



*Book  
of  
Proceedings*



7<sup>th</sup> ISUFitaly International Conference | Naples, 19-21 February 2026

**CITY RENEWAL AND URBAN ARCHAEOLOGY**

The morphological values of city traces



**ISUFitaly**  
International Seminar on Urban Form  
Italian Network

7<sup>th</sup> ISUFitaly International Conference | Naples, 19-21 February 2026



# CITY RENEWAL AND URBAN ARCHAEOLOGY

The morphological values of city traces

## BOOK OF PROCEEDINGS



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## Naples and 7<sup>th</sup> ISUFItaly International Conference

ISUF Italy decided to hold its 7<sup>th</sup> International Conference in Naples, hosted by the Department of Architecture at the University of Naples "Federico II". The topic, *City Renewal and Urban Archaeology. The Morphological Value of City Traces*, has prompted a wide-ranging reflection on the role that traces – material but perhaps also immaterial – accumulated over time can play in the processes of interpretation, conservation and transformation of the contemporary city, understood as a space in which the various layers of history coexist and overlap.

The choice of this topic originates from the awareness that the challenges posed by our times – in which cities and territories are undergoing rapid and profound transformations driven by environmental, economic and social dynamics that are often indifferent to the values of the urban form – cannot be addressed exclusively through approaches focused on technological innovation, functional efficiency and the speed of intervention processes. Rather, they require a renewed focus on the historical and morphological complexity of urban and territorial contexts, reaffirming the value of a tradition of study to which Italian research has made theoretical and methodological contributions of the highest importance throughout the 20<sup>th</sup> century, and which regards the city as a complex historical organism, whose significance also lies in the capacity of its forms to preserve, transmit and reinterpret over time the traces of the transformations that have shaped its structure.

In this sense, discussing the *Morphological Value of City Traces* has meant not only addressing material remains of the past to be protected for their 'documentary' value, but interpreting such evidences as active elements in the construction of urban forms, whose 'monumental' value – that is, their formal value – should often be revealed through the project. The notion of 'trace' has proved, in the richness and variety of the contributions presented, to be a particularly fruitful interpretative category within the different theoretical and methodological approaches that characterise the field of urban morphology studies today. Road alignments that survive functional changes, land divisions that continue to guide the organisation of the built environment, typological continuities, settlement systems that maintain recognisable structural relationships with geographical forms, spatial configurations and relationships between the built environment and open space that

help define the identity of places were just some of the themes addressed during the conference.

The relationship between *City Renewal and Urban Archaeology* played a central role in the debate that unfolded over the three days of the conference. Whilst, on the one hand, the reference to urban archaeology was not interpreted exclusively in a disciplinary sense but was adopted as a thinking paradigm capable of guiding a stratigraphic reading of the city – in which the various temporalities that accompanied its formation emerge as essential components of its current structure – on the other hand, particular attention was devoted to the role of architectural and urban design in engaging with such legacies.

As the archaeologist Andreina Ricci observed, when fragments of the past emerge within the contemporary city, they often produce a sort of 'wound', as their morphological structure conflicts with the systems of order of the city on the surface. Furthermore, it is not uncommon that these remains do not appear because they are 'sought' through excavation, but resurface suddenly during infrastructure works, natural disasters or urban regeneration processes. In this sense, urban archaeology poses a question to the project that is as complex as it is urgent, concerning the composition of spatial systems belonging to different temporalities that are sometimes mutually in conflict. Precisely from this perspective, one of the most original aspects to emerge from the conference concerns the role attributed to the architectural project as a tool for knowledge and interpretation, as well as for the transformation, of the stratified city. Far from being regarded as a subsequent and separate phase from morphological and archaeological analysis, design was frequently presented in the papers as a critical tool capable of revealing latent relationships, recognising hidden continuities and constructing new forms of dialogue between different temporalities. Urban traces, in fact, never present themselves as mere objective data to be recorded or preserved but require an interpretative process that grasps their meaning within the city's overall structure. In this process, the project plays an essential role: it not only protects or enhances what remains but re-situates it within new systems of spatial relations that represent shared values. In this sense, the project does not take the form of an act of superimposition upon the existing but proves to be a practice of critical interpretation of duration, capable of transforming urban memory into an active resource for the construction of the city of the future.

The choice of Naples as the venue for the conference has lent further significance to these reflections. Few European cities, in fact, demonstrate with equal clarity the depth of the stratifications that characterise the relationship between urban form and history. From the Greek-Roman city to the processes of modern and contemporary expansion, Naples offers an emblematic example of how the traces of the past continue to operate within current urban configurations, influencing their spatial organisation, settlement dynamics and possibilities for transformation. In this sense, the city represented not only the physical venue of the

conference, but also a significant cultural reference.

The response from the academic community has been particularly significant. The proceedings bring together 182 papers, organised into the conference's three main thematic areas – *Theory, Reading and Design* – and their respective sub-sections, offering a comprehensive overview of the current state of research on urban form and the relationships between urban archaeology, morphology and design. The conference also confirmed the international dimension of the academic community associated with ISUF. Although the event was organised as part of ISUFItaly's activities, alongside the participation of scholars from numerous Italian universities, the volume brings together contributions developed within European and non-European contexts, demonstrating the network's ability to connect different research experiences, cultural traditions and geographical contexts around a shared reflection on urban form.

We entrust these Proceedings to the academic community in the hope that the reflections gathered here may help to stimulate further research into the morphological value of urban traces and their role in urban renewal processes. At a time in history when the pressure for change appears ever more intense, recognising and interpreting the forms of permanence represents not merely an exercise in knowledge, but an essential condition for building transformations capable of combining memory, identity and a responsible vision of the future.

*The Conference Chairs*

Giuseppe Strappa

Renato Capozzi

Federica Visconti



## Urban Archaeology and Design

In recent years, the relationship between urban archaeology, urban morphology and contemporary design has returned to the center of international architectural debate. At a stage where the project mainly engages with the existing city – with its layered structures, permanences, and discontinuities – the material traces of the past no longer appear merely as testimonies to be preserved, but as active components through which the transformative possibilities of the contemporary city may be critically interpreted.

It is within this framework that the seventh ISUFItaly Conference, *City Renewal and Urban Archaeology. The Morphological Value of City Traces*, takes place, focusing on the morphological value of urban traces and on the role that archaeology and design may assume within processes of urban renewal. The proceedings collect contributions from different disciplinary, geographical, and cultural fields, united by a shared attempt to interpret the city as a complex organism shaped by permanences, fractures, superimpositions, and rewritings.

As Aldo Rossi wrote, “the city is in its history”, and its form coincides with the sedimentation of urban facts capable of traversing time and constructing permanences within transformation. From this perspective, archaeological traces are not merely residual materials belonging to concluded historical epochs, but elements capable of orienting new interpretations of urban structure, revealing deep continuities between the ancient and the contemporary city.

In this sense, the reference to urban archaeology takes on a central meaning. Not as a practice aimed at the enhancement of the individual artifact or of one historical phase prevailing over another, but as a design-oriented gaze directed toward the urban phenomenon as a whole, understood through the continuity of its transformations and stratifications. The city is thus interpreted as a processual organism, in which different temporalities coexist within a single evolutionary process, making archaeology not a separate field, but a structural component of reflection on the design of the existing city.

Many of the contributions included in the volume emphasize on the layered and processual nature of the city, on the dialectic between void and built form, between surfacing and concealment, between fragment and urban order. What emerges are readings that interpret ruins, substructures, historical infrastructures, ancient traces, and typological permanences

as matrices capable of generating new spatial configurations and new social relationships. The archaeological city is therefore understood not as a specialist *enclave* detached from urban life, but as an integral part of an inhabited and continuously re-signified environment. The archaeological issue, approached in terms of continuity rather than as the mere enhancement of the isolated fragment, may thus become an opportunity to orient directions of urban development capable of working through relationships between parts, structural permanences, and connections among different temporalities of the city, opposing logics of isolation and separation of urban materials.

Within this framework, the morphological issue takes on a central role. It is not simply a matter of recognizing the persistence of forms over time, but of understanding the processes through which such forms are transformed, reinterpreted, and reactivated. The morphological approach, recalled transversally in many of the studies collected in the volume, does not coincide with a static description of the city; rather, it constitutes an interpretative method capable of reading the relationships between settlement structure, topography, use, temporality, and transformation. Urban morphology thus becomes both a critical and a design tool: it allows latent continuities, resistant geometries, structural permanences, and evolutionary possibilities within historical and contemporary fabrics to be identified.

Research developed within the Italian typomorphological school has shown, in this regard, how the city may be interpreted as an organism in continuous transformation, within which typological processes do not constitute static elements but structures capable of adaptation, mutation, and permanence. Urban form therefore appears as the outcome of multiple and overlapping layers, in which erosion and deposition, continuity and fracture, absence and recomposition coexist within the same transformative dynamic. The contemporary city thus emerges as a complex morphological structure in which different temporalities coexist in conditions of reciprocal interference. Michel Foucault recalled how history does not proceed through linear sequences, but through "series of discontinuous depths", while Michel Serres described time as a "lacunary and sporadic" matter, composed of returns, suspensions, and accelerations. Urban traces therefore do not appear as fixed or completed elements, but as unstable materials continuously exposed to processes of transformation, reuse, and re-signification. Many of the contributions in the volume move precisely within this tension: between memory and design, permanence and mutation, continuity and discontinuity. The notion of the "trace" is continuously redefined: no longer a simple material residue, but an ordering principle, a latent figure, an invisible infrastructure, threshold, margin, urban void. In some cases, the trace guides processes of urban recomposition; in others, it acts as an element of resistance or as an opportunity to redefine the relationship between the consolidated city, landscape, and public space.

Through this plurality of positions, the proceedings convey an image of the contemporary city as an intrinsically stratified and

relational reality, in which architectural and urban design are called upon to engage not with not isolated objects, but with complex systems of permanences and transformations. Urban archaeology is thus removed both from a purely specialist dimension, confined to archaeological expertise alone, and from an exclusively technical one, to be relocated within a broader reflection on the social and spatial meaning of design.

As Vittorio Gregotti recalled, conservation without design risks becoming a form of immobilization of reality; on the contrary, design may restore an operative dimension to archaeological traces by reinserting them into the living processes of the city. What emerges is therefore an idea of design as an interpretative and processual practice, capable of operating through relationships between different times, between surfaces and subsoil conditions, between memory and contemporary use, between lost fragments and new forms of urban continuity.

In this sense, urban archaeology is not interpreted as a practice aimed at the simple conservation of the past, but as an integral part of a design reflection on the existing city, on its processes of transformation and on the continuities that can still be built between different urban temporalities and strata.

Bruna Di Palma  
Francesca Coppolino  
Valeria Defilippis  
Salvatore Daniele Lombardi



## Call and organization

### **City Renewal and Urban Archaeology The Morphological Value of City Traces**

ISUFitaly, International Seminar on Urban Form, Italian Network, organizes its seventh Conference in Naples on 19-21 February 2026. The theme of the conference is "City Renewal and Urban Archaeology. The Morphological Value of City Traces". Following the previous ISUFitaly conferences themes, dealing mainly with the relationships between urban morphology, history and architectural design, the seventh Conference aims to pose the problem of the relationship between the emergence of urban archaeological traces and the often conspicuous morphological value that this formal legacy can potentially generate through urban design as tool to establish links between contemporary city and artefacts from the past: through the creation of large-scale urban archaeological parks or the construction of archaeological roofs; through establishing unprecedented relationship with infrastructures related to underground level different from those of the city 'in surface'.

The theme of urban continuity/discontinuity in the contemporary city and the role of urban architecture as a necessary intermediary, or condition of possibilities, between the historical city, the public space and possible congruent transformations in the contemporary age, are thus re-proposed.

*The Conference Chairs*

Giuseppe Strappa  
Renato Capozzi  
Federica Visconti

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- T.2 Composition of urban orders
- T.3 Ancient city/contemporary city
- T.4 Theories and methods of morphological analysis in the historical cities

## **R\_Reading urban form**

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# READING

## **R\_Reading urban form**

**R.1** Morphological analysis of historical fabrics

**R.2** Spatial analysis of the urban form

**R.3** Reading urban archaeology as a tool for the regeneration and renewal of the city

**R.4** Dialectical relationship between underlying forms (*Ichnoi*) and emerging forms



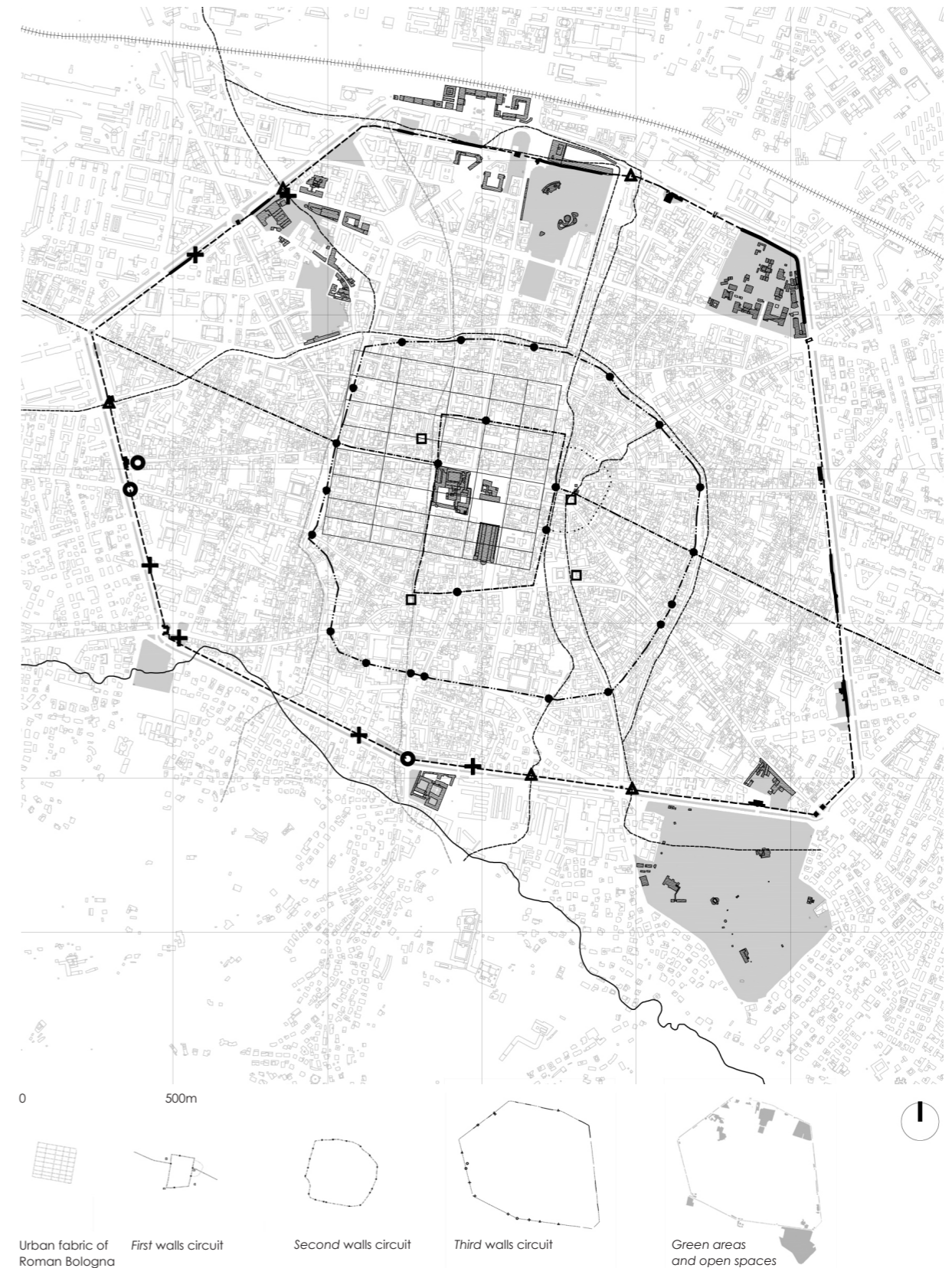
# The morphology of the urban edge

## Traces of Bologna's historic walls as an opportunity for public space design

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**Keywords:** Urban morphology, Urban edge, Public space, Historical traces, Bologna city walls  
**Conference theme:** Reading urban form. Reading urban archaeology as a tool for the regeneration and renewal of the city

**Abstract.** The reading of urban form offers a key for interpreting the city as a stratified system in which historical permanences and contemporary transformations coexist. In Bologna, the 13th-century wall circuit defining the boundary of the historic centre represents a morphological and symbolic threshold between the ancient and the modern city. Although largely demolished, the walls persist through material fragments, urban alignments and open spaces that continue to structure the urban edge. This work proposes a systemic historical and morphological analysis of Bologna's wall system and its surrounding areas, interpreting these traces as operative material for the project of public space. By investigating the relationships between residual archaeological elements, road axis, urban voids and green areas, the study explores the potential of the historic wall edge as a spatial infrastructure for urban regeneration. Interpreting the historic city as a dynamic palimpsest, the paper argues that the traces of Bologna's walls can support strategies aimed at reconnecting fragmented urban areas, enhancing environmental continuity, and strengthening the relationship between cultural heritage and public space. In this perspective, urban morphology emerges as a critical lens for rethinking historic urban edges not as residual limits, but as active and adaptive components of the contemporary city.



**Figure 1.** Traces of the historical evolution of the three city walls circuits of Bologna, open and green spaces, relevant buildings, underground water canals.

## Introduction

The reading of urban form represents a privileged lens for observing the city as a complex construct, resulting from stratifications, permanences and transformations sedimented over time, giving rise to recognisable spatial configurations. From this perspective, the study of urban morphology does not merely describe the physical layout of the city, but becomes a critical tool capable of relating spaces, historical dynamics and new design interventions, allowing the deep structure of urban fabrics and the logics guiding their formation to be grasped. The city is read as a collective artefact in which certain elements – buildings, spaces and traces – assume the role of permanences, capable of maintaining formal and symbolic recognisability over time (Rossi, 1984), while adapting to new uses and values.

Within this interpretative framework, urban borders represent a significant field of study. Traditionally associated with defensive and delimiting functions, the edge has historically embodied a material and symbolic threshold between inside and outside, city and territory, built space and landscape. With the progressive loss of the military function of walls and fortification systems, these margins have undergone profound transformations, often becoming transitional and undefined spaces, lacking a clear identity. However, even when wall structures were demolished or absorbed into urban growth processes, their traces often continued to exert a decisive influence on urban organisation, inscribing themselves into its morphology as persistent signs that allow the form of the historic core to be read by contrast to subsequent developments.

The city of Bologna offers a particularly interesting case study for observing this condition of latent permanence. The 13th-century wall circuit, which defined the physical and symbolic limit of the historic city, still represents a structuring element of the urban organism today. Although much of the walls were demolished starting in the early 20th century, their trace persists in the city's form through a discontinuous sequence of material fragments (e.g., gates, wall sections, artefacts, etc.), open spaces, boulevards, urban widening, gardens, residual areas and in-between spaces that manifest its geometry. This heterogeneous system configures a complex urban edge in which the elements describing historical development emerge as a latent structure. The edge can therefore be interpreted as thickness rather than as a simple tangible or intangible line of separation: a relational domain in which historical, spatial and perceptual dimensions intersect. In this sense, the border can shift from a sign of fragmentation to a device capable of relating parts of the city with different characteristics, acting as a mediator between the historic centre and adjacent urban fabrics.

The margin is among the fundamental elements of the Image of the City, capable of orienting perception and understanding of urban space (Lynch, 1960). In Bologna, the trace of the historic walls continues to function as a cognitive and symbolic reference, marking the urban area of the historic centre.

The reading of the edge as a system of spaces and traces also allows recognition of the design value of open spaces as a structuring component of urban form, in which relationships, continuities and hierarchies are defined, deeply influencing urban quality (Secchi, 1984). The open spaces along Bologna's walls trace – parks, paths, green areas and other undefined spots – can be interpreted as parts of a potentially continuous infrastructure, capable of connecting urban fragments and offering new opportunities for collective use and appropriation, assigning the urban edge a strategic role within contemporary regeneration practices.

Strategies aimed at improving public space quality, slow mobility, green infrastructure and cultural heritage enhancement find particularly suitable contexts in these areas for interventions integrating architecture, public space, environmental and social aspects. Furthermore, consid-



Figure 2. Scenic map of the urban area of Bologna by Joan Blaeu, 1663. Archiginnasio Library, Bologna.

ering reflections on the role of public space in supporting everyday life and social interaction (Gehl, 2011), such spaces can foster new forms of use, gathering and crossing, reaffirming their civic and community character.

Another aspect to consider is how recognizing the historical and symbolic value of walls traces requires a context-sensitive design approach, attentive to existing stratifications. Architectural and urban design must engage with the city understood as a system of historically constructed relationships, avoiding interventions indifferent to the structure of places (Gregotti, 1993). In this sense, Bologna's walls can be read as operative material for design, capable of orienting new interventions aimed at reaffirming urban spatial quality without being reduced to mere objects or memories to be preserved.

The morphological reading of the urban edge thus allows interpretation of the historic city as a palimpsest, in which traces of the past overlap with new configurations while maintaining both recognizability and transformative potential. This approach, aligned with a vision of the city as a living and adaptive organism, opens up the possibility of conceiving the edge not as a definitive limit, but as a space of opportunity.

Combining historical analysis, morphological mapping, and design interpretation of Bologna's third historic walls system, this research aims to explore its potential as complex infrastructure capable of connecting, enhancing, and renewing the relationship between the contemporary city and the permanence of its historical traces.

### The walls of Bologna: historical structure of the urban edge

The urban form of Bologna has historically been defined by a succession of wall circuits, each corresponding to a phase of growth and transformation. The *Mura di Selenite* first circuit, of Roman origin (3<sup>rd</sup>-2<sup>nd</sup> century BC), coincided with the perimeter of the ancient *Bononia* and defined the orthogonal layout of the *castrum*, still legible today in the urban grid.

Built using *opus quadratum* and later reinforced, this wall represented a compact limit for a city of limited size (Fasoli, 1978). Between the 11th and 12th centuries, alongside demographic and economic recovery in the communal age, Bologna constructed a second wall circuit, known as the *Cerchia dei torresotti*. This new enclosure incorporated extra-urban areas and was characterised by a more articulated defensive system, with tower-gates (*torresotti*) positioned at the main access points to the city (Foschi, 1996). Only a few fragments of this circuit survive today, often incorporated into buildings within the historic centre, yet its trace remains legible in its morphology. The third wall circuit of Bologna, known as *la Circla*, constitutes a more extensive and complex medieval defensive system, fundamental to understanding the form that still defines the historic core as an island in relation to surrounding urban fabric. Built starting in 1226 and completed in 1390, this new limit responded to the need to contain urban expansion linked to Bologna's demographic, economic and institutional growth during the 13th century, when the city emerged as one of medieval Europe's major political and cultural centres. Enclosing a perimeter of approximately 7.5 km, it defined a new urban structure destined to endure over time (Roversi, 1985). The wall system consisted of a continuous brick curtain articulated by towers, moats, embankments, and monumental city gates aligned with the main road axes. Secondary gates (*pusterle*) and canal crossings (Reno, Aposa, Savena, Moline and Porto Navile canals) completed the system (Vianelli, 1963). The walls and gates functioned not only defensively but as a true urban infrastructure, delimiting the city's legal space, controlling commercial and fiscal flows, and contributing decisively to Bologna's civic image.

In addition to their defensive function, the urban gates represented the most complex and symbolically significant elements of the wall apparatus. Porta Galliera, Porta Mascarella, Porta San Donato, Porta San Vitale, Porta Mazzini or Maggiore, Porta Santo Stefano, Porta Castiglione, Porta San Mamolo, Porta Saragozza, Porta Sant'Isaia, Porta San Felice, and Porta Lama functioned as urban nodes mediating between city and countryside. Each gate was associated with a road axis and territorial-scale social and economic relations, including control and collection of duties for the introduction of goods. From 1296 onwards, dwellings for gatekeepers were built adjacent to each gate (Vianelli, 1963). Today, several of these gates still retain strong formal and symbolic recognisability, continuing to structure the perception of the urban edge. Alongside the gates, religious complexes (*battifredi*) – twelve sanctuaries corresponding to the twelve gates – played a significant role in structuring the edge. Churches, convents and hospitals were often located near the city boundary, taking advantage of available open space. Complexes such as San Francesco outside Porta San Felice, the Baraccano Complex at Porta Santo Stefano, San Michele in Bosco, San Giacomo Maggiore, Santa Maria della Misericordia and Santa Maria della Pietà (whose façade remains incorporated into the Giosuè Carducci house museum) contributed to defining the urban boundary as a dense field of community value – both secular and religious.

From a morphological standpoint, the presence of walls profoundly influenced both inner and outer urban fabrics. Inside the enclosure, medieval fabric densified towards the edge, adapting its street network to the curved wall alignment and gate locations. Outside and inside near the border, open spaces, gardens and agricultural land prevailed, later urbanised in modern

and contemporary periods. This morphological discontinuity remains legible today, giving the former wall trace a strongly recognisable character.

Approaching the city from the countryside, walls and gates – on which towers and bell towers stood – formed a continuous and recognisable apparatus that marked the entrance to the urban space, further reinforced by the homogeneous and compact materiality of the bricks. Gates acted as scenographic devices concentrating the experience of transition between outside and inside (Figure 3). Adjacent religious and assistance complexes – most of which have now disappeared – reinforced this perception. The open belt near the walls, although largely unbuilt, was articulated into gardens, fields, access roads and gathering spaces (Figure 2). These areas also functioned as everyday social spaces (Figures 4, 5): meeting, children's playgrounds, laundry drying facilities, posting surfaces, informal trade or execution sites (Vianelli, 1963).

### Traces and potentials

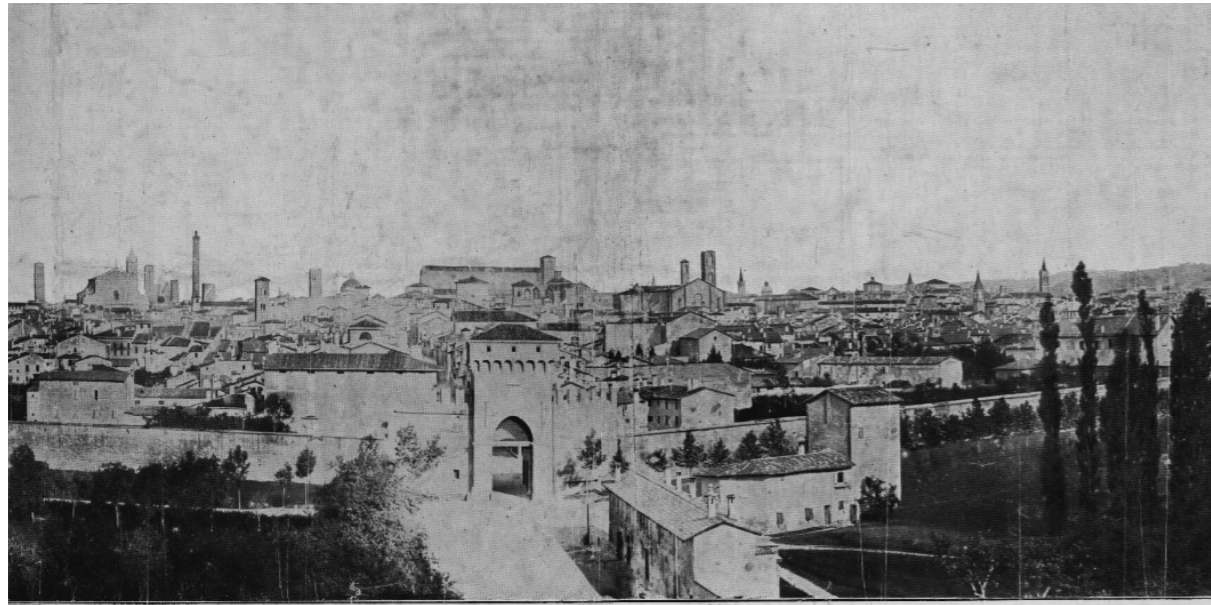
In contemporary Bologna, traces of the different wall circuits display varying degrees of legibility and visibility, reflecting both historical transformation processes, modes of incorporation or erasure. They persist as fragmented sequences embedded in buildings, isolated artefacts, or barely perceptible alignments (Figure 1).

The demolition of the third wall circuit – according to what envisaged by the 1889 Municipal Master Plan and initiated at the beginning of the twentieth century – triggered profound physical, spatial, symbolic, and perceptual transformations of the urban edge. The walls perimeter was replaced by ring roads following its alignment but radically altering its role, transforming a defensive limit into vehicular infrastructure. Nevertheless, the trace persists as an ordering element of the urban form, inscribed in road networks, public space distribution, and functional location (Cervellati, 1970). The green system along the former wall trace constitutes a significant legacy of this transformation, preserving the memory of the original defensive asset and suggesting potential for contemporary environmental infrastructure.

The most tangible references of the third circuit are the surviving monumental gates and radial access roads named after them – such as Porta Castiglione, Porta Mascarella, Porta Maggiore, Porta Galliera, Porta San Felice, and others<sup>1</sup> – which continue to function as visual reference points and orientation devices, despite fragmentation. Indeed, these architectural elements and the public spaces defining their surroundings, although recognisable and strongly identity-forming, appear as isolated objects. Moreover, the presence of the ring road and vehicular traffic compromises the quality of these spaces, reducing their usability and, above all, their perception as parts of a unified and continuous system that once clearly defined the threshold between the inside and the outside of the city centre.

Alongside these landmarks, there are partially legible traces (i.e., including fragments of walls incorporated into buildings, archaeological remains, or urban alignments) that require interpretative reading and are therefore poorly considered in the daily experience of citizens or visitors. The value of such traces lies less in their material presence than in their capacity to support and orient a morphological reading of the city, revealing the logics of growth and transformation that have shaped the urban fabric in the modern epoch.

Finally, a third level of permanence is found in immaterial traces embedded in urban layout, such as the ring roads and open spaces pattern following the historic perimeter. In these cases, the presence of the walls is legible not through built elements, but through urban form itself, which continues to incorporate the historic limit as an ordering logic. This stratification suggests that material disappearance does not equate to loss of spatial significance, but highlights the absence of devices capable of making such traces visible and interpretable today.



**Figure 3.** Panoramic view of Bologna from Porta San Felice in the second half of the 19th century. Archiginnasio Library, Bologna.

### The walls system as infrastructure for the project

The walls edge of Bologna, understood as a stratified spatial domain rather than a simple boundary, can be interpreted as an opportunity for historical heritage enhancement and integrated urban design strategies. It is within this relational space between history and urban form that a richly potential design field emerges, aimed at reconnecting the residual traces into a legible narrative and spatial system, capable of making the history of the urban margin really visible and transforming it into a resource for the city. Based on the different levels of permanence identified, the following section translates analysis results into thematic project-oriented strategies.

#### Linear systems

A first area of potential intervention concerns reconnecting residual open spaces along the walls trace into a continuous system of public and green spaces that could transform the edge from barrier into hinge. In this sense, the existing tree-lined central axis of the ring roads represents a key element upon which to construct new relationships with the gates, wall fragments, open spaces, gardens and significant buildings located along the margin, which could define and reinforce a civic infrastructure capable of integrating environmental, cultural and recreational functions.

Design is also required to engage with the archaeological permanences of the walls and historic gates, according to a vision of the city as a palimpsest (Corboz, 1985), in which traces of the past are interpreted as operative material for design, offering a foundation for imagining new scenarios. Moving beyond a purely conservative approach, these traces can be integrated into new spatial and architectural devices, becoming active elements of public space. Significant experiences developed in the European context demonstrate how historic walls can be reinterpreted as linear parks, cultural routes or spaces of social interaction: the system of the walls of Lucca, transformed into a continuous green ring; the Ringstrasse in Vienna, which



**Figure 4.** The inner wall from Porta Galliera to Porta Mascarella. Washerwomen hung out their laundry on the walls. The Sanctuary of the Beata Vergine del Soccorso can be seen in the background. Cineteca di Bologna.

re-reads the trace of the fortifications as a representative urban space; or the enhancement project of the walls of Girona, where historical heritage becomes a support for new urban practices. In Bologna, targeted interventions on historic gates could reinforce their role as urban nodes, recovering their function as places of meeting, exchange and representation. At the same time, the redevelopment of green spaces and urban voids along the wall trace could contribute to improving environmental quality and providing new spaces for social life, strengthening relationships with important cultural complexes – such as the MAMbo Museum and the Manifattura delle Arti near Porta Lama, the Casa Carducci close to Porta Maggiore, or the university district near Porta San Donato.

#### Fragments

The archaeological permanences of the third wall circuit, despite their fragmentary condition, still play a structuring role in the form of the city and in the perception of its historic edge. It is precisely within this condition of incompleteness and stratification that their design potential resides: the traces are not configured as finished objects, but as open devices capable of activating new relationships and integrating heritage into everyday urban life. The fragments of Bologna's walls can be interpreted as generators of new dynamics and spatial configurations, in line with a reading of urban form as the result of slow and cumulative processes in which certain structures persist and continue to organise space even when their original function has ceased, according to a logic of interdependence between heritage conservation and transformation.

Beyond conservation and protection, design can integrate historical heritage into a broader system of public spaces, routes, green elements and architectural interventions capable

of restoring continuity and meaning to the urban edge, assuming a mediating role between past and present, between material permanences and contemporary practices of use. Walls traces can be read as spatial articulation elements defining sequences, thresholds and differentiated domains. Walls remains, historic gates and archaeological fragments can become points of spatial condensation around which new public spaces are organised, strengthening the legibility of the historic trace and its perception as a unified system. The project does not aim to reconstruct the original image of the walls, but to make their presence visible through a strategy of enhancement that operates through abstraction, juxtaposition and reinterpretation – for example through the definition of thematic routes that visually and physically connect gates and wall sections, thus, reinforcing the connection between public spaces and historical traces.

### **Open spaces**

A central aspect concerns the relationship between archaeological traces and open space. The walls edge of Bologna, today largely occupied by the ring road and vehicular infrastructure, includes several urban voids, residual spaces and underused green areas. The construction of a continuous system of open spaces along the walls trace can contribute to transforming the edge from a limit into a threshold supporting new practices of movement, stopping and social interaction along the margin. Within this field of intervention, ground design plays a fundamental role. Working on spaces adjacent to the walls implies operating on pavements, level differences, vegetation, urban furniture and micro-architectures, and requires the definition of an abacus of spatial solutions capable of creating a dialogue with historical traces without overlapping or overpowering them. Open space design can make the walls trace legible through material variations, alignments, visual sequences and threshold devices, restoring continuity to a system that is currently fragmented and making the residual wall elements recognisable.

### **Nodes**

A further design theme concerns the role of historic gates as urban and mediation nodes. These elements, still today strongly recognisable, can be assumed as strategic points for interventions capable of strengthening the public character of the edge. The redevelopment of spaces around the gates can transform them into places of gathering and representation, recovering their historical function as thresholds between city and territory, and restoring centrality within a connected network of public spaces.

### **New uses**

The enhancement of archaeological traces through new design interventions also implies a reflection on social practices and the use of public space. Historical traces acquire meaning to the extent that they are integrated into the daily life of the city, becoming part of a system of lived and recognised places. New forms of appropriation and temporary use, activating processes of cultural and social regeneration could strengthen the bond between community and cultural heritage. The presence of the walls and their remains can become an opportunity to construct shared narratives – also through the use of digital mapping tools – and to reinforce urban memory beyond musealisation.

### **Conclusion**

Understanding the historic city through its border offers both an interpretative perspective and a transferable methodological framework for acknowledging, reading and intervening on latent historical traces in contemporary urban contexts.

The case study of Bologna, investigated through an historical, morphological, and process-oriented approach, demonstrates how the urban edge can be addressed as a dynamic and adaptive spatial system that represent an operational resource for public space project.

Historical analysis provides the knowledge necessary to understand the dynamics that have influenced the physical and cultural transformations that have occurred over time. Morphological analysis and critical mapping allow the identification of material, spatial and immaterial traces – including archaeological fragments, infrastructural alignments, open spaces and perceptual thresholds – understood as structuring permanences within the urban palimpsest. This preliminary stage moves beyond descriptive survey by revealing the relational thickness of the edge as a system rather than a line. The interpretation of such evidences reframes them as active components through the recognition of their spatial roles – linear systems, nodes, fragments, etc. – and their capacity to organise new urban practices. In this framework, urban morphology functions as a critical lens capable of linking historical structure with current spatial dynamics. Finally, the project translates morphological knowledge into design strategies based on continuity, mediation and adaptive reuse: interventions may act through selective but systemic enhancement, abstraction and spatial sequencing, integrating heritage into everyday public space and environmental infrastructures.

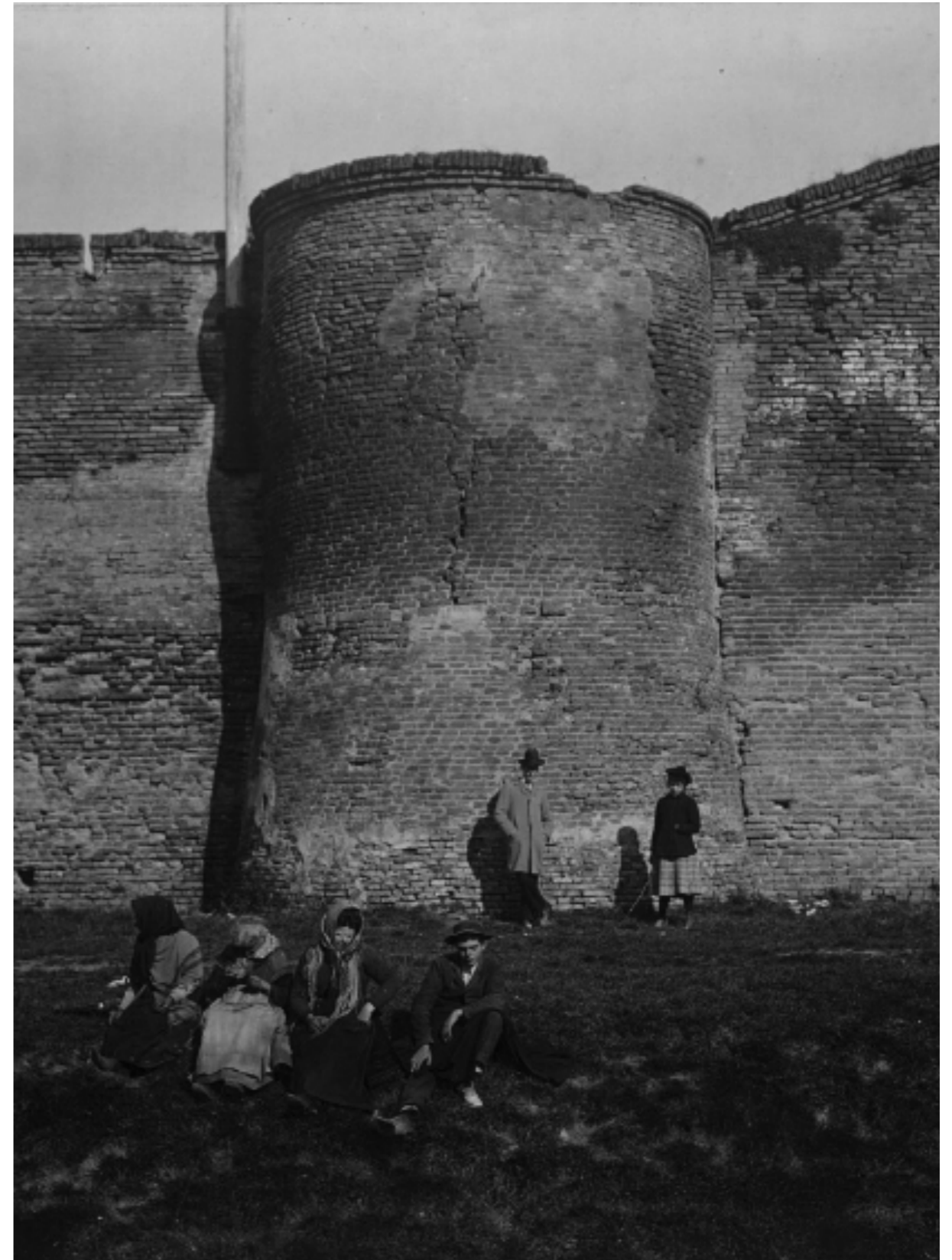
In conclusion, the historic border of Bologna's walls – interpreted as a dynamic palimpsest – emerges as a testing ground for design strategies that reconcile conservation and transformation, permanence and use, memory and innovation: historical traces are therefore not a constraint but rather a generative condition for the project.

## Notes

<sup>1</sup> Of the twelve access gates to the city, two have been demolished: Porta San Mamolo and Porta Sant'Isaia, the names of which remain as a reminder of the location of where they stood (Vianelli, 1963).

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**Figure 5.** External walls of Porta Saragozza, 1902. The image shows part of the walls with the bastion, people resting along the embankment and some women seated and knitting. Archiginnasio Library, Bologna.

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