.

Thanks to these drawings, the paper discusses how, from 1974 to 2001, the Pisan architect dealt with the ruins, attempting to reclaim this urban space for the community's use. Through the development of many project proposals over the years, Carmassi developed an increasing sensitivity towards the ruins of the ancient cloister, eventually formalizing an innovative methodology: if at first, he ignored them, he later made them a part of his design composition, eventually turning them into active protagonists capable of suggesting project themes, technical choices, and spatial solutions.

Masimo Carmassi and the Construction of a Methodology for Ruins Recovery

Born in San Giuliano Terme in 1943, Massimo Carmassi grew in Pisa. He attended the Scuola di Architettura in Florence, graduating in 1970. After collaborating with the Scuola di Ingegneria between 1971 and 1973, and practicing the profession with Gabrielle Iori from 1969 to 1974, Carmassi joined the municipality in 1974 following a public competition, and he founded the Ufficio Progetti. He left the municipality in 1990 and then continued the private practice in Pisa until 1997, also beginning to teach at various universities, first in Ferrara and then at IUAV. In 1997, he left Pisa to move to Florence, where he also relocated his studio.⁴

The Ufficio Progetti certainly represents one of the most important phases in his biography, a period during which his architectural production became known throughout Italy. His tenure in the municipality also coincided with a continuity of the governance of the city of Pisa, which allowed for the planning of a series of interventions in the historic center for its recovery. As Luigi Bulleri, the mayor at that time, writes in his autobiography, "the turning point was favored by the contribution of new figures of the urban and architectural culture of the city, and in particular by hiring Massimo Carmassi in the Municipality. His restoration projects in the historic center, especially *Palazzo Lanfranchi* on the *Lungarni*, the *Teatro Verdi*, and the area behind *San Michele in Borgo*, initiated an important cultural recovery of the city's architecture and urban planning."⁵

The projects that Carmassi designed for the recovery of the historic center have been fundamental in the progressive construction of a peculiar dialogue with the ruins. By referring to the projects mentioned above by Luigi Bulleri, one can grasp how these experiences merge into the development of an increasing awareness. The first case is the restoration of Palazzo Lanfranchi. This case study was fundamental in understanding the deep stratigraphy of the historic fabric of the city of Pisa. Indeed, during the restoration works, this palace revealed itself to be the union of several medieval buildings, pertaining to the typology of the tower-house, which had been merged in the Renaissance period and then decorated during the eighteenth century. As Carmassi writes, the most important lesson from this experience was the development of a new concept of recovery: "Restoring (...) thus means enabling buildings to reveal their own layers, wisely showing the stages and times of their continuous becoming."⁶ Therefore, the first issue arising from this

4 Marco Mulazzani, *Massimo e Gabriella Carmassi: Opere e Progetti* (Milano: Electa, 2004). The most comprehensive monograph on the works of Massimo Carmassi is written by Prof. Mulazzani, providing a broad overview of his professional and academic career.

5 Luigi Bulleri, *Il sindaco rompe la catena* (Pisa: Pacini, 2009), 32. Original text: "la svolta fu favorita dall'apporto di nuovi esponenti della cultura urbanistica ed architettonica della città e in particolare dell'assunzione in Comune di Massimo Carmassi, che, con i progetti di restauro nel centro storico, in particolare Palazzo Lanfranchi sui Lungarni, del Teatro Verdi, del Retro di San Michele in Borgo, dette inizio ad un recupero culturale importante dell'edilizia e urbanistica cittadina." Luigi Bulleri, who served as the mayor of Pisa twice, praised the work of Massimo Carmassi multiple times in his autobiography.

6 Massimo Carmassi, *Un Palazzo, Una Città: Il Palazzo Lanfranchi a Pisa*. (Pisa: Pacini Editore, 1980), 61. Original text: "Restaurare (...) significa dunque mettere in grado gli edifici di rivelare i propri strati, mostrando, con ocularietà, le tappe e i tempi del loro continuo farsi."

restoration was to reveal the historical stratifications and keep them intelligible. The second key episode was the restoration of the Teatro Verdi, a nineteenth-century building that was no longer usable. In this recovery, Carmassi devised a working method aimed at achieving a new integrated unity through the addition of new gestures within the historical palimpsest. Embracing the restoration debate of that time, Carmassi matures the personal conviction to never replace any component with a new, falsely historicized one, and, reasoning by fragments, he manages to solve the problem of a new integrated unity thanks to the adoption of a dialogical language of architecture. As he states in an interview, "It is the strong interest in the material conservation of the existing with its stratifications that led me to minimize transformations and to find a less conspicuous and more balanced relationship between the old and the new (...) Since then, I have been passionate about the complexity of the ancient city and its buildings, with their infinite stratifications. (...) A didactic attitude that has accompanied me throughout my life."⁷

The recovery of the San Michele in Borgo complex represents the most significant challenge that Massimo Carmassi faced in the historic center. Soon after his entry into the Municipality, in 1974, the local government asked him to recover the area with a new complex of social housing. Located in the heart of the historic center, with a prestigious construction system and quality finishes, this social housing would have represented a political gesture aligned with the administration's ideas: the integration of the working class into an urban fabric of high real estate value.⁸

The research conducted by the University of Pisa within the archive has enriched a discussion already presented in other summary studies on the topic,⁹ especially thanks to unpublished drawings, whose cross-reading allows for an understanding of an evolving methodology in dealing with ruins.

The Renovation of the Ruin of San Michele in Borgo. Projects From the Archive of the Municipality of Pisa 1974-1987

After various sketches, Carmassi submitted the first project proposal to the Municipality in 1976, after nearly two years of study. The project focuses on the two structures remaining as ruins of the old cloister, attempting to provide an urban conclusion to the two bodies. The ruins are substantially incorporated into a new volume, which partially follows its outlines. Just the walls of the south facade remain visible, while the rest is covered with plaster. In terms of construction, the southern block appears as an articulated sequence of stacked volumes, while the northern block is a deconstructed block, a solution influenced by the Florentine School of Architecture.¹⁰ Carmassi's first project marks the inception of a critical negotiation process to deliver a new building that could maintain its formal autonomy while simultaneously engaging in a dialogue with the ruins. The relationship with the ruin appears at the beginning of a journey (Fig.2).

7 Valeria Sansoni, *Massimo Carmassi: Trasparenza Del Nuovo Nell'esistente* (Canterano: Aracne editrice, 2020), 76. Original text: "è il forte interesse per la conservazione materiale dell'esistente con le sue stratificazioni, che mi ha portato a ridurre al minimo le trasformazioni e a trovare un rapporto meno vistoso e più equilibrato tra antico e nuovo (...) da allora mi sono appassionato alla complessità della città antica, e dei suoi edifici, con le sue infinite stratificazioni (...) Una attitudine didattica che mi ha accompagnato per tutta la vita."

8 Giuseppe Caciagli, *Pisa* (Pontedera: Arnerio Edizioni, 2001). All the info regarding the urban expansion of this historical period of Pisa can be found in the book by Giuseppe Caciagli, who describes the political decisions behind the developments of the city.

9 Massimo Carmassi, *Pisa: Ricostruzione Di San Michele in Borgo*, (Venezia: IUAV; Il poligrafo, 2005). This volume compiles the story of the recovery of San Michele in Borgo, through various drawings and studies from the private archive of Massimo Carmassi.

10 Carmassi studied at the School of Architecture in Florence, where there were many professors with strong design personalities, such as Leonardo Savioli and Leonardo Ricci, who imparted a strict cultural imprinting to their students.

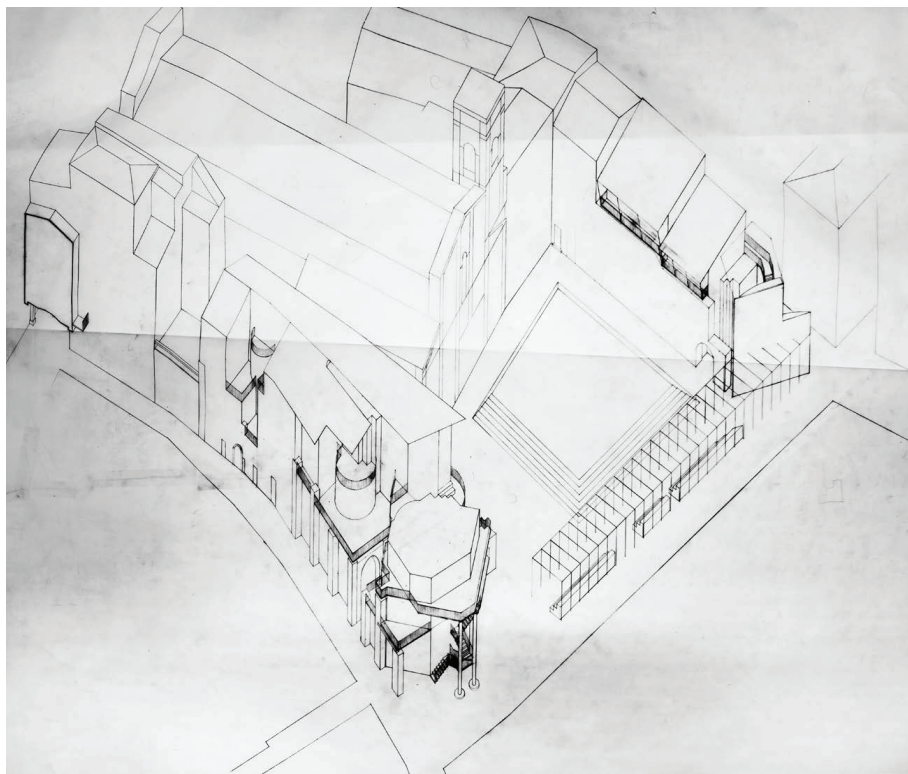


Fig. 2: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 1976. Axonometry

The following year, in 1977, Carmassi developed another project, clearly influenced by the works of Aldo Rossi in that period, a project characterized by extreme constructive clarity. The Tuscan farmhouse's typological model becomes a reference for creating macro-volumes that fill the whole lot according to unexpected angles. The system of openings is regular and distributed over the six parallel curtain walls of the three blocks. The idea of a sequence of compact volumes, interrupted by vertical cuts, will be later chosen for the final solution. In this project, the dialogue with the traces of the ruins is drastic. The decision to disrupt the directions of the urban fabric involves the demolition of most of the ruins. It is very interesting how, on the south facade, the remains of the pillars are exposed, not integrated into the volume, as archaeological remains. This choice greatly emphasizes the typological character of a social housing, an absolute adherence that leads to considering the ruins as presences not to be valued. Nevertheless, the solution for the new volumes will later be adopted in the final design. (Fig.3)

This project proposal explicitly introduces the choice of brick for the first time, considering it as the material selected to engage in dialogue with the ancient masonry of the old cloister. In fact, compared to previous solutions, most of the remains on the south side are preserved, even partially integrated into the new volume. Additionally, the planimetric outline of this remain is completed by a new detached body interlocked with it. In the north body, however, despite proposing new masonry to cover the old one, Carmassi tries to respect the internal distribution of spaces by maintaining the same openings on the facade. While near the church the windows almost coincide, moving away from it, openings appear with a contemporary language, as if to explicitly declare the contemporaneity of this portion of the building. In this block, the study of Carlo Scarpa's works emerges clearly, particularly the restoration of Castelvecchio in Verona in terms of manipulation of form and space. In this project, the ruin

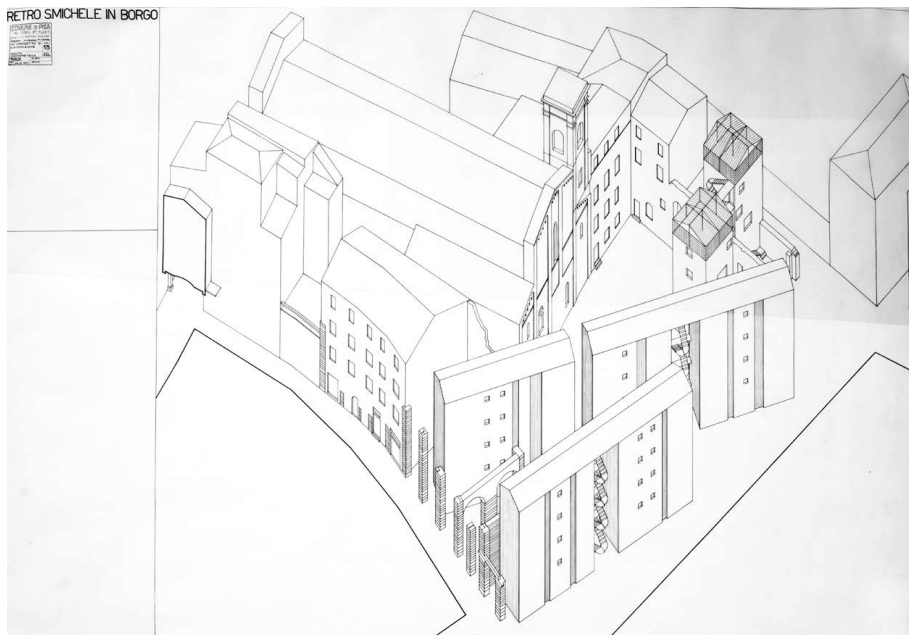
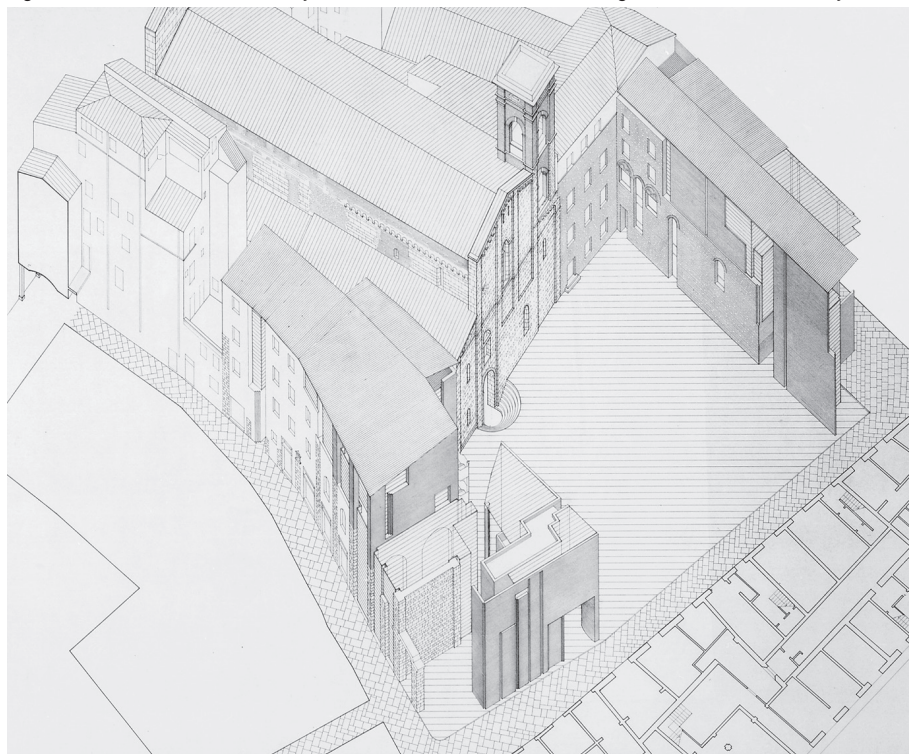


Fig. 3: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 1977. Axonometry
Fig. 4: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 1979. Axonometry



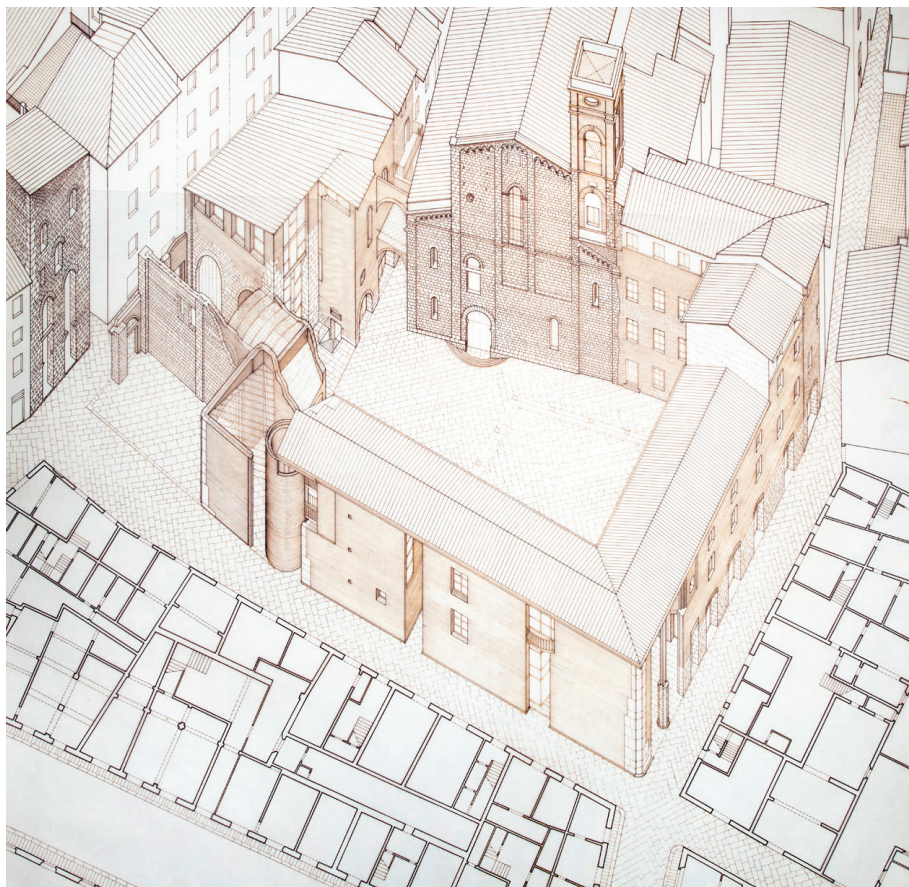


Fig. 5: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 1985. Axonometry

of the old convent begins acquiring greater importance, eventually integrating with the new addition. This marks the beginning of a new phase, where Carmassi has developed a different methodology for intervening in historical heritage, engaging in dialogue with the components to be preserved (Fig.4).

The 1985 solution represents a turning point in terms of design concept. In this project, Carmassi implements a process of formal synthesis, and he critically merges the ideas from previous solutions towards the realization of a single one, articulated in terms of connection with the ruin of the convent. The south body and the new addition to the east are connected by a hinge, where the layering of history is revealed, and the distinction between the new masonry and the old is emphasized by staggered overlaps. The distinction becomes didactic, but integrated into a new unity. Beyond the material dialogue, this project introduces for the first time a dialogue with the spatial structure of the ruin: by closing the east side, a courtyard is created, forming a square that recaptures the idea of the ancient cloister. For the first time, the urban memory of this space is restored (Fig.5).

Even if the construction site started in 1986, following the previous project, Carmassi developed the final set in 1987. The drawings found in the archive comprehend a large set of construction documents for this final version. Carmassi writes: “Staying within a logic of appropriate distinction between old and new, a solution that is more practical structurally and

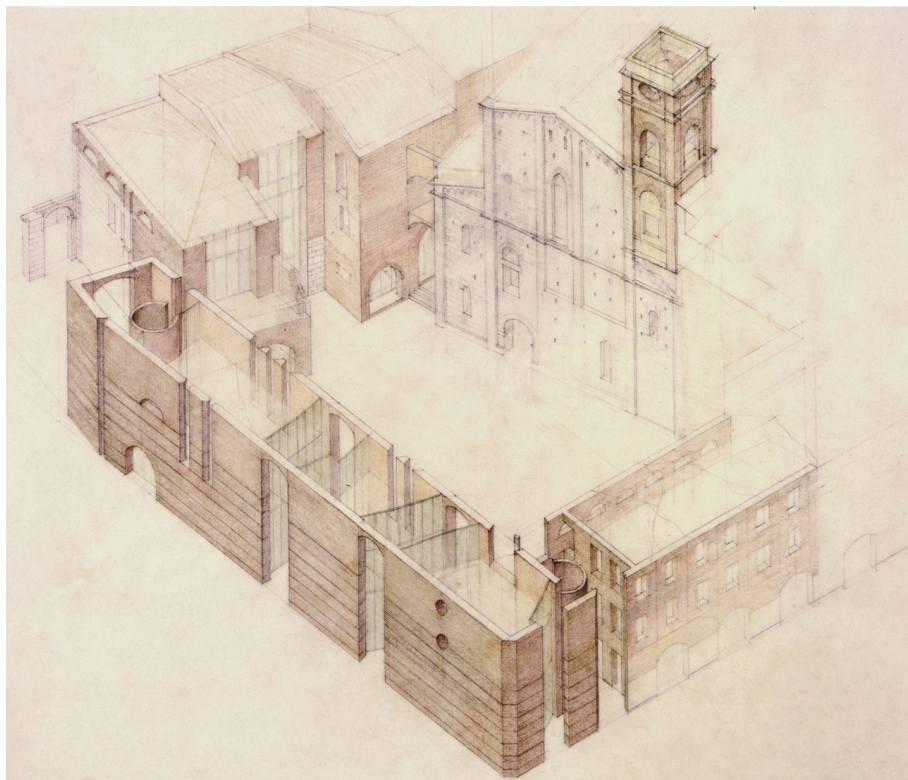


Fig. 6: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 1987. Axonometry
Fig. 7: Massimo Carmassi: Recovery of the convent of San Michele in Borgo, Pisa, 2018



less forced formally has now been adopted.”¹¹ The Pisan architect chooses to adopt a stronger adherence to the existing structures, opting to reuse the foundations of the medieval urban fabric to support the new walls, thus restoring the spatial structure of the original courtyard. The study of the ruins, and their technological aspect, suggests to Carmassi the adoption of a contemporary construction solution that reinterprets an ancient construction technique. He creates a 65 cm thick wall all along the perimeter, using two solid bricks vertical planes as formwork for a reinforced concrete core, similar to medieval sack-walls.

Throughout the progression of projects, Carmassi's endeavor to develop a topological methodology in San Michele in Borgo is revealed with remarkable sophistication. Every fragment of the cloister is conserved and meticulously documented in the initial survey. Using this documentation, the newly adopted materials and the architectural language become a critical extension of the ruins. In this context, Carmassi's approach can be considered as integrating the design phase within the investigative phase, where the examination of the ancient structure acts as a Socratic method in shaping the project's definition. Thus, the site of San Michele in Borgo is envisioned as a layering of interventions, ranging from archaeological efforts aimed at highlighting discoveries made during excavations, to a cultural endeavor through the reclamation of the cloister's spatial framework behind the church (Fig. 6).

The Circular Destiny of Ruins

According to Auguste Perret, the quality of a building contributes to its becoming a beautiful ruin.¹² Following this statement, the reconstruction of the ruins of the convent of San Michele in Borgo had a sad ending. The construction site was closed in 2001, after a challenging process that lasted nearly two decades. Soon after completion, the local administration sought to sell the building because they no longer intended to use it as social housing. The attempts to auction the property in 2003 and 2006 were unsuccessful. In the following years, the building was sporadically occupied, first by the homeless and then by student groups. These occupations caused very serious damage, quickly returning the new structure to a state of ruin (Fig. 7).

The case of the convent of San Michele in Borgo, from the bombings of World War II to the attempts at recovery, remains plagued by a state of “ruin” due to its abandonment, telling the story of an Italian failure. At the same time, however, it also narrates a paradigmatic journey of restoration, conservation, urban integration, and active dialogue with history. The challenge of integrating a new construction within the historical ruins has been solved progressively, searching for a balance between the old and the new, towards a new unity. This mediation between tradition and innovation is reached thanks to a discerning negotiation process. Throughout the various proposals, Carmassi developed a deep understanding of the historical layering and construction techniques. As Marco Mulazzani states: “With greater appropriateness, we could speak, regarding the work of the Carmassis, of a concrete experimentation, which does not originate from the realm of language, from an abstract search for the new, but from the relationship established with the place and a specific context, from the patient analysis of its settlement and its construction methods.”¹³ In the projects for San Michele in Borgo, Carmassi also develops a progressive intimacy with the ruins, working on

11 Carmassi, *Pisa: Ricostruzione Di San Michele in Borgo*, 25. Original text: “Rimanendo sempre all'interno di una logica di opportuna distinzione tra vecchio e nuovo si è adottata ora una soluzione più pratica strutturalmente e meno forzata formalmente.”

12 Luca Basso Peressut, *Il museo moderno: architettura e museografia da Auguste Perret a Louis I. Kahn* (Milano: Ed. Lybra Immagine, 2005).

13 Mulazzani, *Massimo e Gabriella Carmassi: Opere e Progetti*, 102. Original text: “Con maggiore appropriatezza potremmo parlare, per quanto riguarda l'opera dei Carmassi, di una sperimentazione concreta, che non parte dall'area del linguaggio, da una ricerca astratta del nuovo, ma dalla relazione stabilita con il luogo e un contesto preciso, dall'analisi paziente del suo insediamento e dei suoi metodi costruttivi.”

some design-oriented topics, such as the tectonic of the syntactic organization, the topological approach to the site, intended as a stratigraphic conception of the human gestures, and the tactile quality of materials, emphasizing architecture's capacity to engage individuals in a physical experience.

As Carlo Ceschi articulated: "Each era has its unique way of engaging with the past."¹⁴ In this sense, the dialogue that Carmassi has established with the ruins belongs to his era and is also part of the cultural context of Pisa. Carmassi's built option consists of a structure that is deeply embedded in its historical and cultural context, yet conveys contemporary insights and a progressive outlook. His innovative approach is to consider the ruin not merely as an object but as an active participant, a living entity that informs design suggestions and spatial strategies, meriting celebration within the restoration endeavor. Today, more than twenty years after its abandonment, the restored complex of the convent of San Michele in Borgo waits for a new chapter of its story, hopefully, to be returned to its citizens. In the meantime, overrun by plants, with broken windows and flooded apartments, it stands as a backdrop in the center of Pisa, like the setting of a beautiful ruin.

REFERENCE LIST:

- Basso Peressut, Luca. *Il museo moderno: architettura e museografia da Auguste Perret a Louis I. Kahn*. Museografia. Milano: Ed. Lybra Immagine, 2005.
- Bulleri, Luigi. *Il sindaco rompe la catena*. Pisa: Pacini, 2009.
- Caccia Gherardini, Susanna. *Memorie di un restauratore: Piero Sanpaulesi: scienza e arte del restauro*. Firenze: Didapress, 2019.
- Caciagli, Giuseppe. *Pisa*. Pontedera: Arnerio Edizioni, 2001.
- Carmassi, Massimo. *Un Palazzo, Una Città: Il Palazzo Lanfranchi a Pisa*. Pisa: Pacini Editore, 1980.
- Carmassi, Massimo. *Pisa: Ricostruzione Di San Michele in Borgo*. Venezia: Il poligrafo, 2005.
- Carmassi, Massimo. "La Progettazione Della Città Storica." *Parametro* 96 (1981): 34.
- Carmassi, Massimo, and Gabriele Lelli. *Progetto Urbano e Architettura*. Firenze: Alinea, 1996.
- Carmassi, Massimo. "Pisa: Una Esperienza Di Recupero Dell'Ufficio Progetti Del Comune." *RassegnaDiArchitettura* 117 (1981): 151–158.
- Ceschi, Carlo. *Teoria e Storia Del Restauro*. Roma: Carlo Bulzoni editore, 1970.
- De Carlo, Giancarlo. "Un nuovo modo di costruire Pisa." *Progetti per una città: Pisa 1975/1985*. Firenze: Electa, 1986.
- Garzella, Gabriella, and Maria Luisa Ceccarelli Lemut. *San Michele in borgo: mille anni di storia*. Pisa: Pacini editore, 2016.
- Matteoni, Dario, and Sergio Polano and Marco Mulazzani. *Massimo Carmassi. Architettura Della Semplicità*. Milano: Electa, 1995.
- Mulazzani, Marco. *Massimo e Gabriella Carmassi: Opere e Progetti*. Milano: Electa, 2004.
- Mulazzani, Marco. "Progettare Usando Il Passato." *Casabella* 794 (2010): 38–65.
- Mulazzani, Marco. "Costruire Sull'antico." *Casabella* 701 (2002): 78–91.
- Sansoni, Valeria. *Massimo Carmassi: Trasparenza Del Nuovo Nell'esistente*. Canterano: Aracne editrice, 2020.
- Tolaini, Emilio. *Pisa: la città e la storia*. Pisa: ETS, 2007.

ILLUSTRATION CREDITS:

Fig. 1: Drawing from the archive of the *Ufficio Progetti* of the Municipality of Pisa, curated by Massimo Carmassi.

Fig. 2-5: Archive of the Municipality of Pisa.

Fig. 6: Archive of Massimo Carmassi

Fig. 7: Photo by Andrea Baglini.

¹⁴ Carlo Ceschi, *Teoria e Storia Del Restauro*, (Roma: Carlo Bulzoni editore, 1970), 18. Original text: "Ogni epoca ha il suo modo unico di dialogare con il passato."