

BETWEEN CITY AND CEREMONY

Staging a new relationship between La Scala and the city

2025 - 2026

Complex Projects
Bodies and Building Milan
Graduation Studio

Delft University of Technology
Department of Architecture

Student
Loes van Tilborg / 5308062

chair
Kees Kaan

studio lead
Hrvoje Smidihen

supervisory team
Benjamin Groothuijse (responsible supervisor)
Hrvoje Smidihen
Martin Grech

delegate
Rohan Varma

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Bodies & Building Milan
Teatro alla Scala
Between city and ceremony
Complex projects

Can architectural flow
reconnect the opera
with the city?



Figure 1 | Between city and ceremony



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FOREWORD

In Milan, culture is not confined to institutions; it unfolds in the street.

Ritual, appearance, and collective presence are woven into everyday life in Milan, reaching a heightened intensity on evenings such as the *Prima della Scala*. Teatro alla Scala, the opera and ballet house of Milan, is not only a destination, but part of a wider civic choreography in which the city, its inhabitants, and its rituals perform together.

This graduation project departs from that condition. It investigates the opera house as a civic interior where ceremony and daily life intersect, and where architecture can actively curate sequences of arrival, movement, encounter, and anticipation. Rather than treating La Scala as an isolated monument, the project positions it as a spatial mediator between city and performance, between routine and ritual, between accessible and elevated.

Through research into Milanese culture, flows and the opera typology and rituals, the project explores how architectural design can extend the opera's presence beyond the performance moment, translating cultural values into architecture that actively engages with the city and the people of Milan.

01



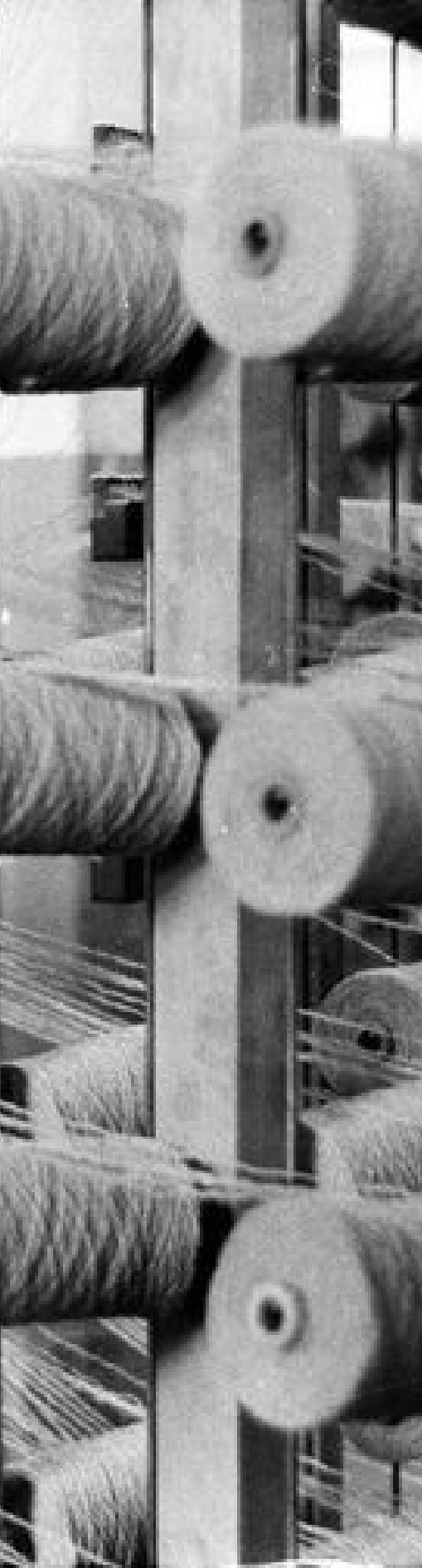


Figure 2 | Italian cotton production

Throughout this report, red annotations indicate findings that were later translated into the design of the new opera and ballet house, showing how the initial analysis informed the architectural proposal.









Figure 3 | Italian coffee and dressing culture

INTRODUCTION

The opera as a temporal journey

Italian culture is expressed through appearance, posture, rhythm, and ritual. Shaped by a long history of craftsmanship and industrial production, Milanese culture is characterised by precision rather than excess. The city's global leadership in fashion and design did not emerge as spectacle, but from the production of silk and cotton, where refinement, repetition, and attention to detail were embedded in everyday labour. Dressing well became not an exception, but a cultural given, an everyday practice through which social presence is constructed and read. This logic closely resembles what is often described as silent luxury in Milanese fashion: refinement without excess, authority without display.

This cultural condition has profoundly shaped Milanese public life. Behaviour in the city is performative yet restrained, individual yet collective. The urban environment operates as a stage in which small, repeated actions such as walking, waiting, arriving, and gathering acquire meaning through visibility and observation.

Similar to the Italian attitude towards fashion, the city does not reveal itself immediately. Buildings express presence through proportion, material discipline, and monumental restraint rather than spectacle. Buildings often operate through controlled sequences, layered thresholds, and gradual transitions between public and private life. Courtyards and patios organise encounter without

Milanese culture informed the design through an attitude of restrained refinement: visible enough to hold civic presence, but layered and subtle enough to avoid spectacle.

exposure, while entrances often withhold rather than reveal, guiding visitors through a process of arrival rather than immediate access. Milan contains a richness of ornament, material detail, and unexpected spatial depth, rewarding those who take the time to look beyond the surface.

This spatial logic is further articulated through the palazzo typology. Symmetrical layouts and enfilades of rooms structure movement as a sequence rather than a choice, producing rhythm, anticipation, and awareness of position within a larger spatial order. Detail plays a crucial role within this architectural culture. Materials, textures, door handles, thresholds, and other small, deliberate gestures guide behaviour and perception. Movement is choreographed and access is negotiated through degrees, making architecture a framework for ritualised behaviour.

Opera and theatre are deeply embedded within this cultural logic, operating not as singular events but as temporal journeys. Theatre embodies ritual, emotion, and collective presence. The performance never begins with the first note.

Historically, opera houses were integral components of urban social life. They functioned as places of encounter, debate, and visibility, where cultural production intersected with civic presence. The opera house functioned as a symbol of the city, conceived as an architectural representation of cultural identity, political power,



Figure 4 | Milanese architecture



Figure 5 | Milanese architecture

and collective progress. Entrances, foyers, staircases, and public routes staged social interaction, transforming movement into ritual and arrival into performance. At the time, audiences were not expected to remain silent; conversation during performances was still common (Teatro Alla Scala, 2001).

Contemporary visitors mainly come for the performance itself, while the historical opera house was just as much about social encounter. This informed the design focus on reactivating the spaces before and around the performance.

An opera functions not only as an artistic institution but as a public instrument for cultural formation, social cohesion, and collective emancipation, whose role has historically been shaped by state support and welfare ideals. In contemporary contexts, this role has expanded beyond artistic excellence toward the creation of public value, responding to broader social, educational, and civic responsibilities (Markovic Bozovic, 2021).

This relationship between city, ritual, and theatre becomes especially visible during events such as the Prima della Scala, the annual opening night on the 7th of December, the feast day of St. Ambrose. This occasion exemplifies how the performance begins long before the curtain rises. Preparation, dressing, arrival, and encounter all form part of the event. While the lights are dimmed, attention is directed towards the stage; once they rise, the audience itself becomes the spectacle. Leading fashion designers dress the audience, and the entire evening unfolds as a highly ritualised public performance, shaped by art, timing, precision, and perfection.

The rituals and codes surrounding such a respected opera house are not seen as limitations, but as cultural value. They give the opera an additional layer of meaning, in which dressing, arriving and behaving with care are part of tradition. The new building should respect this heritage, while translating and enhancing it in contemporary ways.

The opera house thus operates not only as a container for art, but as a civic stage on which

the city performs itself, with architecture acting as an active participant in this choreography.

Problem statement

From the eighteenth century onwards, opera houses occupied central positions within European cities, asserting their presence through monumental architecture, formal entrances, and carefully choreographed relationships with public space. Architecturally, they form a distinct typology. Opera houses are designed to accommodate large-scale productions involving orchestras, choirs, dancers, and complex technical infrastructures. Their scale, internal organisation, and acoustic requirements demand a highly specialised spatial logic.

Over time, however, the relationship between the opera house and the city has shifted. Before, many visitors did not primarily attend for the music, but arrived late, circulated through foyers and loges, met others, and used the opera house as an extension of urban social life. While opera houses remained monumental and centrally located, their social role moved to an episodic, event-based experience. This transformation is not only cultural or organisational, but also architectural.

The buildings are often optimised for the evening performance, with circulation, access, and foyers choreographed around ceremony rather than daily use. Production spaces operate continuously yet remain spatially and symbolically invisible to the city. Closed façades and strict separations between front-of-house and back-of-house further weaken

Figure 6 | Protest at La Scala



"Il Teatro alla Scala è il
salotto della città.... 'ci
vedremo alla Scala' si
dicono l'un l'altro per ogni
sorta di affari..."

"La Scala is the city's
drawing room... 'We'll see
each other at La Scala'
they say to each other for
all sorts of business..."

wrote Stendhal in 1817.

35% of Scala's money comes from public funding

35 % private funding

30 % ticket sales

(Teatro Alla Scala Of Milan, 2001)

Who enters and interacts?
Who does the opera belong to?

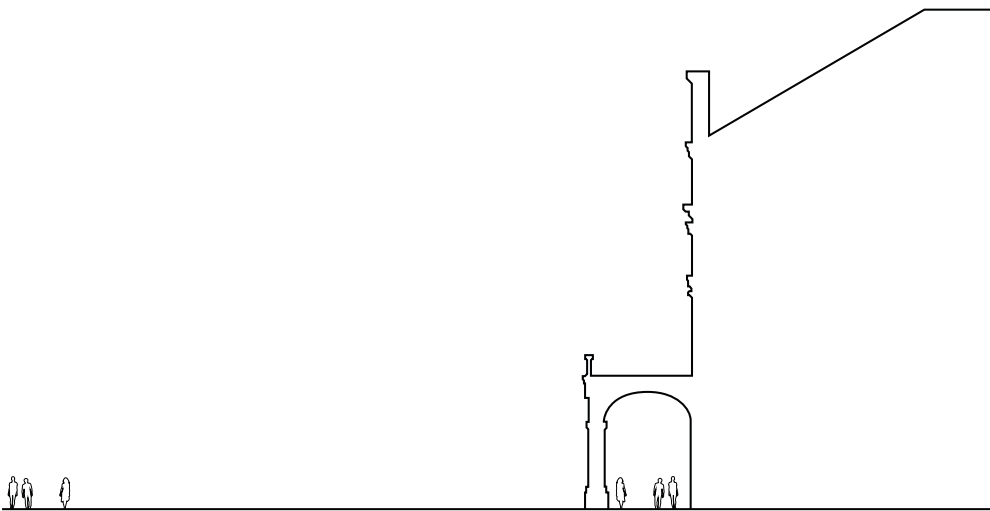


Figure 7 | The Toscanini foyer

The design responds to a generational shift: cultural institutions should no longer remain hidden behind a wall of perfection, but invite a more visible, reciprocal and meaningful relationship with the public.

continuity between the building and everyday urban life. Together, these conditions compress the temporal experience of opera into a single peak moment. As opera and ballet increasingly lose their place within the everyday cultural lives of younger generations and audiences across the globe are both ageing and being wooed by an increasingly sophisticated range of home entertainment, the building is required to perform once more, as a civic, educational and spatial instrument (Hammond, 2006).

This shift becomes particularly critical within contemporary urban contexts marked by increasing densification, economic polarisation, and the commercialisation of public interiors (Crawford, 1999). As cities lose spaces that allow



Figure 8 | The Toscanini foyer



Designing a contemporary opera and ballet house means responding not only to technical complexity, but also to shifting social, cultural, and civic demands.



Figure 9 | City as a stage

informal, non-commercial presence, publicly funded cultural institutions emerge as some of the few remaining architectural anchors for civic life. Their role is no longer limited to representation or occasional spectacle, but extends to their capacity to support everyday presence, encounter, and collective belonging (Amin, 2008).

In contrast, other civic institutions such as libraries and museums have increasingly transformed into open public interiors that support prolonged stay, informal occupation, and diverse forms of social interaction throughout the day. Such spaces allow people to be present without a predefined objective, enabling repeated, low-threshold encounters that create a feeling of familiarity and place attachment over time (Altman & Low, 1992). Jan Gehl distinguishes between necessary, optional, and social outdoor activities, emphasizing that while necessary activities occur regardless of spatial conditions, optional and social activities depend strongly on the quality of the built environment. Well-designed public spaces encourage lingering, slow movement, and informal encounters, thereby supporting low-intensity social interaction. These everyday forms of contact, what Gehl terms “life between buildings”, are fundamental to social cohesion and a sense of civic belonging, and can be actively enabled or inhibited through architectural design (Gehl, (2011); Markovic Bozovic, (2021)).

The project sees it as the opera house's responsibility to support 'life between buildings': not only as a civic value, but also as a way to strengthen its own relevance and future survival.

The problem is that, despite its public funding and symbolic importance, the opera house struggles to become part of the lived mental map of the city,

reinforcing its perception as a closed institution with limited everyday relevance (Hammond, 2006). By focusing on Milan, this research addresses a broader condition in which cultural institutions across contemporary cities struggle to maintain civic relevance and audience attachment. The opera house is therefore required to accommodate two fundamentally different public roles within one building. During the day, it has the potential to function as an urban interior: a place for encounter, experimentation, cultural production, education, and informal presence. In the evening, it must transform into a highly orchestrated machine, focused on ritual, concentration, flow, and performance.

This project therefore approaches the opera house not as a closed monument, but as a proactive civic instrument. It investigates how the architecture of theatre can re-engage with Milan's culture of ritual, visibility, and movement by translating

LA SCALA

One of the most famous and leading
opera houses globally

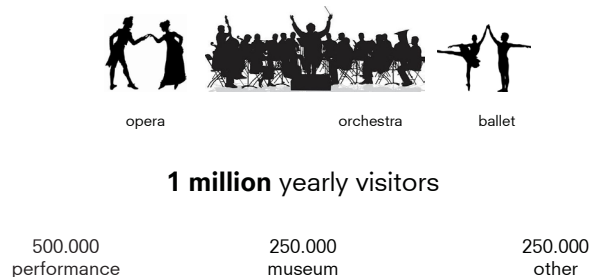


Figure 10 | Figures Scala

these qualities into spatial sequences, routes, and thresholds, with flow as its primary analytical lens. By reconsidering circulation and public interiors, the project explores how the opera house can once again participate in the everyday life of the city, strengthening public attachment and enabling new forms of cultural exchange across generations.

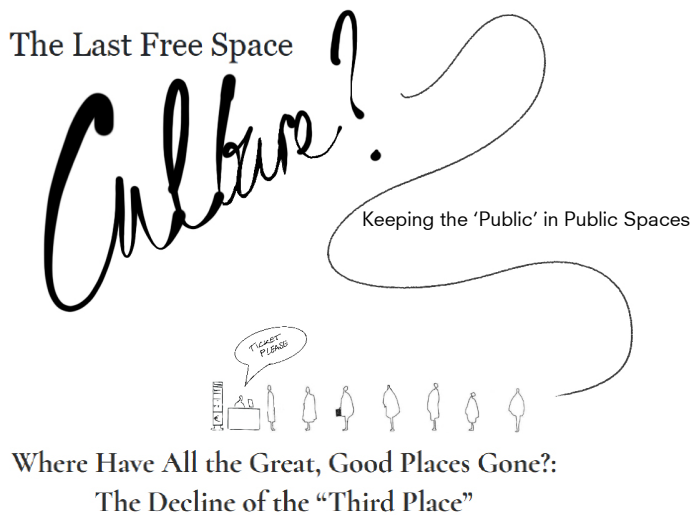


Figure 11 | News articles

Objective and architectural focus

This research aims to investigate how architecture can spatially accommodate both everyday civic presence and the highly choreographed rituals of evening performance within the opera house. Rather than treating civicness as a programmatic attribute, the project approaches it as a spatial and temporal condition that emerges through architectural organisation, movement, and bodily experience. The objective is to understand how architectural choreography structures transitions between different modes of use, ranging from informal, everyday occupation to highly ritualised collective moments.

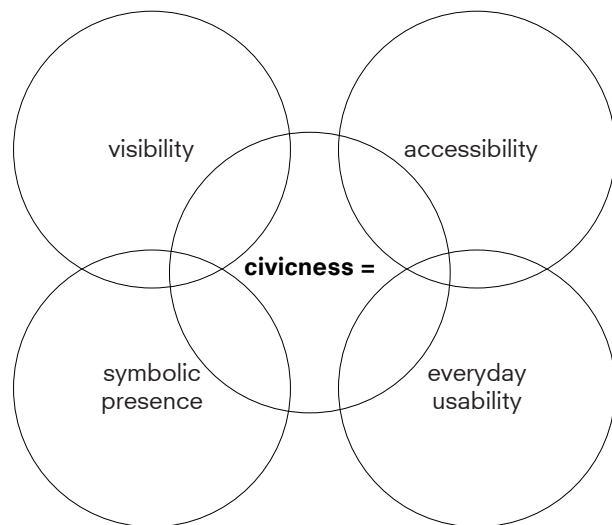


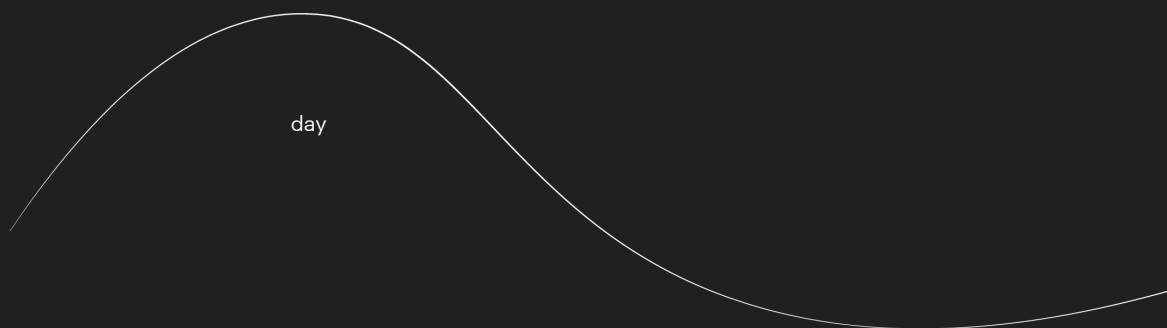
Figure 12 I Definition civicness

“A civic building allows people to enter, pass through, or remain without requiring a ticket, appointment, or clearly defined reason for being there (Poot et al., 2015).”

unscripted
informal
daily routine

choreographed
formal
exception

unscripted
informal
daily routine



day

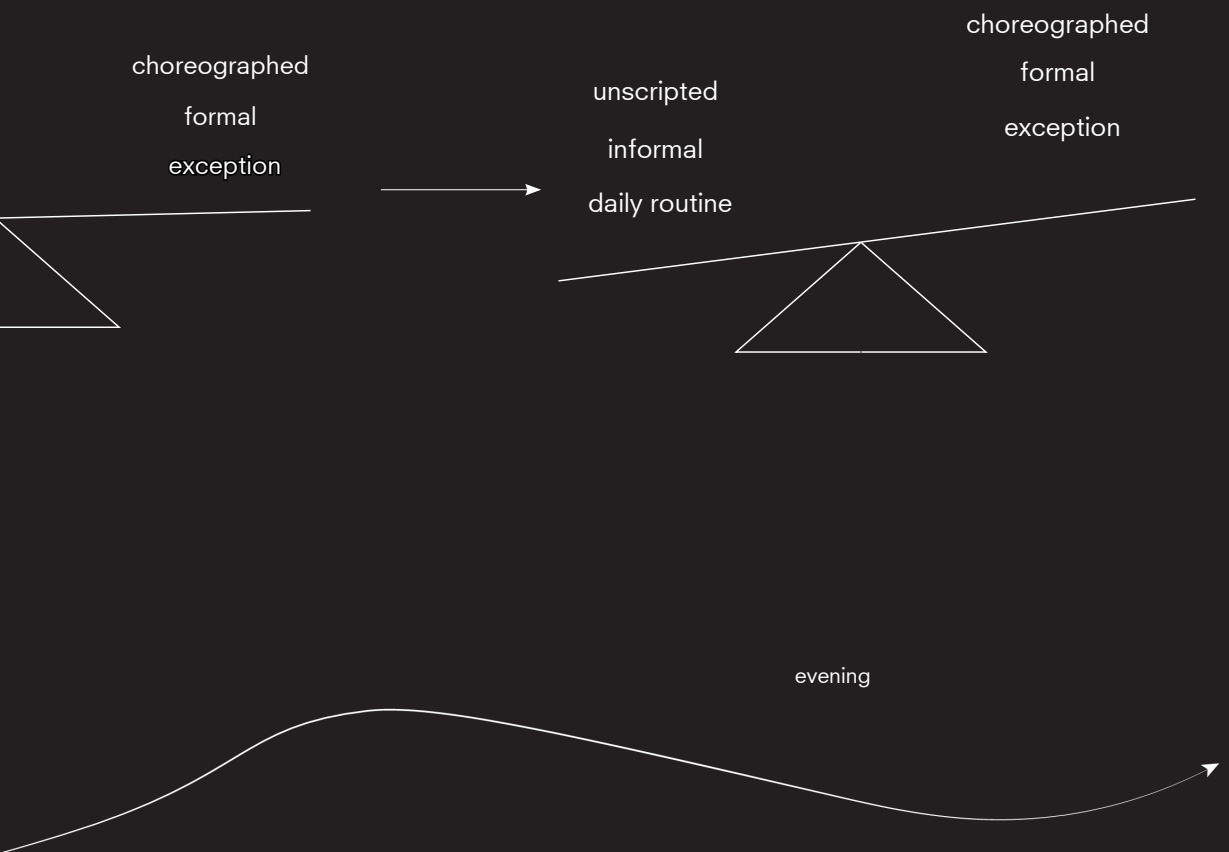


Figure 13 | From city to ceremony

Situated within the Bodies & Buildings studio, the research understands architecture as an active mediator between institutional systems and bodily presence (Complex Projects Graduation Studio, (2025)). The opera house is examined as a building that not only hosts performance, but also balances the operational demands of a complex institutional machine with the lived experience of bodies, movement, and social presence. Movement, pause, gathering, comfort, orientation, and perception are therefore treated as central architectural parameters rather than secondary effects. Through this lens, the project explores how spatial design can both guide and condition behaviour, while allowing for different degrees of accessibility, security and control.

The architectural focus of the research lies on:

- the relationship between the opera house and its urban surroundings, understood as part of a wider civic ensemble rather than an isolated monument;
- the design and positioning of entrances and façades as spatial mediators that communicate institutional presence and invite or restrict public access;
- the organisation and atmosphere of foyers, museums, and adjacent public spaces as civic interiors that support waiting, gathering, and social interaction during the day;
- the sequencing of routes and thresholds through which movement, pause, and collective rituals are choreographed across different temporal regimes of use;
- the spatial relationship between public circulation and production spaces, exploring

how rehearsal, learning, and making can become legible as part of the civic experience of opera.

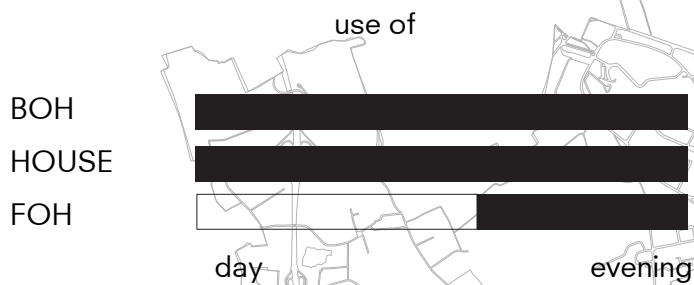
Research and design questions

This project is guided by the following main and sub questions:

“How can architectural flow enable the opera house to accommodate both everyday civic presence and the highly choreographed rituals of evening performance?”

1. How do site conditions, entrances, and façades shape the opera house’s relationship with the city across different times of use?
2. How can architectural routing and spatial sequencing be designed as a dramaturgical tool, building from everyday use toward the performance moment?
3. How can foyer typologies and public routes accommodate different flow conditions, such as peak movement moments, waiting, and gathering, while also supporting civic presence beyond performance hours?

The research questions follow the logic of flow, moving from the city scale to the interior: from urban approach and thresholds, to routing and dramaturgical sequencing, to interior flow conditions within foyers and public routes.



What is missing in opera architecture is a safe in-between space: a place to linger, learn, observe, and engage before commitment to the ritual of performance.

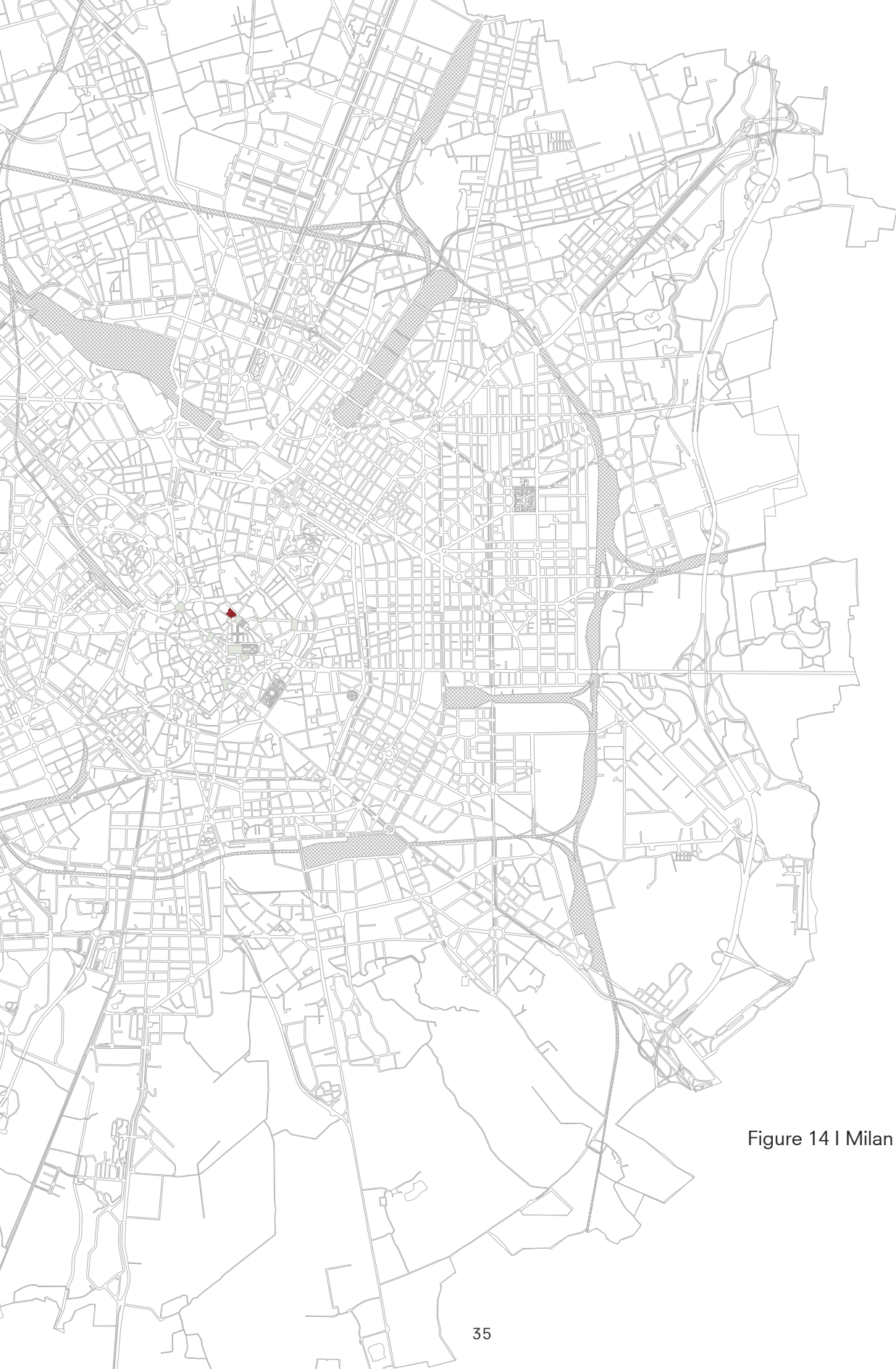


Figure 14 | Milan





Figure 15 | 7th of December



"Performing spaces a
own right, breathing p
into a lung, exposi
colour, drama and e
them, enriched, back

Hammon

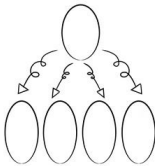
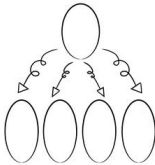
are organisms in their
people in like particles
ng them to sound,
motion, and exhaling
into the community”

nd (2016)



Figure 16 | Ballet dancers

La Scala’s architectural logic remains largely calibrated to past social conditions



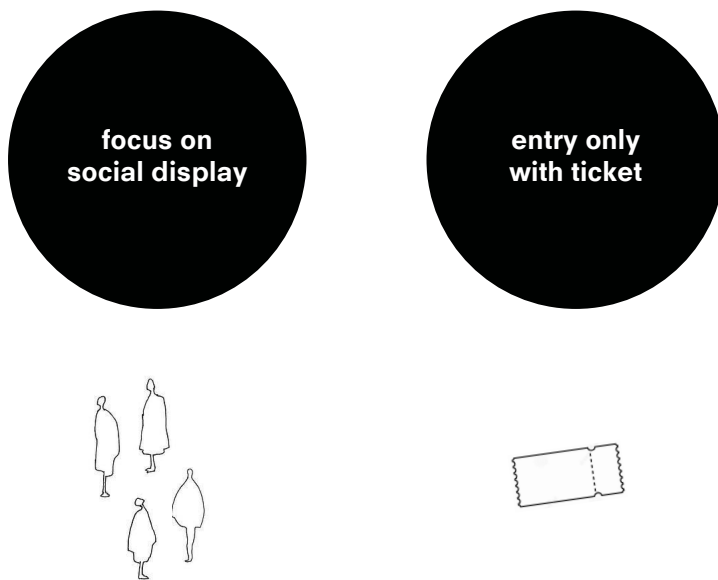


Figure 17 | Diagram

An important tension in this project lies in the fact that opening up the opera house and making it more publicly accessible may also interfere with the protected, intimate and exceptional feeling of sharing a specific space and experience with a group of people during a performance. This can be understood as the magic of collective attention: stepping into another world, entering the auditorium, and being temporarily removed from the noise of everyday life.

In the design of a new opera and ballet building, this tension becomes central. The project must safeguard these rituals, thresholds and atmospheres, while also questioning outdated conventions, reducing exclusivity, and rethinking the opera house as a more generous civic institution.



Figure 18 | Audience at La Scala



Figure 19 | Opera at La Scala

The research phase was carried out in a duo, with one focus on flow and the other on programme. In addition, broader research was conducted into the reference project (Teatro alla Scala) as a building type, including its urban role, spatial organisation, public functions and operational requirements. This research was written earlier in the process.





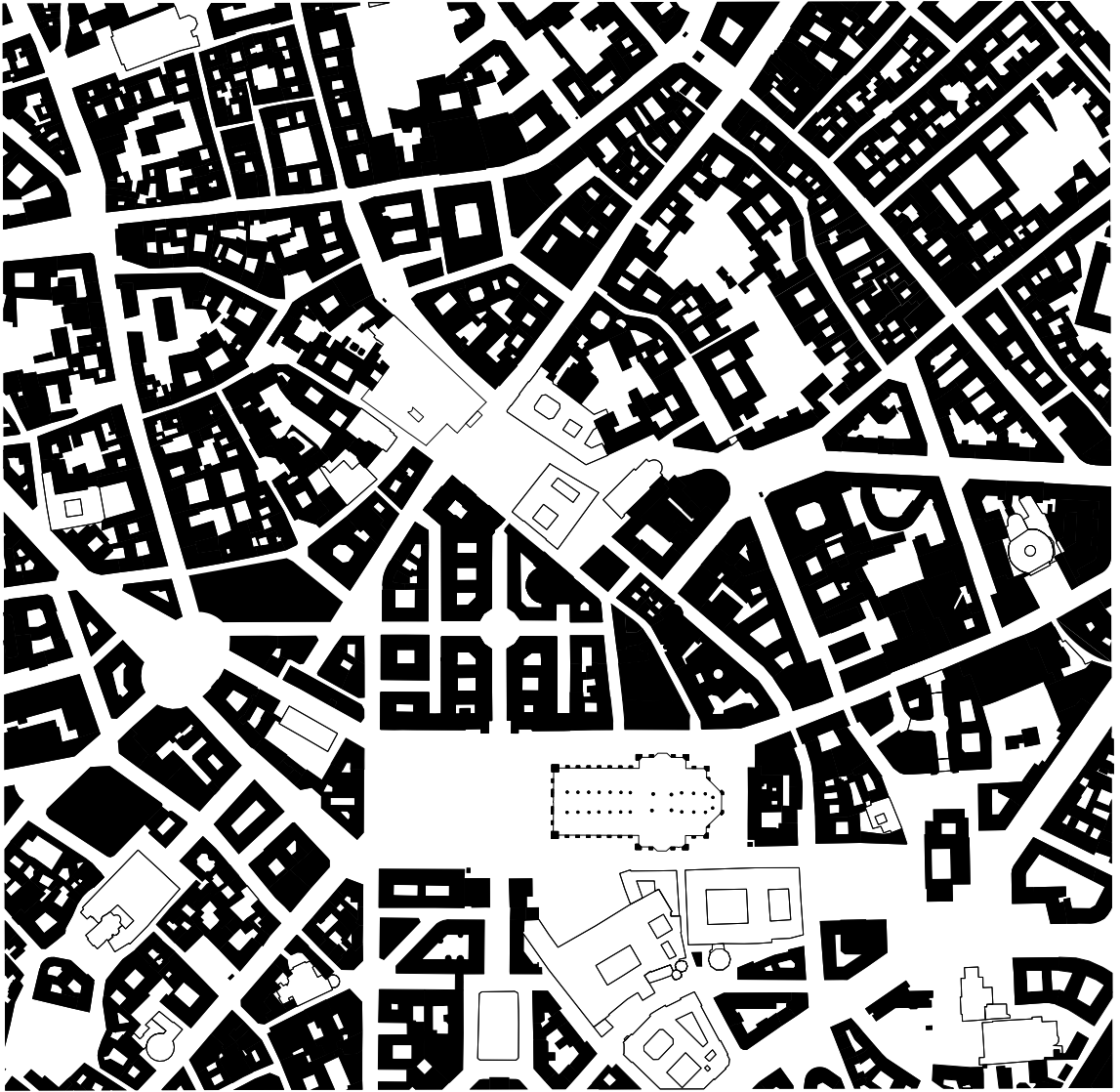


Figure 20 | Nolli map Milan city centre

Nolli's map presents public space as a continuous field, independent of enclosure. Churches, porticoes, and interior courtyards are not read as isolated buildings but as extensions of the urban realm.

Rather than foregrounding architectural objects, the map makes routes, passages, and spatial sequences visible, allowing the city to be understood as a choreography of bodies in movement.

By rendering public space in white and built mass in black, Nolli exposes institutional power structures, revealing which spaces are permitted to operate as public. Buildings function as spatial filters that prolong the city inside.

This discovery revealed how many of Milan's cultural interiors are only conditionally public. It became the starting point for a design that explores how public space can extend into the interior of a cultural building.

In this map, the surrounding urban environment of La Scala, also public spaces with ticketing and controlled access are included. This is because they historically and typologically operate as public extensions of the urban realm, even though contemporary access regimes increasingly restrict their openness. If these spaces were excluded almost no interior public space would remain, revealing the degree to which the notion of an open public interior has been eroded due to densification, commercialisation, and privatisation (World Construction Network (2017)).

APPROACH

Research strategy and assignment

This project adopts a research-by-design approach, in which architectural analysis, theoretical research, and design exploration are developed in parallel and inform one another iteratively. Research is not treated as a linear phase preceding design, but as an ongoing process that structures spatial questions to be tested through architectural propositions.

The research strategy combines:

- historical and theoretical analysis,
- site-specific spatial analysis,
- case study comparison,
- diagrammatic exploration
- the design of a new opera and ballet

Teatro alla Scala in Milan serves as the primary case study, as the project is developed on the site of the existing opera house, which is assigned as the design location within this graduation studio. The assignment assumes that the current opera house was designed but never built, leaving the site vacant for a new architectural proposal with a comparable, adjusted programme and the same client. Comparative references to other opera houses are used to situate the analysis within a broader typological and architectural context.

Case studies are analysed through:

- architectural plans and sections,
- spatial diagrams of circulation and use,
- temporal mappings of day versus evening activity.

The urban surroundings of La Scala are analysed to understand:

- its relationship to the city centre, and other public interiors (mapped set of civic buildings in a city)
- the visibility and accessibility of entrances,
- the role of adjacent public space in shaping civic presence.

This includes mapping pedestrian flows, thresholds, and points of encounter between the opera house and the city.

Key interior spaces (entrances, foyers, staircases, and public routes) are analysed using diagrammatic tools that focus on:

- movement and pause,
- waiting, gathering and program,
- degrees of accessibility and control,
- temporal shifts in use.

These diagrams allow qualitative spatial phenomena, such as civic presence and ceremonial choreography, to be analysed architecturally.

Expected output

The research phase produces

- analytical diagrams of existing opera house typologies,
- comparative mappings of civic and ceremonial use,
- spatial interpretations that inform

the architectural design proposal.

These outputs directly inform the design phase, where insights are translated into architectural strategies.

Theoretical framework

This research is situated within the studio theme of Bodies and Buildings, which understands architecture as a mediator between bodily presence, movement, and institutional systems. Topics such as safety and security, opposite to proportions, movement and experience. Within this framework, the opera house is examined not only as an important urban anchor, but as a building that actively choreographs bodies through ritualised sequences. The research therefore draws on architectural and urban theory addressing civic space, public interiors, performance architecture, and place attachment in order to investigate how spatial organisation enables or restricts different forms of presence over time.

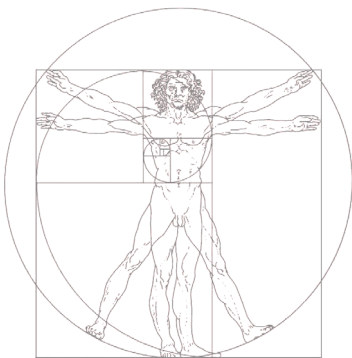


Figure 21 | The Vitruvian man



Figure 22 | Statue Leonardo da Vinci

Contemporary European cities face increasing densification, commercialisation of public space, and a steady reduction of environments that allow informal, non-commercial presence (Sennett, 2019; Amin, 2008; Harvey, 2012). Public life is increasingly accommodated within privately owned, consumption-driven interiors that visually resemble public space while fundamentally limiting civic behaviour (Acconci, 2007). In this context, publicness becomes conditional, regulated, and often tied to economic participation, reducing opportunities for lingering, appropriation, social interaction and civic unpredictability (historically central to public life) (Poot, Van Acker, & De Vos, 2015). This study builds on the idea that civic life is not only enacted through formal events but continuously produced through everyday movement and presence (Crawford, 1999), highlighting a tension with the opera house's present orientation toward the evening performance as its primary moment of public engagement.

The site visit showed that La Scala attracts many visitors, yet the public interaction mostly remains limited to photographing the façade. Apart from the museum and restaurant, two functions that both require payment, the building remains visually and physically closed to the city.

Within these conditions, publicly funded cultural institutions carry a renewed responsibility. Beyond symbolic representation, they are increasingly expected to contribute spatially and temporally to everyday urban life as part of the city's daily rhythm (Amin, 2008; Harvey, 2012). Civicness in this research is therefore understood not as a programmatic attribute or a question of access alone, but as a spatial condition shaped by visibility, accessibility, symbolic presence, and everyday usability.

This understanding aligns with the concept of the public interior as articulated by Poot, Van Acker, and De Vos (2015), who describe it as a critical interface between city and architecture in which civic meaning is produced through spatial mediation rather than legal ownership. Public interiors are conceived less as discrete rooms and more as environments or nodes within the urban network, whose civic potential lies in their capacity to connect routes, users, and temporal patterns. The authors distinguish between primary public space (streets, squares) and secondary public space (semi-public interiors), emphasising that civic life often emerges in the interrelationship between these realms.

The site has strong potential to connect primary and secondary public spaces, but this relationship is currently interrupted by the road and parked cars.

From this perspective, micro-spatial conditions become central. Issues such as the configuration and orientation of entrances, degrees of permeability, territorial depth, and the gradual transition between formal and informal spheres critically influence whether an interior is perceived as public. The entrance transition and intimacy gradient determine how users move from the city into the building, shaping feelings of accessibility and belonging. When entrances lack visibility, continuity with pedestrian routes, or spatial legibility, public interiors lose their civic character and become experienced as exclusive or private environments (Poot et al., 2015).

The evening performance visit revealed a different side of the building. The piazza becomes animated as people arrive from all directions and gather before entering the theatre. After passing through the queue, the experience shifts from the city into an entirely different world.

The temporal dimension of civic space is further reinforced through the concept of place attachment. Bowlby (1969) and Altman and Low (1992) describe attachment as an emotional and

Around its edges, Teatro alla Scala becomes difficult to read as a separate building. It dissolves into the surrounding urban block, and without the front façade, many people would pass by without recognising it as the theatre.

behavioural bond formed through repeated, low-threshold interaction. Applied architecturally, this suggests that buildings encountered only during exceptional, ticketed moments struggle to become embedded in the everyday mental map of the city. Civic attachment therefore depends not on intensity of experience, but on spatial familiarity and temporal continuity. In this sense, the legitimacy of civic institutions derives from their continuous presence and accessibility within the city (Amin, 2008). Harvey (2012) adds a political dimension, highlighting that publicly funded institutions have a collective obligation to contribute to shared urban life beyond commodified experience.

Within this framework, audience engagement can be understood as a gradient rather than a binary condition. Cultural participation unfolds through degrees of familiarity and intention, ranging from habitual presence, to conscious choice, to moments of surprise. Habit is formed through repeated, low-threshold encounters; choice emerges when users actively decide to engage; surprise occurs when unexpected spatial or experiential conditions disrupt routine and create heightened awareness (European Commission, 2019; Arts Council England, 2017). Architecture plays a critical role in this gradient, particularly in the layer of surprise. Through sequencing, visibility, and the orchestration of movement, buildings can introduce moments of discovery that invite engagement without requiring prior intention, thereby expanding the civic reach of cultural institutions beyond their core audiences.

Freshwater (2009) demonstrates how architectural settings choreograph audience behaviour through hierarchy, ritual, and spatial sequencing, while Fischer-Lichte (2008) frames performance as a transformative process in which spatial transition and ceremonial discipline are essential to collective focus. From this perspective, foyers, entrances, and circulation spaces are not neutral transitions, but integral components of the performance apparatus that cannot be reduced to efficiency or crowd management alone. They must be considered in relation to how spatial surplus, visibility, and temporal openness enable social presence. Public routes are similarly framed as spatial sequences that contribute to the dramaturgy of the building. Through deliberate orchestration of movement, compression and expansion, and moments of delay, circulation becomes a form of architectural narrative that mediates between everyday access and highly choreographed rituals.

This principle of seeing foyers, entrances and circulation spaces as more than functional transitions informed the design by seeing the visitor flow as a whole as the performance, where arrival, waiting, movement and anticipation are spatially choreographed.

The need to make the art form's cultural production, craftsmanship, and creative labour more visible becomes increasingly urgent, positioning the opera house not only as a venue for performance but as an active contributor to the public realm (European Commission (2019); Arts Council England. (2017)).

In this sense, performing arts buildings perform architecturally (Hammond, 2006). Movement itself becomes a civic experience, allowing visitors to inhabit the building as a public interior even in the absence of a performance, while maintaining the ceremonial discipline required during performance

The historical value of La Scala is immense. A new opera house should preserve the aura of a cultural jewel: a place that radiates talent, refinement and emotion. At the same time, it should move beyond the hierarchy and outdated image that have become associated with opera and ballet.

moments.

Within the context of the opera house, monumentality plays a crucial role in shaping civic presence, as these buildings are historically conceived not only as functional performance venues, but as enduring architectural representations of collective cultural identity. At the same time, architectural discourse complicates the relationship between monumentality and everyday use. Kahn (2007) frames monumentality not as stylistic expression but as the spatial articulation of collective meaning over time, while Stirling (2007) argues for forms of monumentality that remain accessible and inhabitable rather than distant or authoritarian.

Together, these perspectives frame the opera house as a building that must reconcile ceremonial discipline with civic openness, not primarily through programmatic expansion, but through spatial and temporal reconfiguration. Although legally semi-private, Teatro alla Scala operates as a publicly funded cultural institution with public accountability, supported by state, regional, and municipal funding (European Commission, 2019). This dual condition makes it a critical case to question how such a typology can respond to contemporary expectations.

Planning

The project follows an iterative structure:

- Pre-design research: literature review, precedent analysis, and site mapping



Figure 23 | Audience gradient



(European Commission (2019))

- Analytical phase: spatial and temporal diagramming of La Scala and comparative cases, literature review
- Design exploration: testing architectural strategies through plans, sections, and sequences
- Evaluation and refinement: confronting design proposals with research findings

This cyclical approach ensures that architectural decisions remain grounded in research while mainly using design as a research tool.

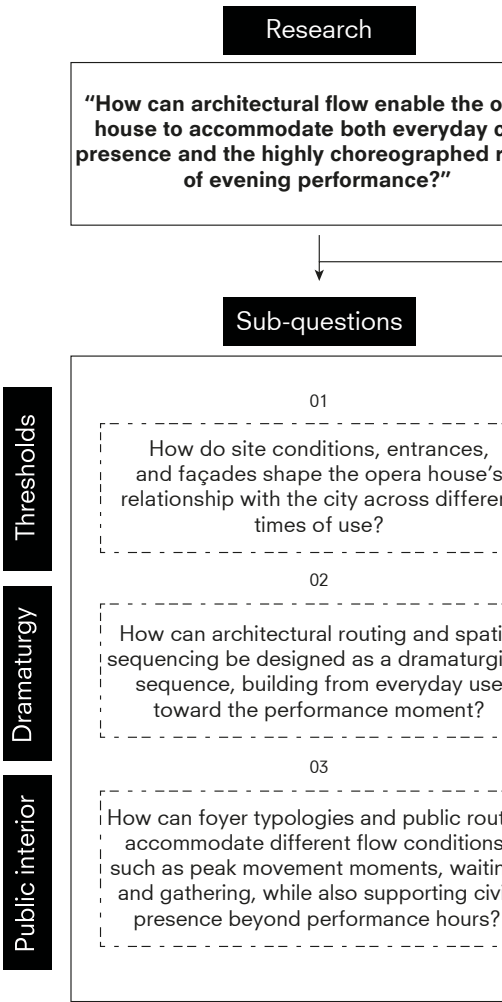
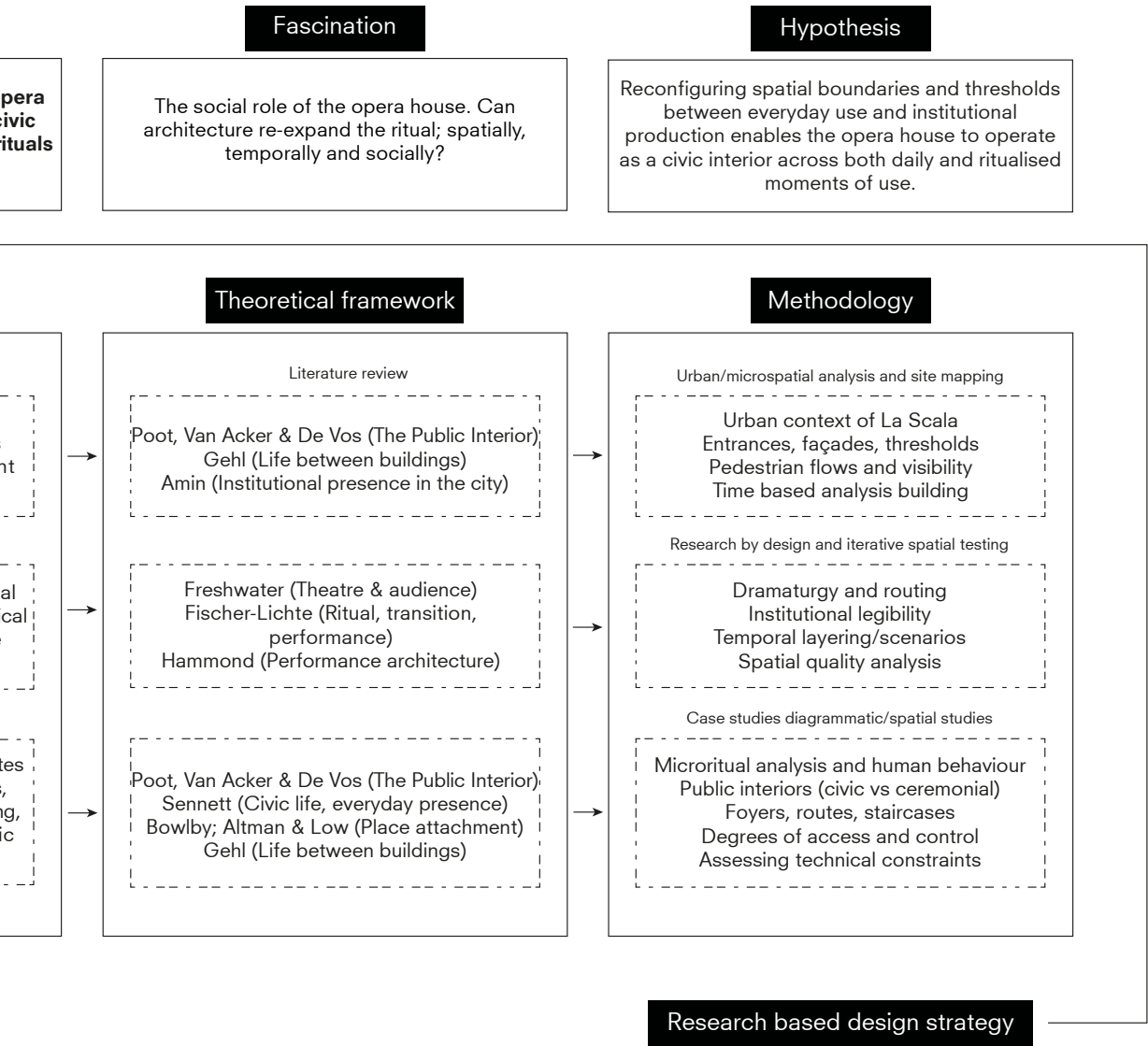


Figure 24 | Research plan



FLOW

In a group, we researched the ten 'one-off' buildings of Milan. All large, functionally specific buildings, that have a unique role in the city. The opera and ballet house is one of them.

Seeing the city as an interconnected system, helped understand the opera house not as an isolated object, but part of a larger urban and cultural network. This chapter will show research through the lens of flow, to gain insight into how movement, access, programme, and public life shape the role of the opera in the city.



one off...
10 complex buildings in Milan



1. Central station
2. Library
3. Stadium
4. Opera and ballet house
5. Courthouse
6. Hospital
7. Airport
8. Museum
9. Swimming pool
10. University

Figure 25 | Group drawing

Movement through the building functions as a form of dramaturgy. Visitors pass through a sequence of intermediate spaces on their way to the auditorium.

Through moments of compression and release, indirect routes, shifting sightlines, and changes in scale, a sense of anticipation is gradually constructed.

The route itself becomes an experiential prelude to the performance, preparing bodies and attention before the event begins (Hammond, 2006).

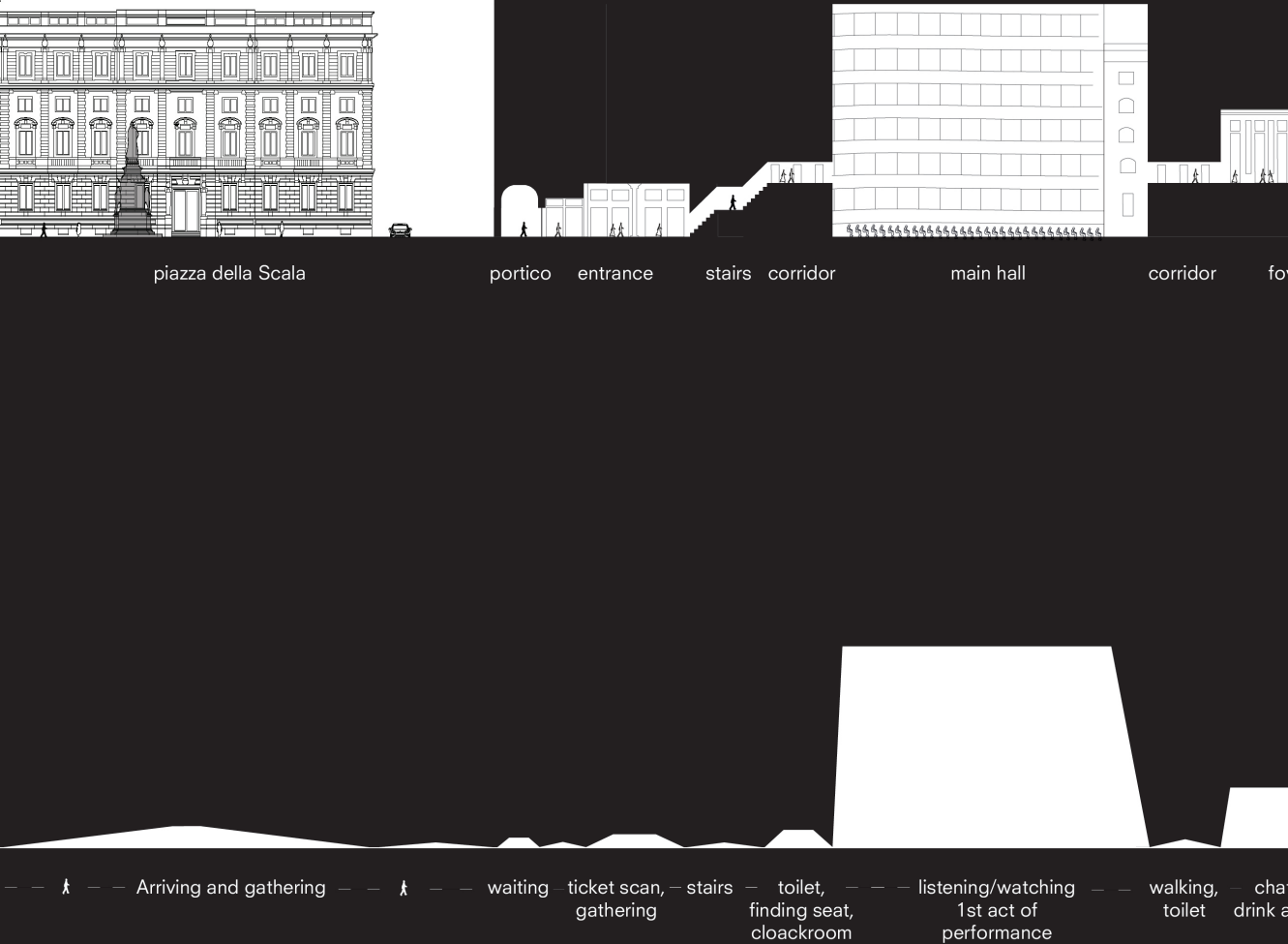
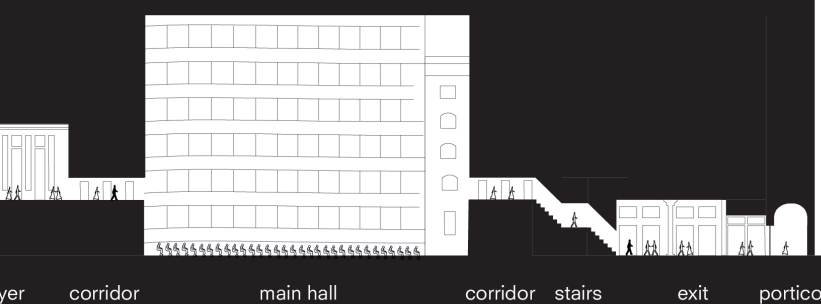
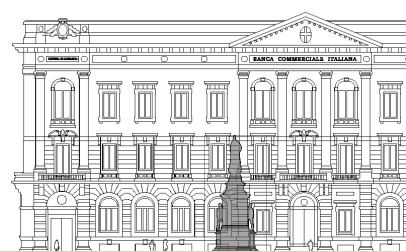


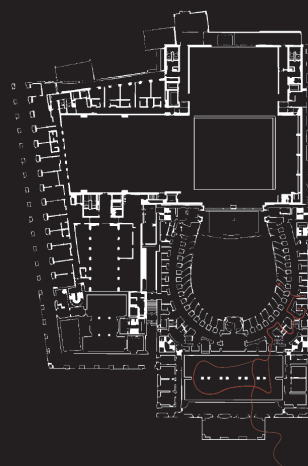
Figure 26 | Perceptive diagram



oyer corridor main hall corridor stairs exit portico



piazza della Scala



etting, and bite — — k — — listening/watching 2nd act of performance — — cloakroom, toilet — stairs — exiting — — k — — taking taxi, tram, walking to metro — —

This drawing should be understood as a perceptive diagram rather than a conventional architectural section. The black and white representation of compression and decompression is deliberately used as an analytical instrument. Its aim is not realism, but clarity: to make spatial effects that often remain implicit visible and comparable.

The section operates through three layers. The first layer is the spatial sequence shown in section, revealing how volumes expand and contract. The second layer is the movement path, represented as a plan based route, indicating how bodies move through the building. The third layer is a timeline of activities, mapping what people do in each space and how long they remain there. Together, these layers visualise what the Flow Group defines as the spatial choreography of the body.

Across the different building types, compression frequently functions as preparation. These compressed spaces, such as entrances, corridors and stairs, operate as moments of social disciplining and behavioural alignment. They are often also the locations of security checks, ticket scans or access control. In these spaces, large crowds are unravelled, filtered and made manageable, allowing the building to safely absorb a collective body.

In building types such as the opera, stadium and swimming pool, this compression is typically followed by a strong moment of decompression. These spaces are characterised by large heights, extended duration of stay and, except for the swimming pool, relatively limited bodily movement. The size of these spaces correlates not only with the number of people present, but more importantly with the intensity of attention they demand. Architecture

here creates the conditions for collective focus.

An important observation is the asymmetry between arrival and departure. Arrival sequences are almost always slower. People arrive early, enter gradually and use the building as a social and atmospheric space. The entrance functions as a place of anticipation and gathering. Departure, by contrast, is fast and forceful. Once the function has been fulfilled, the building releases its users almost immediately, pushing them outward through large and overwhelming flows that guide them back into the city.

Through the lens of time, a clear differentiation between spaces becomes visible. Some spaces are short and intense, such as entrances, security zones and ticket checks, while others allow for longer durations, such as auditoria, museums and foyers. Ultimately, the diagram reveals how the body is continuously directed. The body slows down, speeds up, stops and concentrates, not through explicit instruction, but through architectural means: ceiling height, spatial width, sightlines and light. The body reads architecture pre cognitively, responding instinctively before conscious interpretation.

The same analytical method used for the existing La Scala is later applied to the preliminary design, allowing the new proposal to be evaluated through comparable spatial, social and temporal criteria.

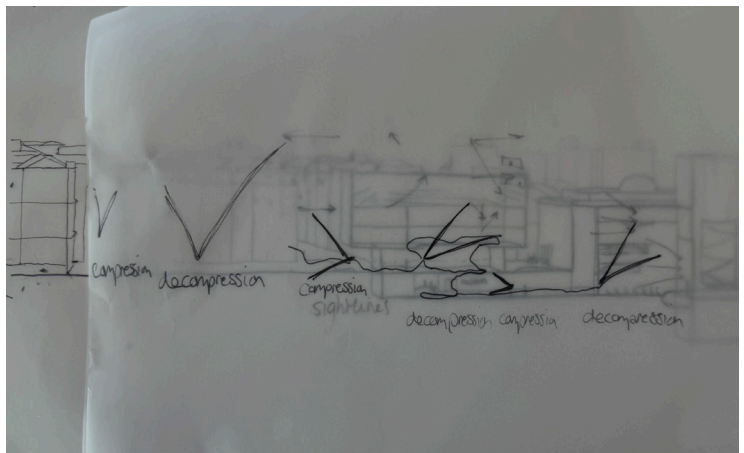
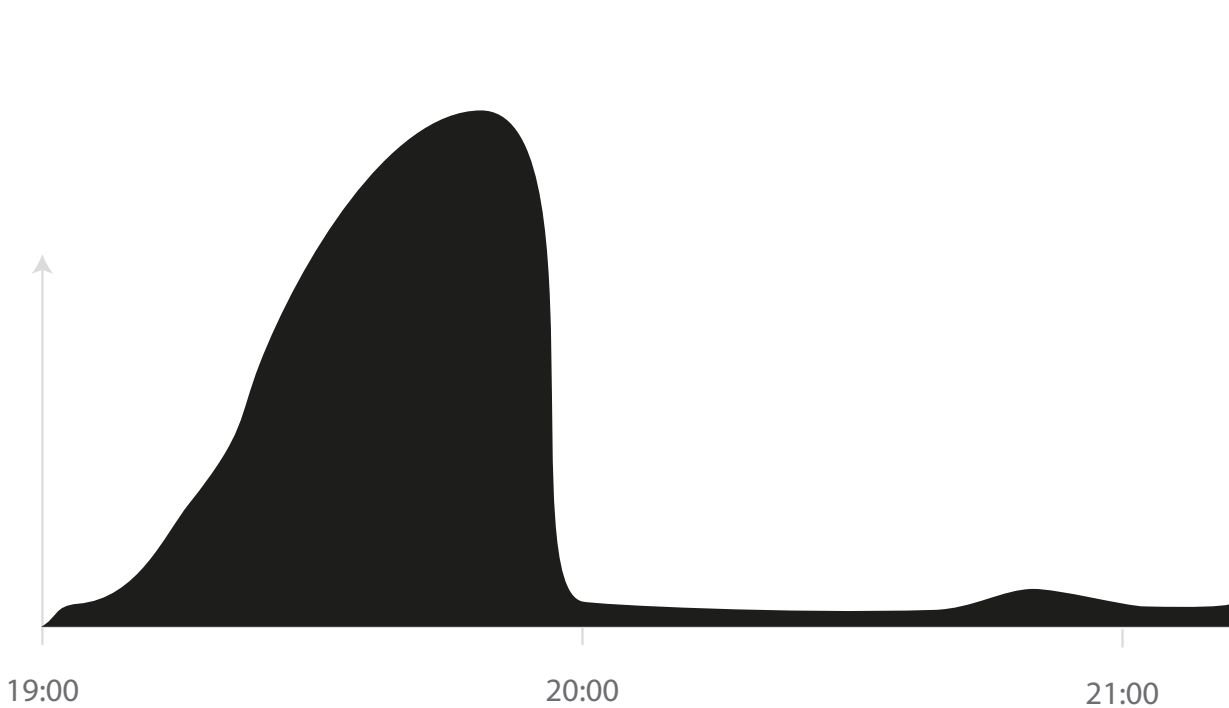


Figure 27 | Designing method (de)compression



1. Pre show arrival

Figure 28 | Peak flows

Performance rituals in the opera house structure the building as a time-based sequence of anticipation, discipline, and release.

Arrival typically begins well before the performance, allowing visitors to acclimatise, observe others, and participate in a shared moment of social display. During intermission there are certain clear bottlenecks, such as auditorium exits, staircases, toilets and bars.

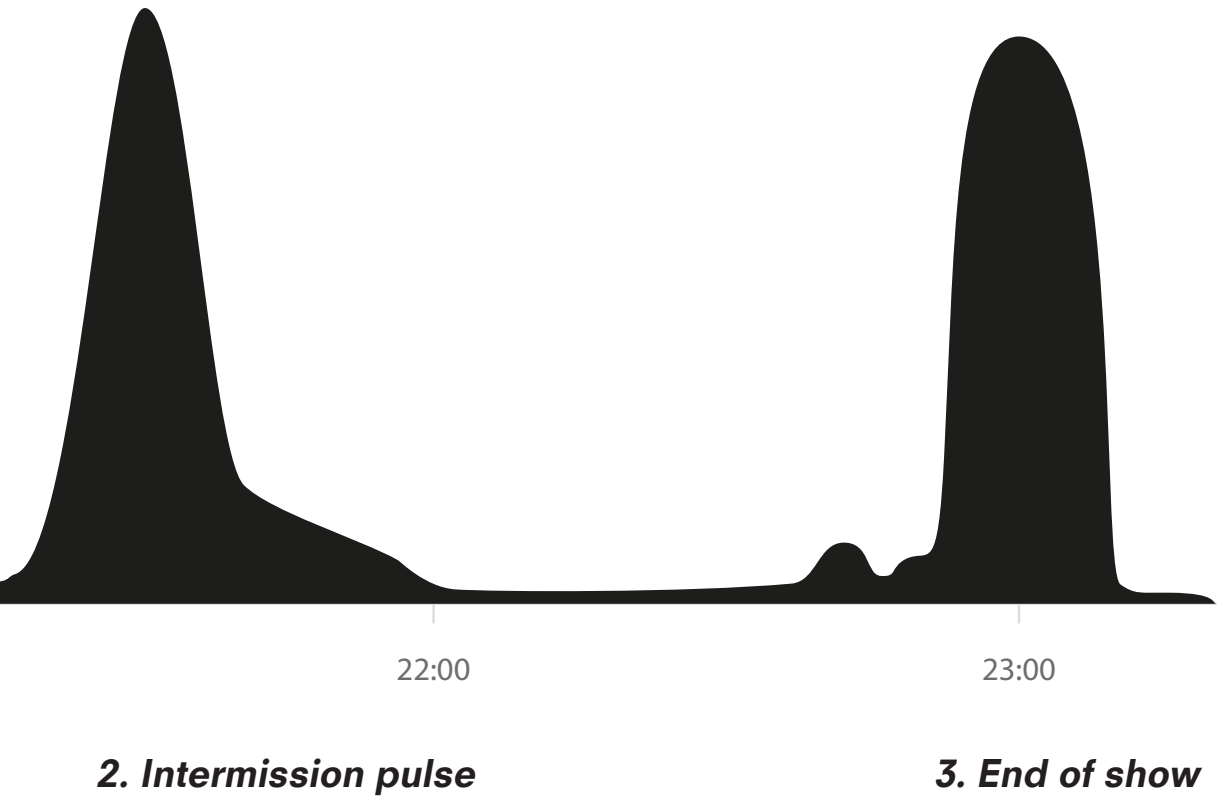
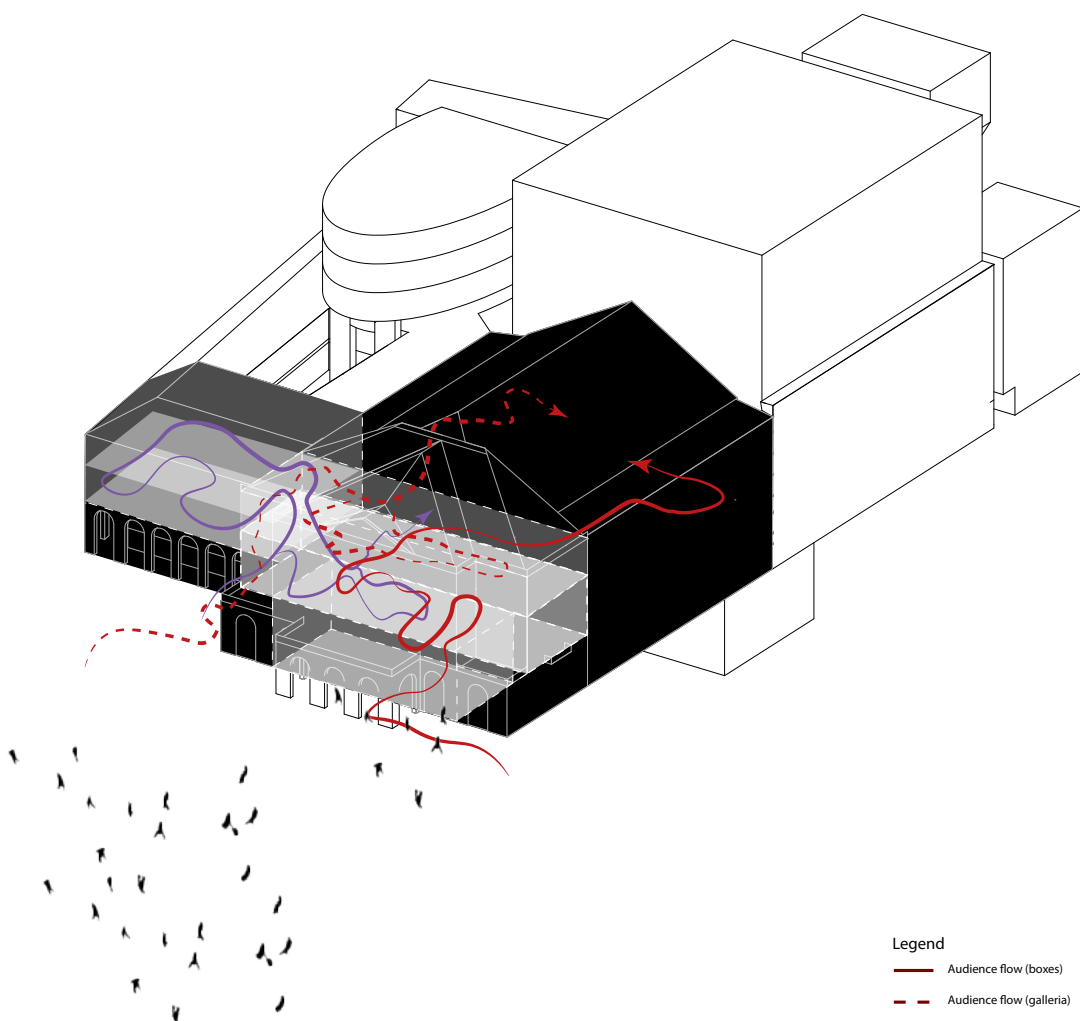


Figure 29 | Lines at entrance and bar



- Legend
- Audience flow (boxes)
 - - Audience flow (galleria)
 - Museum flow
 - Performer flow
 - Staff flow
 - Public areas
 - Private areas

Figure 30 | Piazza della scala as 'antechamber'

La Scala's ticketing regulations make its spatial hierarchy explicit: audience members seated in the galleries have a dedicated entrance and are not permitted to access the main entrance foyer or the Ridotto Toscanini, even during intermissions.

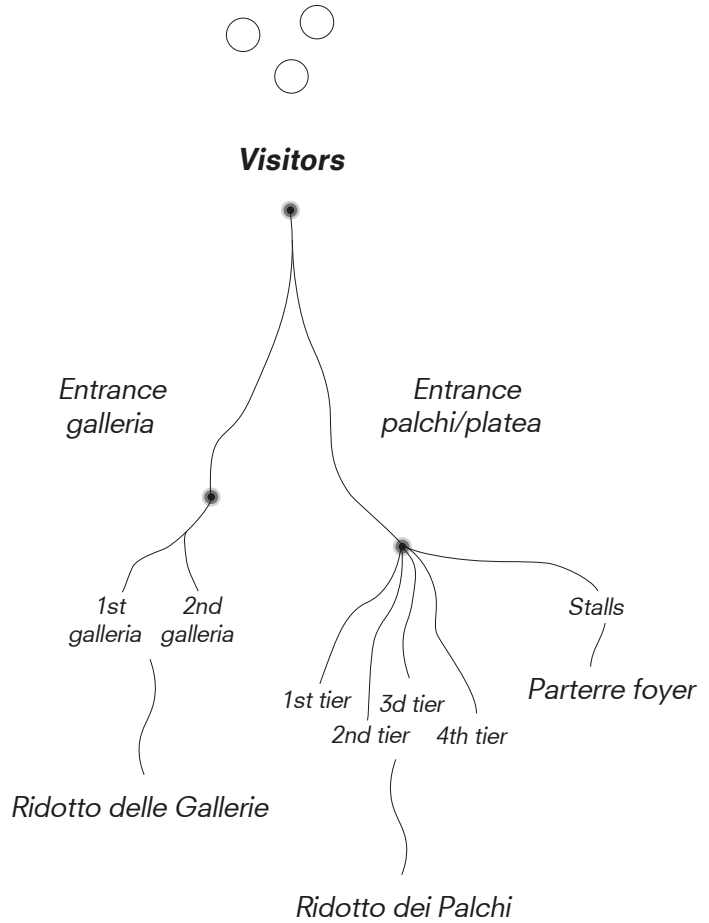


Figure 31 | Organisation of entrances/seats/foyers

The separation of flows according to ticket class informed the decision to design one shared foyer. The balcony arrangement preserves spatial layering, but replaces social separation with a collective public interior.

Together, these foyers reveal how social hierarchy in La Scala is not only expressed through seating, but choreographed through distinct spatial conditions of entering, waiting, movement, and encounter.



Ridotto parterre

Atmosphere

- Monumental and transitional

Spatial logic

- Large, legible space organizing arrival, intermission movement, and collective circulation
- Functions as both ceremonial foyer and infrastructural buffer



Ridotto dei palchi

Atmosphere

- Intimate and socially performative

Spatial logic

- Exclusive, enclosed foyer
- Space for lingering, recognition, and social exchange



Ridotto gallerie

ormative

for box-holders
gnition, and ritualized

Atmosphere

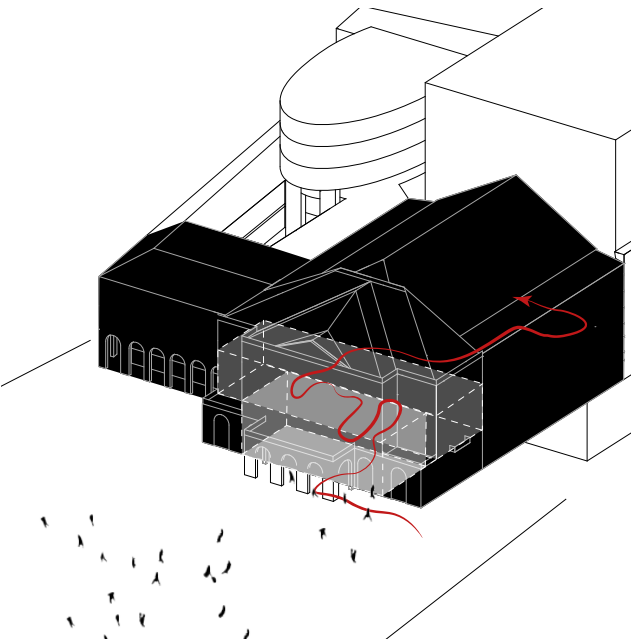
- Restrained and pragmatic

Spatial logic

- Clearly separated audience group
- Lower ceilings and reduced ornament reinforce functional access over social display

Figure 32 | The three foyers of La Scala

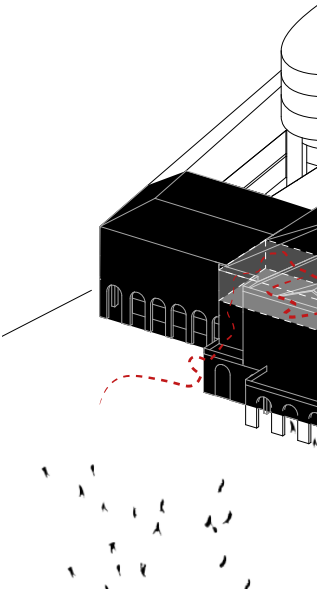
Distributed stairs + separate entrances =
fragmented circulation



Audience flow boxes

Sequence of spaces

*Piazza della Scala - Portico - Vestibule - Corridor -
Cloakroom - Main hall - Foyer Palchi - Toilets - Main hall
- Corridor - Vestibule - Exit - Piazza della Scala*

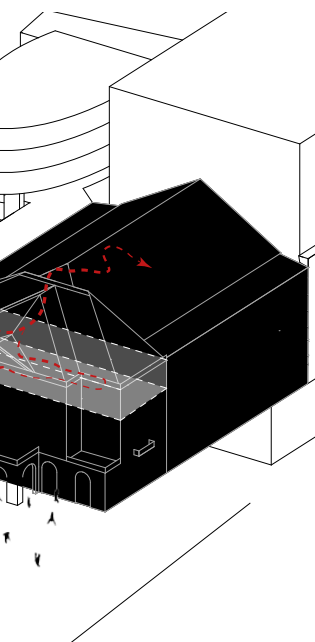


Audience flow galleria

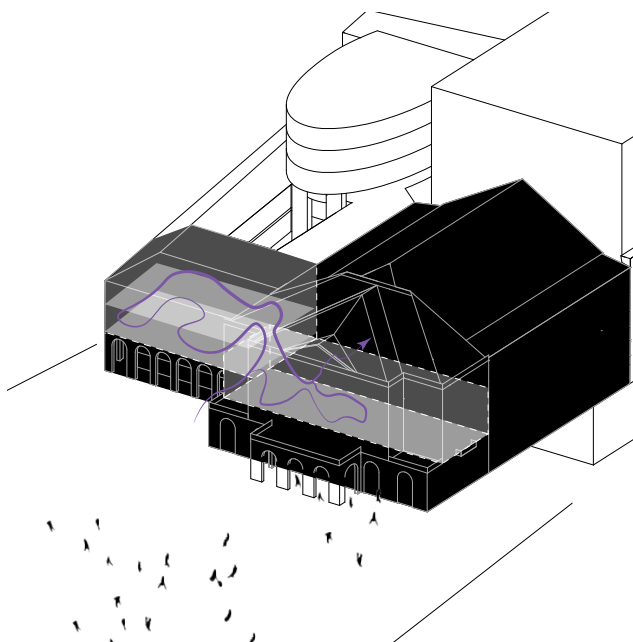
Sequence of spaces

*Piazza della Scala - Portico - G
- Staircase - Corridor - Cloak
Galleria - Toilets - Main hall - C
- Piazza della Scala*

Figure 33 | Diagrammatic visualisation of flows



Galleria/museum entrance
 room - Main hall - Foyer
 Corridor - Staircase - Exit



Audience flow museum

Sequence of spaces

*Piazza della Scala - Portico - Galleria/museum entrance
 - Staircase - Museum - Foyer Palchi - Main hall -
 Staircase - Exit - Piazza della Scala*

Legend

- Audience flow (boxes)
- - Audience flow (galleria)
- Museum flow

- Performer flow
- Staff flow
- Public areas
- Private areas

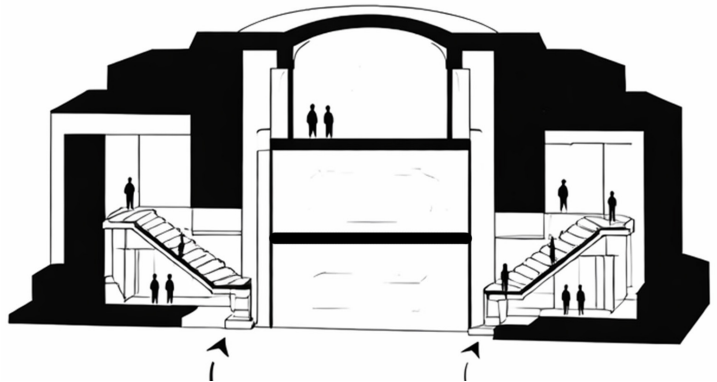


Monumental stair system

Centralized, ceremonial, and socially expressive

La Scala's circulation logic prioritises operational efficiency and ritual separation over collective public presence, producing a fragmented spatial experience that is difficult to appropriate outside performance moments.

La Scala's dispersed route system informed the use of open circulation spaces. In the new design, movement is not hidden, but architecturally integrated into the foyers as part of the public experience.



Dispersed route system

Decentralized, functional/
discrete, and flow-oriented

Figure 34 | Diagrammatic visualisation open and closed flow system



Although the intimate boxes have strong spatial quality and character, the area occupied by boxes and cloakrooms in La Scala informed a different spatial priority in the new building. These square metres are reallocated to create larger civic areas and more generous foyers.

La Scala has a unique way of personal and intimate guidance and a ritualised performance experience.

Figure 35 | Loges La Scala

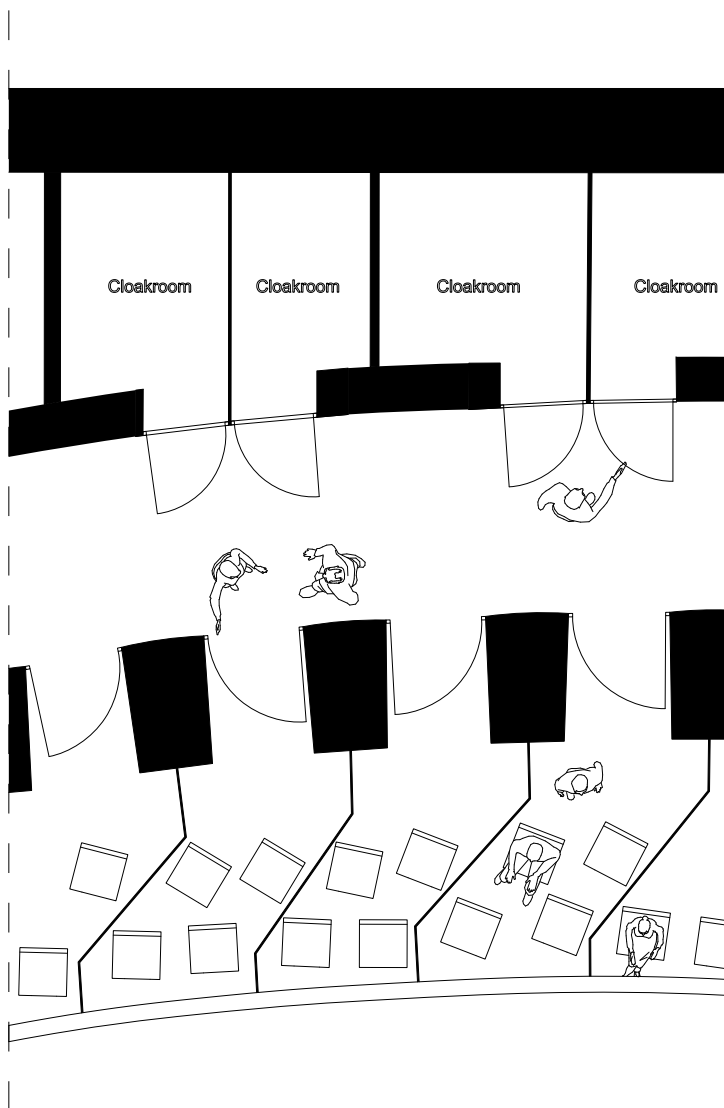
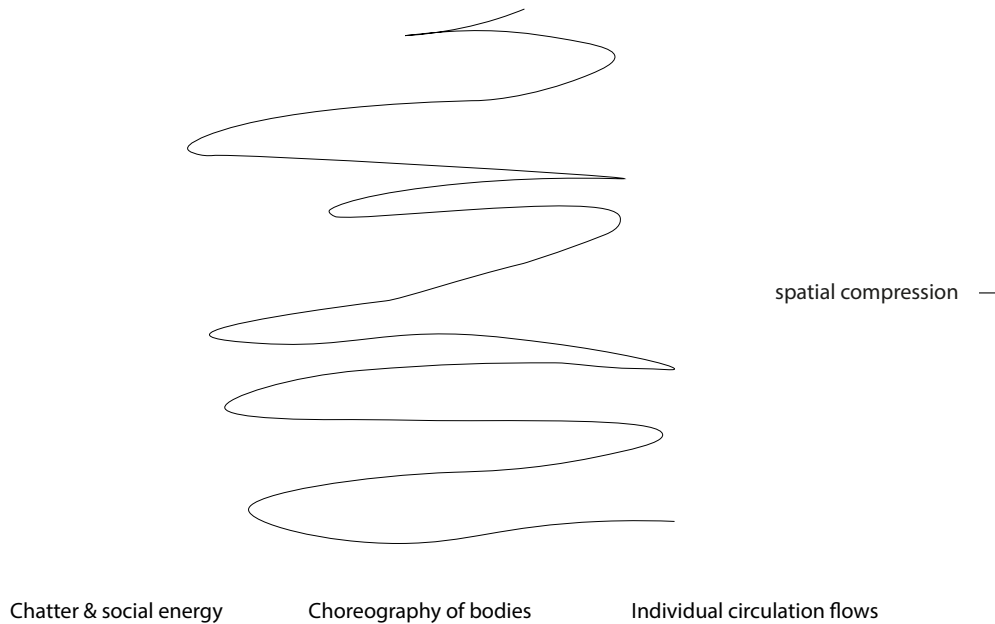


Figure 36 | Loges La Scala

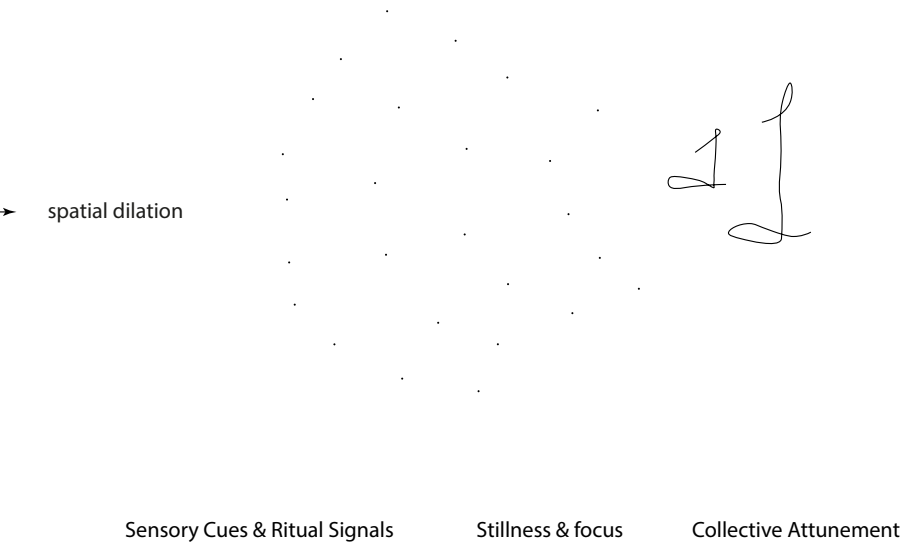


Noise

The opera house functions as a scripted environment in which bodies move through a sequence of rituals and control mechanisms that produce specific forms of publicness. The transition into performance relies on intuitive spatial and sensory cues that guide attention without explicit instruction (Freshwater, 2009; Hammond, 2016).

Subtle spatial and sensory cues informed the design as tools to guide visitors from social noise towards collective focus and theatrical attention.

As performance time approaches, rituals shift



Magic

from openness to control. Auditory signals such as bells and announcements, changes in lighting, and staff guidance mark the transition from social gathering to focused attention. During the performance, movement is minimised and behaviour becomes highly regulated: silence, stillness, and collective orientation towards the stage dominate.

Figure 37 | Diagrammatic visualisation

The intermission temporarily suspends this discipline. Movement, conversation, and consumption return, but within a limited timeframe and spatially prescribed zones. After the final applause, the ritual dissolves rapidly and speed, clearance, and control are dominating.

Actors & roles

Audience (subdivided: stalls / palchi / galleria / VIP)

Performers (soloists, orchestra, chorus, dancers)

Staff (front-of-house (hospitality, catering), security, ushers)

Back-of-house workers (technical crew, logistics)

Institutional actors (management, press, sponsors)

Temporal rituals

Arrival rituals (early arrival, anticipation, gathering)

Pre-performance moments (ticket check, coat check, foyer dwelling, bathroom visits)

Intermission rituals (preparing bars for big intermission peak, circulation, visibility, consumption, shop visits)

Exit rituals (rapid dispersal, cloakroom peak, gathering)

Non-performance time (museum visits, rehearsals, tours)

Security & control protocols

Ticketing as spatial filter

Bag checks

Visual surveillance (sightlines, staff positioning, help finding seats, closing and opening doors just before start and end of performance)

Soft control (ushers, lighting, material cues, bells/ announcements)

Hard control (doors, gates, level changes)

Behavioural scripts/etiquette

No disturbing (being on time/not leaving early, no screens and no talking during performance)

Dress codes (implicit / explicit)

Silence vs. noise zones

Sitting still vs. movement

Visibility rituals (seeing and being seen)

Photography and applause protocols (after overture, arias and curtain calls, extended applause at end of performance)

“Venue managers cannot simply rely on performances themselves to provide a sufficient attraction; the building must create an ‘experience’ and a ‘sense of place’ for its increasingly demanding audience. It is with such intangibles that live events can really win against home entertainment. Thought must be given to all aspects of a visit, from the foyers and bars to the facilities and ease of access.”

(Hammond, 2006)



Figure 38 | Oslo opera house

Reference projects showed how contemporary opera houses integrate new spatial demands. This informed the design decision to spatially give back to the city, such as in Oslo or Hamburg.



Figure 39 | Oslo opera house

"It is first an urban space, a gift to the city. The building can be considered a catalyst of all the energies of the city and is emblematic of the regeneration of its urban tissue."



Figure 40 | Outdoor performance area

The Oslo opera house is a good example of how a building can dissolve the boundary between institution and city. Public surfaces, accessible circulation, and visible movement transform the opera house into an active civic landscape. The act of engagement, walking, observing, learning, becomes part of the performance continuum and therefore the building becomes part of the city.



Figure 41 | Elbphilharmonie Hamburg

Dramaturgy is how architecture directs experience. The deliberate structuring, sequencing, and timing of an experience over time. In an architectural context dramaturgy can refer to:

- how spaces are experienced sequentially, as a narrative (overlapping vs. separate routes)
- how tension, anticipation, and release are built up
- how movement (delay/acceleration), sightlines, disclosure, sound, and encounters are choreographed
- how users are gradually guided toward a key moment (the performance)

The dramaturgical sequencing of spaces seen in the Elbphilharmonie Hamburg, shows how architecture can carefully stage anticipation, transition, and orientation. Movement through the building is structured as a temporal experience: compression and release, restricted view and skyline, opacity and transparency, sound and silence.

The escalator creates as Koolhaas describes 'crush and bustle', this controlled crowding before a performance increases anticipation and strengthens the collective experience.



Figure 42 | Elbphilharmonie Hamburg

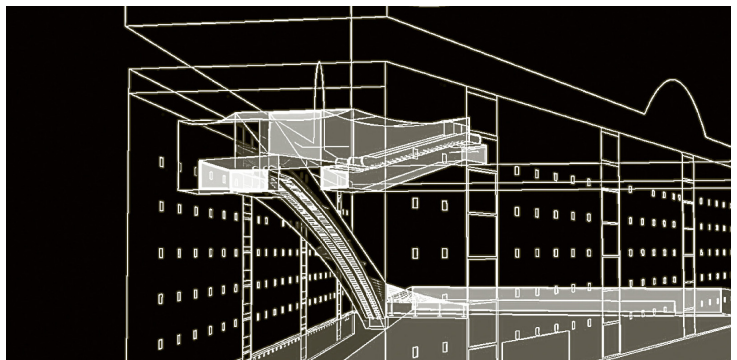


Figure 43 | Elbphilharmonie Hamburg

The design brief organises the information required to develop the architectural proposal for a new opera and ballet house. It is structured around three primary sections: the client, the site, and the programme.

Together, these chapters define the project's starting conditions. They outline the ambitions and requirements of the relevant stakeholders, the urban and cultural context, and the required functional and spatial programme.

Each section translates research findings into design-relevant information, strategies, and parameters, forming a clear foundation for the further architectural development of the building.

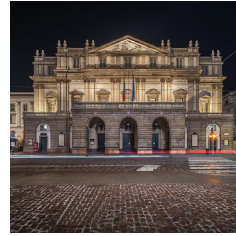




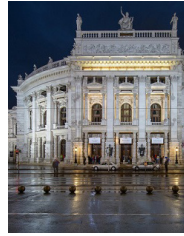
Opera performance demands highly specific spatial and technical conditions, particularly regarding the shape of the auditorium, acoustics, material articulation, orchestra configuration, and the relationship between stage and audience.

Ballet performance similarly relies on strict spatial parameters, including stage dimensions, floor performance, sightlines, and visual continuity between dancers and spectators.

1700 - 1800

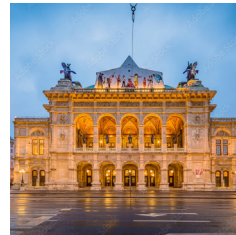


Teatro alla Scala
Milan, Italy, 1778



Burgtheater
Vienna, Austria, 1741

1800 - 1900



Staatsoper Wien
Vienna, Austria, 1869



Semperoper
Dresden, Germany, 18

1900 - 2000



Deutsche Oper Berlin
Berlin, Germany, 1961



Gran Teatre del Liceu
Barcelona, Spain, 199

2000 - now



Harbin Grand Theatre
Harbin, China, 2015



Royal Danish Opera
Copenhagen, Denmark, 2005



Teatro di San Carlo
Naples, Italy, 1737



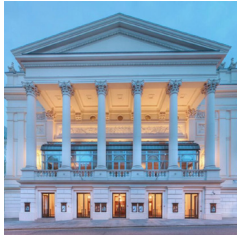
Teatro Regio di Torino
Turin, Italy, 1740



Teatro La Fenice
Venice, Italy, 1792



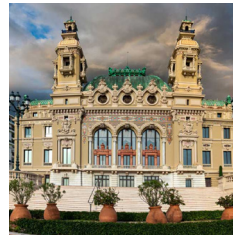
Drottningholm Palace Theatre
Stockholm, Sweden, 1766



Royal Opera House
London, England, 1858



Opéra Garnier
Paris, France, 1875



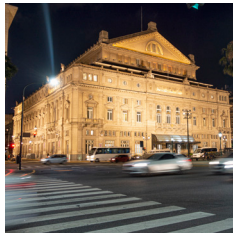
Palais Garnier Monte Carlo
Monte Carlo, France, 1879



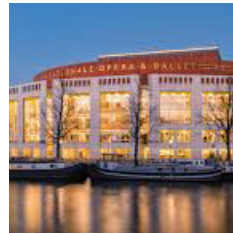
Teatro Massimo
Palermo, Sicily, Italy, 1897



Sydney Opera House
Sydney, Australia, 1973



Teatro Colón
Buenos Aires, Argentina, 1908



Nationale Opera en Ballet
Amsterdam, Netherlands, 1986



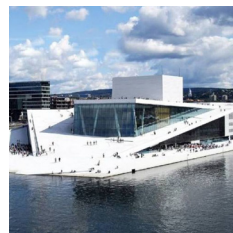
Suomen kansallisooppera ja -baletti
Helsinki, Finland, 1993



Cidade das Artes
Rio de Janeiro, Brazil, 2013



Shanghai Grand Opera House
Shanghai, China, 2025



Oslo Opera House
Oslo, Norway, 2008



Neue Oper am Rhein
Dusseldorf, Germany, t.b.b.

Figure 44 | Opera comparison matrix

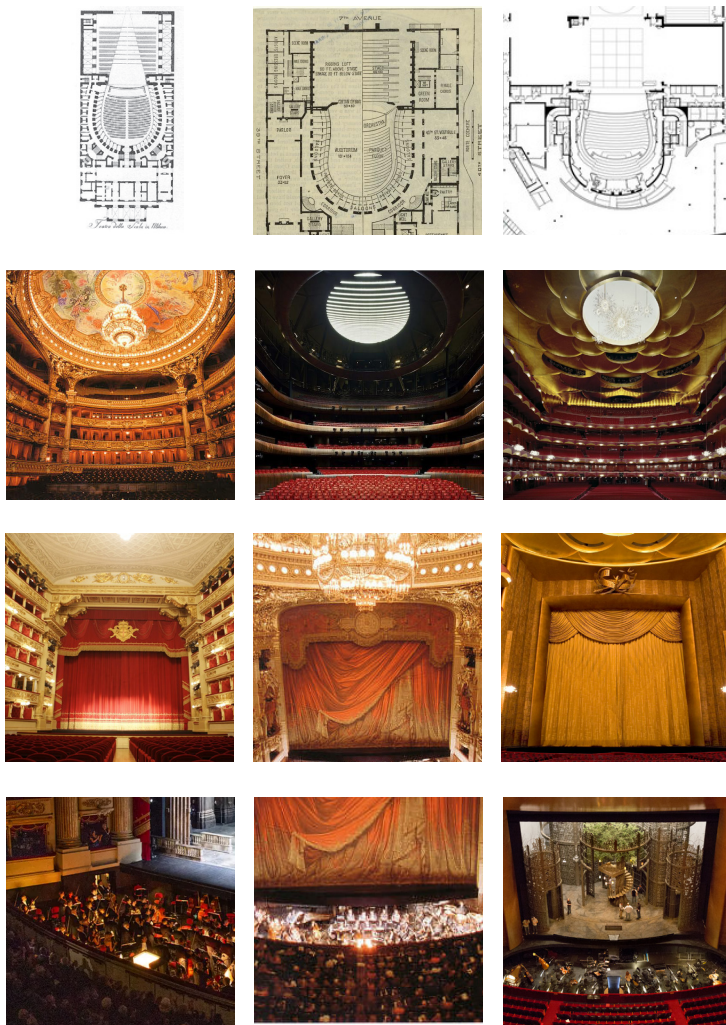


Figure 45 | Comparison opera typology

Orchestra Pit Lowered
Opera Mode



- Visual focus on the singers.
- Clear spatial separation between stage and musical accompaniment
- Sound blends inside pit

Orchestra Pit Raised
Concert Mode



- Expanded floor area accommodates larger orchestras
- Direct and transparent sound projection
- Visual focus on the musicians; the orchestra becomes the primary performer

Intermediate Height
Operetta / Small Ensembles



- Half-raised position for lighter repertoire or reduced ensembles
- More presence than opera mode, less dominance than full concert mode
- Offers adaptable acoustics

Figure 46 | Modes orchestra pit

CLIENT

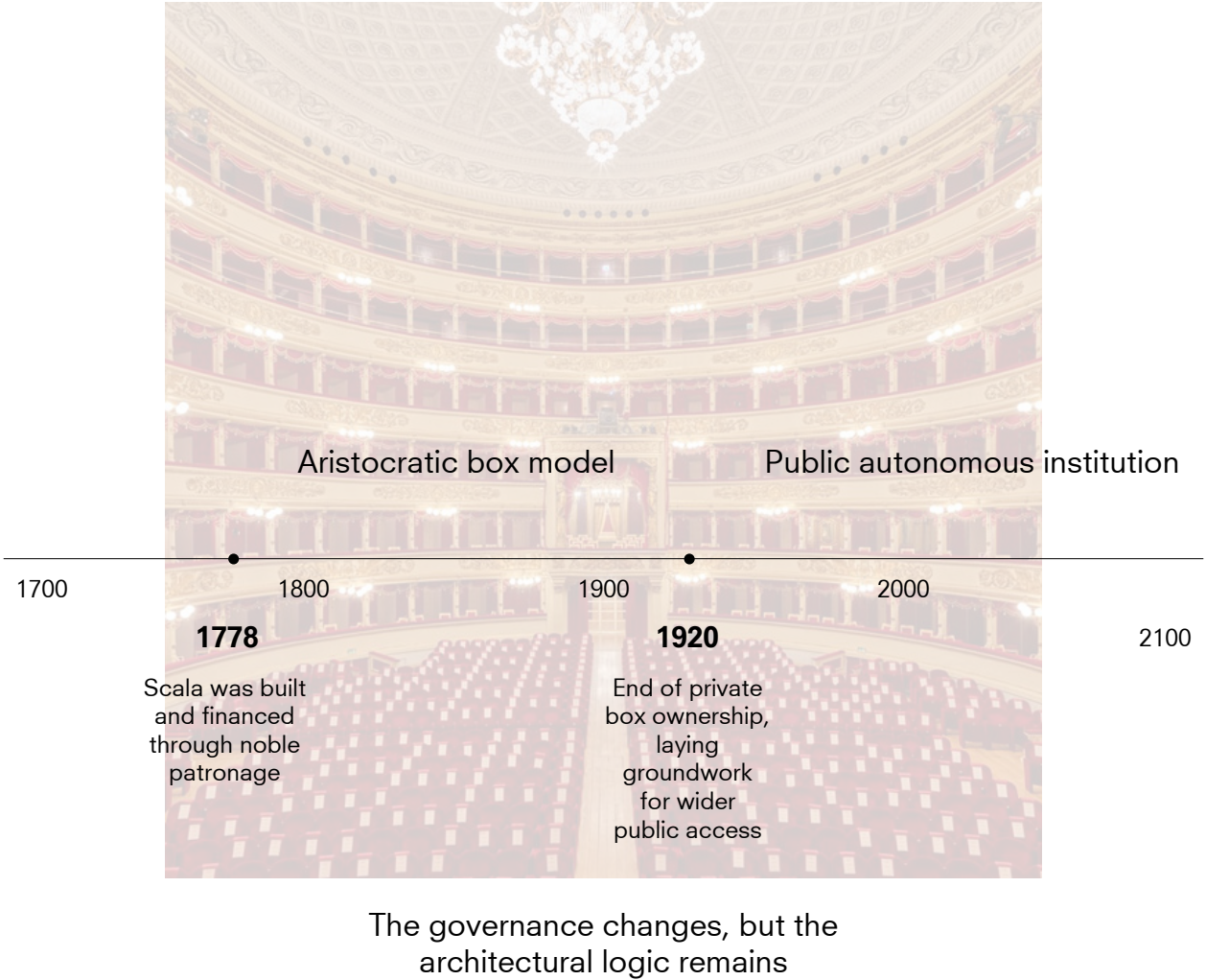


Figure 47 | Institutional transformation

Historically, the opera house was initiated under the patronage of Maria Theresa of Austria, following the destruction of the Teatro Regio Ducale in 1776. The new theatre was built on the degraded area of the Church of Santa Maria della Scala and financed through an early box-holder model, in which former box owners funded the construction in exchange for renewed ownership of their boxes and the building site. From its beginning, Teatro alla Scala functioned as a hybrid institution, combining private investment with a public cultural role (Teatro Alla Scala Of Milan, 2001).

Today, the client role is primarily represented by the Comune di Milano, together with national cultural authorities. As owner and public representative, the municipality positions Teatro alla Scala as a cultural institution of international importance, while remaining responsible for public access, heritage protection, and civic accountability. Private support is additionally channelled through initiatives such as Milano per la Scala (Friends of La Scala), which facilitates long-term patronage and fundraising from local private actors.

The opera house is additionally supported by a network of private partners and sponsors, who contribute financially and symbolically but do not act as direct design clients. Collaborations with brands such as Rolex, Collistar, and BMW position La Scala as a high-end cultural institution, associated with quality, precision, exclusivity, and prestige. The opera house as the cultural equivalent of a luxury brand. Partners such as



RO

Official Partner / Official

INTESA



Main Partner of the Sea

**BMW
GROUP**

Italia



Official Supplier (since 2002)



BELLAVISTA
FRANCIACORTA

Partner and Official Supplier (since 2014)



LEX

Official Supplier (since 2012)

SANPAOLO

Official Supplier (partner since 1998)



COLLISTAR

Partner and Official Supplier (since 2016)

CAFFÈ
BORBONE
magica emozione

Official Supplier (since 2019)

Figure 48 | Partnerships

Teatro alla Scala + Comune di Milano +
Regione Lombardia + Ministero della cultura



Internal initiators

1. Strategic Leadership & Governance

- Board of Directors
- General Director
- Communications & Branding
- Fundraising & Sponsorship

2. Artistic & Programmatic Direction

- Artistic Direction (opera, ballet, orchestra)
- Orchestra / Choir / Ballet Management
- Museum & Archive

3. Technical & Production Operations

- Technical Direction (stagehouse, logistics, pit, ateliers)
- Production Management (daily planning, flows, safety)

4. Audience & Public Engagement

- FOH Management (hospitality, foyers, audience flows)
- Education & Outreach, Ticketing & Public Services)

Figure 49 | Client description

Intesa Sanpaolo emphasise a close relationship with public and national interests, and La Scala's role as an urban anchor within Milan.

Within this project, the client is therefore understood not only as an administrative or financial body, but



Comune di
Milano

External initiators

1. Department of Culture (Assessorato alla Cultura)

2. Department of Urban Planning and
Urban Regeneration (Assessorato all'Urbanistica e
Rigenerazione Urbana)

3. Department of Tourism, Territorial
Marketing and Fashion (Assessorato al Turismo,
Marketing Territoriale e Moda)

4. Museums / Entertainment and Cultural
Production Directorate (Direzione Musei / Direzione
Spettacolo e Produzione Culturale)



Figure 50 | Milano per la Scala fundraising since 1991

as a collective civic entity composed of public governance, institutional history, and the audience itself. The opera house is approached as a public building whose architectural transformation must balance governance, heritage, and funding structures with the lived experience of citizens of Milan and visitors of Teatro alla Scala.

The statutory objectives of Teatro alla Scala including cultural and social education and the dissemination of musical art underpin and inform its institutional core values, clearly showing focus on civic engagement.

The client is required to adopt a proactive role by identifying parts of the building that can operate, at specific times, as non-ticketed civic interiors, as a strategic investment in a culturally sustainable future. Beyond hosting performances, the institution must expand its core functions to include social exchange, public debate, and collective presence (Markovic Bozovic, 2021).

Audience engagement should be strengthened through visible storytelling, such as short documentary formats accompanying each production, revealing creative processes and reinforcing the relationship between performers and visitors.

TEATRO ALLA SCALA

global cultural
leadership

heritage preservation &
renewal

urban integration &
civic Presence

education & talent
development

artistic & technical
excellence



1.

2.

3.

4.

5.

Figure 51 | Core values La Scala

TEATRO ALLA SCALA



3 entities
accademia — museo — ristorante

Figure 52 | Subdivision entities La Scala

SITE

La Scala performs across multiple scales.

At the largest scale, it operates within the network of European cultural capitals.

At the city scale, it functions alongside other urban anchor points within Milan's fabric.

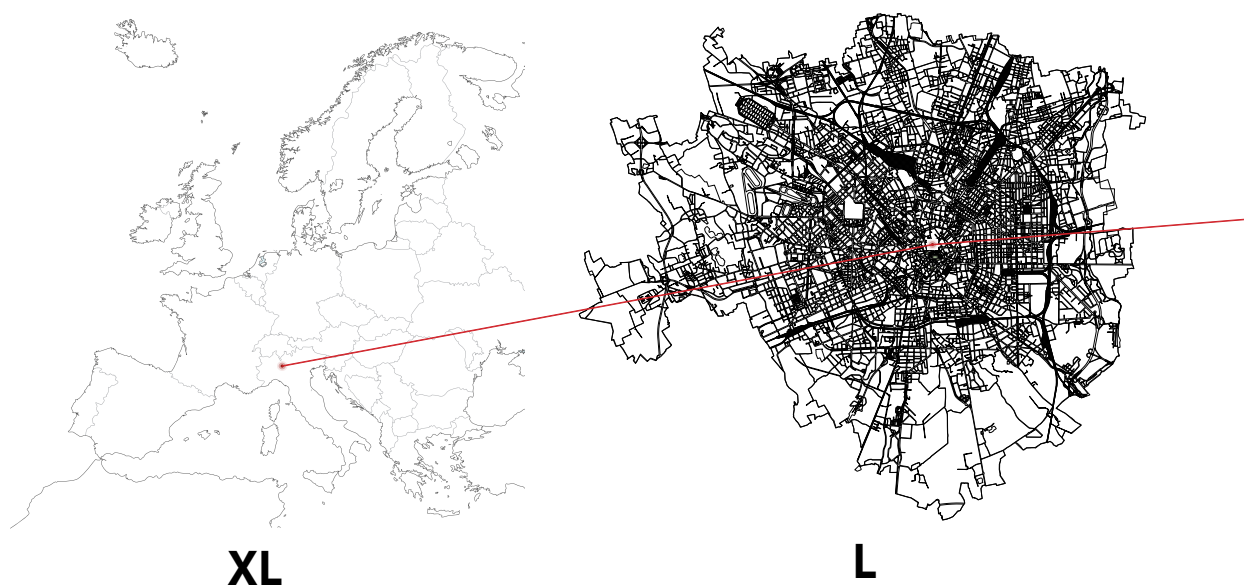
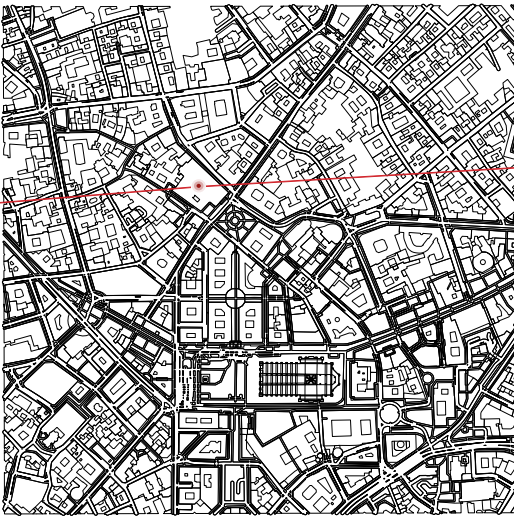


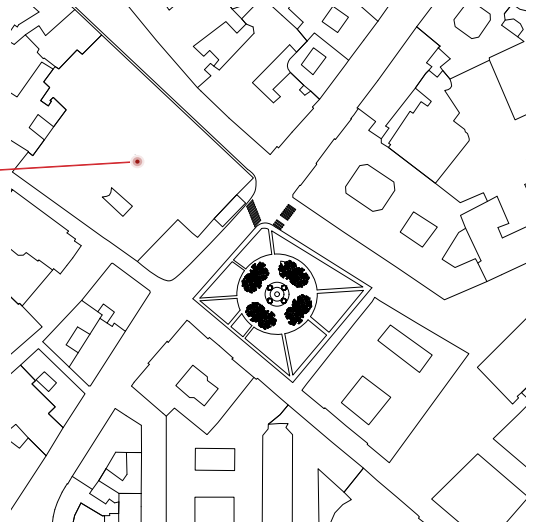
Figure 53 | Location Teatro alla Scala

At the scale of the city centre, La Scala is embedded in a chain of streets, passages, and public interiors that structure movement through the historic core.

And at the scale of the piazza, it responds directly to its immediate surroundings, shaping sightlines, movement, encounter, and everyday presence.



M



S



The site is seen as a critical urban threshold between ceremonial monumentality and everyday civic life. Located within Milan's historic centre, the opera house is embedded in a dense network of cultural, commercial, and institutional spaces, including Piazza del Duomo, the Galleria Vittorio Emanuele II, Via Manzoni and Via Dante leading to Castello Sforzesco.

Rather than functioning as an open square, Piazza della Scala operates as a contained forecourt or antechamber, framed by symmetrical palazzi that establish a strong spatial enclosure and a pronounced sense of formality. As part of the user journey to Teatro alla Scala, this space has a significant impact on how the opera is approached, perceived, and entered, and therefore plays a critical role in this design assignment.

The square has not always existed in its current form, but was deliberately developed in relation to Piazza del Duomo, creating an almost unconscious yet logical route that guides visitors through a sequence of major Milanese landmarks. La Scala's position along this route reinforces its cultural importance and symbolic accessibility. Upon reaching Piazza della Scala, however, the surrounding palazzi remain largely closed and inward-looking, limiting visual activity and everyday interaction at ground level.

The site analysis focuses on how this urban configuration shapes bodily movement, perception, and access across different times of day. While the surrounding area is highly

pedestrianised and intensively used, the immediate foreground of Teatro alla Scala is still dominated by traffic flows, parked cars, controlled crossings, and short-term movement. The design therefore investigates more sustainable and pedestrian-oriented ways of organising the entrance, in parallel with strengthening the relationship between the opera house and daily activity in the public realm.

Through historical mapping, micro-spatial analysis, and observation of pedestrian behaviour, the site is studied at multiple scales: from its position within Milan's broader urban network (L) to the detailed articulation of façades, entrances, thresholds, and waiting zones (S). The spatial hierarchy of the square reinforces the ceremonial role of the opera house during evening performances, while offering limited visual activity and few affordances for entry, informal use, or engagement without a ticket during daytime hours.

Rather than treating the site as a neutral setting, this research approaches the surroundings of Teatro alla Scala as an active mediator between the city and the institution. The site analysis therefore aims to identify spatial conditions that could enable a reconfiguration of the relationship between everyday urban presence and the highly choreographed rituals of performance. By understanding how bodies currently move through, pause within, or bypass the square, the site becomes the starting point for exploring how architectural intervention can transform the opera house from a destination accessed at specific moments into a civic anchor embedded in the daily

Teatro alla
Scala (1778)

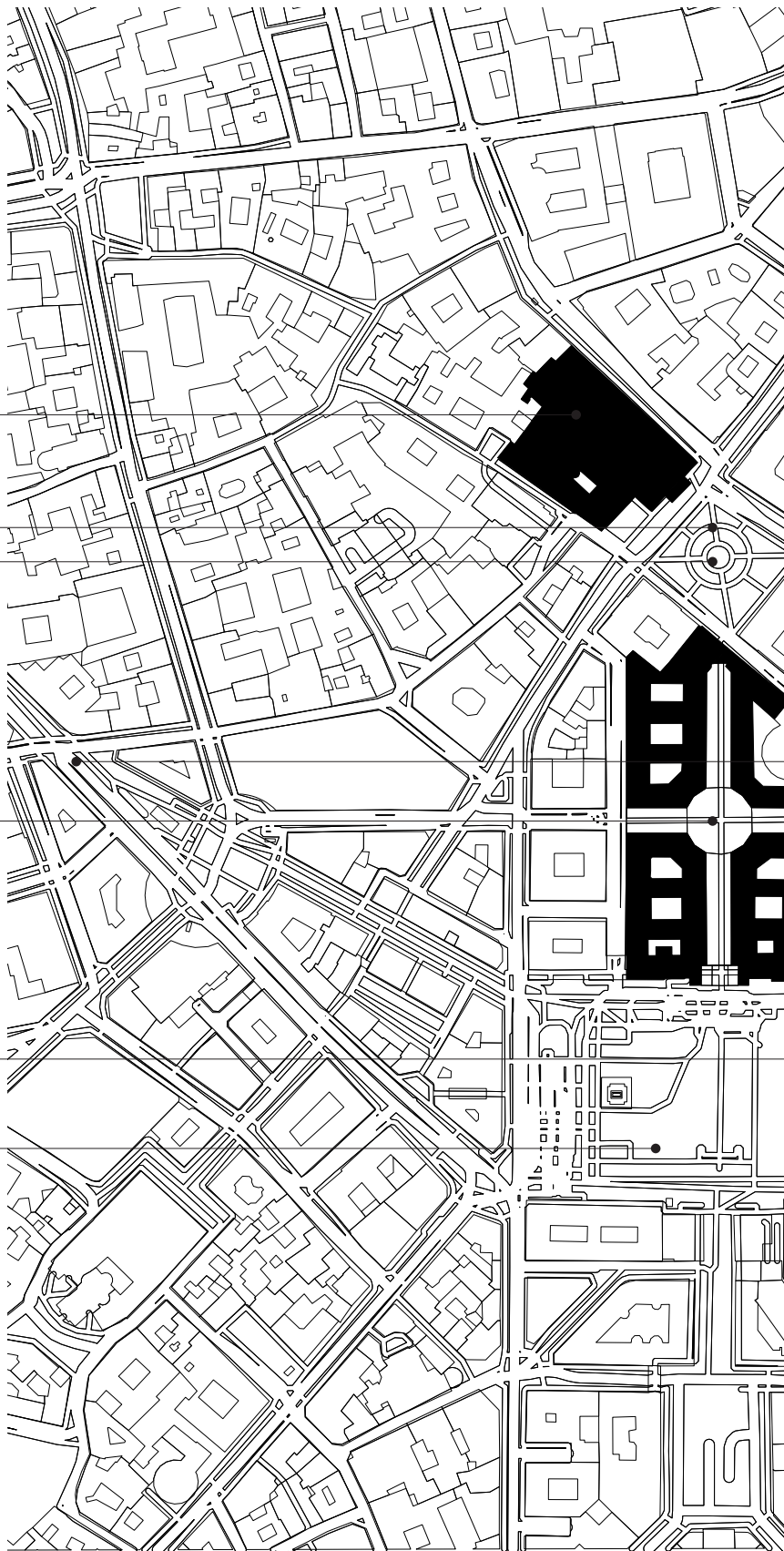
Piazza della Scala
(1856-1865)

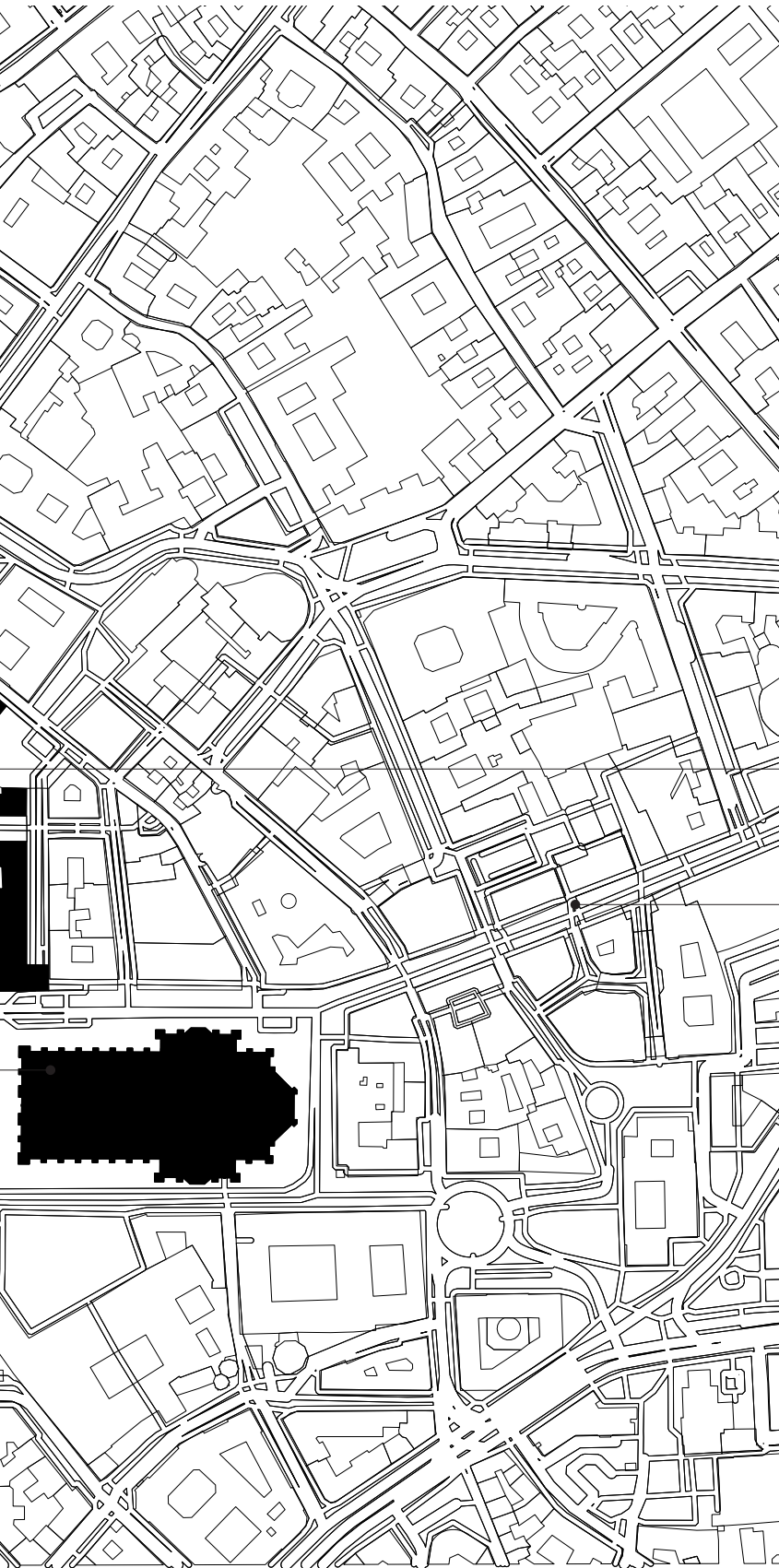
Monument
Leonardo
(1872)

Galleria Vittorio
Emanuele II
(1865-1877)

Duomo di
Milano (1386)

Piazza del
Duomo
(1856-1877)





Via Dante (1894)
Piazza Cordusio to
Castello Sforzesco

Corso Vittorio
Emanuele II
(1870)

Figure 54 | Urban context





Figure 55 | Piazza della Scala



Figure 56 | Galleria Vittorio



Emanuele II



Figure 57 | Piazza del Duomo

life of the city. The square is therefore understood as an integral part of the design assignment.

Public transport access to Teatro alla Scala is indirect: major metro lines stop nearby rather than at the building itself, reinforcing a pedestrian approach and the ceremonial character of arrival.

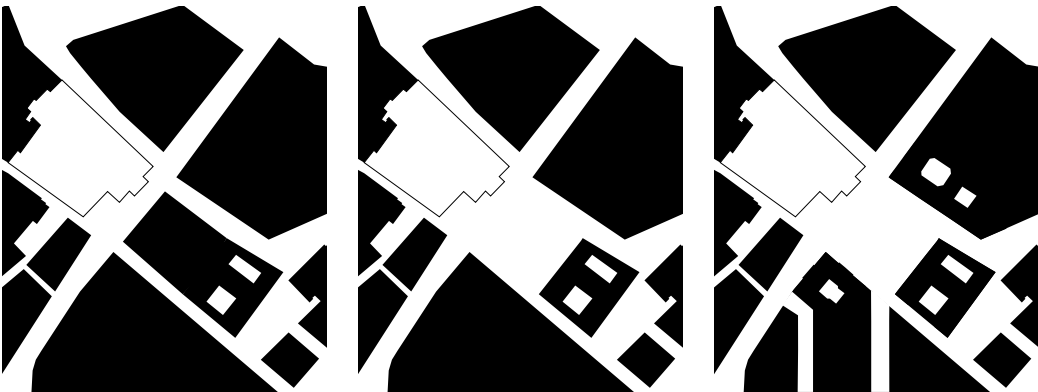


Figure 58 | Historical transformation site

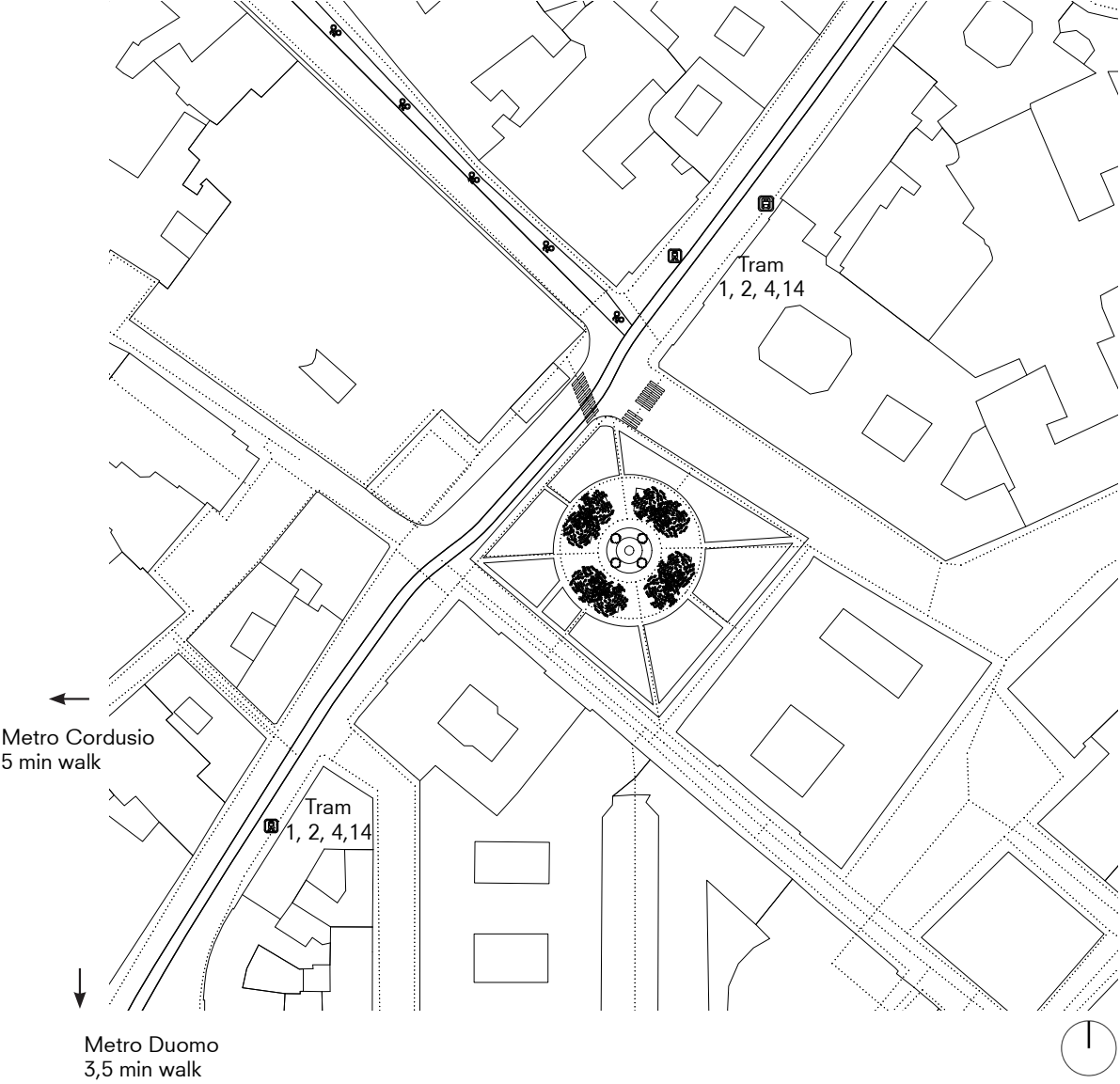


Figure 59 | Mobility map





Figure 60 | Dominant road 'Piazza della Scala'

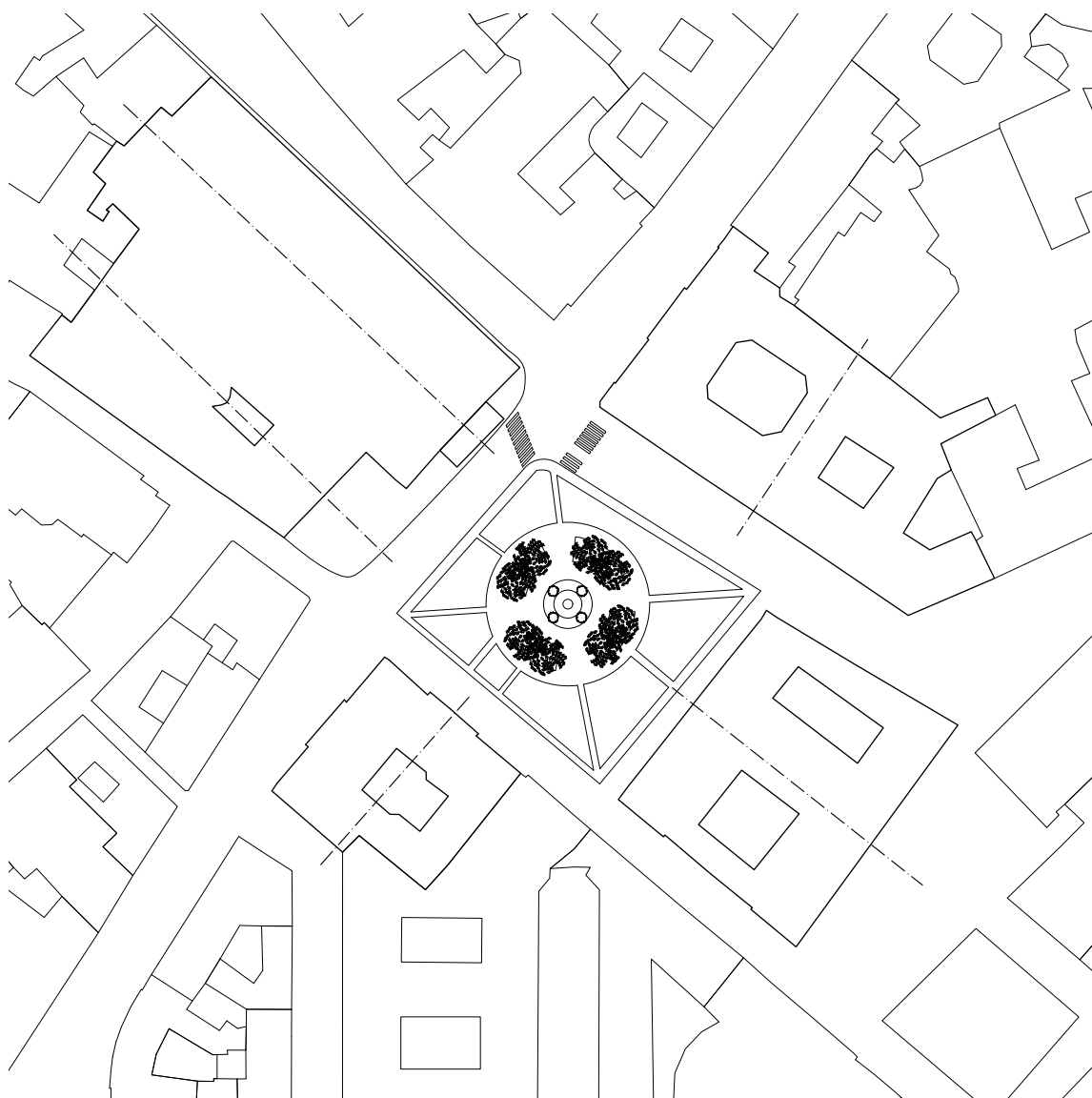


Figure 61 | Symmetry palazzi

- Piazza della Scala as antechamber
- Milanese introverted monumentality
- Thresholds instead of transparency



A piazza is more than an open urban space; it is a social and cultural construct. Unlike the generic notion of a square or plaza, which often describes a physical void within the city, the piazza is defined by how it is used, inhabited, and experienced over time. It is a place shaped by daily routines, informal encounters, ritual moments, and collective presence.

The piazza was not designed for a single purpose, but for simultaneity: movement and pause, commerce and conversation, spectacle and everyday life. Its value lies not in monumentality alone, but in its capacity to host overlapping rhythms of the city: from spontaneous gathering to ceremonial events.

Crucially, a piazza is relational rather than autonomous. Its meaning emerges through its connection to surrounding institutions, façades, and thresholds. Buildings do not merely frame the space; they actively participate in it, addressing the public realm through entrances, arcades, and visible activity. The piazza therefore operates as a stage for urban life, where architecture and social behaviour continuously inform one another (Defining A Piazza, And Why It's Not A Plaza | Smart Cities Dive, n.d.).



1865

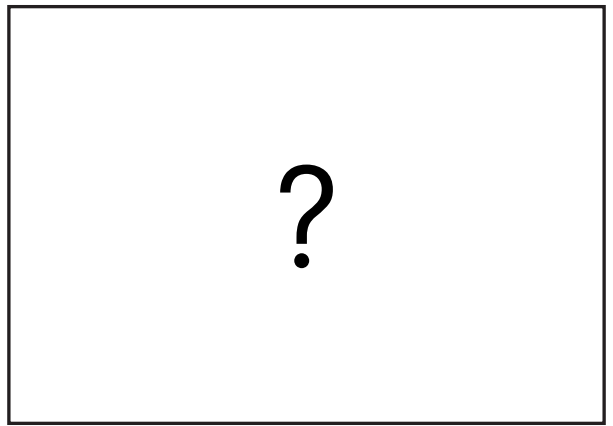


60s and 70s

The piazza has taken many forms.
What will it be next?

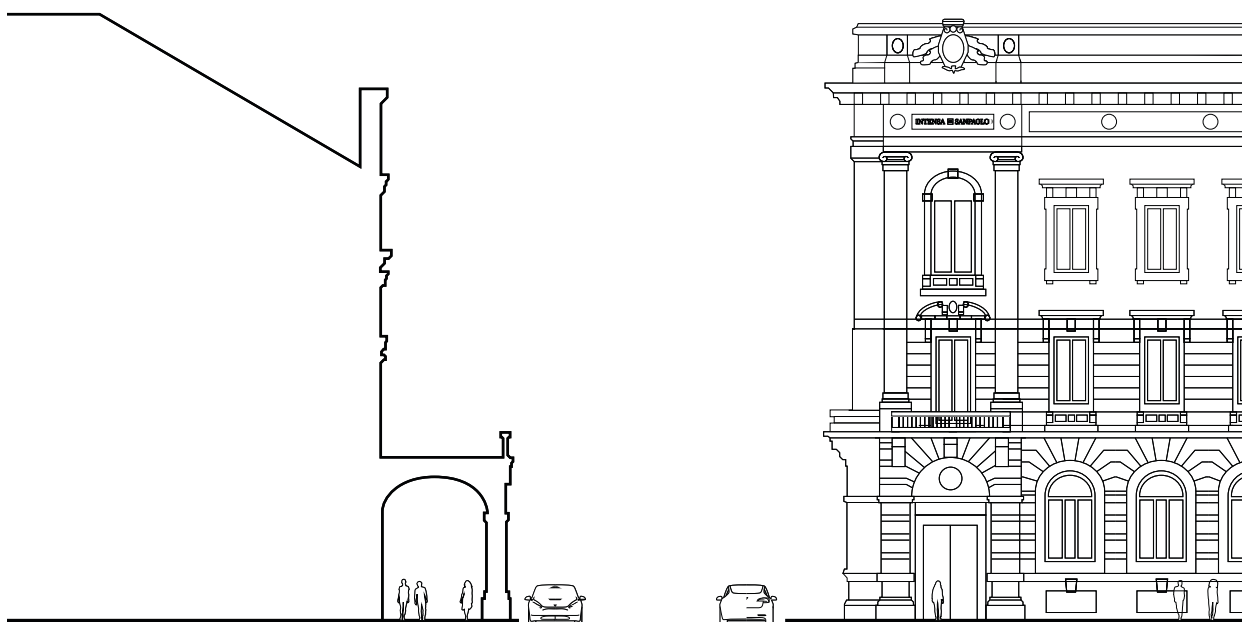


Current



What's next?

Figure 62 | Piazza della Scala

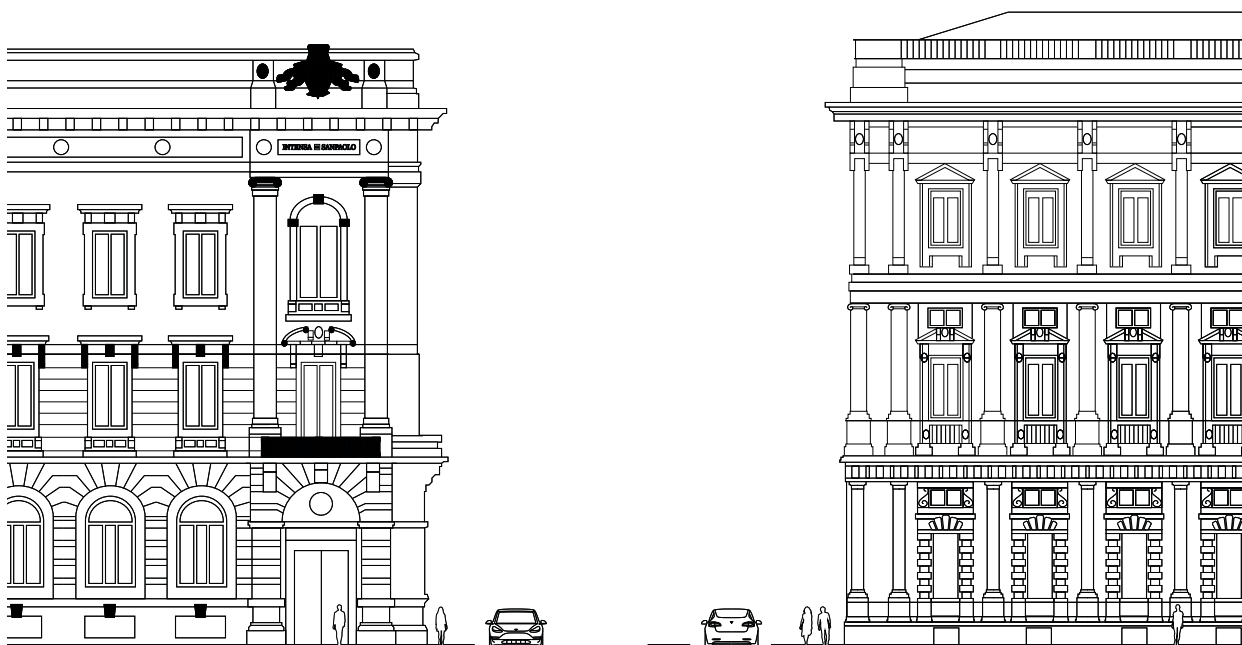


in 1907 houses were demolished to build the headquarters of the Banca Commerciale, designed by Luca Beltrami.



Figure 63 | Banca Commerciale Italiana

Facades extracted from <https://repository.tudelft.nl/record/uuid:4d266412-01a7-4c70-b780-ada79753df4e>



Home to the city of Milan since 1860. Facade designed by Beltrami.

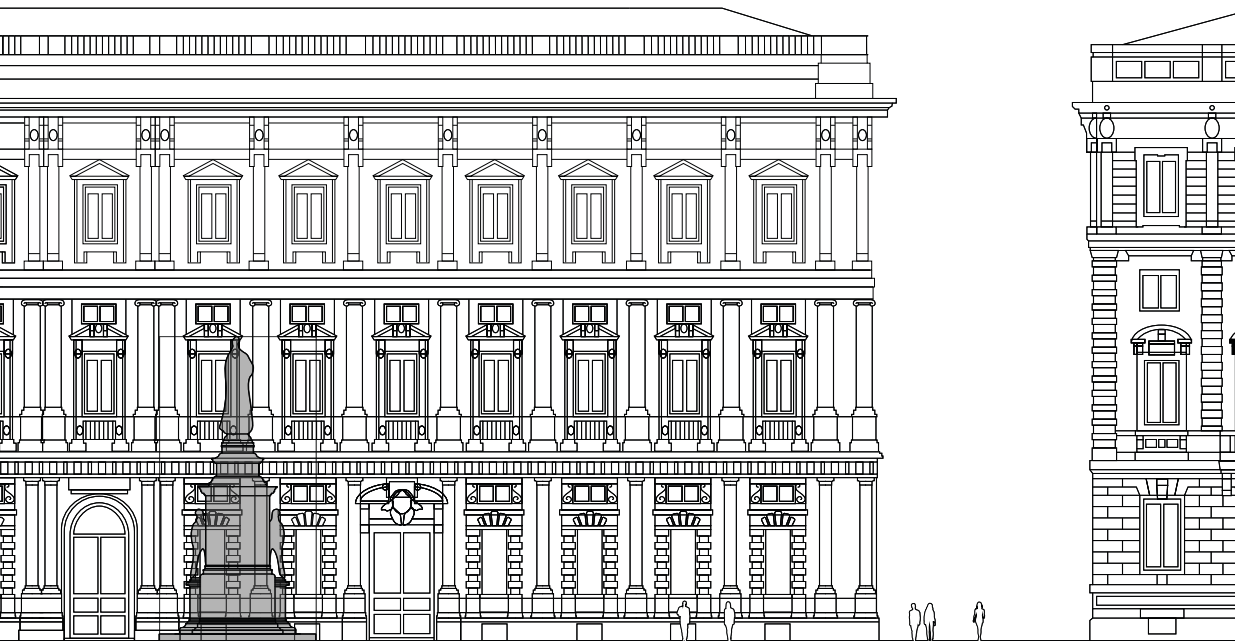
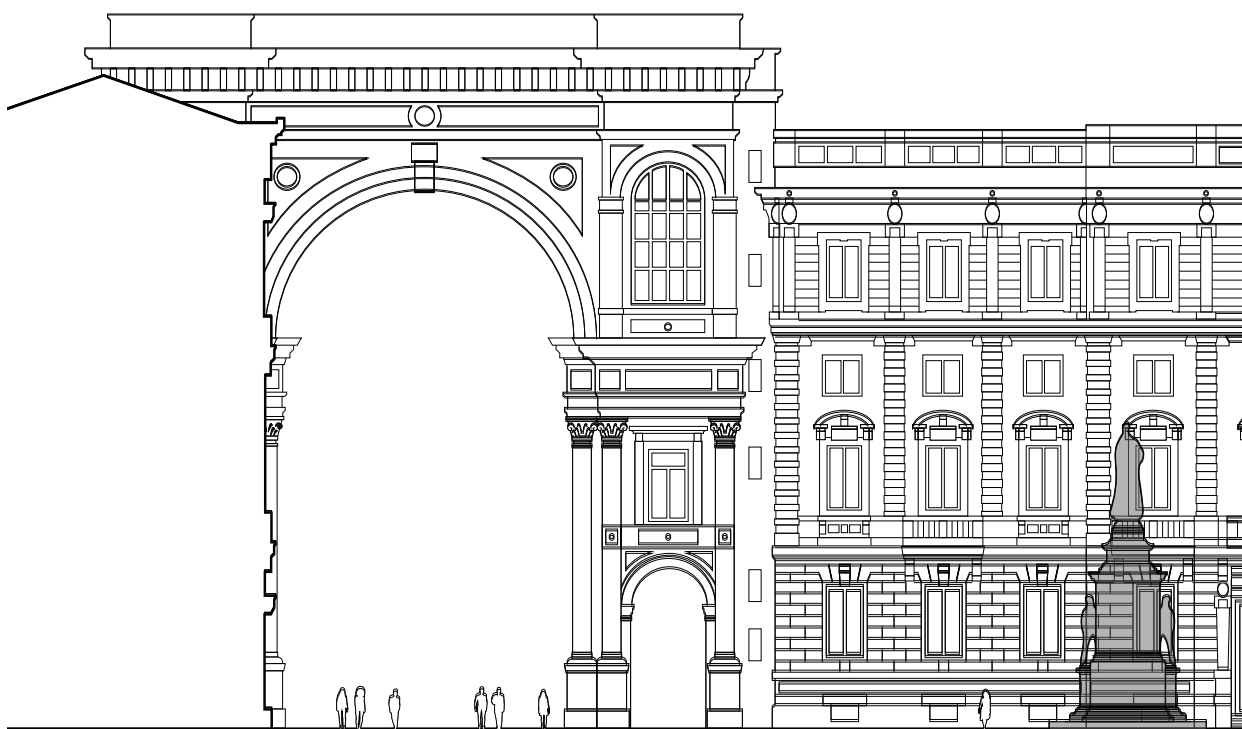


Figure 64 | Palazzo Marino

Facades extracted from <https://repository.tudelft.nl/record/uuid:4d266412-01a7-4c70-b780-ada79753df4e>



City's accounts offices by Beltrami (1907)

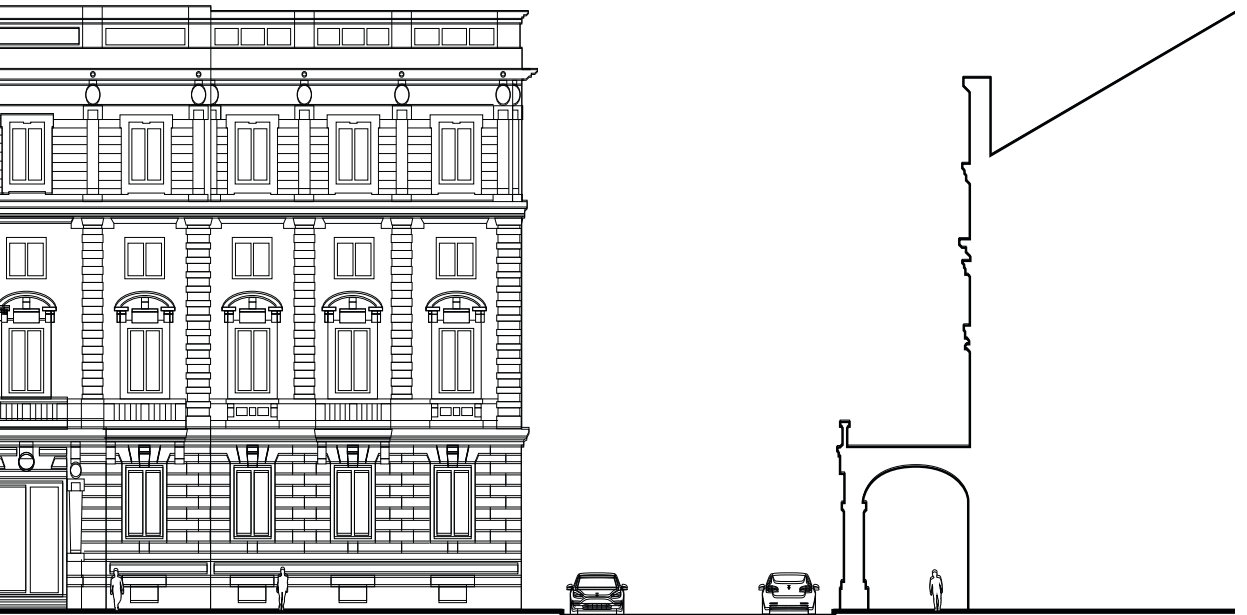
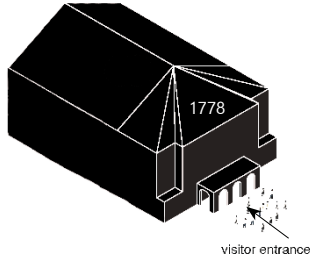


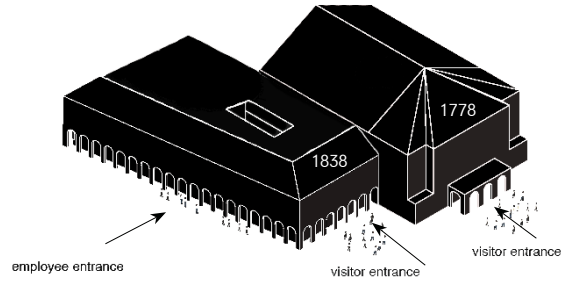
Figure 65 | Palazzo Beltrami & Galleria Vittorio Emanuele II
 Facades extracted from <https://repository.tudelft.nl/record/uuid:4d266412-01a7-4c70-b780-ada79753df4e>

1



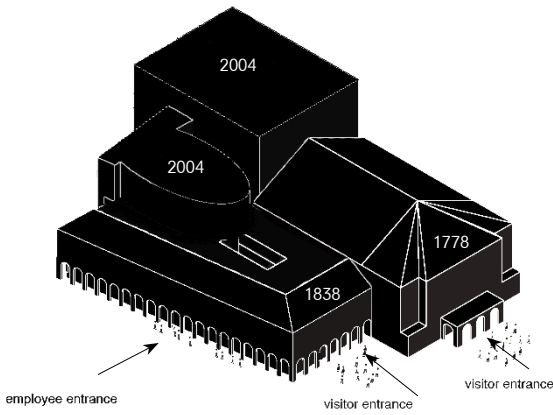
by Giuseppe Piermanini

2



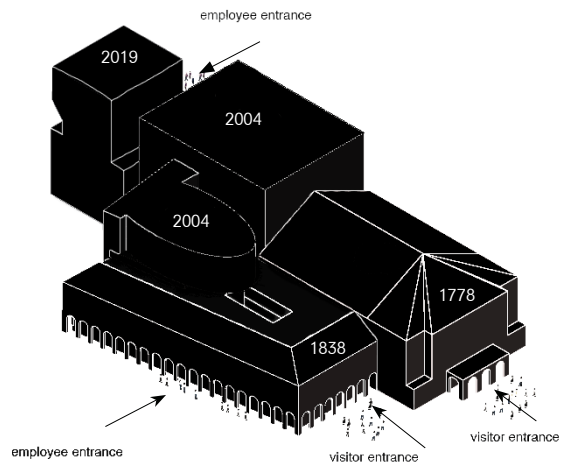
by Luigi Canonica

3



by Mario Botta

4



by Mario Botta

Figure 66 | Building order La Scala



Space functions as an active instrument of inclusion and exclusion:

- the facade communicates status, identity and authority
- there is no visual and spatial accessibility.

Audience development requires spatial and organisational change. Public institutions must facilitate multiple, simultaneous degrees of accessibility, rather than a single notion of openness (European Commission (2019)).

Figure 67 | Facade analysis

“The entrance leads directly to the foyer barrier. No public space here. Opera-goers only and no hint of the activity inside. How many people will have passed this building day and night, by car and on foot, and have no idea of the wonderful performances taking place?”

(Hammond, 2006)



piazza della Scala
separated by ->

public street, dominated
by non pedestrian traffic



institutional authority
through
- scale
- symmetry
- material 'heaviness'

low visual permeability

tiny gap between
street edge and
facade causes a
formal urban wall

semi public arcade as
threshold and entrance

behind the facade is a
controlled environment

Figure 68 | Facade analysis

What if....

Teatro alla Scala was designed,
but was **never built**?



Figure 69 | Empty site



The site analysis indicates that future interventions should reinforce the civic role of Piazza della Scala while recalibrating its spatial hierarchy in favour of pedestrians and public life.

Firstly, any new architectural volume should step down in height toward the surrounding historic buildings, ensuring a gradual transition in scale and preserving the existing urban grain of the piazza.

Secondly, the piazza would benefit from an increased presence of greenery, not as decoration but as spatial infrastructure. Green elements can be used to soften hard edges, improve microclimate, and structure movement.

Thirdly, the forecourt of Teatro alla Scala should be spatially enlarged and clarified, allowing the building to engage more directly with the piazza and strengthening its role as a civic landmark rather than a closed object.

Traffic organisation should be reconfigured to prioritise pedestrians over vehicles. A one-way street system combined with a clear separation between tram/vehicular traffic and pedestrian zones, mediated through landscape elements, would significantly improve safety, comfort, and legibility.

Public accessibility must be made explicit through a clearly communicated public entrance to non-ticketed zones, supported by an active ground-floor façade that visually and spatially connects interior and exterior.

Finally, these spatial strategies should collectively aim to activate the piazza throughout the day, shifting it from a transitional space into a lived civic environment that supports everyday use alongside cultural events.

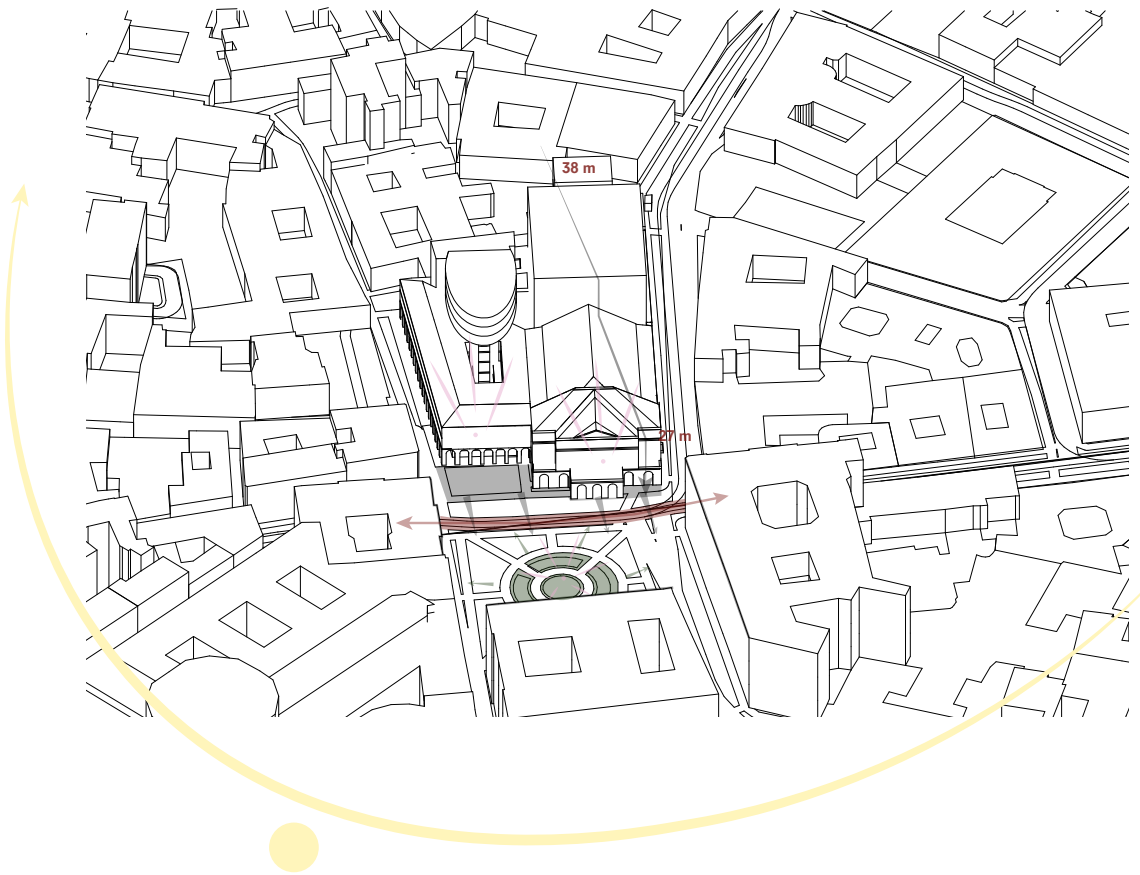


Figure 70 | Site conclusions

PROGRAM

The existing program of La Scala is taken as the baseline; the project redistributes and recalibrates this program to strengthen public presence, temporal flexibility, and everyday accessibility.

Central to the program is the reconsideration of front-of-house spaces, including foyers, circulation routes, exhibition areas, and public amenities. These begin to function as civic interiors rather than exclusively pre-performance zones. These spaces support everyday presence, informal occupation, and visual engagement with the institution, while still accommodating peak flows and ceremonial rituals during performance hours.

In addition to the main auditorium, the program introduces a second, smaller performance hall. This space is designed as a flexible and experimental venue, capable of hosting contemporary performances, rehearsals, talks, film screenings, archival material, and other cross-disciplinary programming. Its scale and adaptability allow the institution to operate beyond the traditional opera format and support a broader range of artistic expressions. The existing main hall is also reconsidered as a modernized space that can incorporate cinematic experiences and more personalized ways of engaging the public.

An important programmatic focus is the reorganisation of the museum, with increased floor area dedicated to exhibitions that reveal the history, craft, and ongoing production of Teatro alla Scala. While the museum contains a rich body of material, its current spatial and

curatorial organisation is outdated; a new design offers the opportunity to present this content in a more legible and engaging way.

The program also explores opportunities to increase the visibility of artistic and technical production within the building, allowing aspects of rehearsal, craftsmanship, and preparation to become perceptible within both interior and

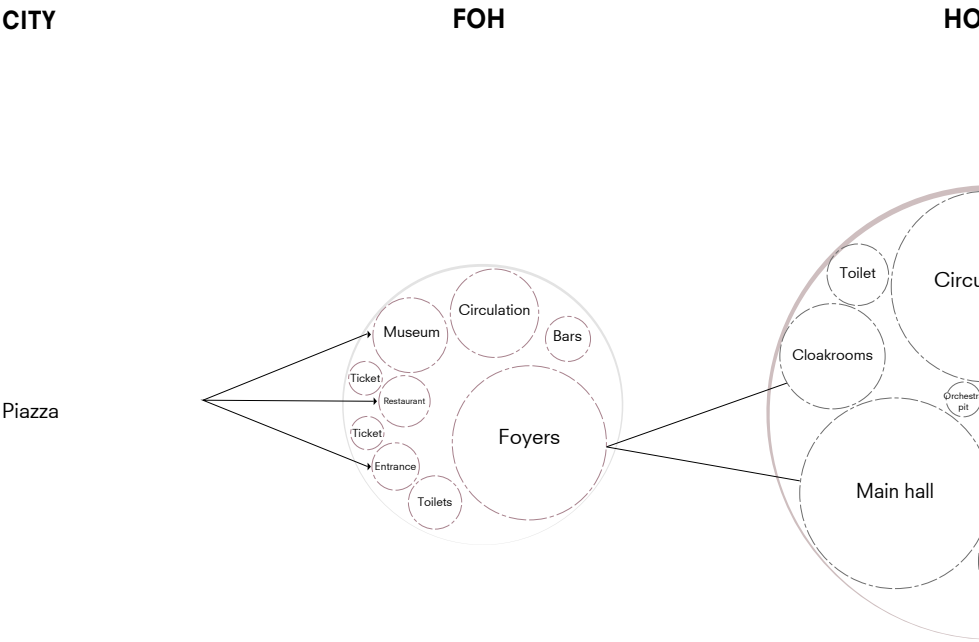
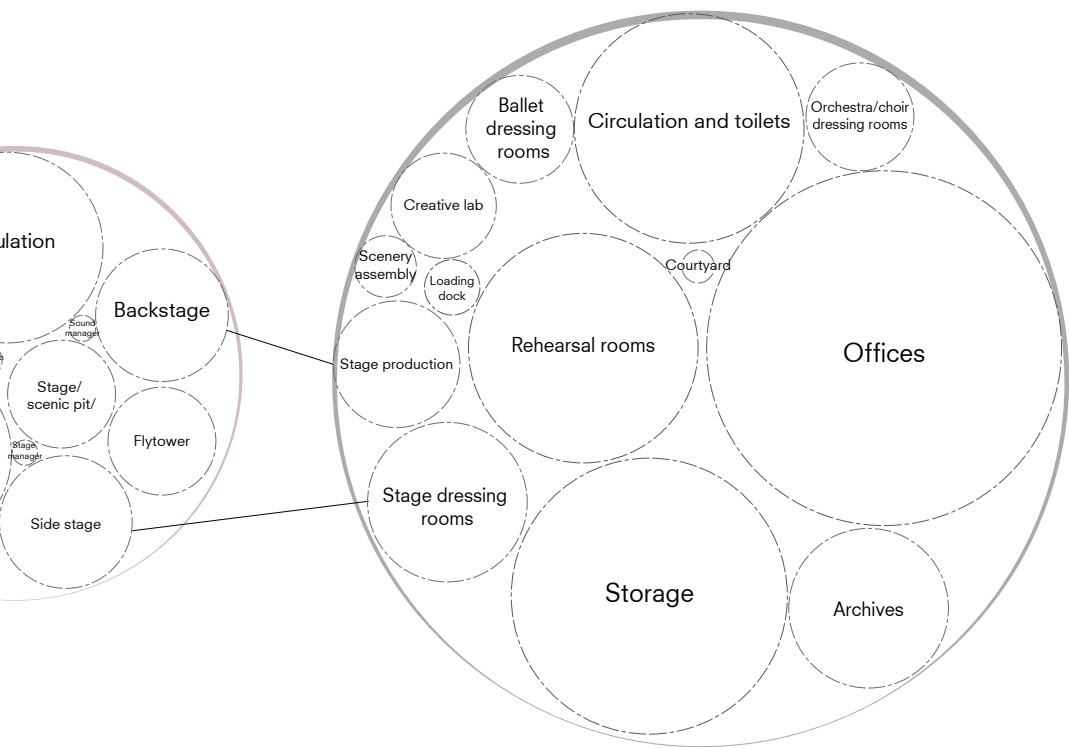


Figure 71 | Relational diagram

exterior public zones. This supports a broader understanding of the opera house as a living cultural institution, engaging with visitors with and without a ticket.

HOUSE

BOH

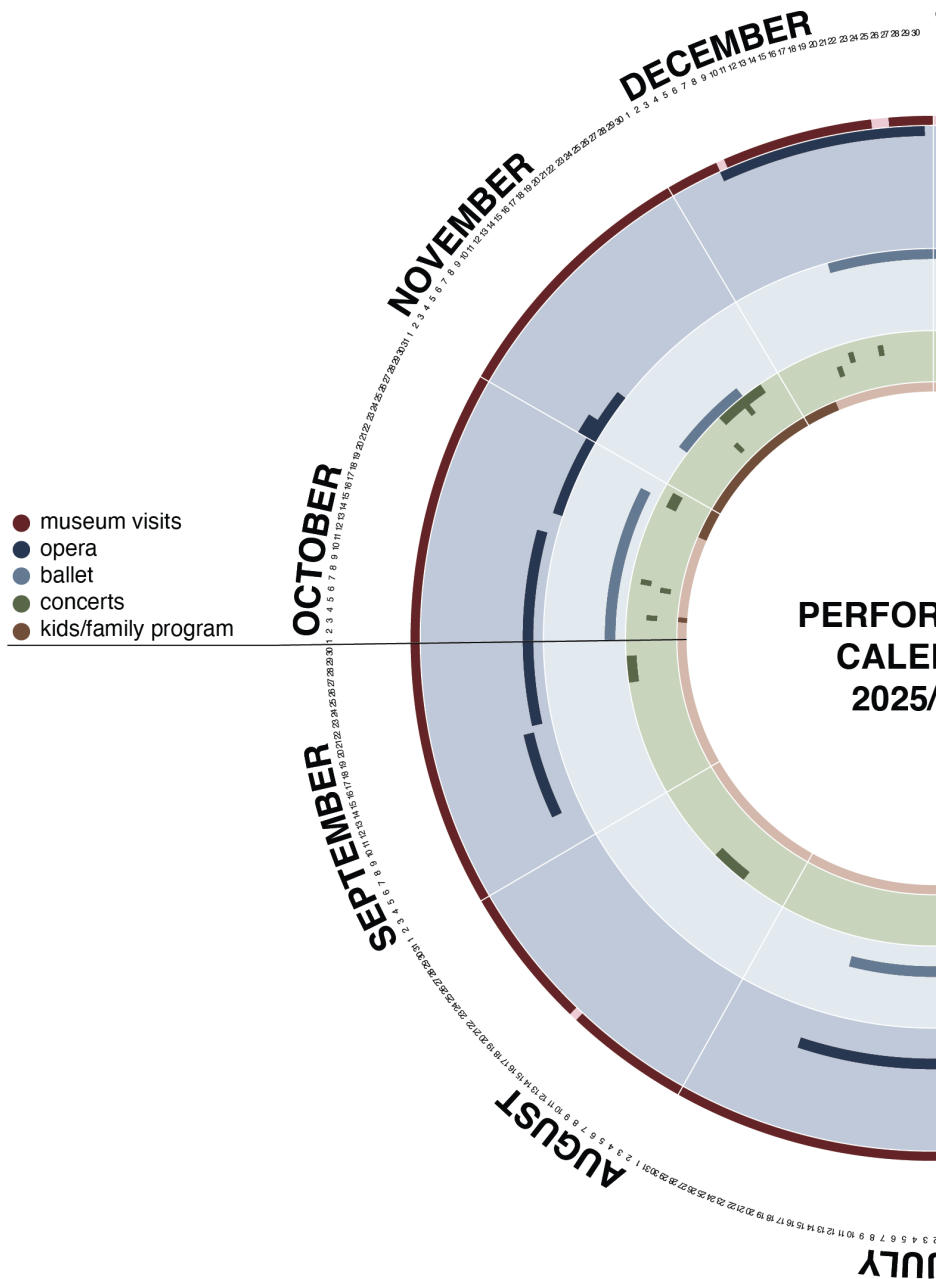


- 01 Teatro alla Scala
- 02 Accademia Teatro alla Scala
- 03 Workshops
- 04 Magnifica Fabbrica



Figure 72 | Scala locations across Milan





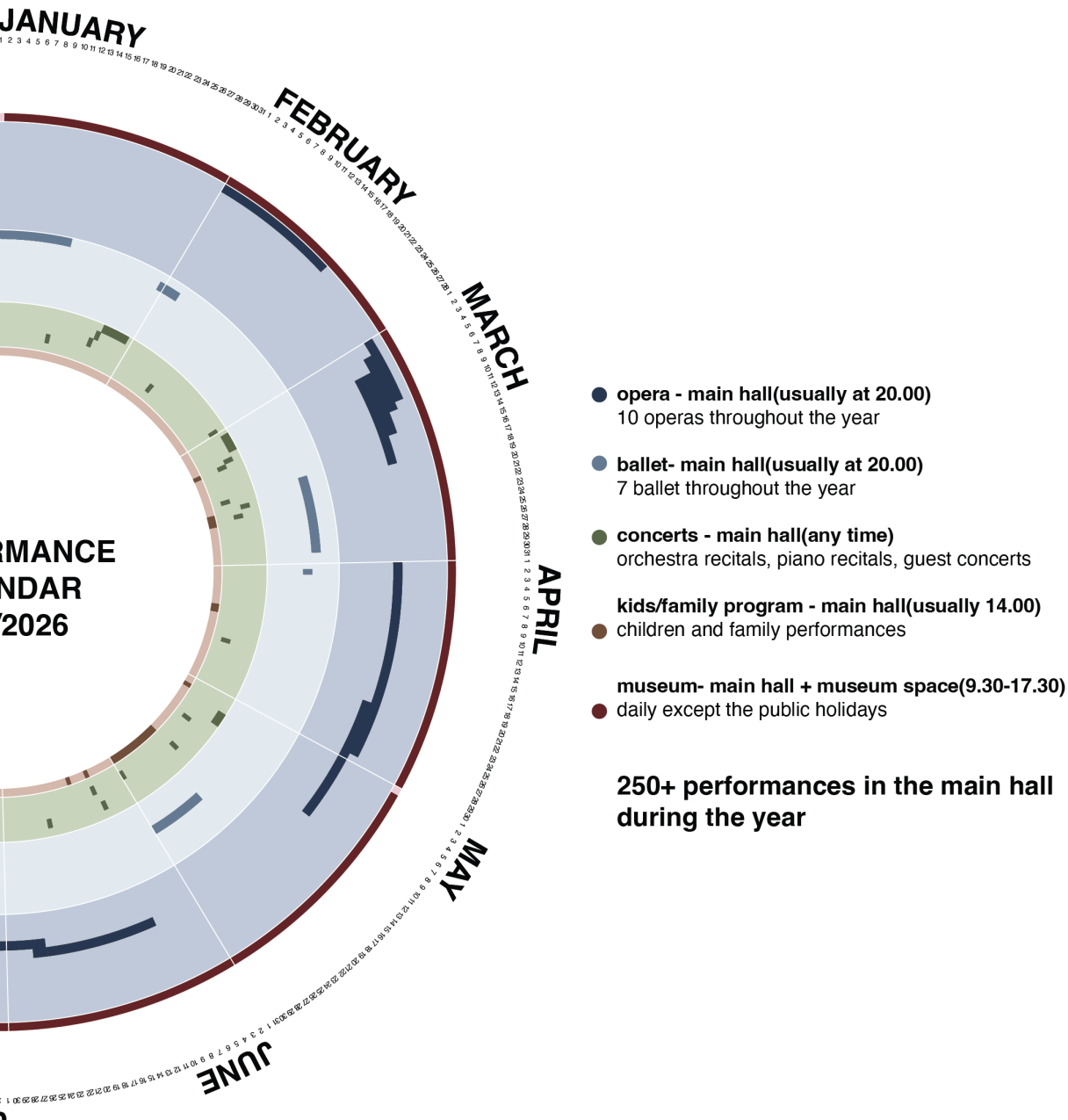


Figure 73 | Performance calendar

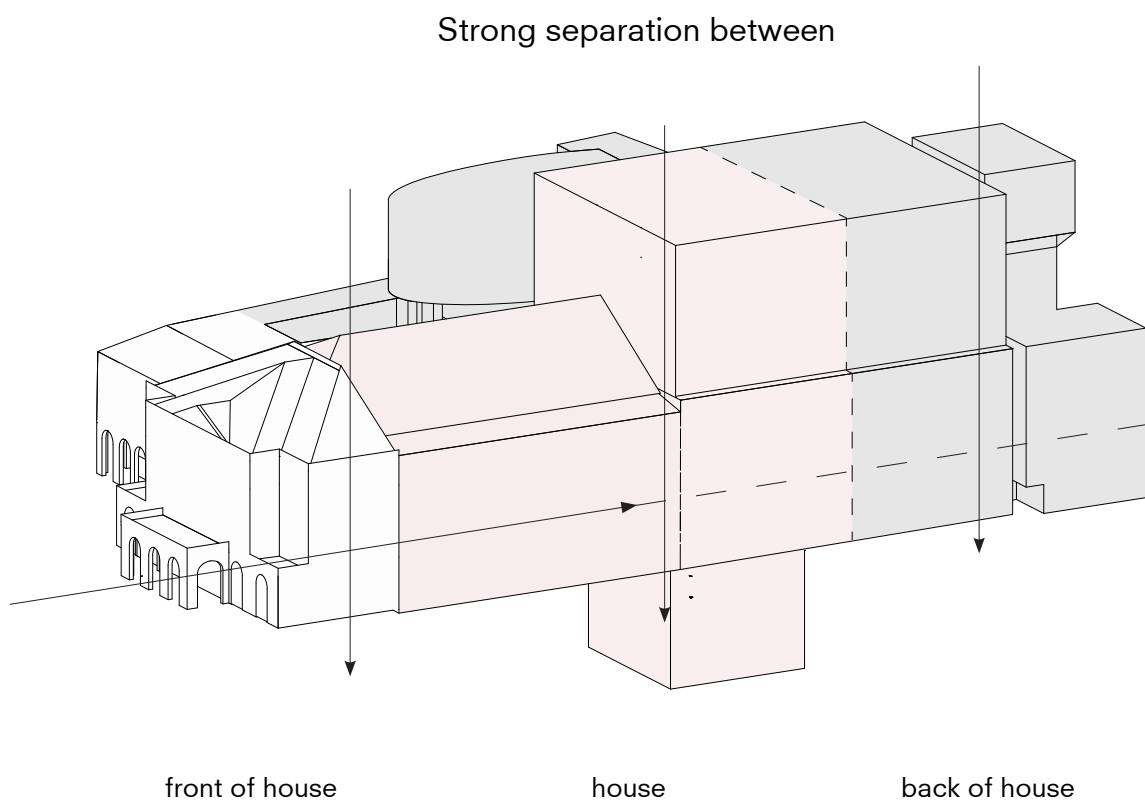
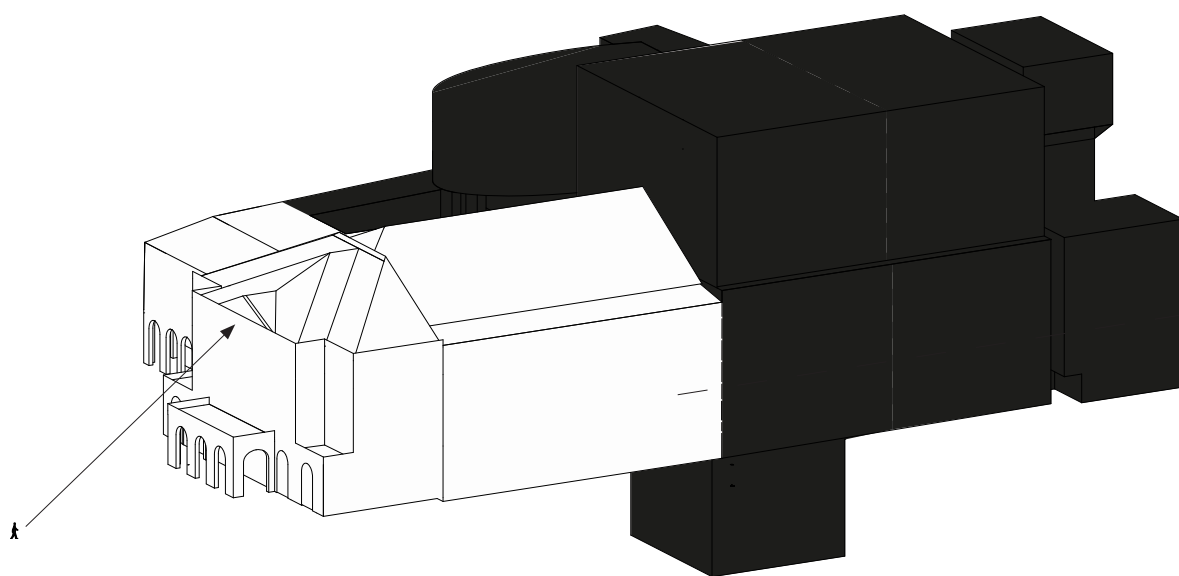


Figure 74 | Vertical programmatic stacking



Technique = invisible = magic

Figure 75 | Opera as a machine

FRONT OF THE HOUSE(HOSTS 2000 PEOPLE)

TOTAL AREA = 3 775m2(12.30% of the whole building)

ENTRANCE(2x) + FOYER(x2) = 1500m2

MUSEUM(x1) = 400 m2

RESTAURANT(x1) = 225m2

BAR(2x) = 200 m2

TICKET OFFICE = 150m2

PUBLIC RELATION OFFICE = 150m2

TOILETS = 250m2

VISITOR CIRCULATION = 500m2

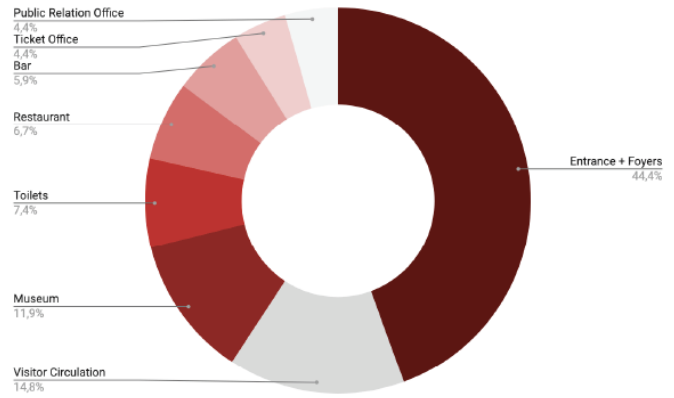
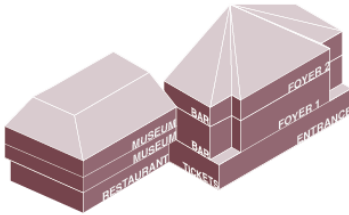
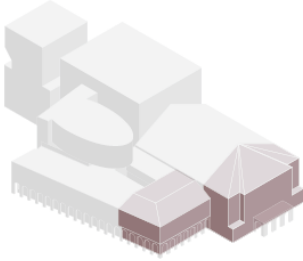


Figure 76 I Program brief FOH

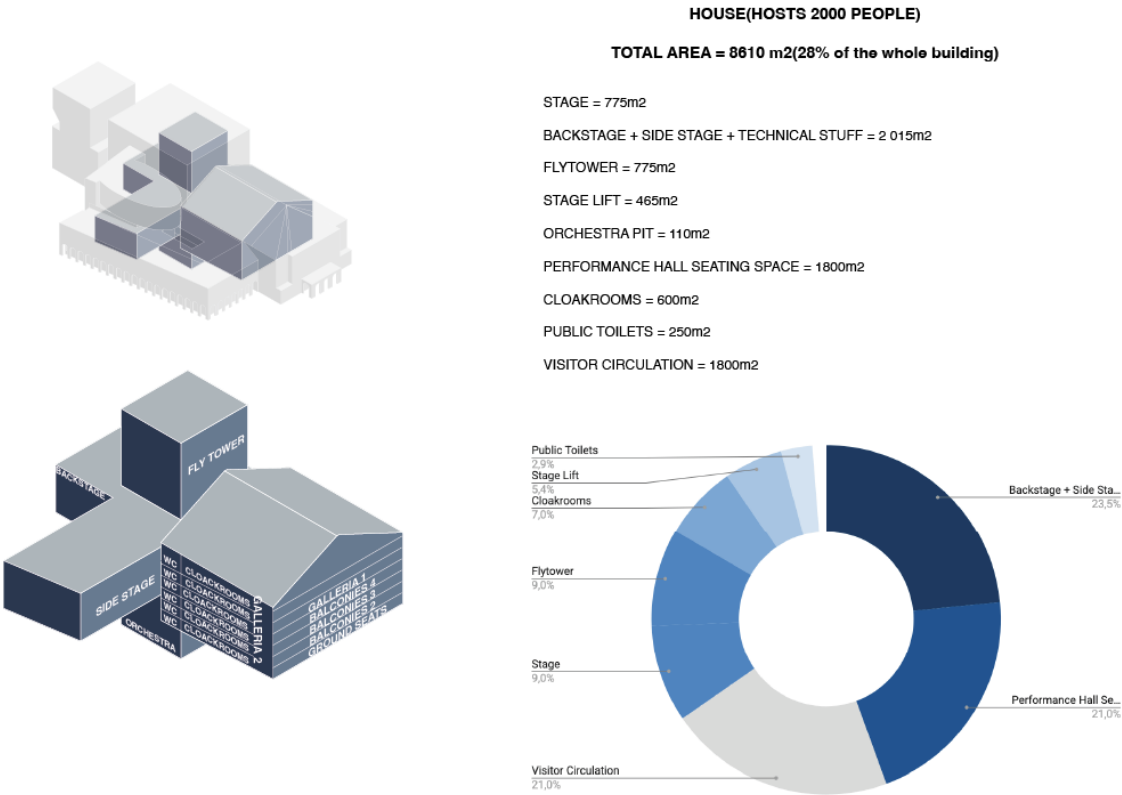


Figure 77 | Program brief House

BACK OF THE HOUSE

TOTAL AREA = 18 265m² (59.60% of the whole building)

REHEARSAL ROOMS(3 BALLET REHEARSAL, 2 CHOIR REHEARSAL, 1 ORCHESTRA REHEARSAL) 3000m²

DRESSING ROOMS

BALLET DRESSING ROOMS = 775m²

ORCHESTRA/CHOIR DRESSING ROOMS= 775m²

NEXT TO STAGE DRESSING ROOMS= 1200m²

275

ARCHIVES = 1200m²

SCENERY ASSEMBLY WORKSHOP = 260m²

CREATIVE LAB(ATELIER) = 600m²

COURTYARD = 70m³

WORKER AMENITIES(1 x CANTEEN) = 50m²

OFFICES(ADMINISTRATION,MANAGEMENT)= 1700m²

OFFICES(TECHNICAL ROOMS) = 2400m²(some underground space)

STORAGE ROOMS = 3000m²(mainly underground space)

LOADING DOCK = 235m²

CIRCULATION+TOILETS = 3000m²

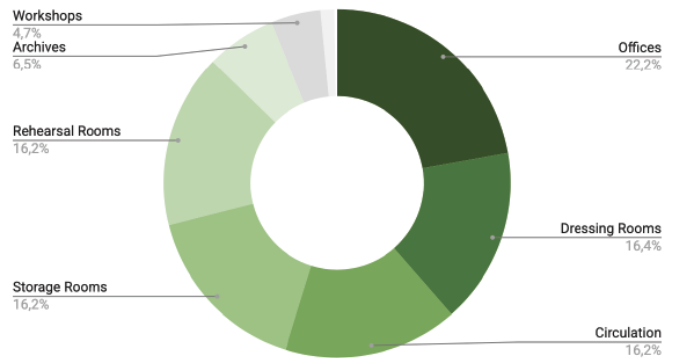
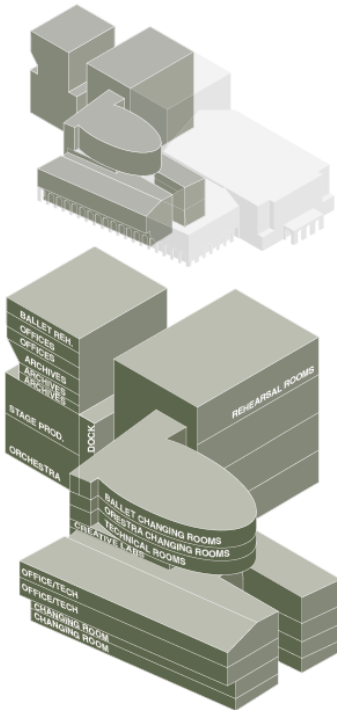


Figure 78 | Program brief BOH

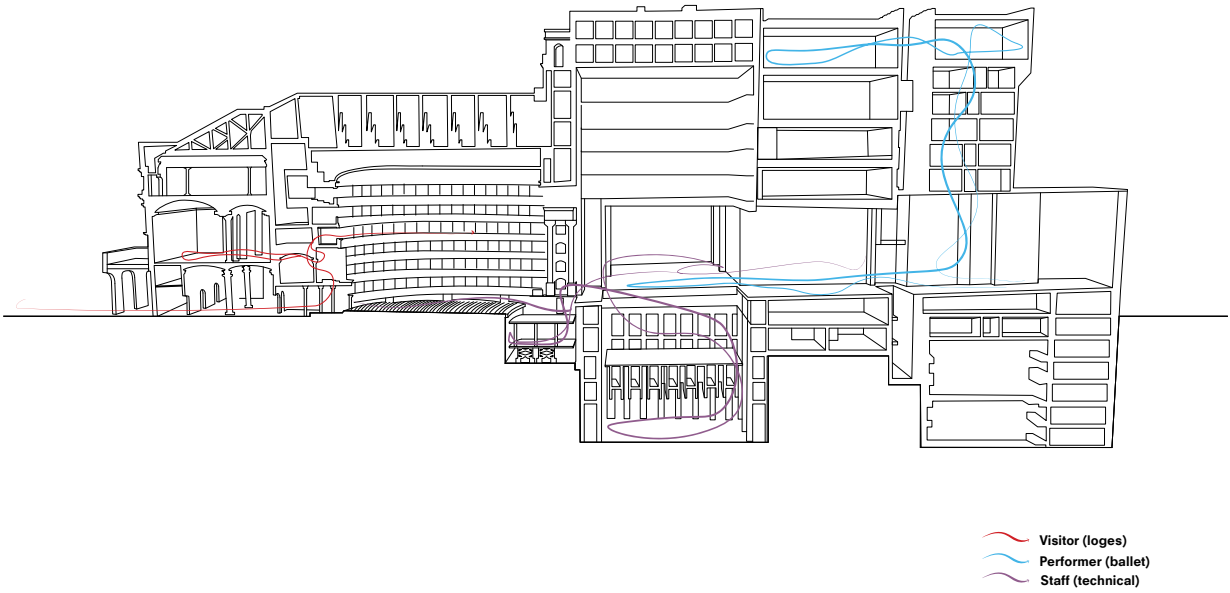


Figure 80 | Separated flow system

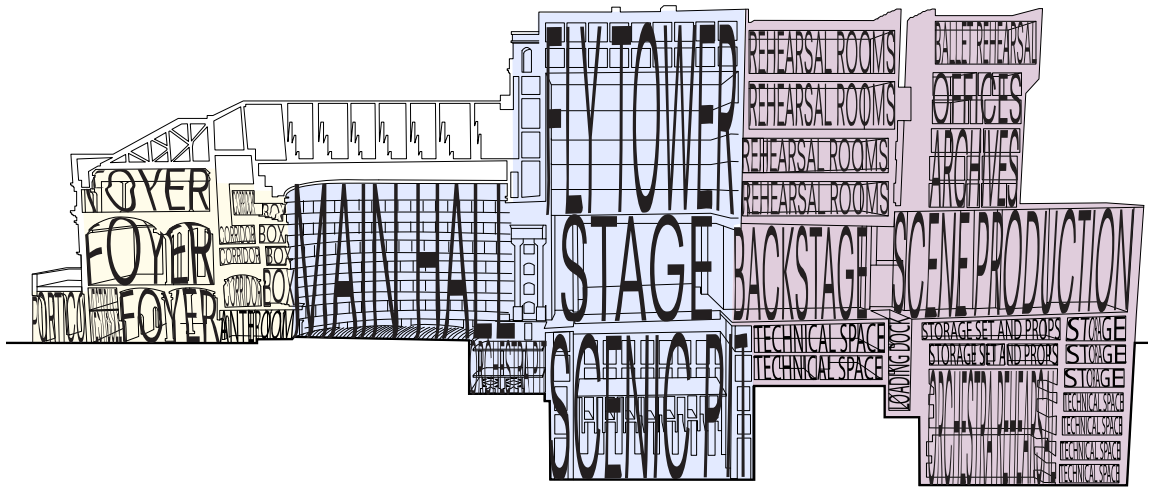


Figure 79 | Program section

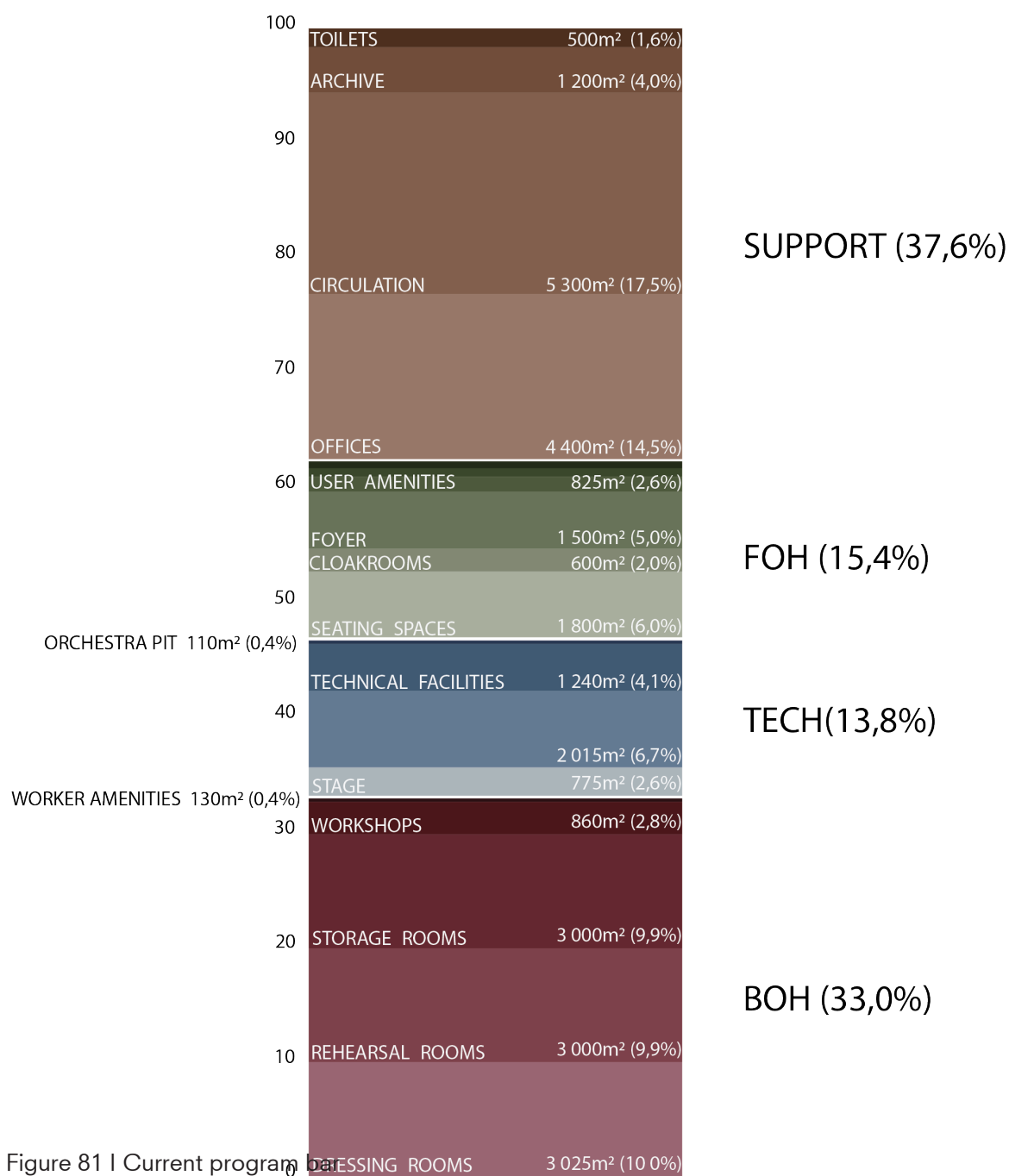


Figure 81 | Current program

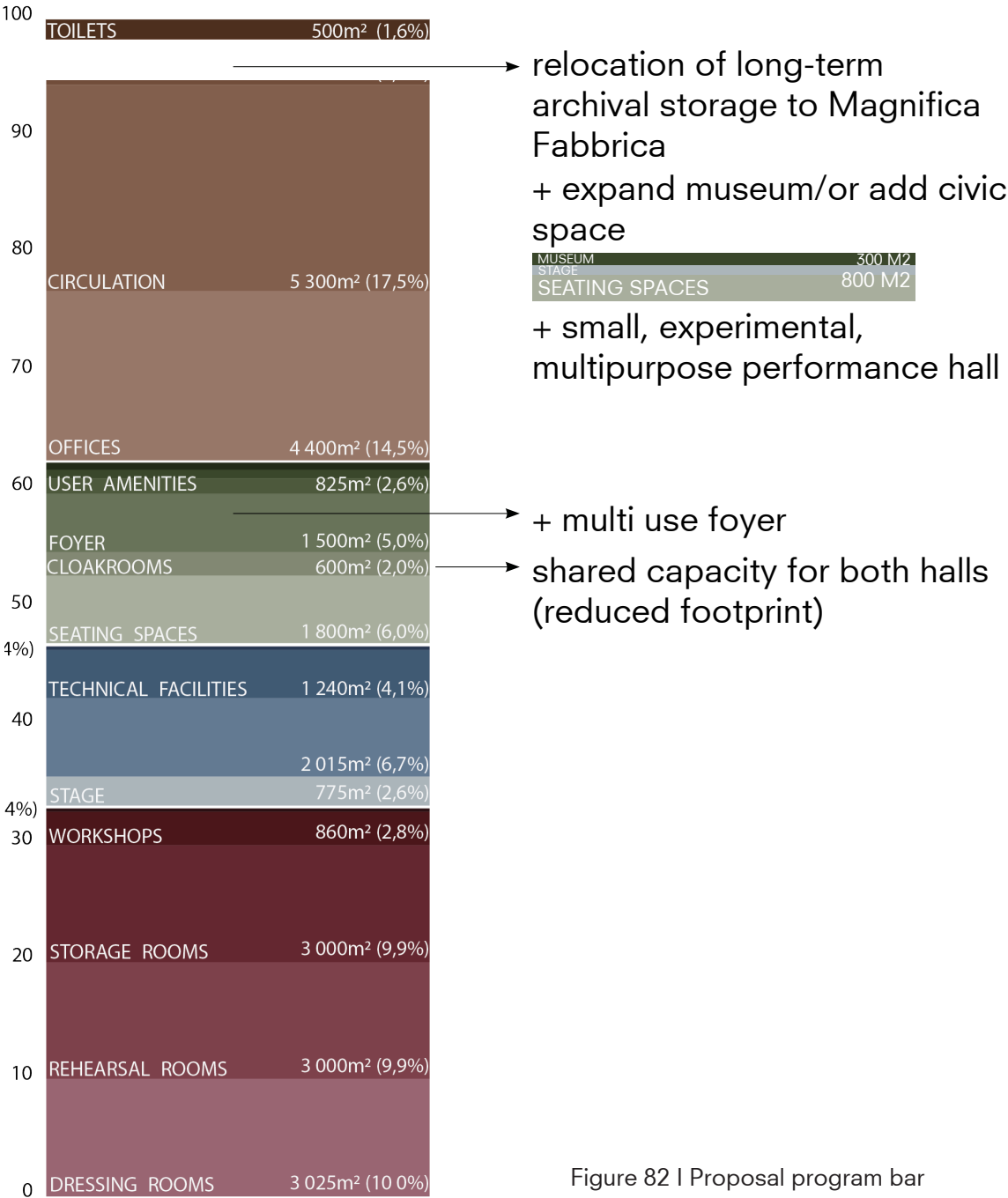


Figure 82 | Proposal program bar

The project expands the audience of the opera house. Before the intervention, the building mainly served tourists, museum visitors, and the traditional opera and ballet audience. After the intervention, the building becomes accessible to a broader range of users: students, children, professionals, experimental performance visitors, and everyday urban visitors. This shift supports the transformation of La Scala from a closed cultural institution into a more open civic-cultural building.

Visitor palette - current Scala



- the tourist
visits the site as part of the cultural route through Milan



- the opera and ballet audience
comes mainly for the evening performance and follows a formal arrival ritual



- the child / young visitor
has limited access to the building, mostly through guided or occasional programmes



- the museum visitor
engages with La Scala's cultural heritage through a relatively small and conventional museum experience, with limited interaction, multimedia, or appeal to younger audiences

Visitor palette - new Scala

- the tourist
discovers the building as part of the city, even without attending a performance
- the opera and ballet audience
comes for the evening performance and follows a formal arrival ritual toward the main hall
- the child / young visitor
encounters opera and ballet through education, workshops, and accessible public programmes
- the museum visitor
moves through exhibitions, archives, and visible production spaces, connecting heritage with contemporary making
- the student
uses the building as a place for learning, research, rehearsal, and cultural exchange
- the professional
uses the building as a workplace for production, rehearsal, teaching, and artistic preparation
- the experimental performance visitor
attends smaller dance, music, or interdisciplinary performances in a less formal setting



Figure 83 | Visitor palette

A recurring strategy in the adaptation of historic opera houses involves preserving the ceremonial core of the building, particularly the main auditorium, while introducing new spatial additions that host expanded foyers, exhibition programmes, or smaller experimental theatres. While this approach allows institutions to respond to contemporary demands, it also tends to spatially separate tradition from experimentation.

If innovation is consistently accommodated through architectural addition, the question remains how a newly conceived opera house, unconstrained by historical structures, might fundamentally reorganize its internal spatial relationships, embedding experimentation and public life within its ceremonial core rather than at its periphery.

If classical opera houses articulated hierarchy and ritual through symmetry, façade, and spatial sequence, what does a contemporary opera house look like? How does this contemporariness translate into the building envelope, form, organization of program, flows, use and rituals?



Figure 84 | Royal opera house London



Figure 85 | Depot Boijmans van Beuningen



Figure 86 | The underground Met Opera wig shop

Examples of possibilities of exposing archive, and production spaces integrated in architecture.

George Balanchine
revealed the body
of ballet.



Figure 87 | Balanchine

George Balanchine modernised classical ballet not by rejecting its traditions, but by stripping them back to their essence. By reducing decoration, narrative, scenography and costume, he made the structure of ballet visible: the body, alignment, timing, musical structure, and discipline of movement. The result was not less ballet, but more clarity of ballet.

This project applies a similar logic to La Scala. Rather than concealing the complexity of opera production behind a monumental shell, the building is restructured to partially reveal the processes of art-making. Production, rehearsal and learning become architectural elements. At the same time, the dreamlike quality of performance is not lost. In the evening, ritual and monumentality are intensified through spatial sequencing, dramaturgy and carefully choreographed architectural thresholds.

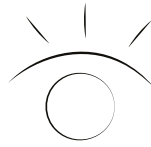
Flow operates as both spatial and organizational principle. The building is conceived as a continuous system rather than a collection of closed typologies. Social, educational, and civic programs extend outward from the performance core, functioning as an expanded field of the opera rather than secondary additions.

The building actively invites people to discover it. Like Balanchine's choreography, it makes its underlying structure legible, engaging the city directly while still preserving the mystery and intensity of performance.

design principles

1. Investment in audience development and behind-the-scenes processes should be translated into the spatial logic of the building. The building should be well embedded in the existing urban fabric, maintain a visibly active and inhabited presence throughout the day and beyond performance hours.
2. Foyers should operate as hybrid civic interiors, capable of accommodating both performance-related rituals and informal, educational, or non-commercial uses, regulated through graduated and interchangeable access conditions. Time is an important design aspect.
3. Foyer spaces and auditorium seating should avoid hierarchical structuring, instead promoting social mixing; peak flows must be resolved through strategic architectural guidance rather than segregation.
4. The primary opera hall and a secondary, smaller performance space should function as complementary entities, with the latter operating as an experimental platform to broaden the performance canon and engage peripheral cultural practices and forms such as use as cinema for documentaries and films.
5. As one of Milan's most visited museums, the Scala museum requires a contemporary curatorial and spatial approach, incorporating visible, live activities rather than functioning solely as a static outdated archival display.

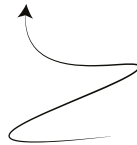
6. Movement through the theatre should be conceived as a dramaturgical sequence, reinforcing the sense of exceptionality and ritual, clearly distinct from everyday, low-threshold modes of entry.



operate as an urban
attractor through visible
architectural
performance



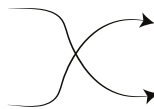
the foyer should
operate as a hybrid
between ceremonial
and civic space



use movement through
theatre as dramaturgical
sequence



selectively reveal live
activities and the labour
of artistic production



promote social mixing,
avoid hierarchical
structuring



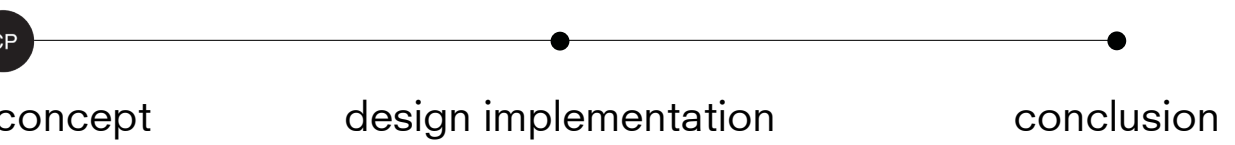
the main and secondary
auditorium should
complement each other

Figure 88 | Design principles

The research developed into both a building concept and a site concept in different phases. The overarching concept was shaped through theoretical research, the site visit, comparative case studies and an iterative design process.

This chapter explains the main idea of the project through diagrams. It translates the design principles derived from the research into a clear spatial narrative: the first architectural formulation of the project’s core ambition. The concept functions as a guiding framework throughout the design process, offering a reference point to return to when making spatial, programmatic and atmospheric decisions.





CONCEPT SITE DESIGN



Figure 89 | Urban green nodes ‘greening Paris’



1. Place de la Bastille
2. Place d'Italie
3. Place de la Nation
4. Place du Panthéon
5. Place de la Madeleine
6. Place Gambetta
7. Place des Fêtes
8. Place de la République
9. Place de la Concorde
10. Place de Catalogne
11. Pl. du Colonel Fabien
12. Une Forêt Linéaire
13. Bois de Charonne
14. Pl de l'Hôtel de Ville



The greening revolution in Paris, under the leadership of Mayor Anne Hidalgo, transforms car-dominated spaces such as squares, traffic circles and riverbanks, into a network of pedestrian-oriented green nodes. This strategy introduces trees and vegetation for shading and microclimate improvement, creates space for public terraces and social use, and integrates water retention and infiltration.

Although implemented in Paris, the approach functions as a transferable urban model, offering a scalable framework for rethinking public space, mobility, and ecological integration in cities worldwide.

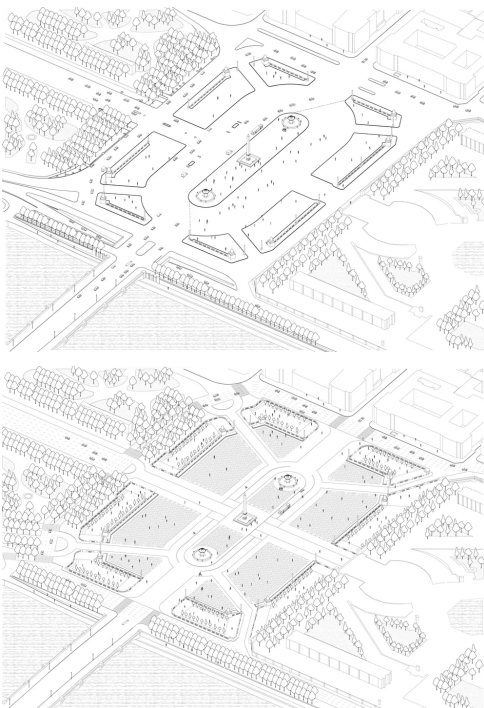


Figure 90 | Examples green revolution Paris



Figure 91 | Examples green revolution Paris

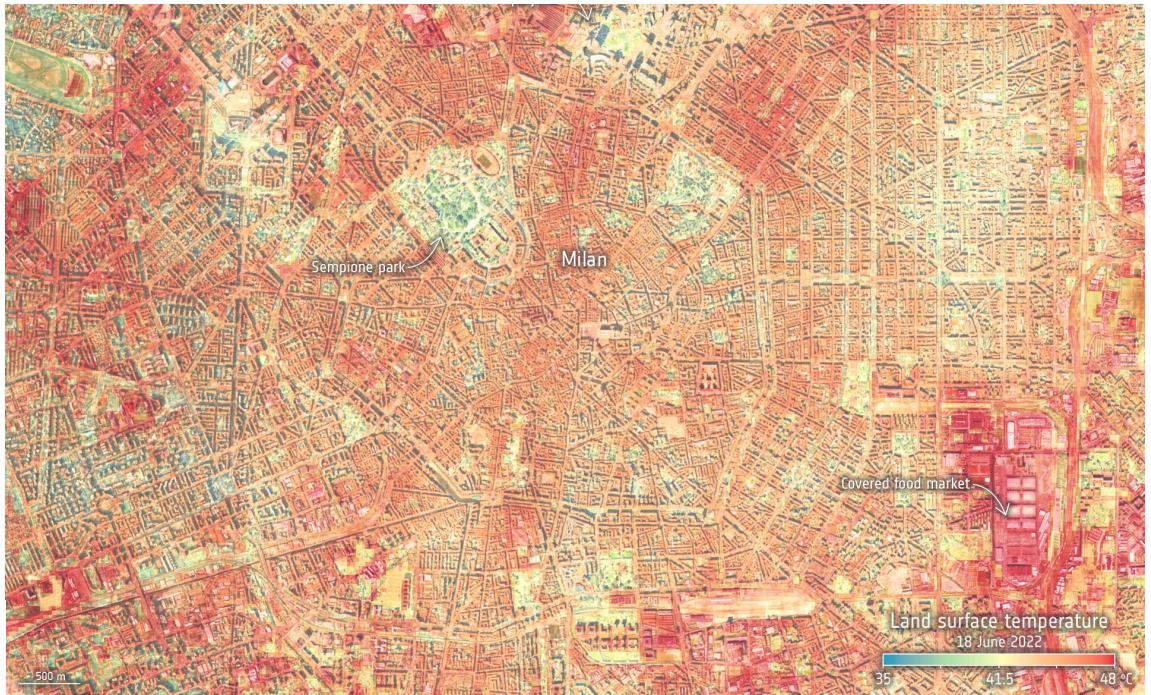
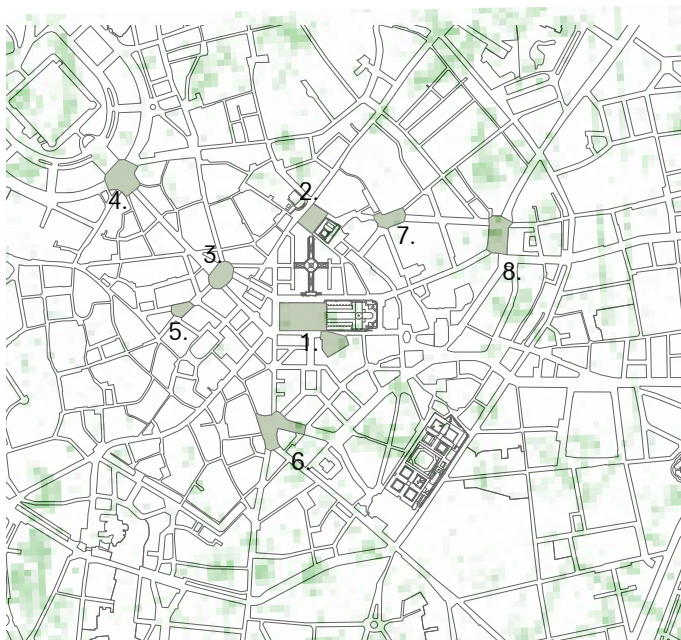


Figure 92 | Urban heat island effect map Milan



1. Piazza del Duomo
2. Piazza della Scala
3. Piazza Cordusio
4. Largo Cairoli
5. Piazza Tommaso Edison
6. Piazza Giuseppe Missori
7. Piazza Filippo Meda
8. Piazza San Babila

Figure 93 | Proposal network of green nodes Milan

Milan, similar to many dense European cities, faces increasing urban heat island effect challenges due to extensive paving, traffic, and limited urban greenery. In response, the municipality is implementing a low-traffic urban strategy aimed at reducing private car use, improving air quality, and reclaiming public space for pedestrians.

Within this framework, the area surrounding Teatro alla Scala is located inside Area C, where access for private vehicles is already restricted. A partially pedestrianised urban sequence is present, extending toward Piazza della Scala. However, this continuity weakens beyond this point, revealing fragmentation in the pedestrian network.

This project builds upon this condition and envisions a future scenario in which the transformation toward a pedestrian-oriented environment is intensified and spatially extended. The first step consists of restricting access through the road Piazza della Scala, allowing only trams, emergency services, taxis, and destination-based traffic such as loading and unloading. The second step extends this logic to the immediate surroundings of the theatre, converting all adjacent streets into pedestrian-priority zones with limited access.

This intervention creates the basis for a broader urban strategy. Key nodes seen in figure 93 can be reconfigured to prioritise greenery and pedestrians, reduce hard surfaces, and enhance climate resilience. In this way, a continuous pedestrian and ecological network emerges, aligning spatial quality with environmental performance.

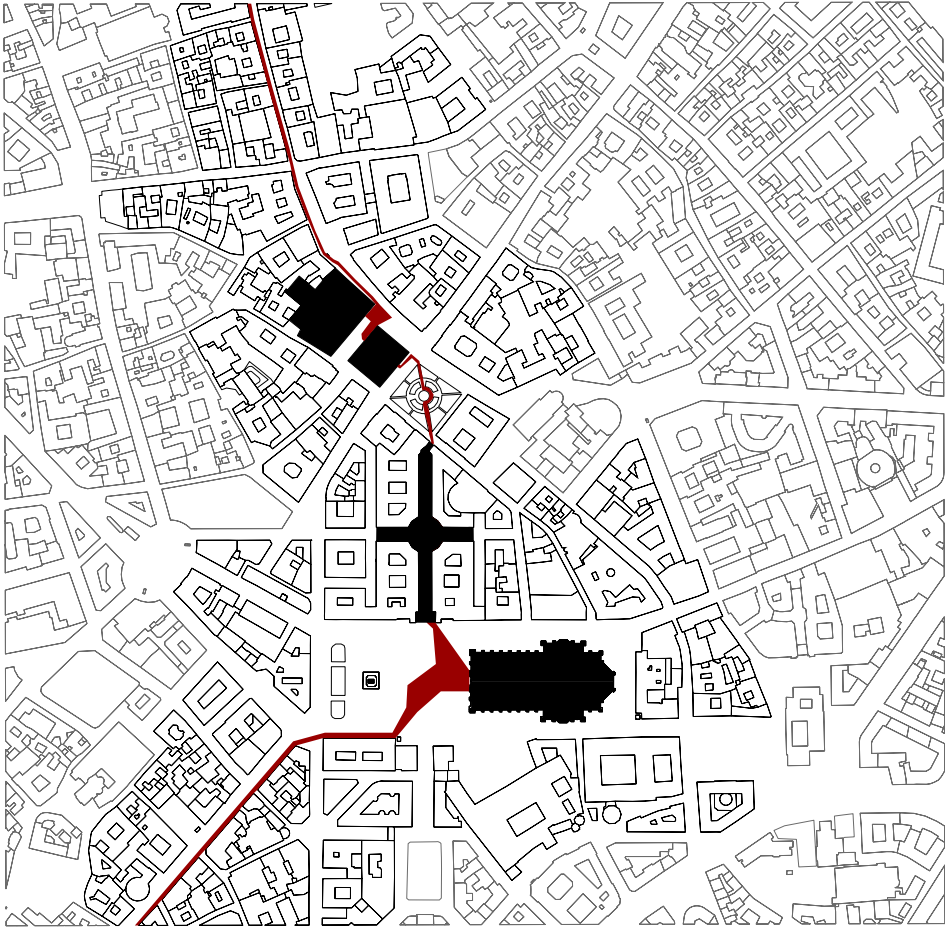


Figure 94 | A red carpet through the city

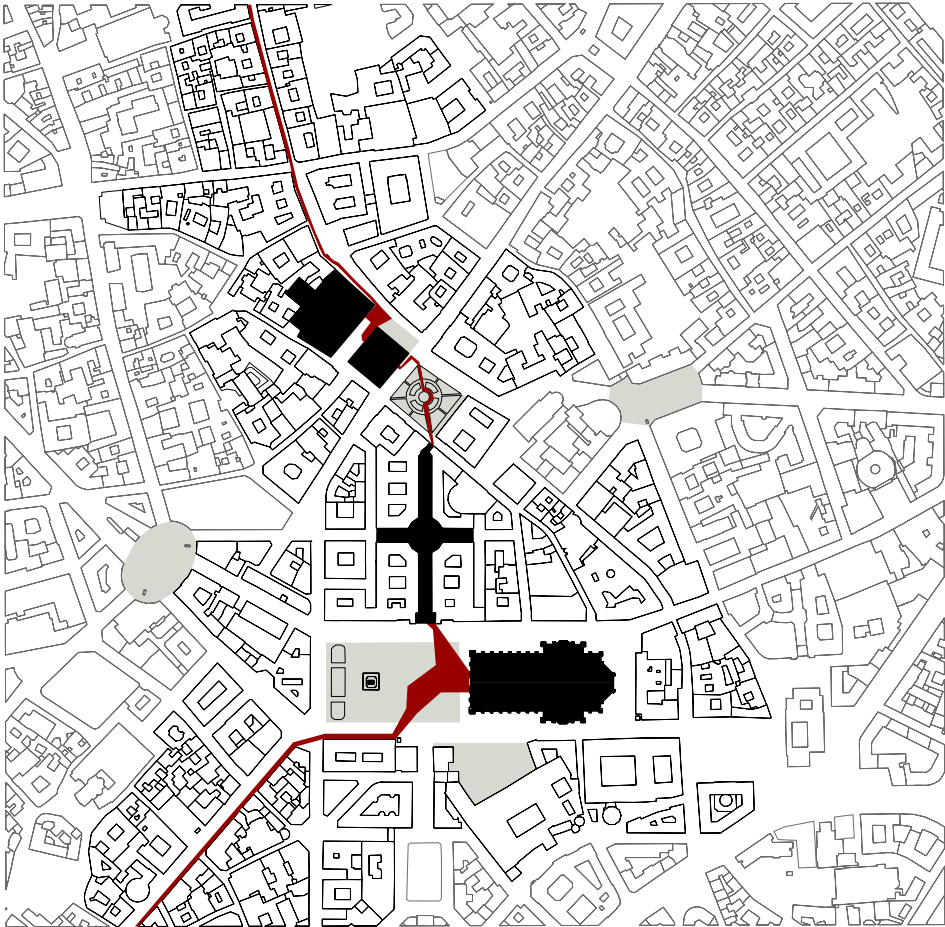


Figure 95 | Green nodes

The project site is located within an important, historical urban sequence in Milan. This sequence constitutes a spatial progression through the historic city centre and is characterized by a carefully orchestrated series of public spaces. The experience is defined by framed views, moments of spatial compression and expansion, and gradual transitions between different urban conditions. By far the most people arrive at the piazza through this sequence, meaning that the building is mostly approached from one side.

However, this urban sequence currently ends at La Scala and does not clearly continue beyond the opera house. The site therefore represents a critical point of transition within this urban route.

The project aims to extend this sequence through the site, allowing movement to continue along Via Giuseppe Verdi to Brera. In order to achieve this, the building mass is used to guide movement through the site, while the placement of public functions and active façades helps to structure and activate this route.

The building is not conceived as a standalone landmark, as is often the case with newly designed opera houses that function as iconic attractions within the city. This prominent site in Milan full of monumental buildings, asks for a carefully designed sequence rather than a singular monumental object. The project proposes two volumes that relate to the surrounding block structure and the three palazzi around the piazza, while passages, sightlines and public routes reconnect the opera house with the city.



Figure 96 | Duomo, Galleria, Scala

an urban
sequence

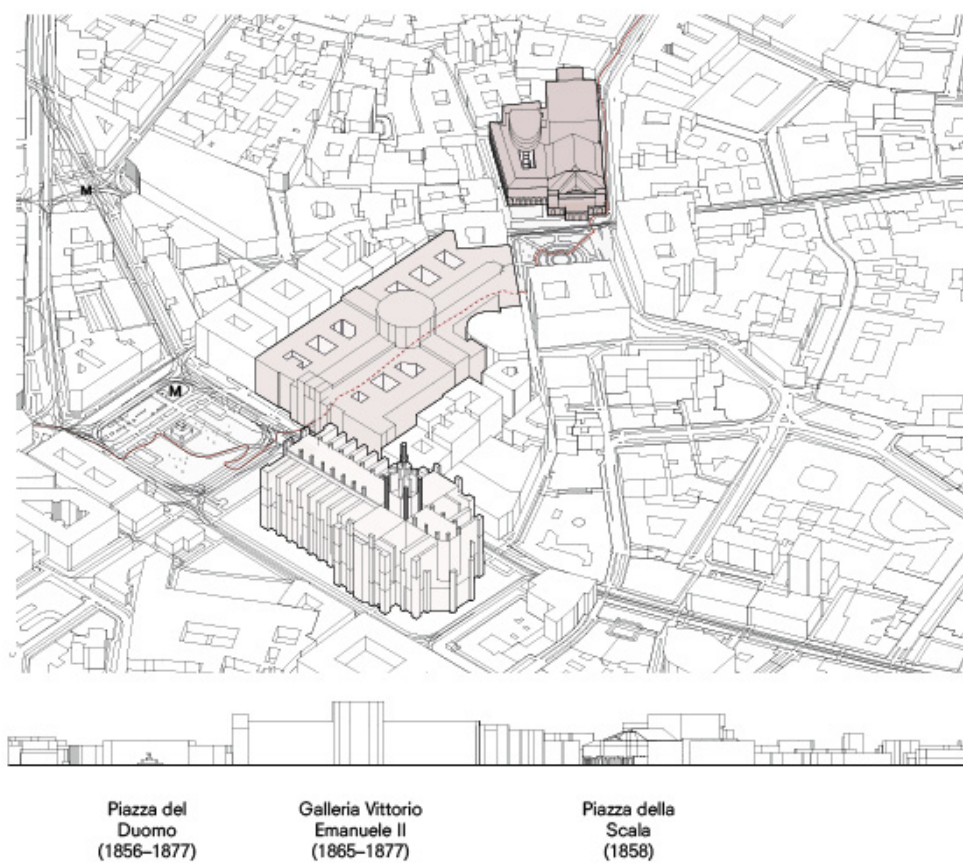


Figure 97 | A c ured urban sequence

that unfolds
towards the
Pinacoteca di
Brera

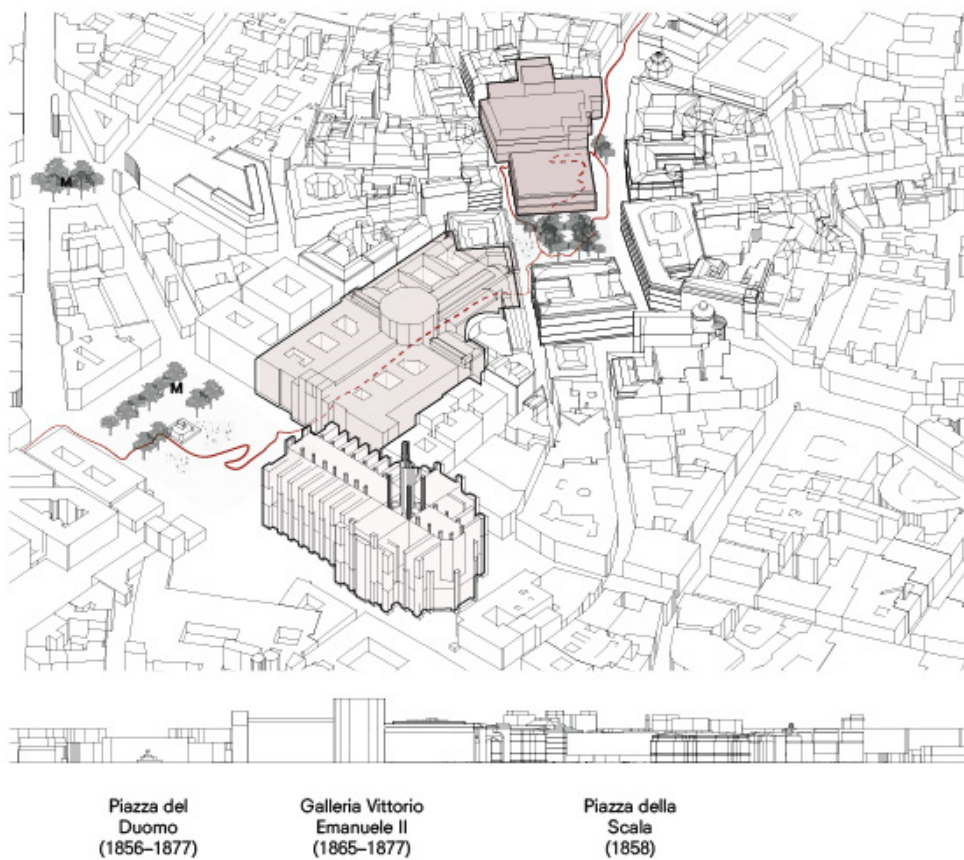


Figure 98 | Proposal expanded curated sequence

- Paved environment
- Car roads and car parking are dominant
- The piazza functions as an enclosed island, where the urban sequence comes to a halt

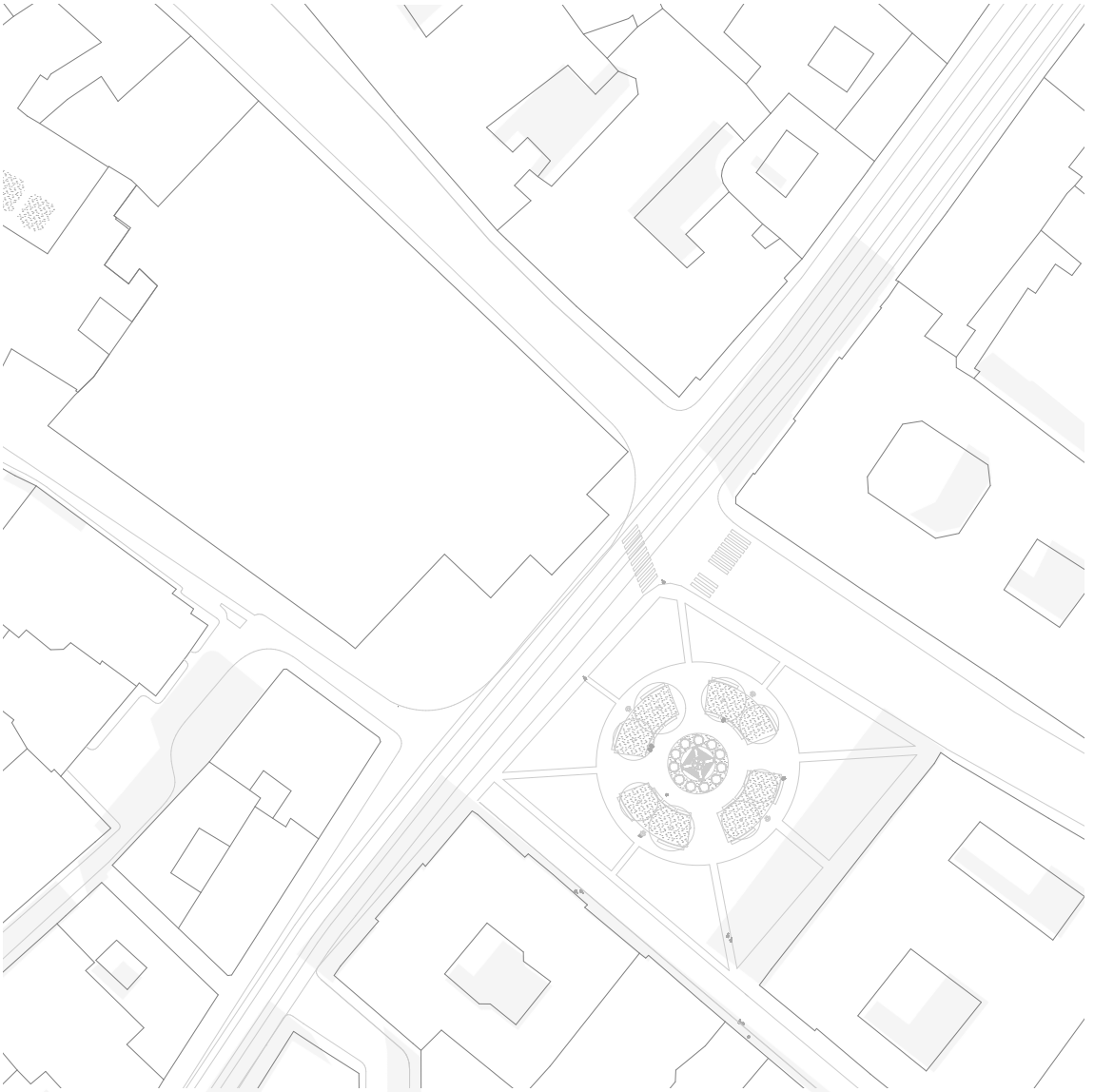


Figure 99 | Existing Piazza della Scala

- Pedestrianised area, permeable urban block
- Connectivity with expanded and green square
- Emphasis on diagonal axis to Brera

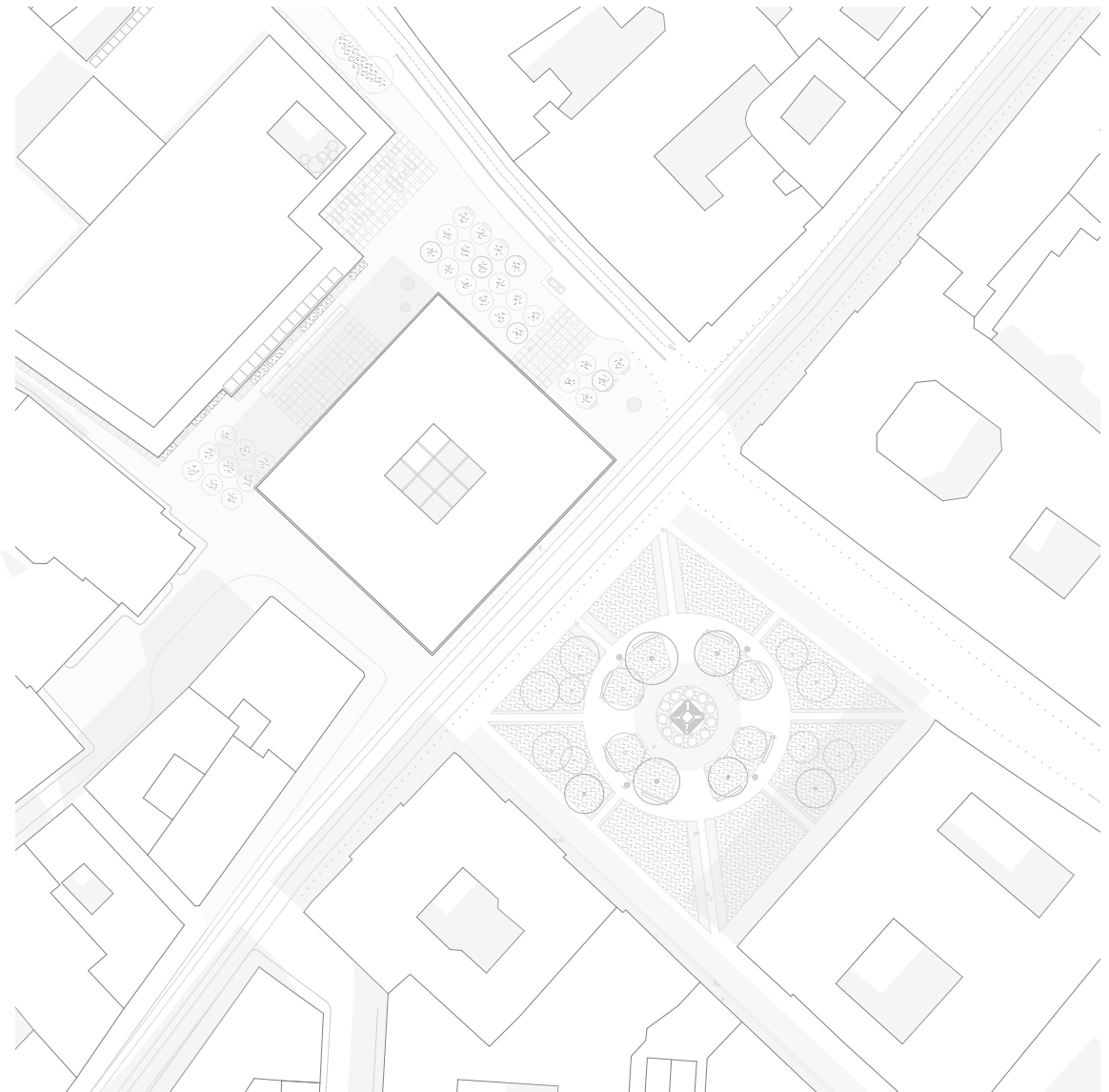


Figure 100 | Proposal Piazza della Scala

CONCEPT BUILDING

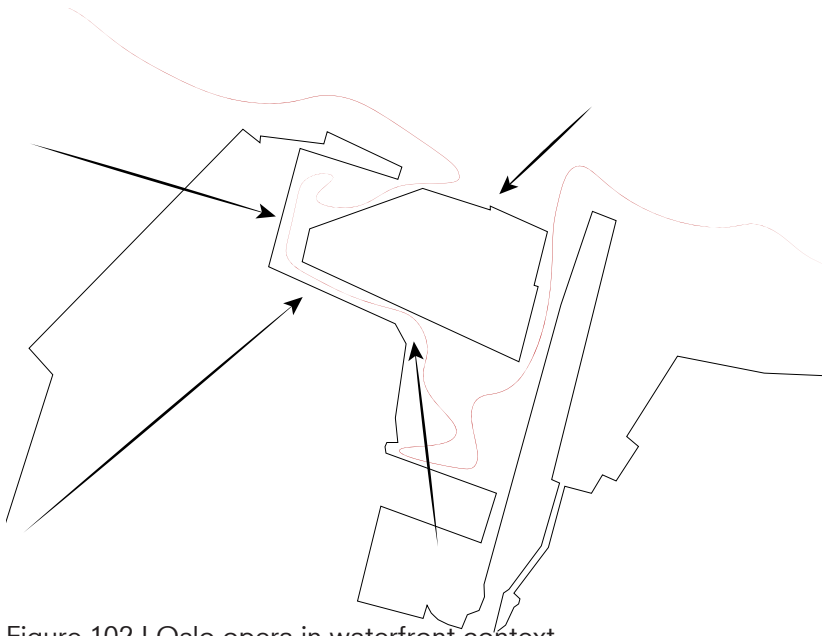


Figure 102 | Oslo opera in waterfront context

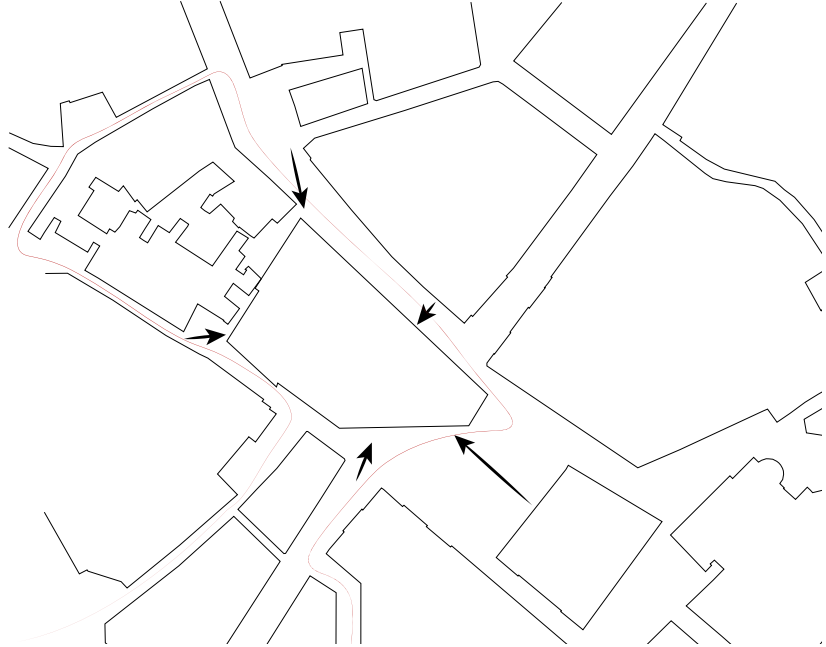


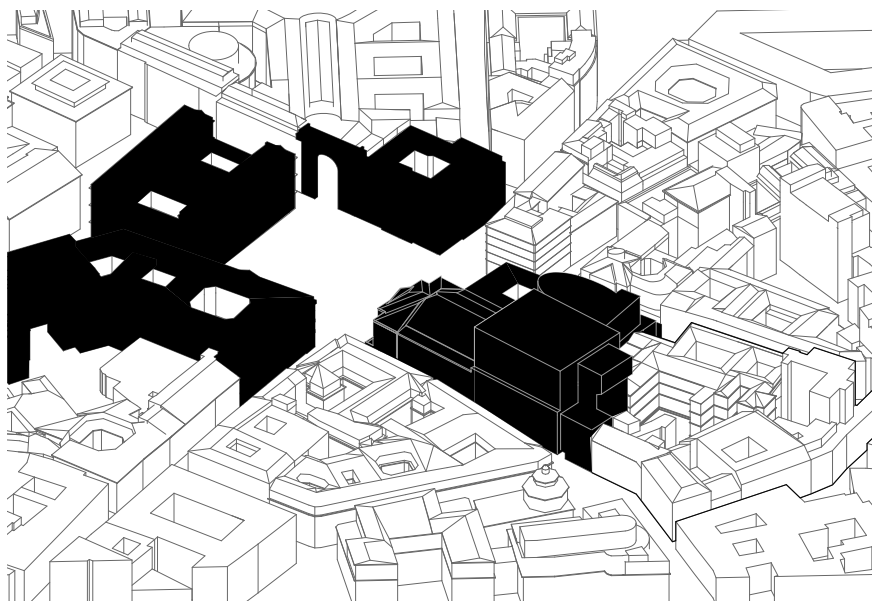
Figure 101 | Oslo opera in dense Milan context



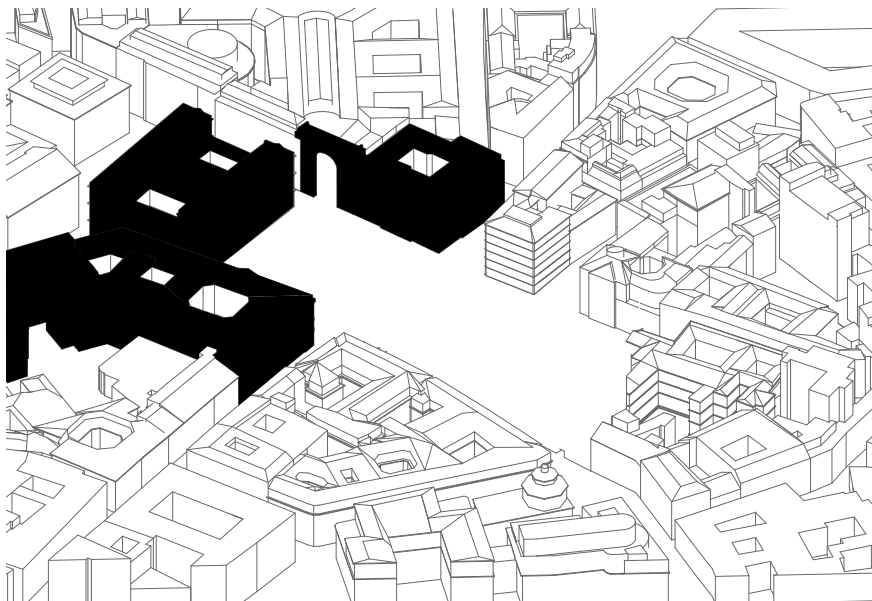
Figure 103 | Opera house as a ‘Megalomaniac’ object

Modern opera buildings are frequently located in areas of the city where large-scale development remains possible, offering long sightlines, open views, and the capacity to position the building as an iconic, standalone object that attracts visitors and reinforces the city’s cultural presence.

In the context of Teatro alla Scala, this approach would operate fundamentally differently. The dense urban fabric limits sightlines and more importantly, inserting such a large volume within an existing urban block results in a building that becomes difficult to navigate, and insufficiently permeable. Rather than functioning as an open cultural landmark, it risks forming a closed, monolithic mass within the city.

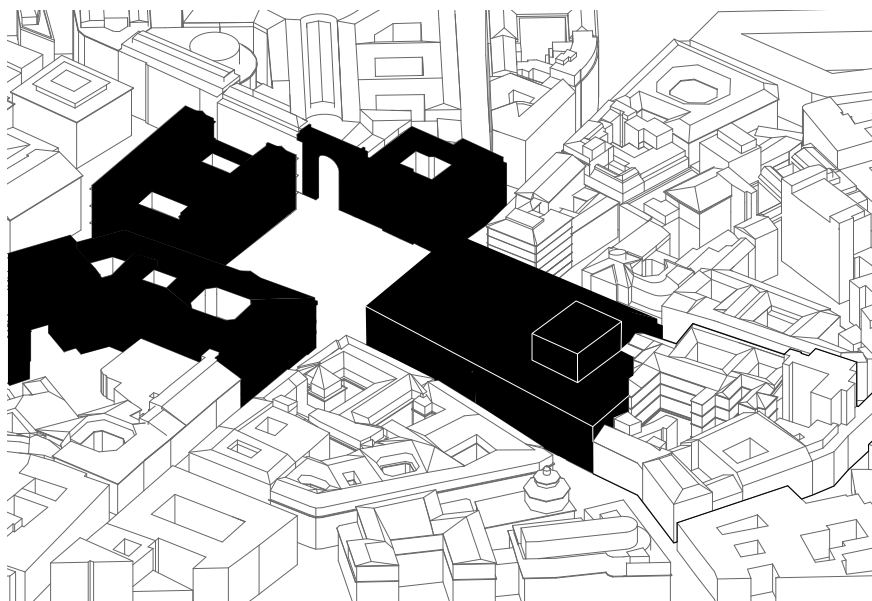


1 existing situation

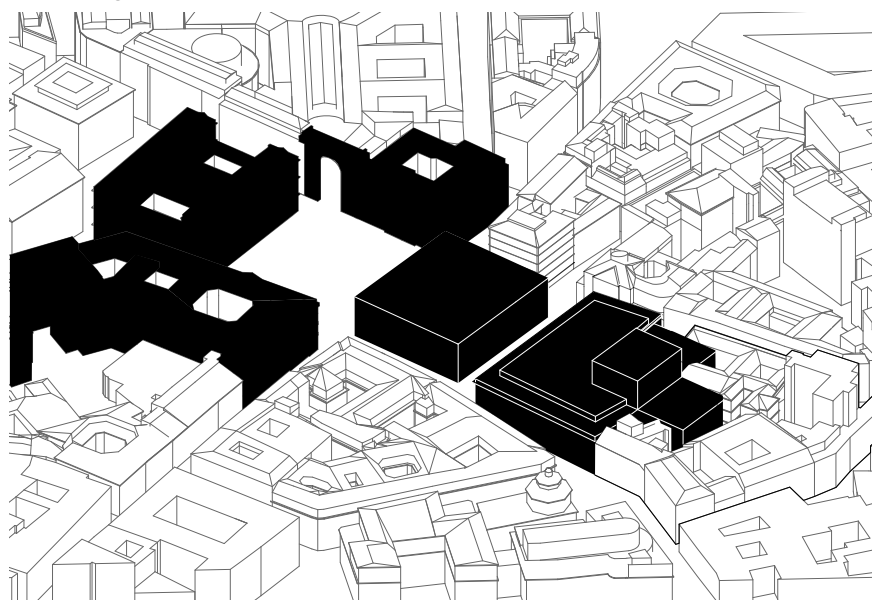


2 empty site

Figure 104 | Step by step concept exploration



3 finishing urban block



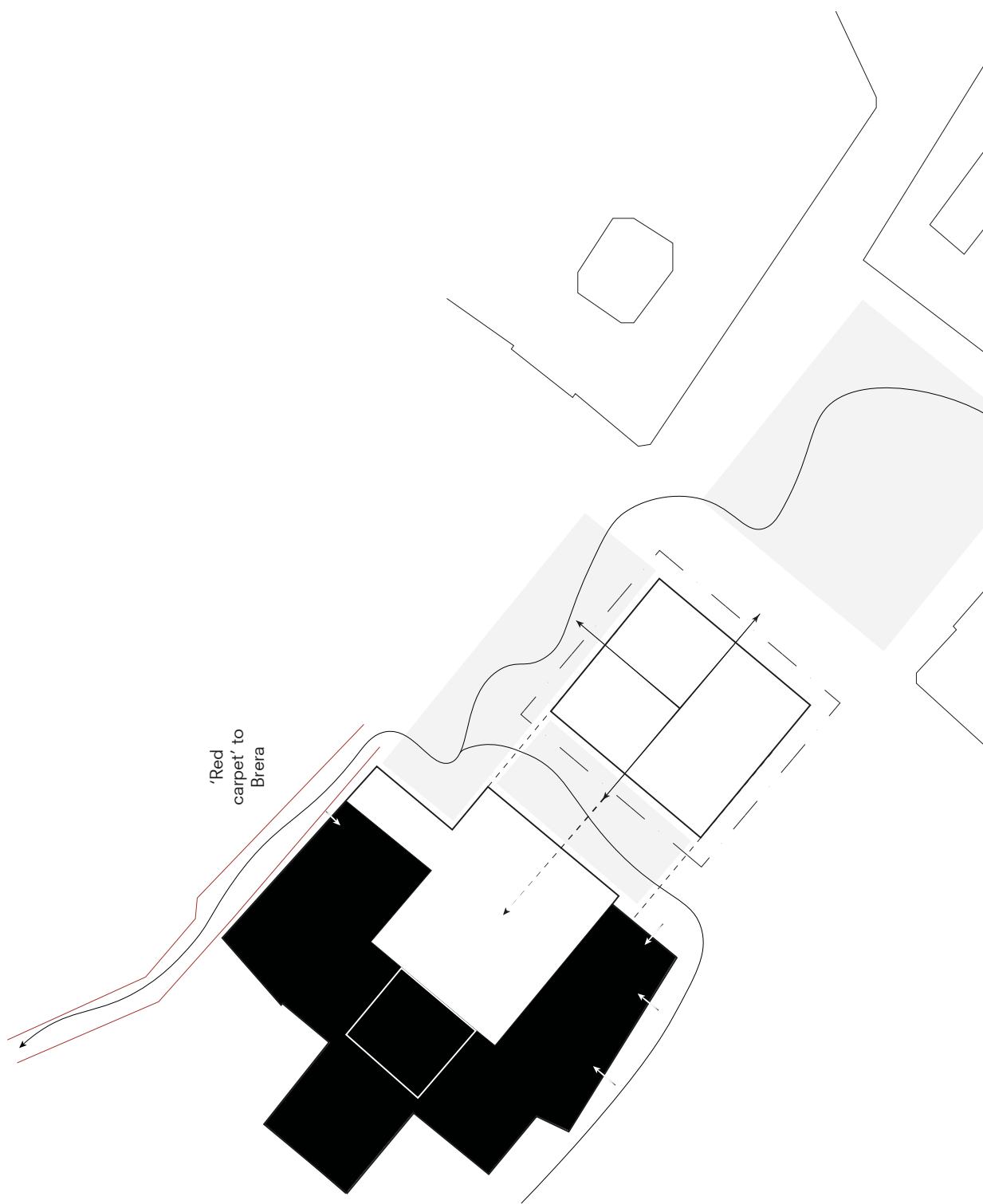
4 splitting up megalomaniac volume

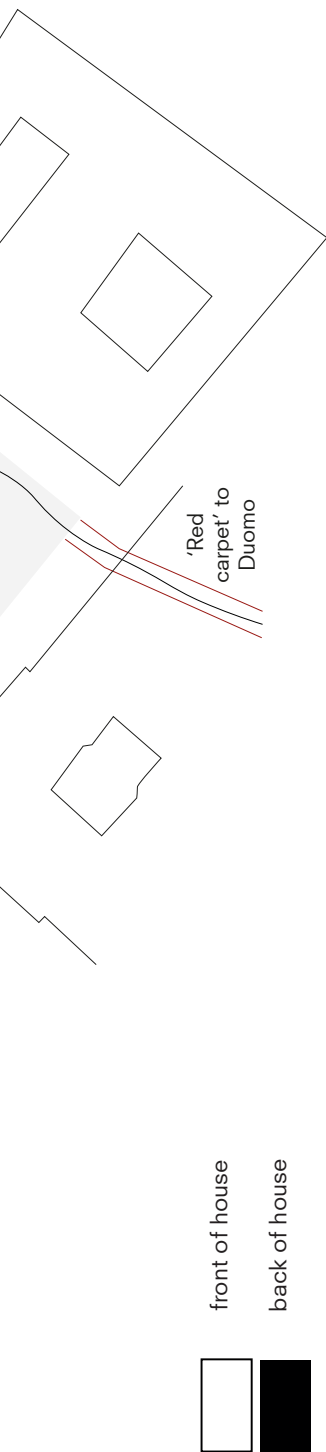
Splitting the mass into two volumes reduces the scale of the building, creates space for urban routes and introduces new points of contact between the opera house and the city.



Figure 105 | Conclusion 3x3 massing assignment

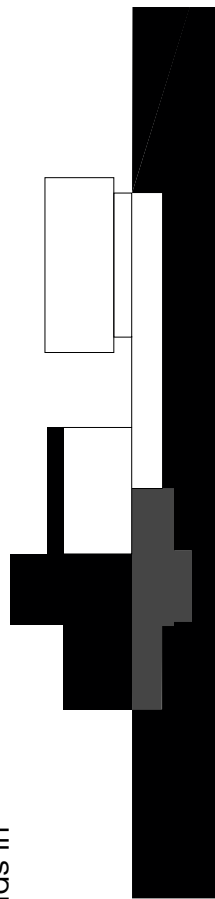






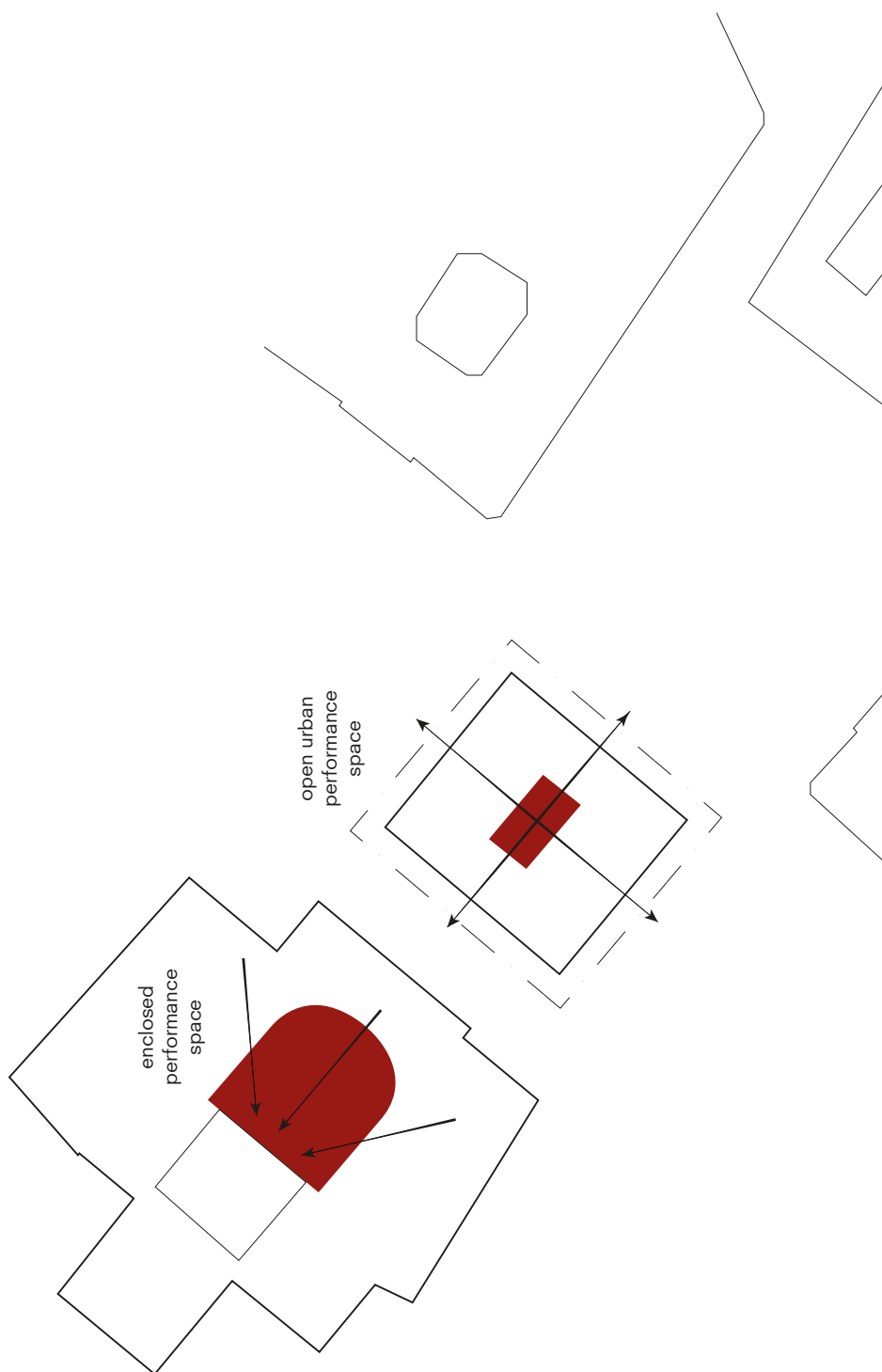
back volume blends in

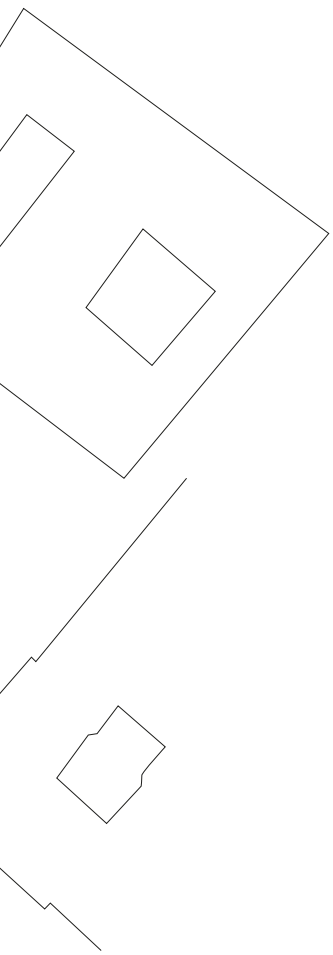
frontal volume separates



- + increased visual contact points
 - + rich sequence of spaces
 - + enhanced user orientation
- + improved permeability and human scale

Figure 106 | Building and routing concept





horseshoe hall
enclosed, focused, warm,
ceremonial

experimental performance
open, flexible, neutral, urban

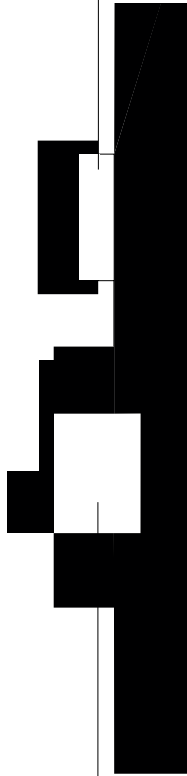


Figure 107 | Concept adjacent performance spaces

The central design intention of the project is to reconnect the opera house with the city. Fragmentation of the building mass therefore becomes an important strategy to soften the scale of the building and re-establish its relationship with the surrounding urban fabric. The goal is not only to create a destination during performances, but to embed the opera house within the daily life of Milan.

To achieve this, the project introduces daily urban routes and visual connections that allow citizens of Milan, tourists and passersby to establish a continuous relationship with the building. This includes sightlines between streets and public spaces, but also between street and rehearsal rooms, archives, the orchestra rehearsal room, the dye workshop and the prop workshop.

Two spatial systems

To realise this strategy, the project separates the architecture into two distinct spatial systems: the urban block and the palazzo. These correspond to two architectural identities within the building: the theatre machine and the public face of the opera.

The urban block: the theatre machine

The urban block integrates into the surrounding city fabric and completes the existing block structure. Due to its functional requirements, it is primarily inward-oriented and accommodates the operational and technical infrastructure of the theatre. Within this system, the main auditorium is positioned deeper within the block and more centrally

compared to the current configuration, enabling a more efficient back-of-house organisation.

The block contains the stage, fly tower, and orchestra pit, as well as backstage areas, production spaces, storage, offices, dressing rooms, rehearsal rooms, and staff facilities. This organisation ensures that critical logistical relationships remain direct and efficient.

Despite its internal focus, the building maintains a relationship with the surrounding street scale and engages the public realm. The façade establishes visual connections between the city and the interior, while more publicly oriented functions are positioned along the edges. The route alongside Via Giuseppe Verdi is activated through the placement of a café with an outdoor terrace, adjacent to the performance square, encouraging movement and interaction. This all connected by the paved grid structure that connects the full plan.

The façade responds to the existing urban block and relates to the more public expression of the palazzo by partially adopting a similar material language.

The palazzo: the public face

The palazzo represents the more experimental architecture of the opera house. It forms the public face of the building and focuses on opening up to the city. Its placement is therefore prominent onto the side of the square and its shape literally omnidirectional,

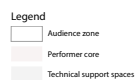
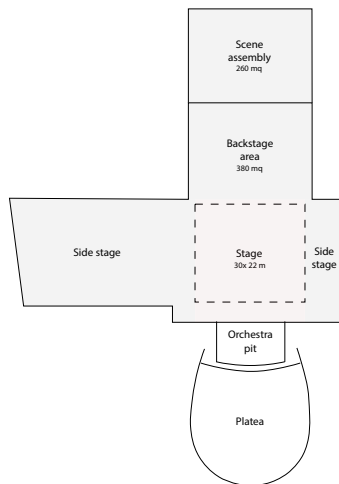
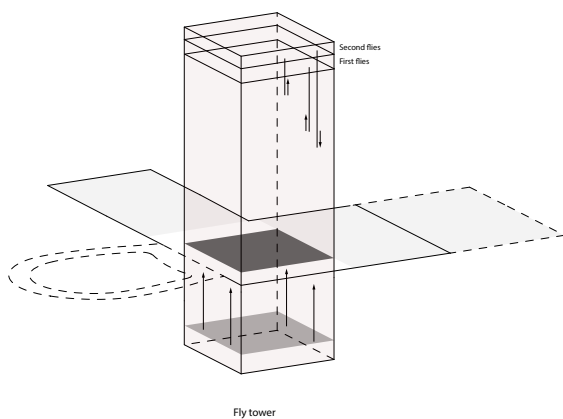


Figure 108 | Existing flytower and backstage area

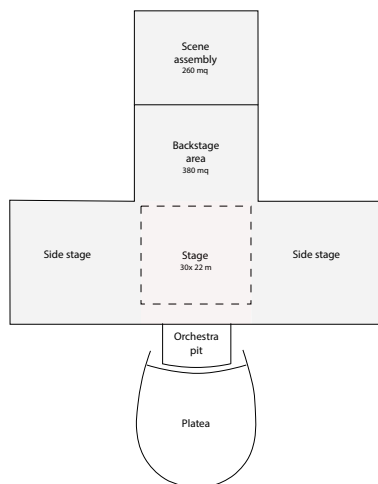
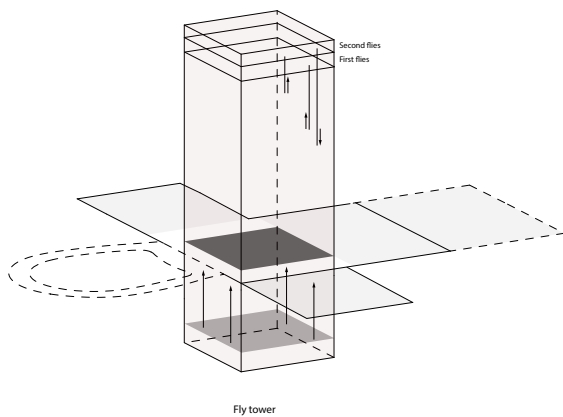


Figure 109 | New flytower and backstage area

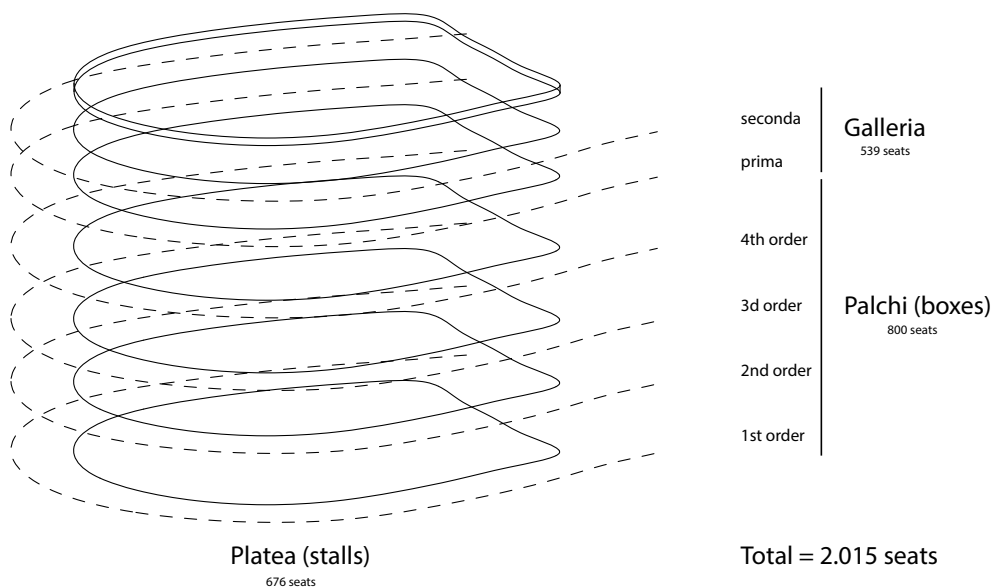


Figure 110 | Existing hall with box structure

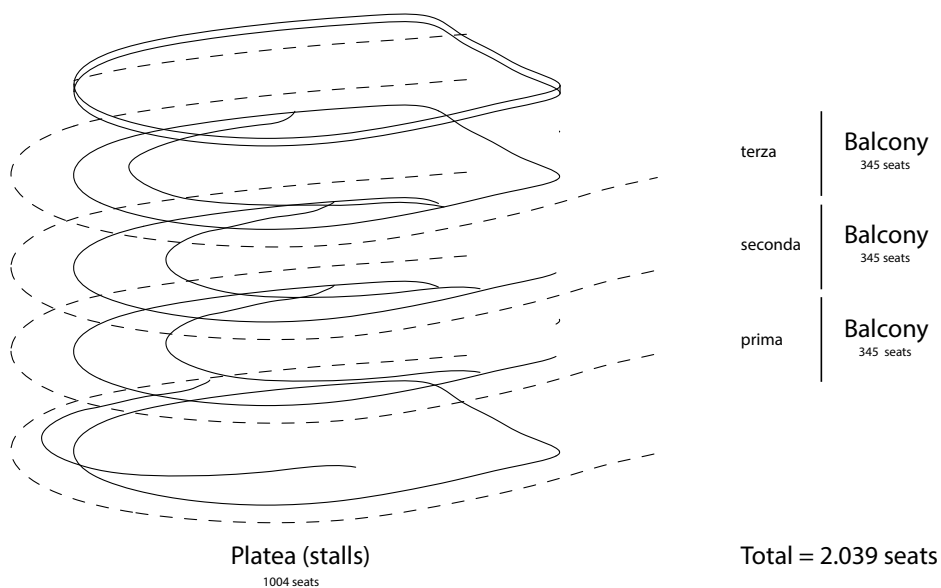


Figure 111 | new hall with balcony structure

addressing not only visitors attending performances but also a broader urban public.

In addition to the foyer, museum and restaurant functions, the public spaces incorporate informal contact points and meeting places that invite everyday use by citizens of Milan. These include

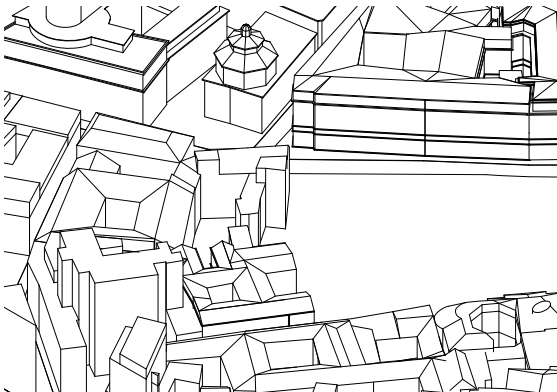
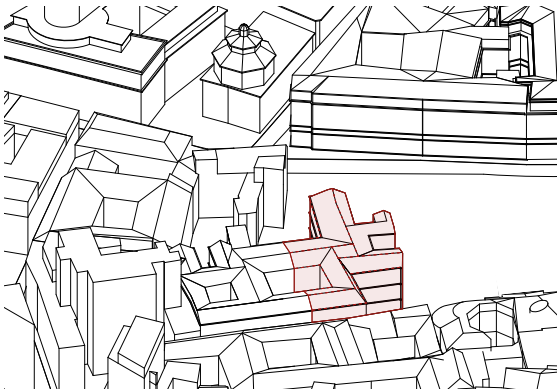


Figure 112 | Demolished part urban block

small gathering spaces where people can sit, observe, meet, study or work, visit the archives, or simply pass through during the day. The goal of the building is to use its unique location and view onto the piazza, and become embedded in the daily rhythms of the city. By literally giving more space to functions such as the museum and the (civic) foyer, people are invited into the world of opera and ballet with a lower threshold than during the evening.

Evening visitors move through a spatial sequence that gradually transitions from the everyday city into the ceremonial world of performance. This transition is not only functional but also architectural. Variations in height, daylight, and sightlines guide visitors through the building and create moments of engagement with both the city and the internal workings of the theatre.

The experience of the building also changes throughout the day. During daytime more spaces are open and connected to the city. During performances, the building closes itself off into a more ceremonial atmosphere centred around the collective experience of the audience. Still these two atmospheres remain intact and both performance halls are able to function separately from one another.

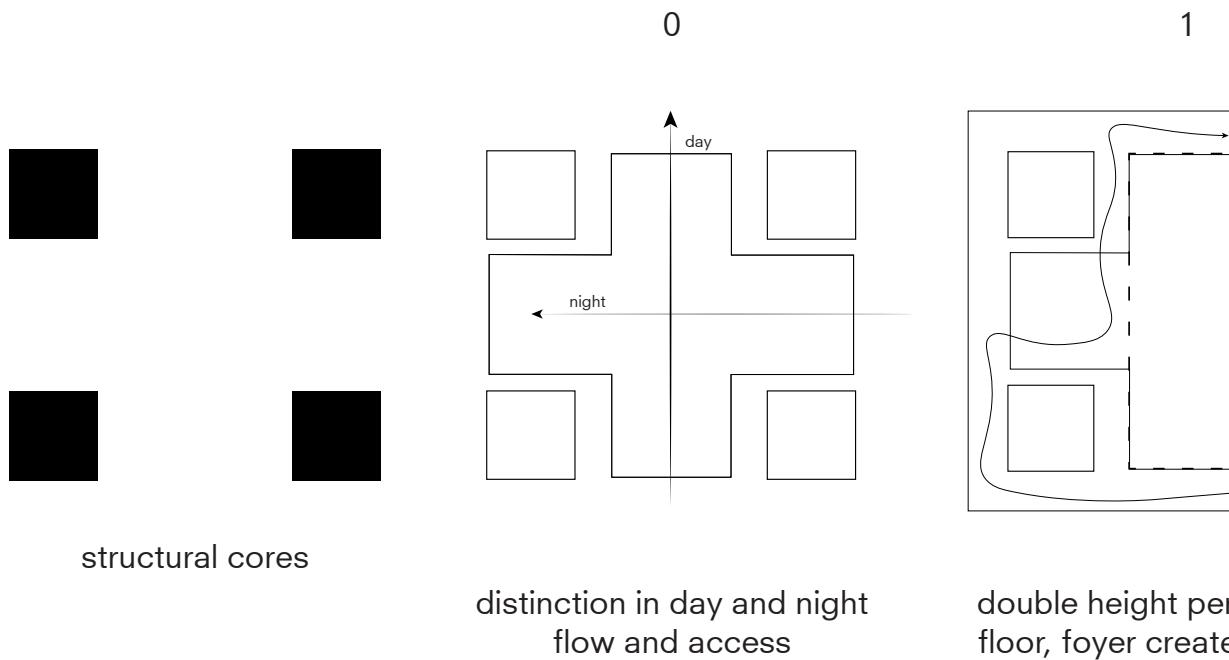
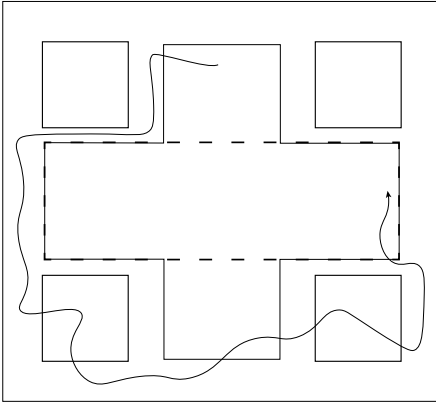


Figure 113 | Step by step concept civic palazzo

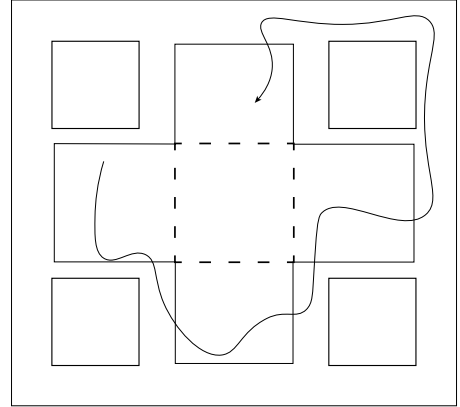
The palazzo as a public face contains a big atrium, for an airy atmosphere. Lively, light, interesting views, and harder materials. There is space for expositions or big performances in the middle, and the sequence of voids gives the opportunity to experiment with decor and positioning of the audience and performers.

2



rotated void forms atrium
and museum loop

3



void aligned with skylight;
restaurant fills remaining
space

performance
ed by void



Figure 114 | Inspiration temporary decor performance atrium

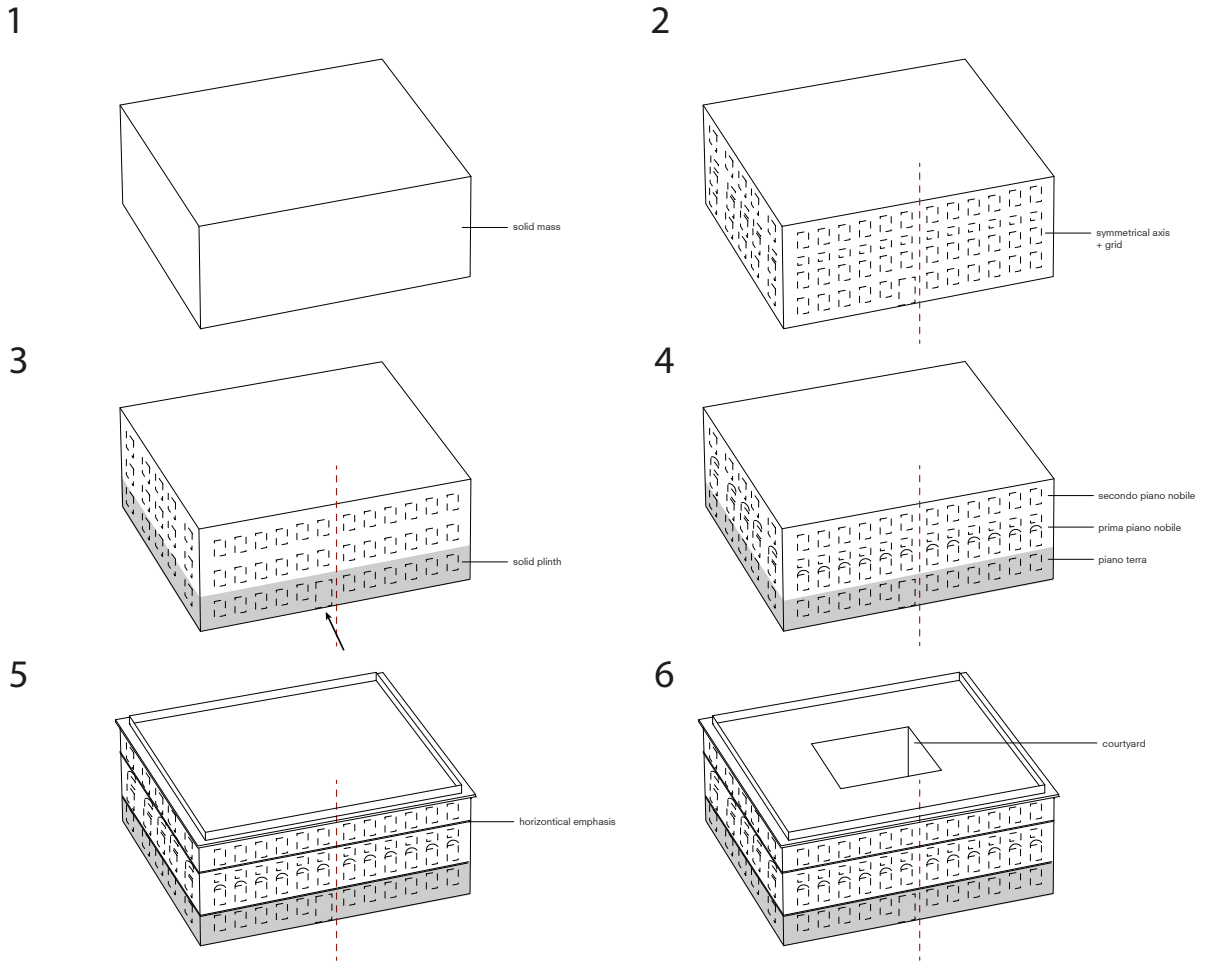
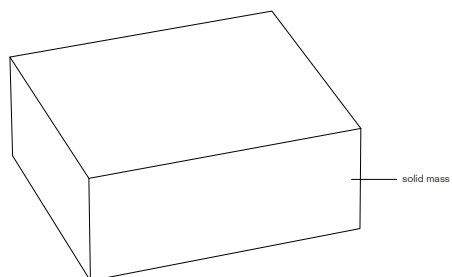


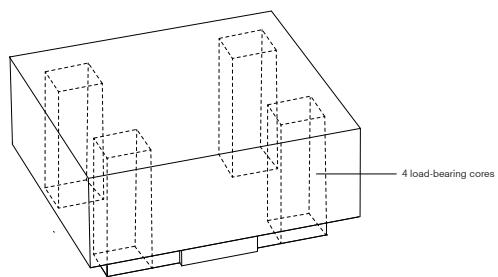
Figure 115 | Principles palazzo

The shape of the building derives from the direct urban context, but plays with asymmetry, open and closed facades and routing.

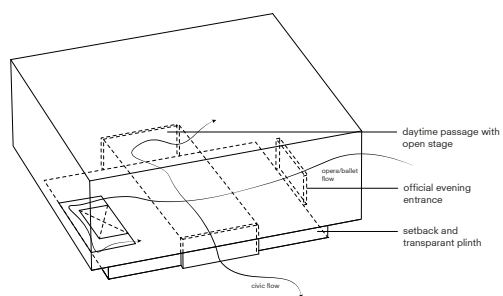
1



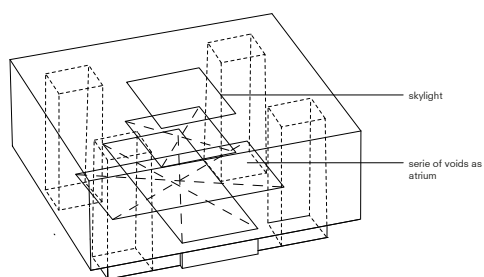
2



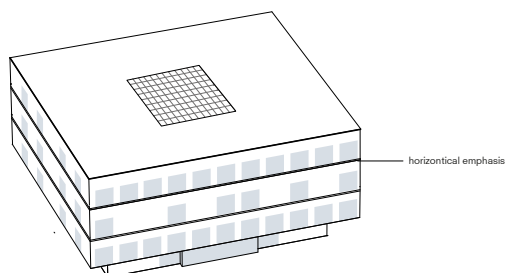
3



4



5



6

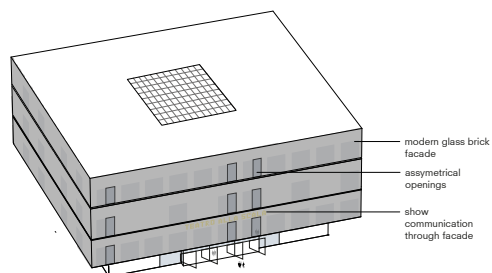


Figure 116 | Exploration shifting principles palazzo

Milanese architectural culture is characterised by discretion on the exterior and richness within. Unlike many European cities, where wealth is expressed through monumental façades, Milanese buildings often present restrained street elevations, revealing their spatial and decorative depth only after crossing the threshold.

This logic is rooted in the palazzo typology, which shaped Milan's urban fabric from the Renaissance onward. These buildings consist of compact perimeter blocks, while their architectural richness unfolds in interior spaces such as courtyards, entrance halls, and staircases. Within the dense urban structure of Milan, these internal spaces became essential for light, orientation, and representation, resulting in a culture of hidden architecture.

However, this inward orientation also limits accessibility. Much of the architectural richness remains invisible to passers-by and is only experienced by those who enter. For contemporary public architecture, this raises the question of how to balance introversion with openness.

This project builds upon the Milanese tradition of spatial sequence and gradual revelation, while adapting it to a civic context. While opening up the building plinth, and really dragging the city into the frontal volume, the design introduces a layered transition from city to the opera/ballet hall. The facades are kept simple and restrained, in a contemporary way.

In this way, the project reinterprets the palazzo typology while making parts of its interior richness accessible to the public realm.



Figure 117 | Green piazza della Scala



Figure 118 | Milan fashion week



Figure 119 | Render facade from La Galleria





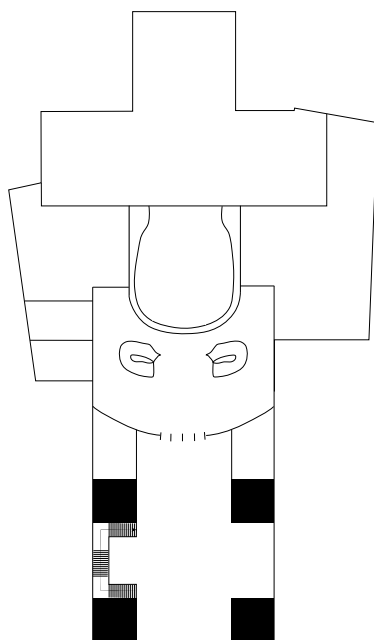


Figure 120 | Render main entrance

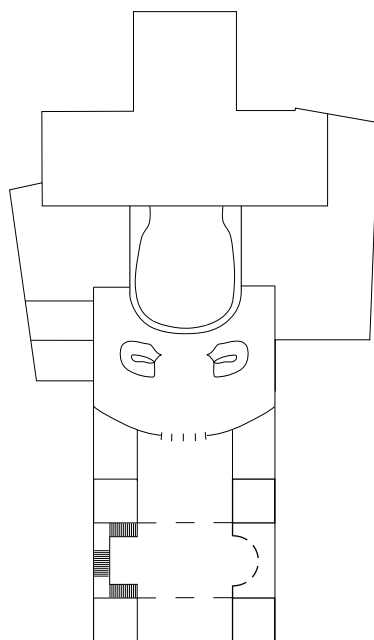




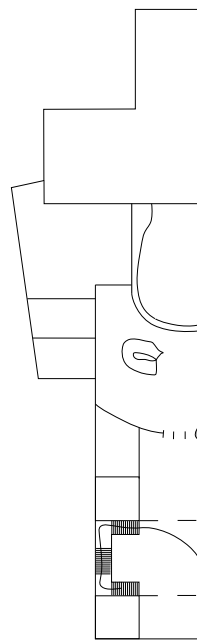
Figure 121 | Render main entrance



staircase, service core and
toilets



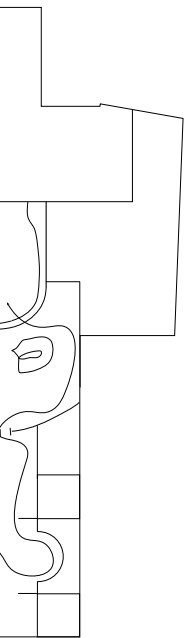
cloakrooms positioned
along the entry sequence



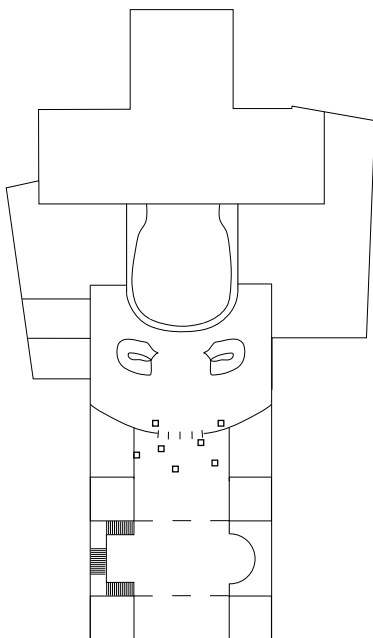
linear flow guide
naturally to the

Figure 122 | Step by step concept grand foyer

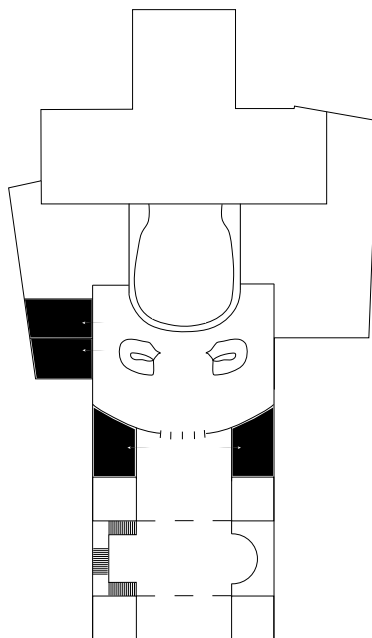
The underground connecting grand foyer has to accommodate more than 2000 people. This is why the space is kept open and clear: a linear set up guides the audience directly towards the visible auditorium. Through skylights and voids, connections with outside and some back of house spaces, visitors can enjoy the surroundings while chatting and waiting.



guides visitors
to the auditorium



skylights introduce
controlled daylight into the
central interior

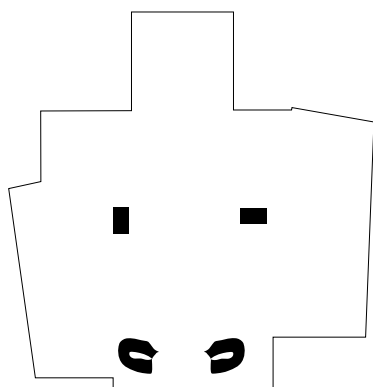


visual connections reveal
archives, wig workshop
and costume atelier

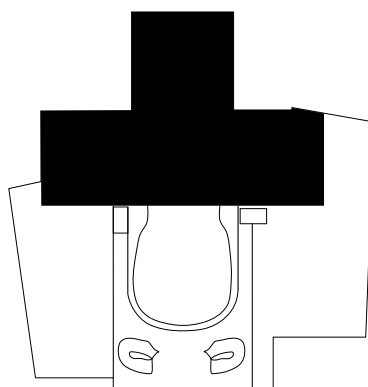




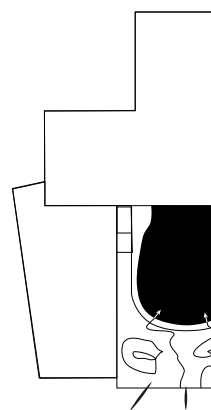
Figure 123 | Render grand foyer



vertical circulation



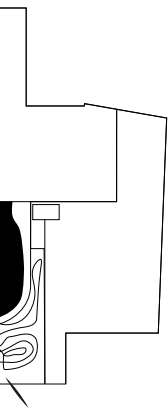
(back- and side)
stage zones



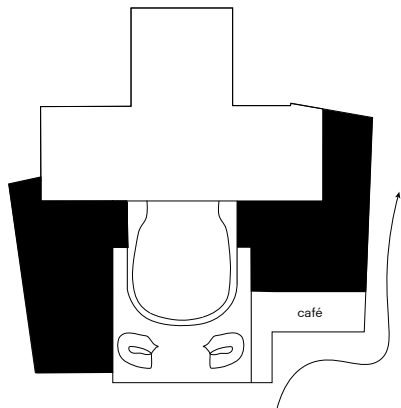
horseshoe h
the visible d
the

Figure 124 | Step by step concept theatre block

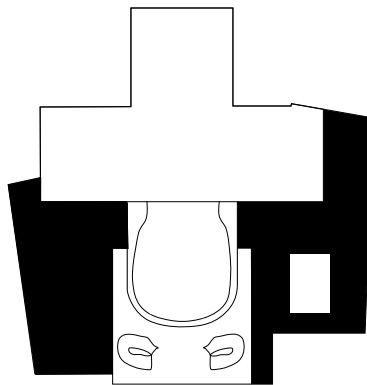
The main auditorium is positioned within the part of the theatre that is integrated into the urban block. This volume functions as the operational core of the building, with clearly separated flows. However, these more practical spaces are not treated as purely technical zones. A key ambition was to give architectural quality to the working environment as well: performers have access to a generous restaurant, rehearsal spaces with pleasant views, and office areas organised around a patio.



all becomes
estimation of
flow



supporting functions
occupy the side volumes;
café and terrace create an
active public edge



patio for offices



Figure 126 | Render facade theatre block



Figure 125 | Render rehearsal room



Figure 128 | Render foyer balconies

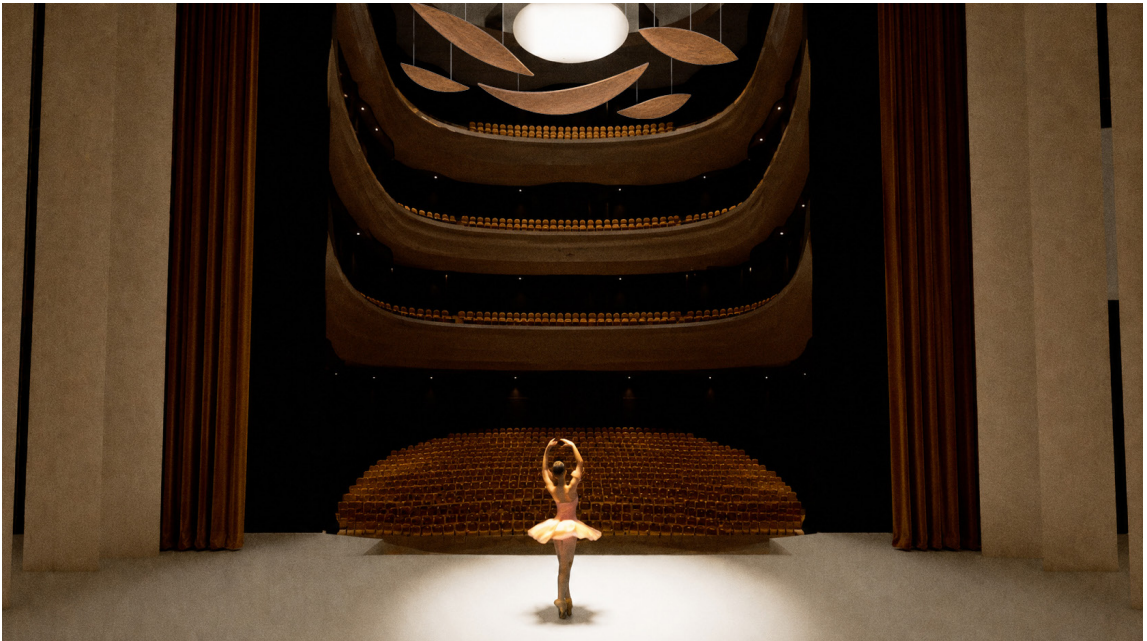
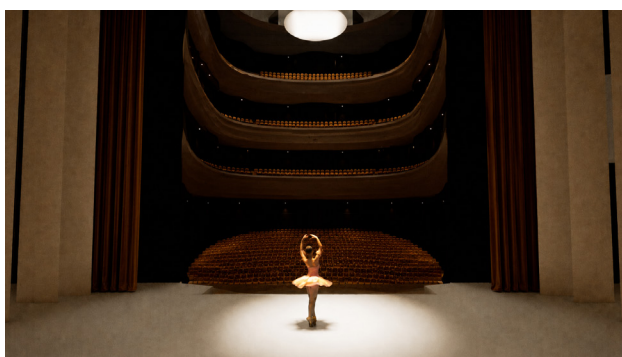


Figure 127 | Render horseshoe hall

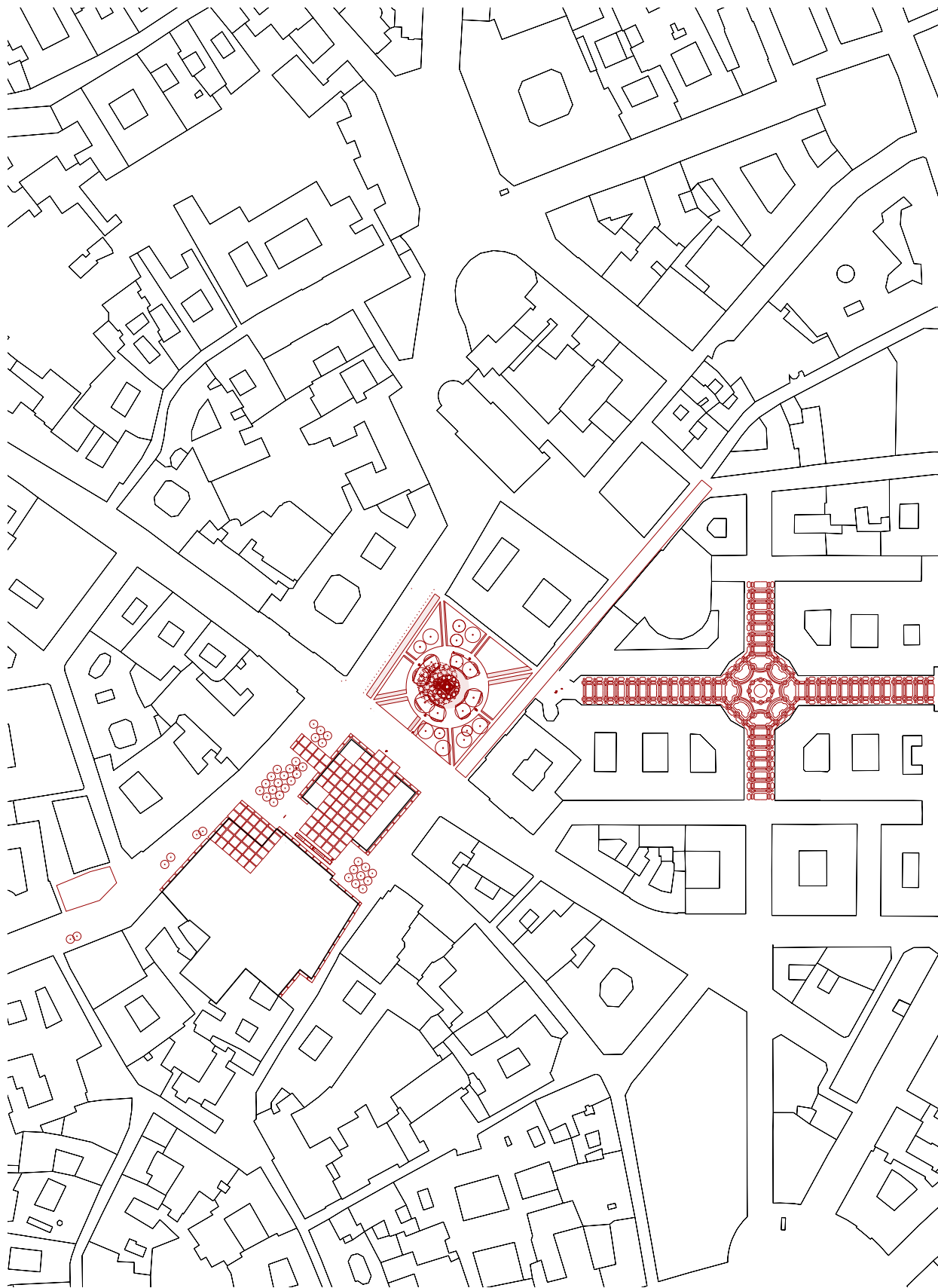


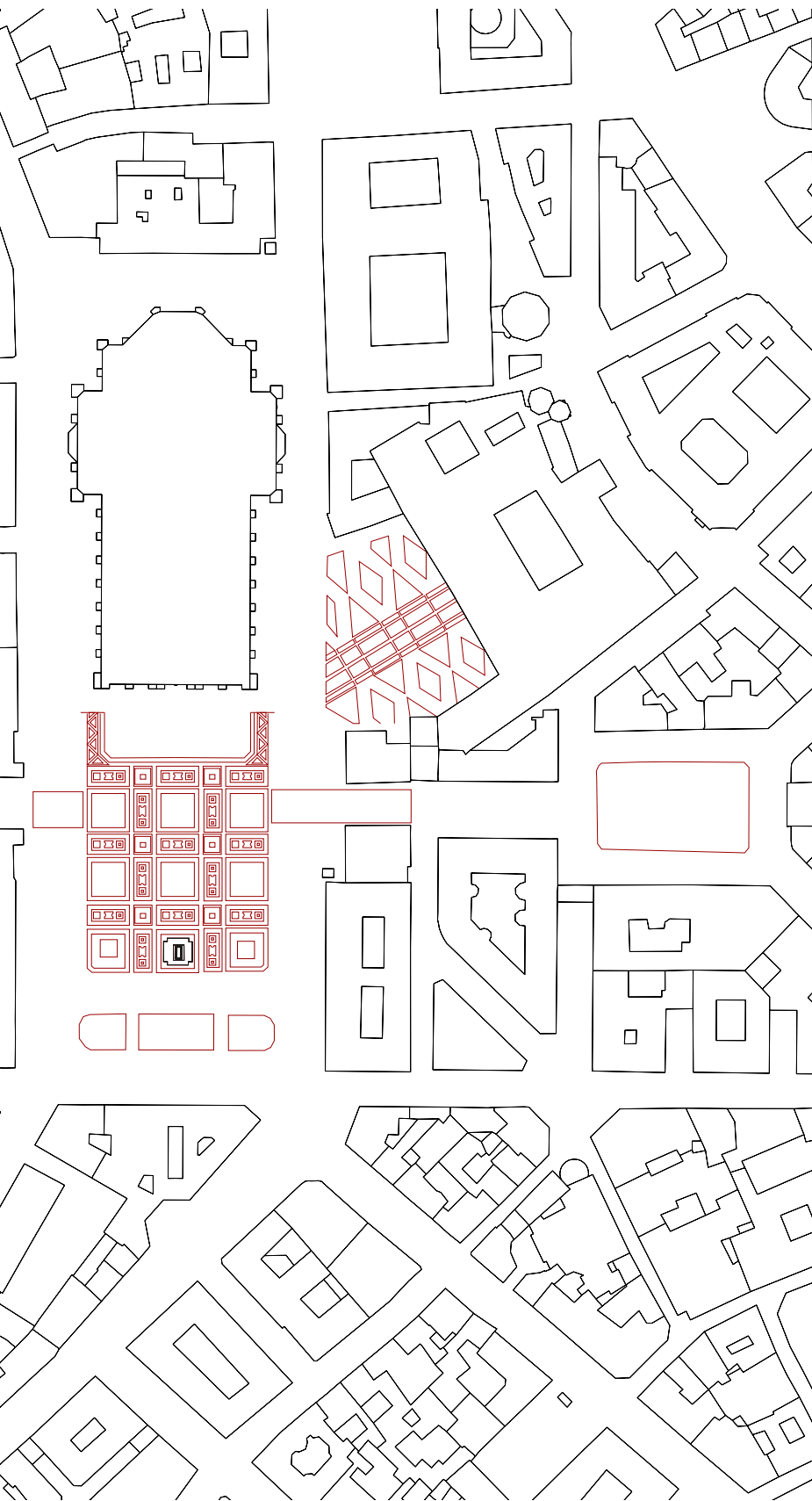


This chapter presents the architectural implementation of the concept. The design is developed through drawings, spatial arrangements, materialisation, construction principles and technical solutions. Plans, sections, elevations, fragments and details are used to explain how the concept is translated into a complete building proposal. Short descriptions accompany the drawings to clarify the spatial organisation, programme, atmosphere and technical logic of the project.



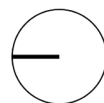
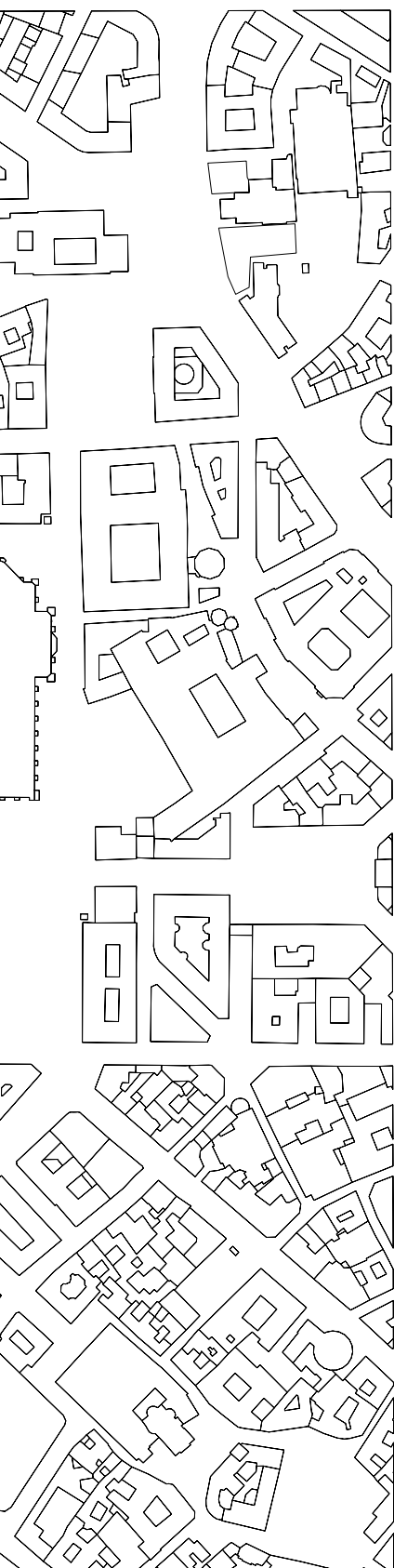






The urban public space plays an important role in this project. Therefore, the pavement pattern that surrounds and defines the Duomo and Galleria is extended towards La Scala. By pedestrianising the area and continuing this urban red carpet, the site becomes more legible and inviting for pedestrians. The grid also continues into the civic palazzo and the café, where it aligns with the architectural and structural logic of the building. In this way, the ground surface, public space and building are read as one coherent urban composition.

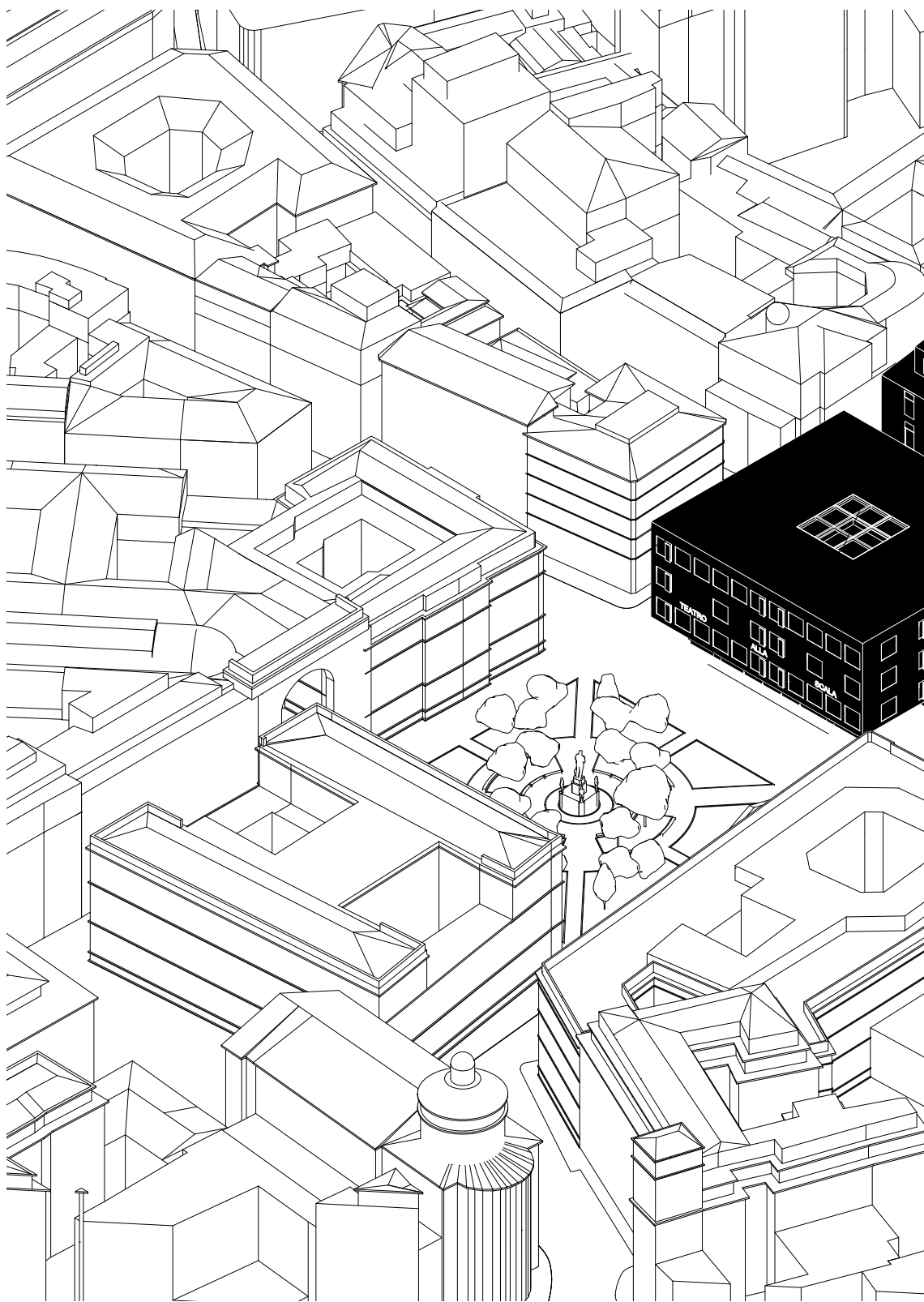


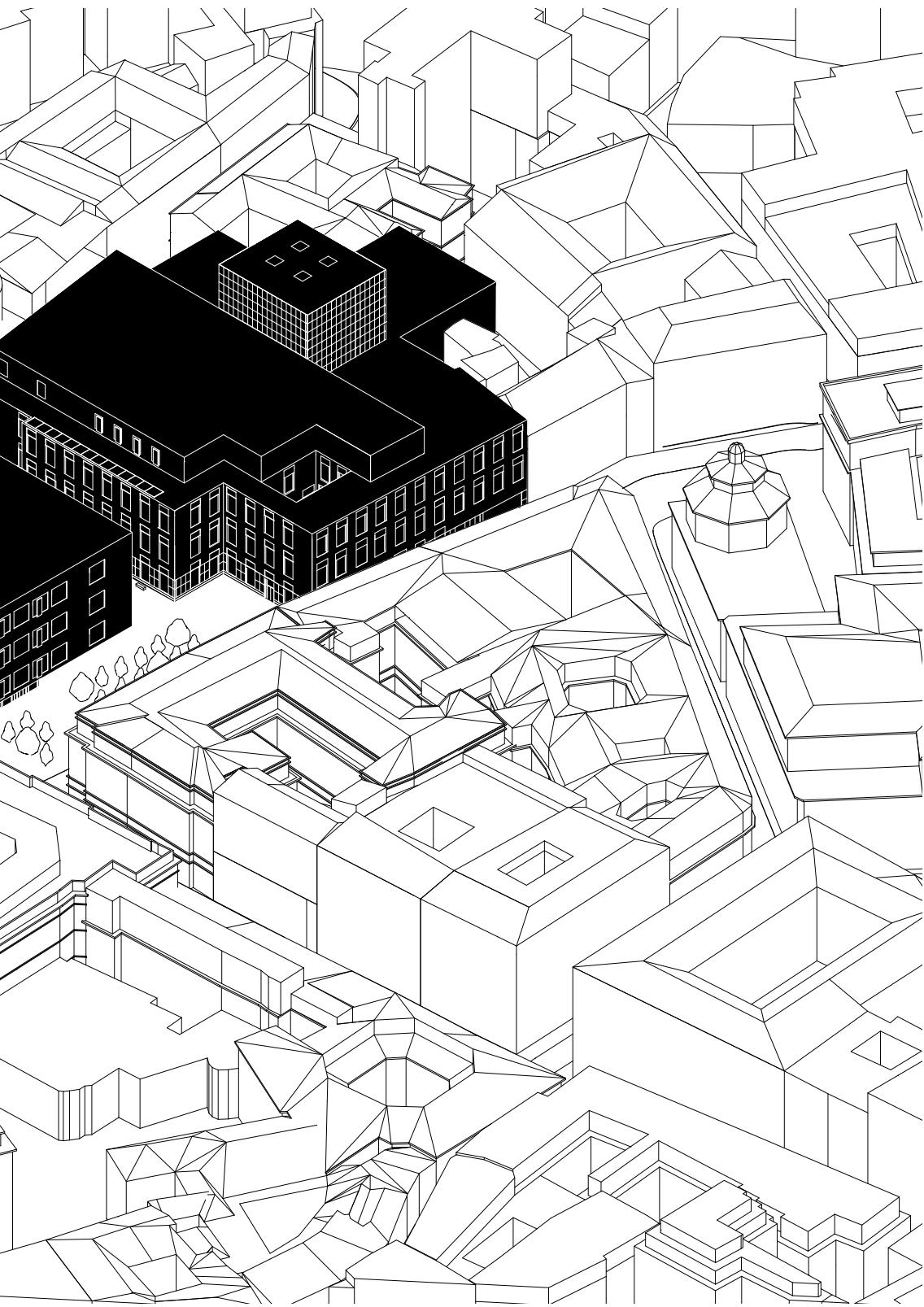


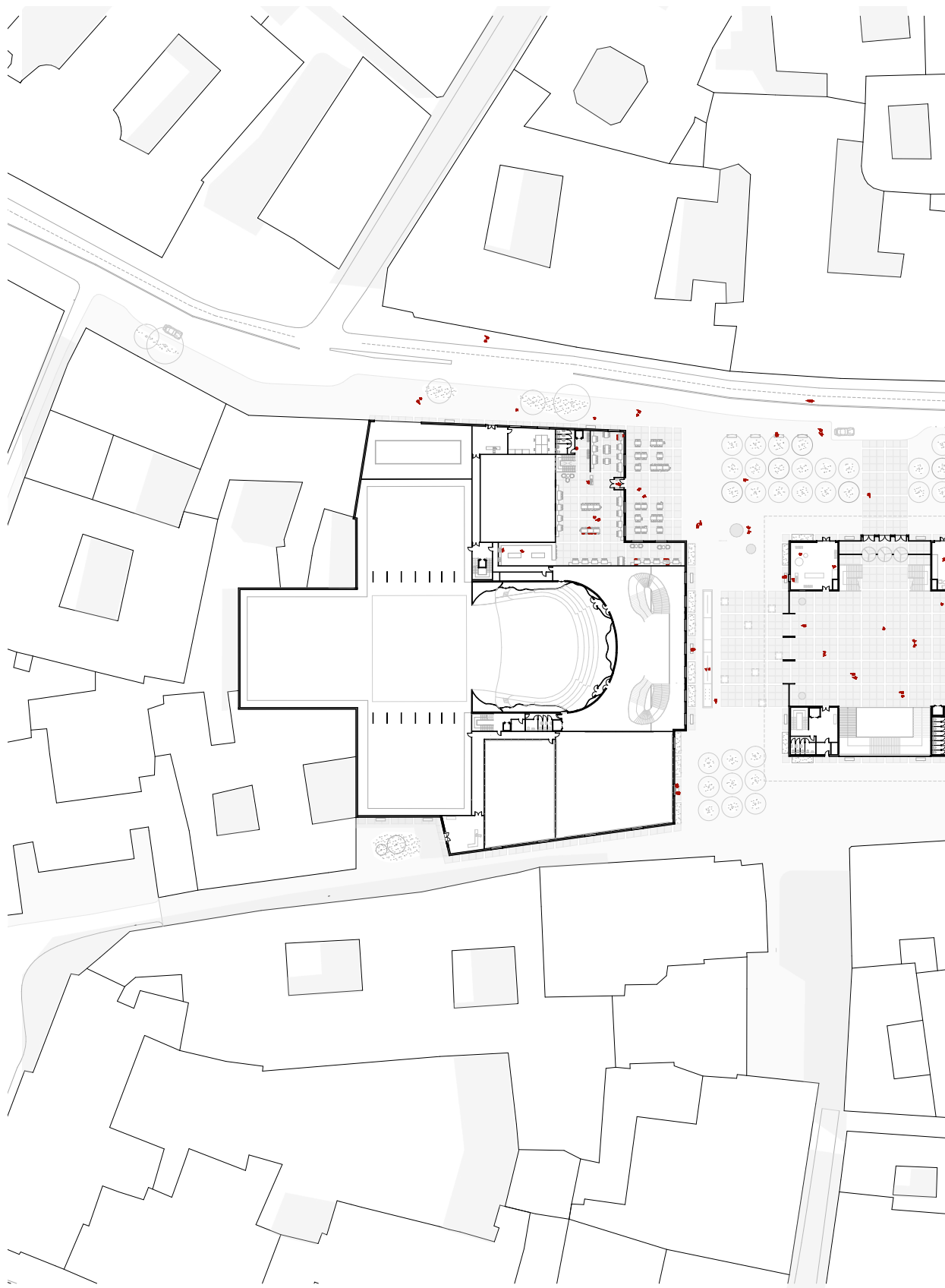
Location of the opera & ballet house within the city fabric

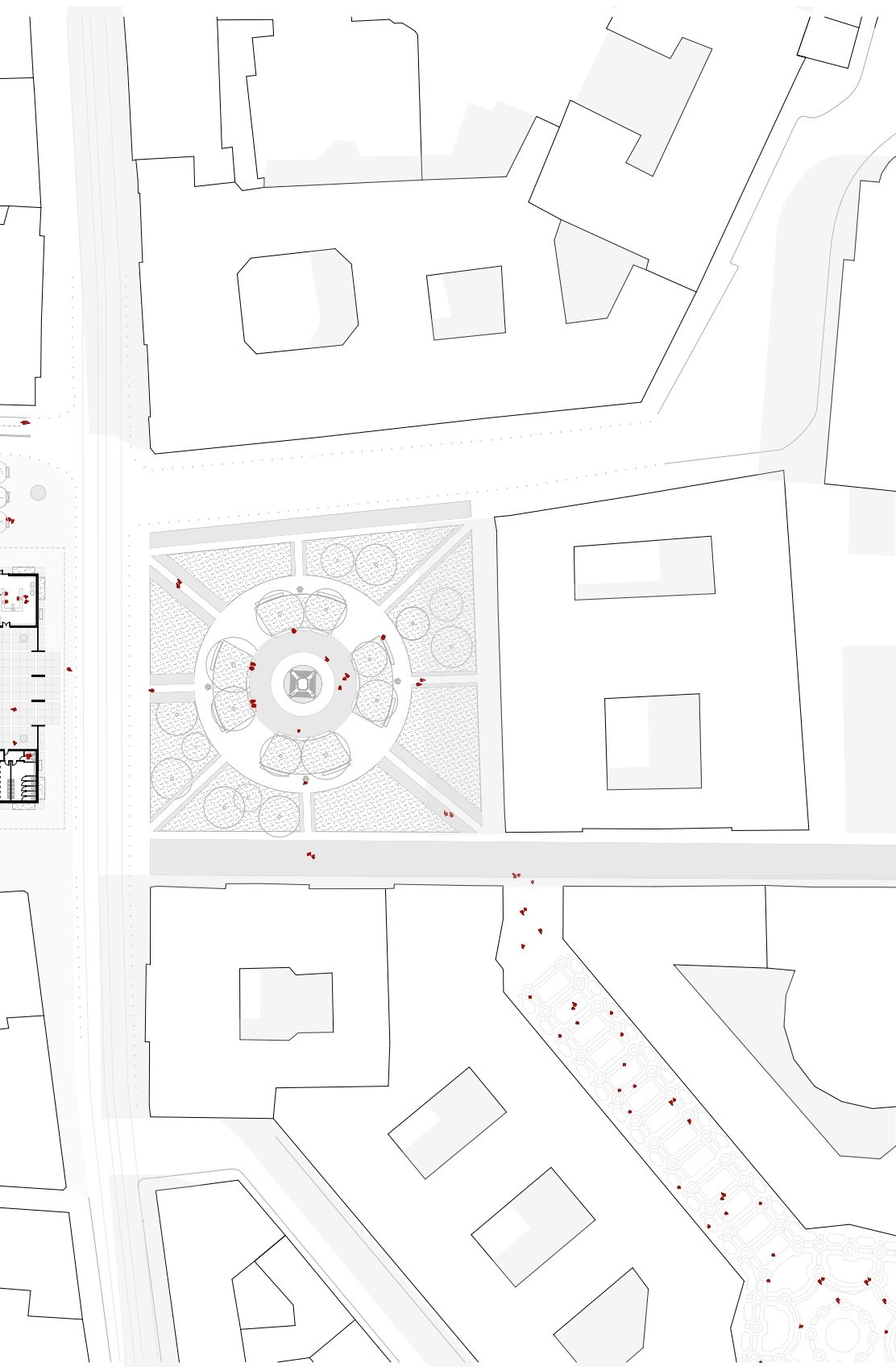








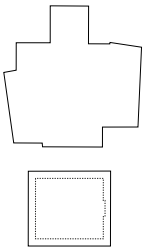
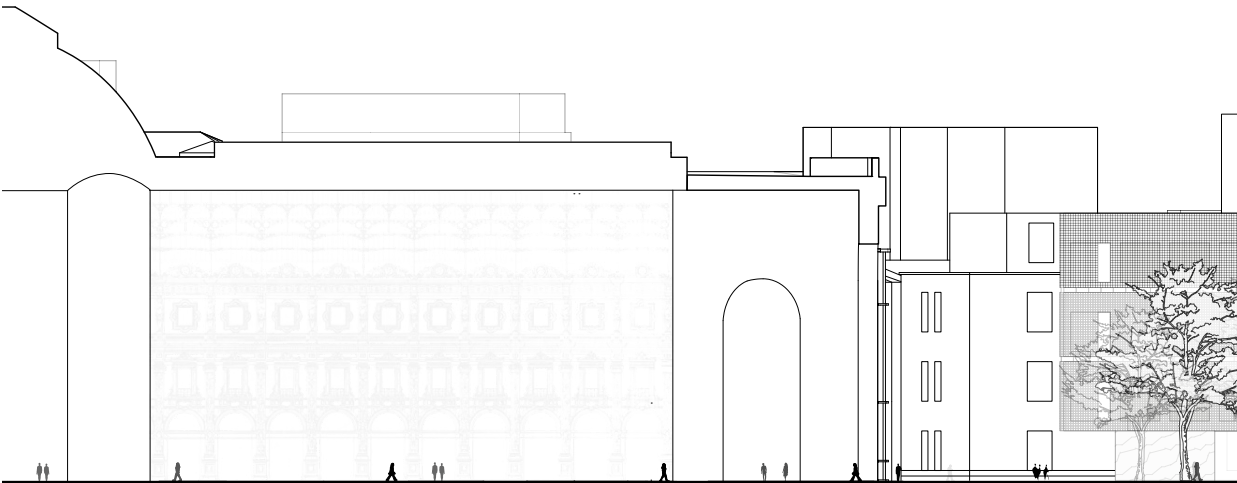


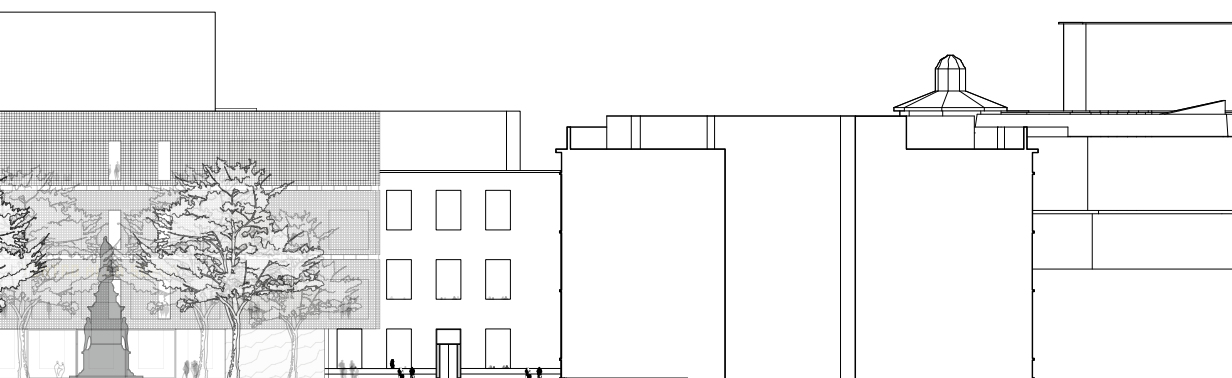


Urban implementation



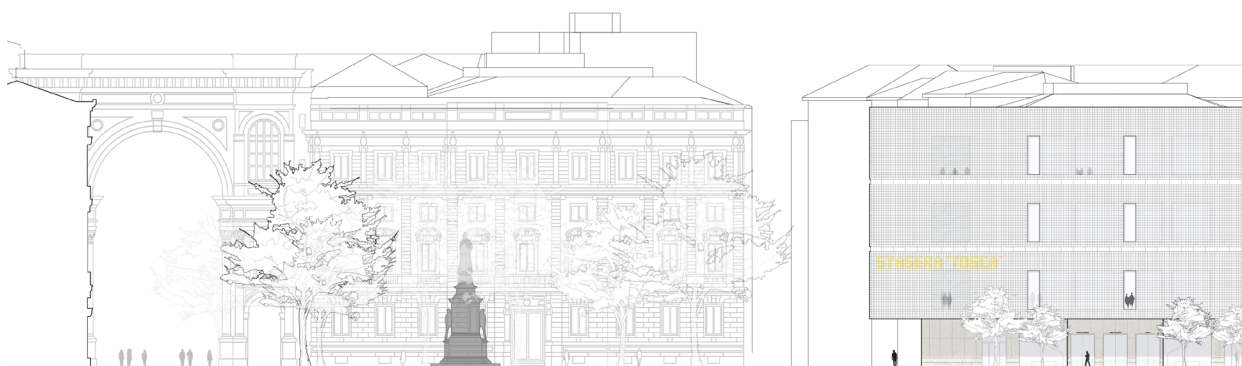
La Scala is primarily approached on foot. Many visitors arrive through the Galleria, making the moment of exit an important first encounter with the new opera house. From this perspective, the glass block façade becomes the first visible element of La Scala, marking the transition from the covered urban passage into the renewed public sequence of the theatre. Its scale relates to the neighbouring buildings, while the glass block façade gives it a more contemporary and public identity.





levation





1

2

3

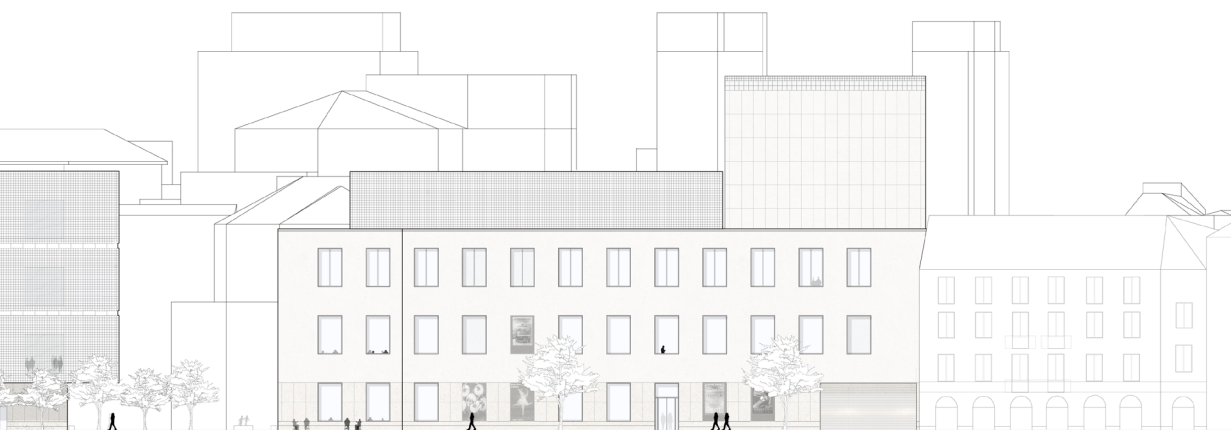
section context

main facade

cross section

The building is based on an urban sequence, the drawings are also made in this order.

north-east

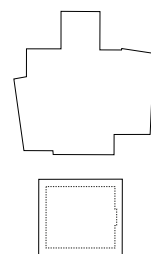


main facade

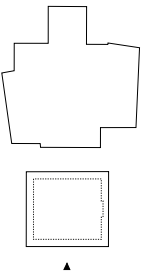
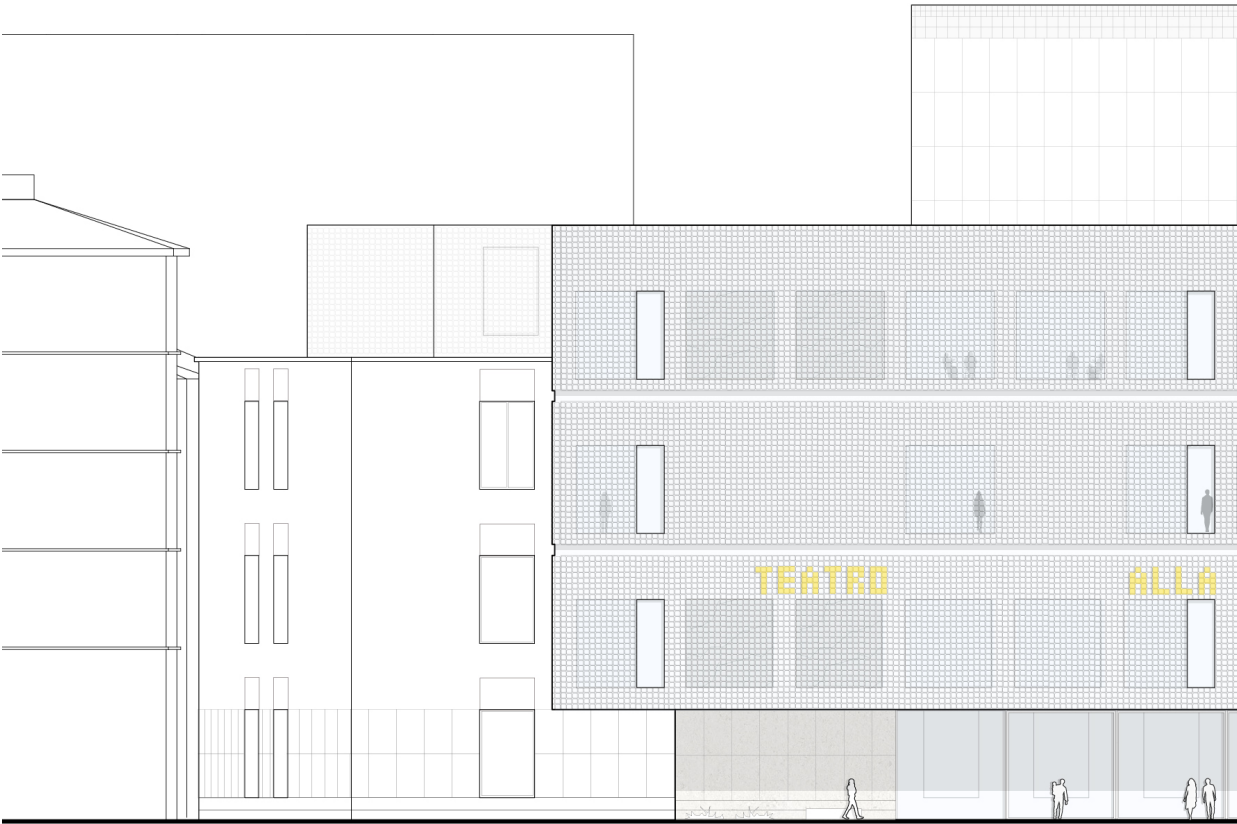
cross section

cross section

st facade



The proportions of the civic palazzo allow it to sit comfortably within the surrounding urban context. The asymmetrical façade openings and the grid structure behind the glass blocks create layered depth. Rather than revealing the interior completely, the building offers partial views, shadows and silhouettes. This filtered visibility invites curiosity and encourages passers-by to look closer, enter and discover the public life

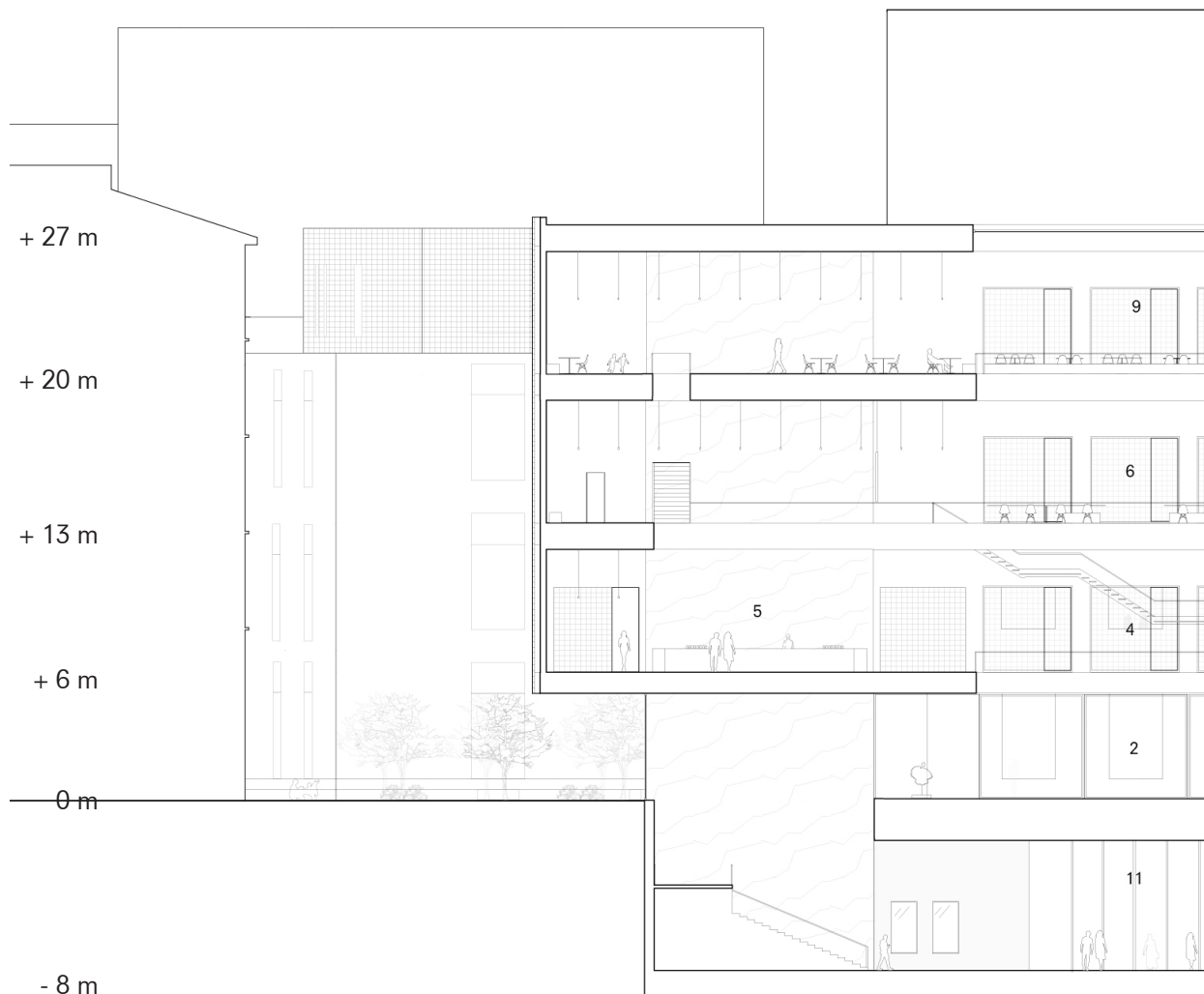


south-east

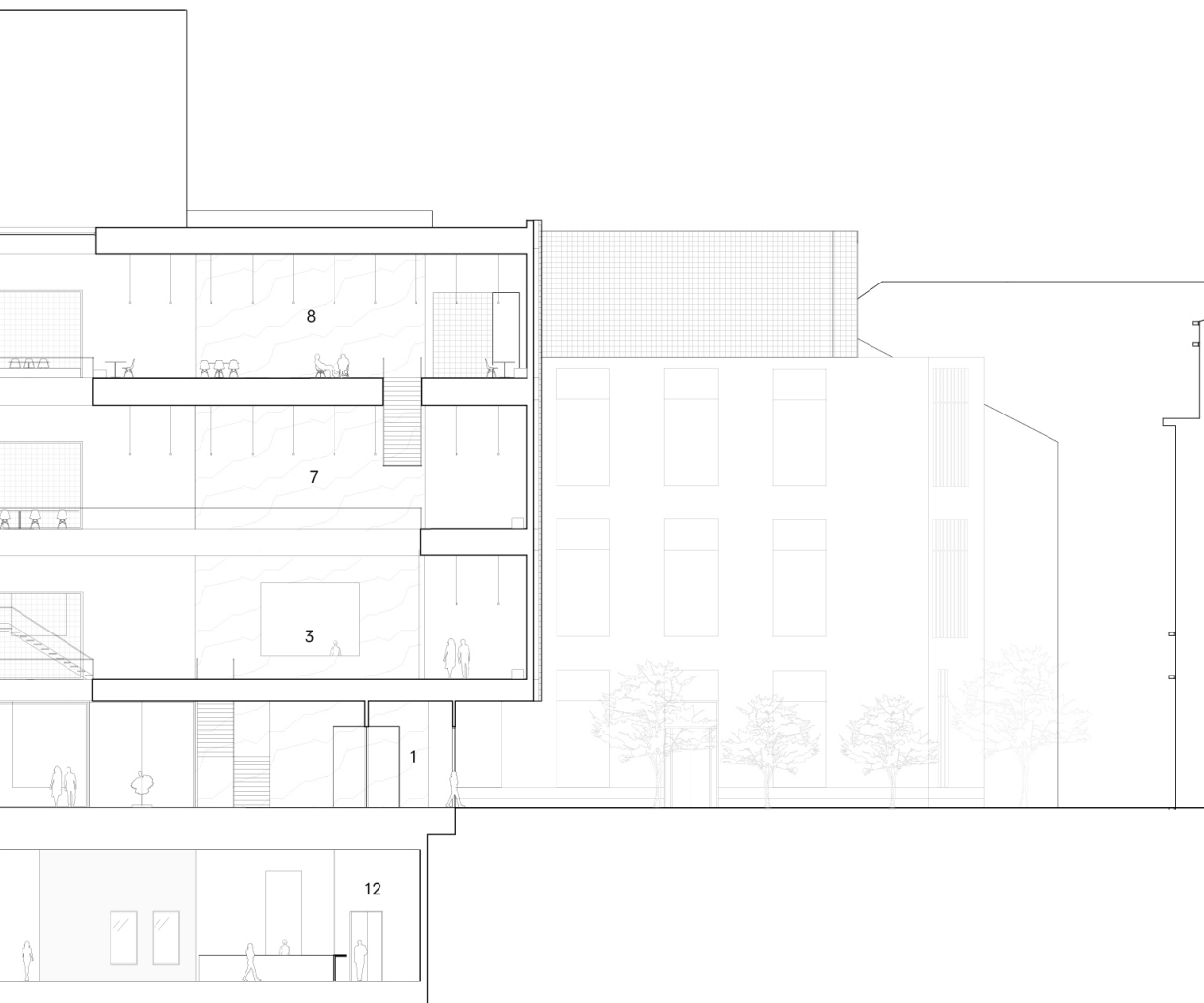


st facade

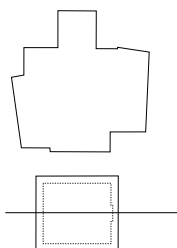


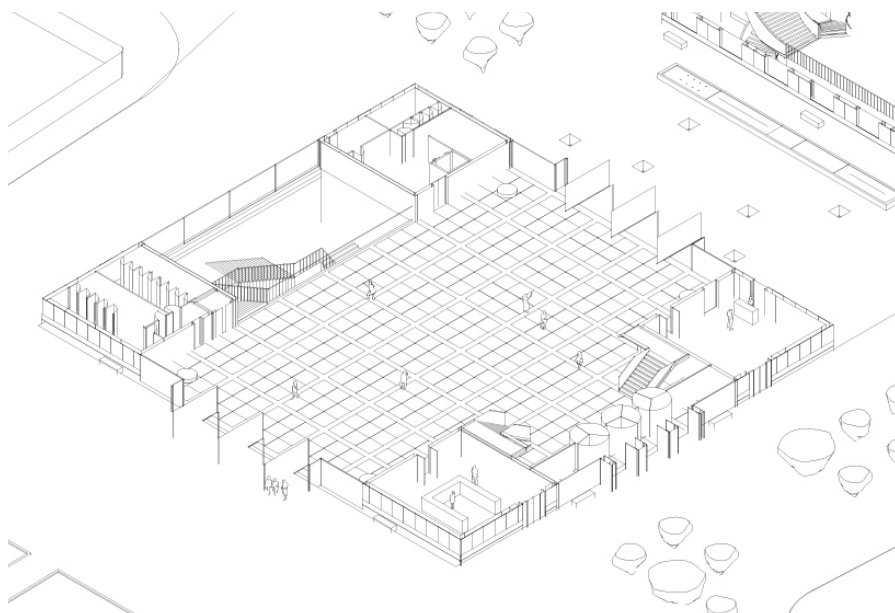


The stairs are integrated into the void as an architectural element, leading the visitor flow through the building. They activate the atrium and create a strong visual connection between the different public levels. The large skylight above the atrium fills the open performance space with daylight, creating an unconventional setting for opera and ballet. This allows performances, rehearsals or public events to take place in a less formal and more accessible atmosphere. A lightweight truss structure can be used to support temporary scenery, lighting or spatial installations, making the atrium adaptable for different types of cultural events.

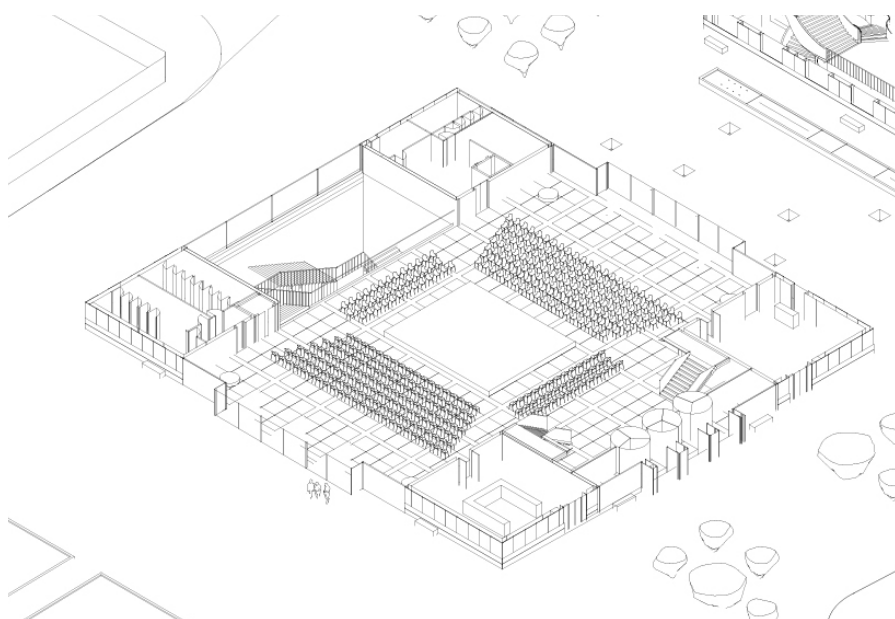


1. Official entrance
2. Open stage
3. Cloakroom
4. Atrium
5. Foyer/bar
6. Museum
7. Staff core
8. Creative workshop
9. Restaurant
10. Multifunctional space (pre performance talks, gathering space, working space)
11. Grand foyer
12. Cloakroom





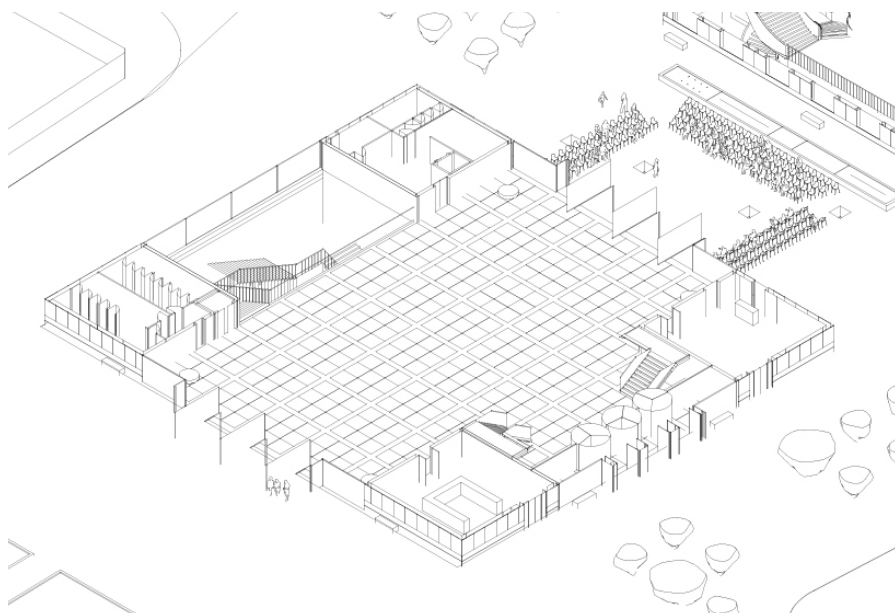
passage and urban square



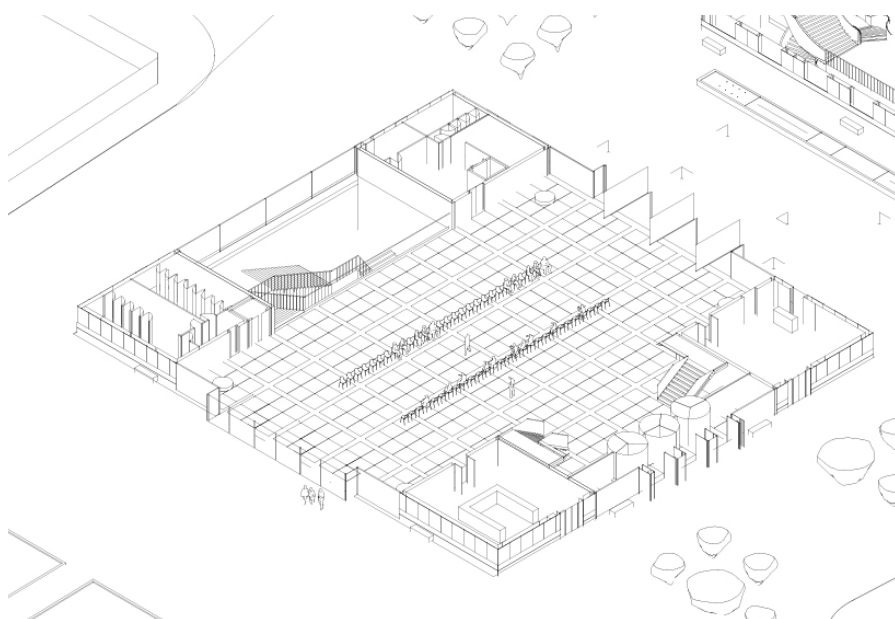
performance atrium

Openable pivot doors, together with the continuous pavement grid, embed the ground floor within the surrounding public space. During the day, the building begins to dissolve into the pedestrianised area, allowing the boundary between city and interior to become more fluid. In the evening, when the opera house needs to operate as an organised flow machine, these doors can be closed and the main entrance becomes the primary point of orientation, control and audience circulation.

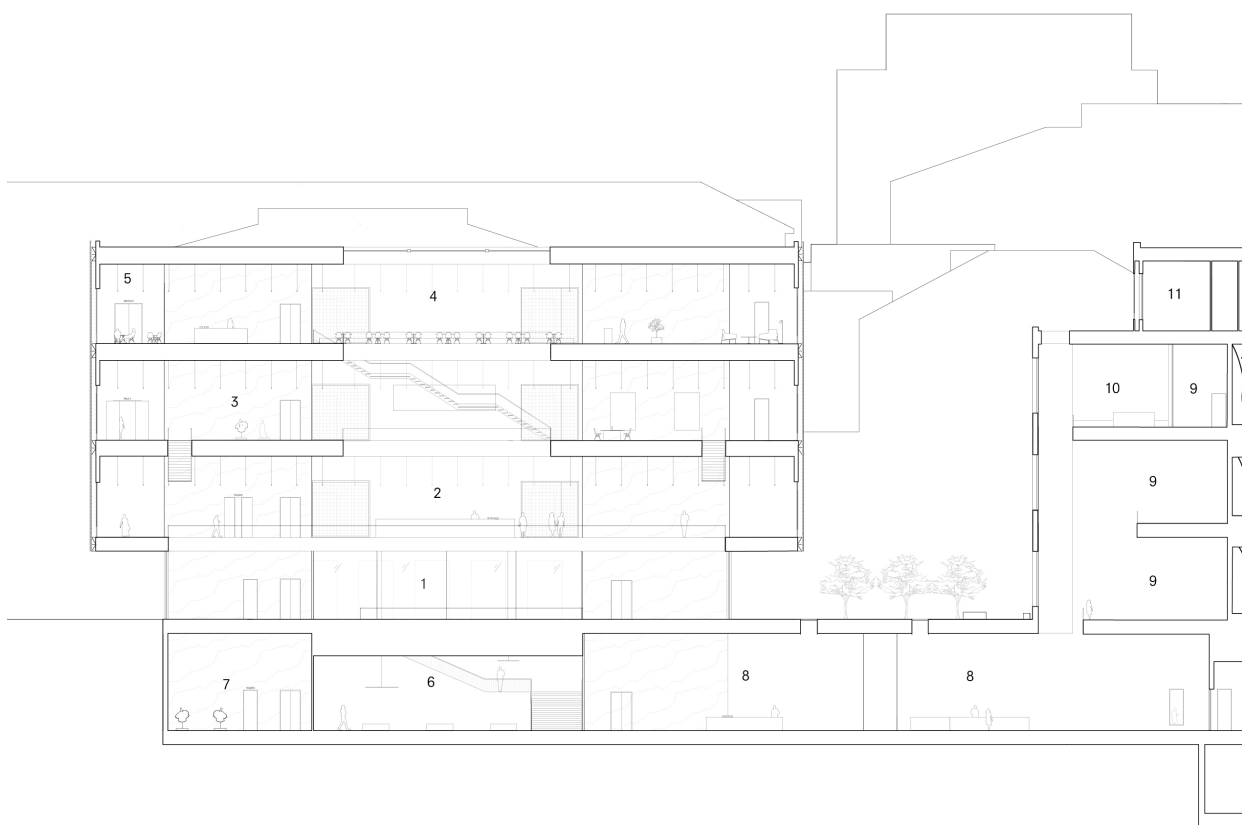
hybrid use of



outside performance

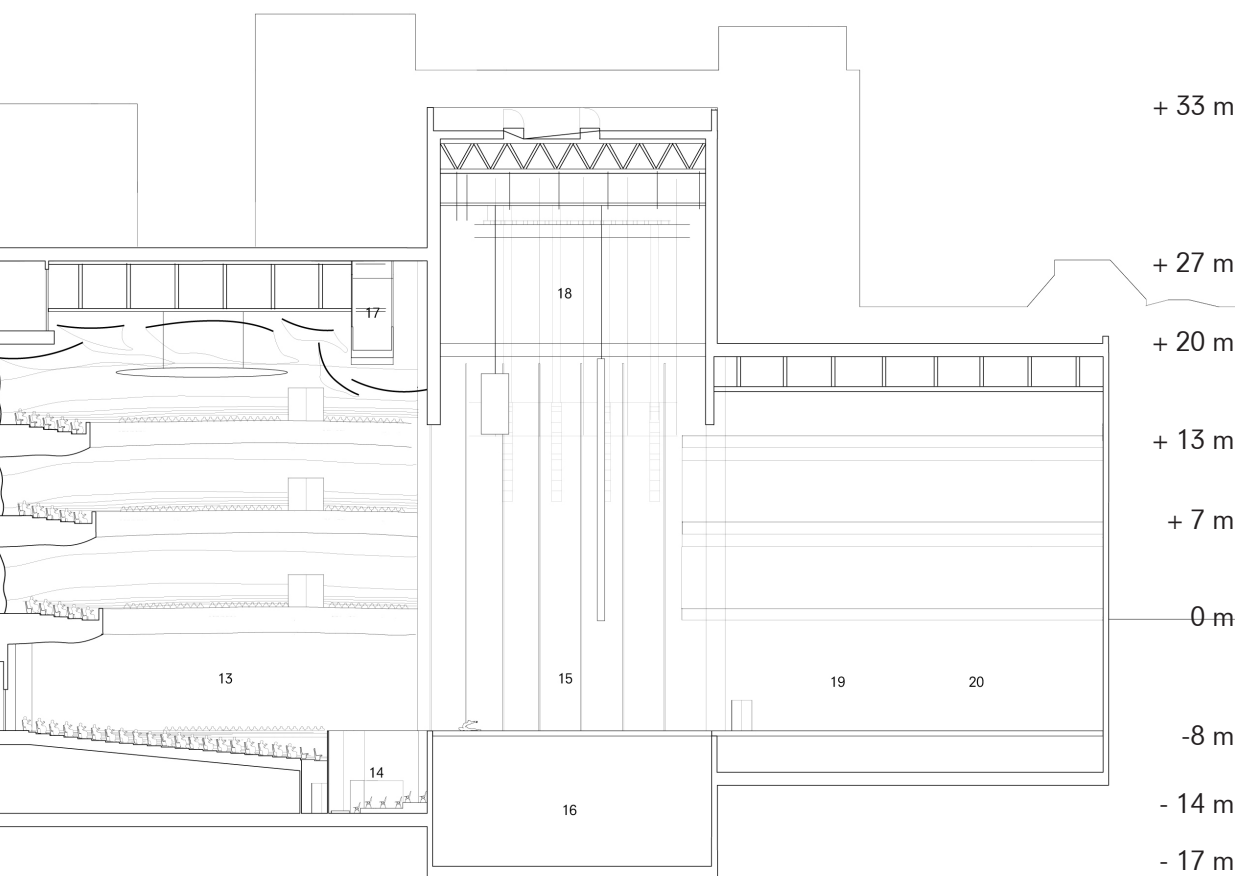


fashion week

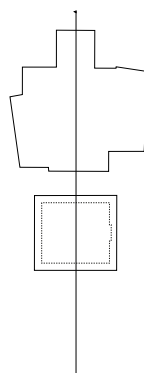


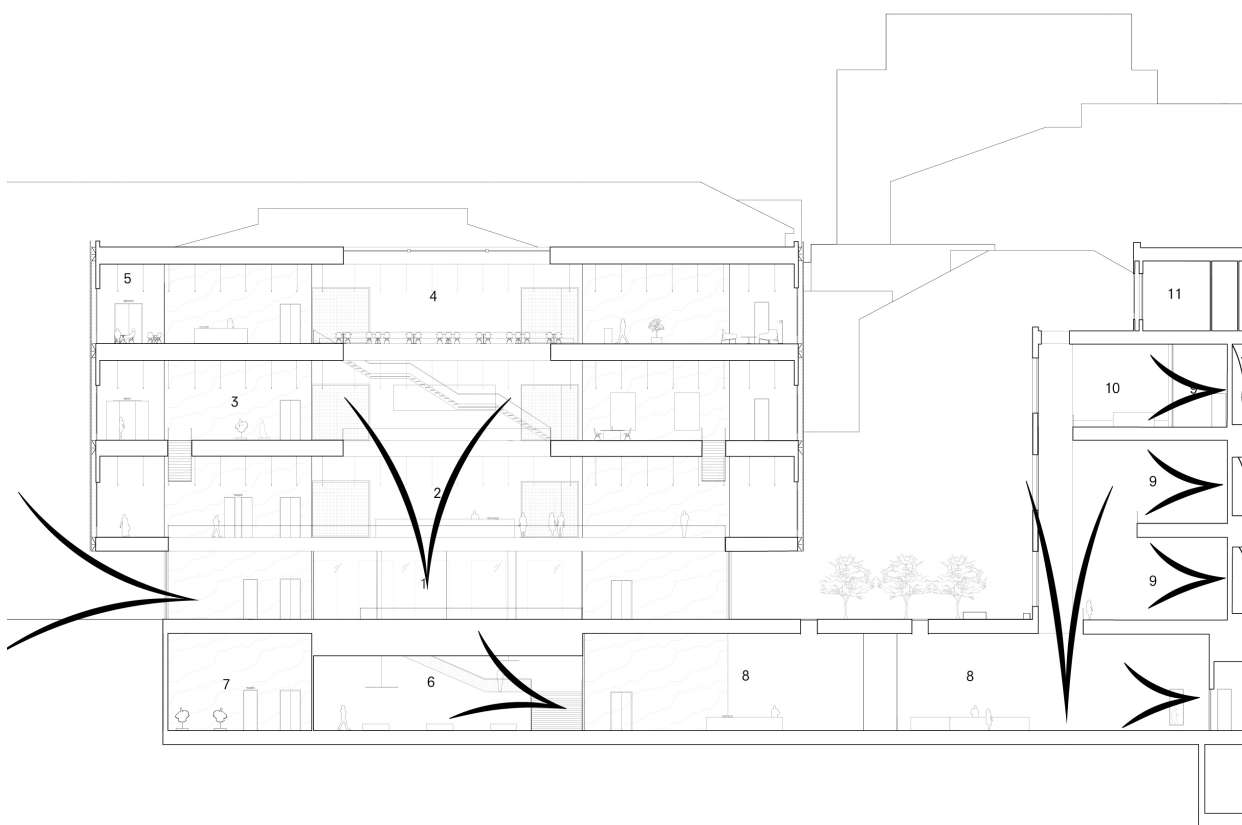
The longitudinal section shows the underground connection between the two buildings. It reveals how the civic palazzo and the theatre block are spatially linked, and how the relationship between both façades is shaped. The auditorium is designed with more rounded and fluid forms, creating a deliberate contrast with the rigid and orthogonal structure of the civic palazzo. This contrast gives the performance spaces their own atmospheric identity, while still allowing them to function as part of one architectural language.

longitudin



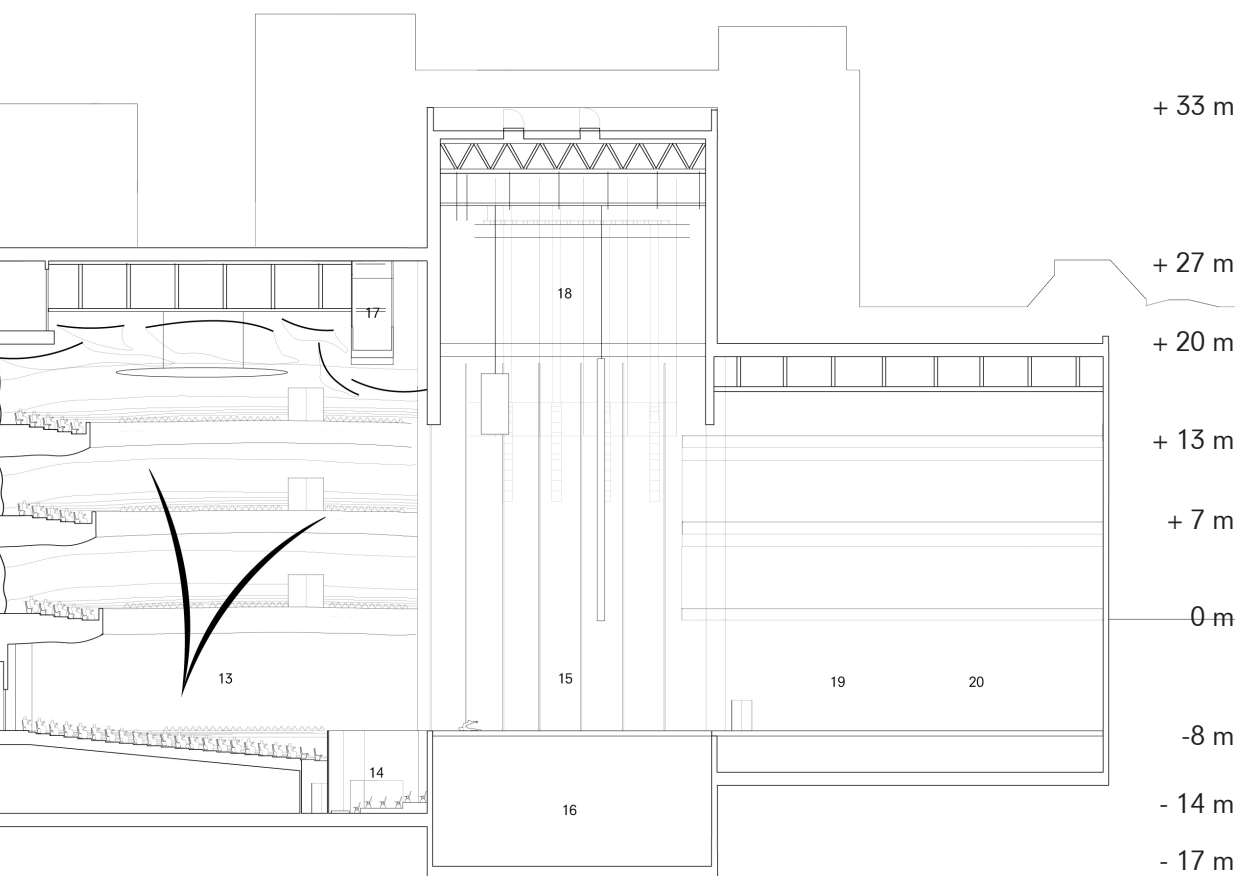
1. Open stage
2. Foyer with cloakrooms and toilets
3. Museum
4. Restaurant
5. Archives (publicly accessible)
6. Multifunctional space (pre performance talks, gathering space, working space)
7. Costume exhibition
8. Bar
9. Foyer balconies
10. Staff restaurant
11. Treatment room
12. Technical gallery
13. Horseshoe hall
14. Orchestra pit
15. Stage
16. Scenic pit
17. Followspot operator
18. Fly tower
19. Rear stage
20. Scene assembly



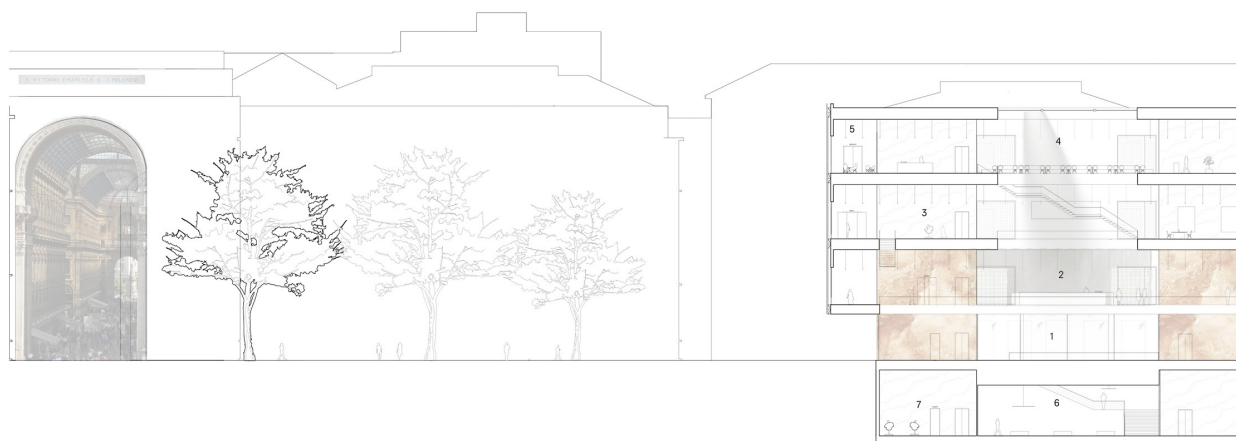


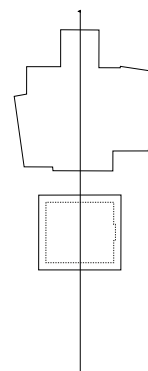
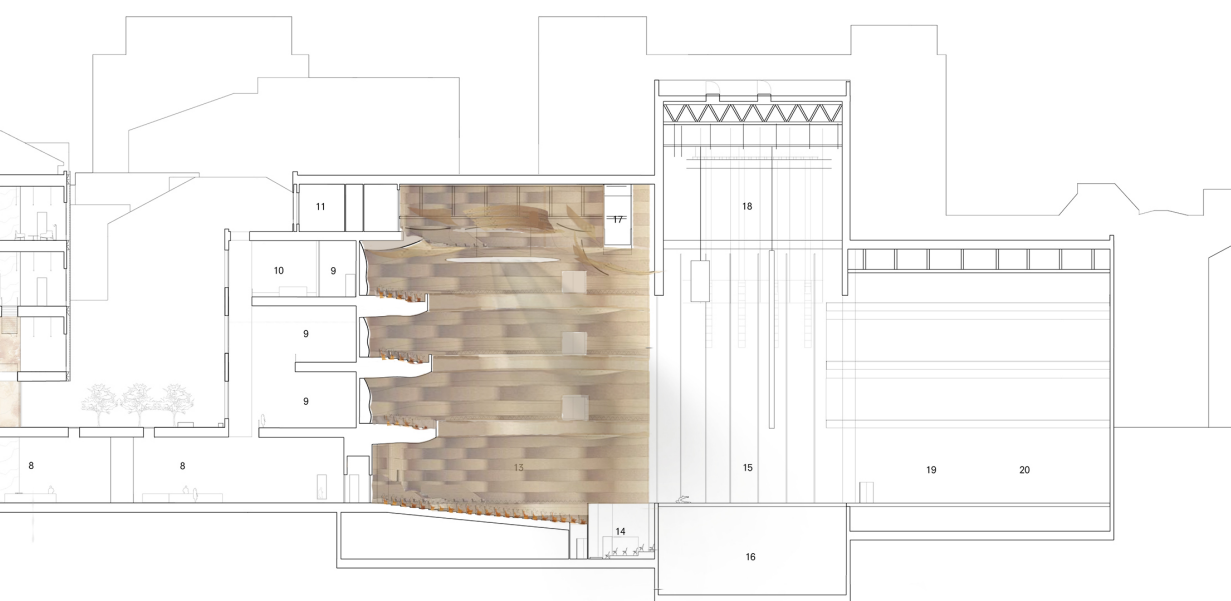
Compression and decompression of space is used as a design tool to play with height, intimacy and spatial intensity, preparing and surprising visitors before they enter the performance hall. This gives the route a choreographed rhythm, where narrower and lower moments create focus, while larger and taller spaces release tension and heighten the sense of arrival.

compression/c

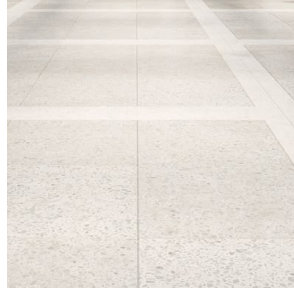


1. Open stage
2. Foyer with cloakrooms and toilets
3. Museum
4. Restaurant
5. Archives (publicly accessible)
6. Multifunctional space (pre performance talks, gathering space, working space)
7. Costume exhibition
8. Bar
9. Foyer balconies
10. Staff restaurant
11. Treatment room
12. Technical gallery
13. Horseshoe hall
14. Orchestra pit
15. Stage
16. Scenic pit
17. Followspot operator
18. Fly tower
19. Rear stage
20. Scene assembly





open stage



grid floor
terrazzo tiles



cores
onyx tiles

foyer 1/museum/restaurant



walls
glass blocks

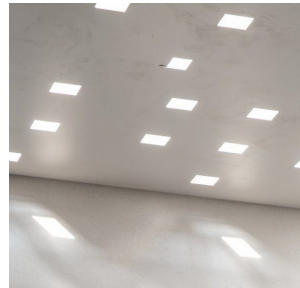


cores
onyx tiles

grand foyer

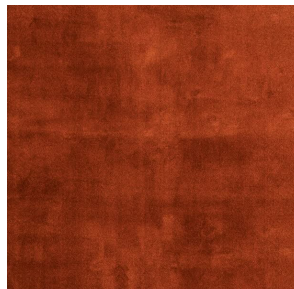


doors and floor

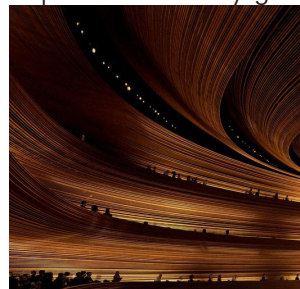


ceiling
plastered with skylights

horseshoe hall



chairs
burnt orange velvet



wall, ceiling, railings
walnut oak (veneer)

material



chairs open stage



ceiling
perforated acoustic panel



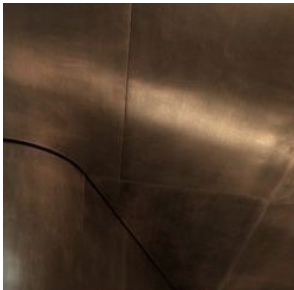
ceiling & railings
aluminium and glass



oculus
light element



stairs



auditorium exterior
plastered with skylights



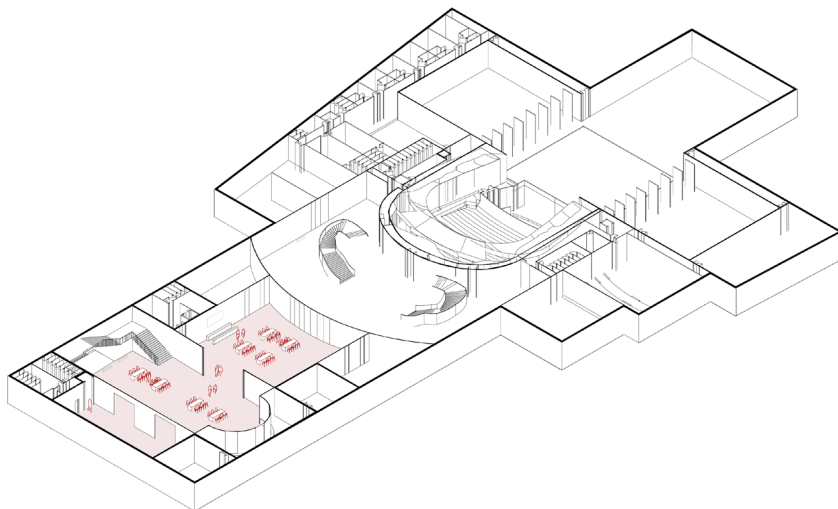
carpeting
light element



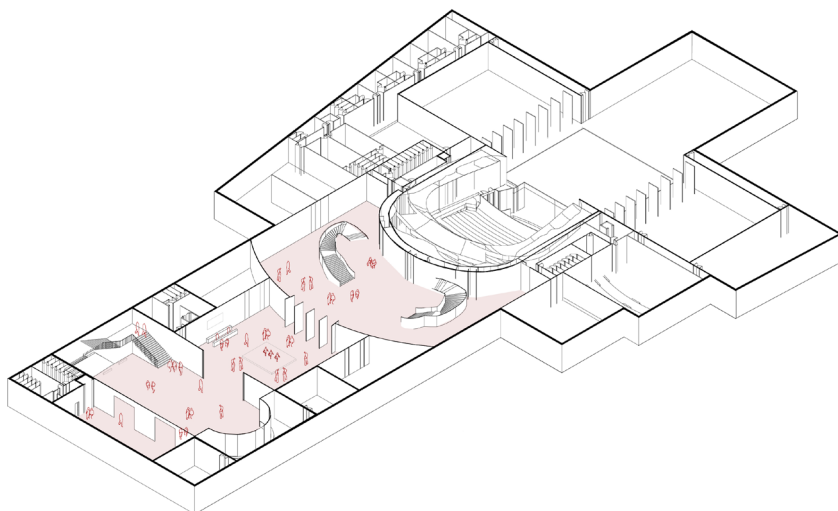
oculus
light element



gradual shift towards
warmer materials



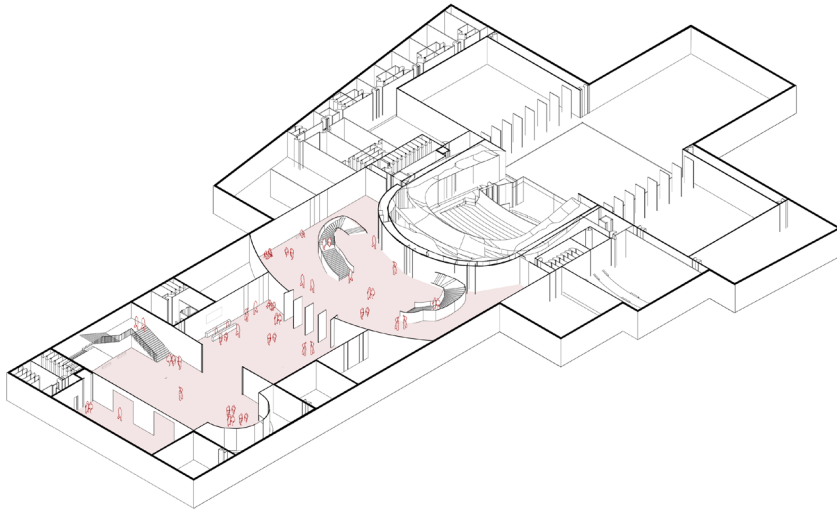
daily use



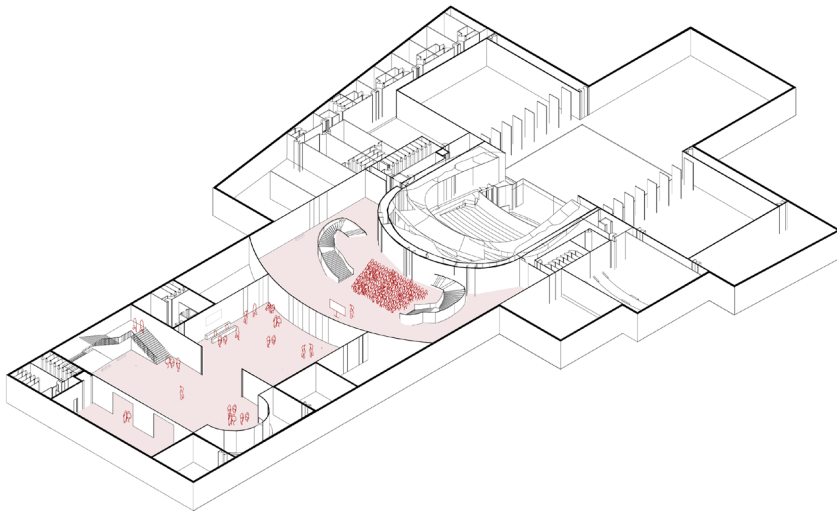
event

The -1 grand foyer is designed for multiple forms of use. It can be divided in the middle, allowing it to operate as two independent spaces. One side remains connected to the back-of-house areas of the theatre block, supporting preparations for the evening performance. The other side can function separately as an event space, working area, or early foyer zone during pre-performance talks. In this way, the grand foyer is not only a circulation space, but a flexible public interior that can adapt to different moments of the day.

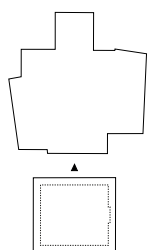
hybrid



intermission show



pre-show talk



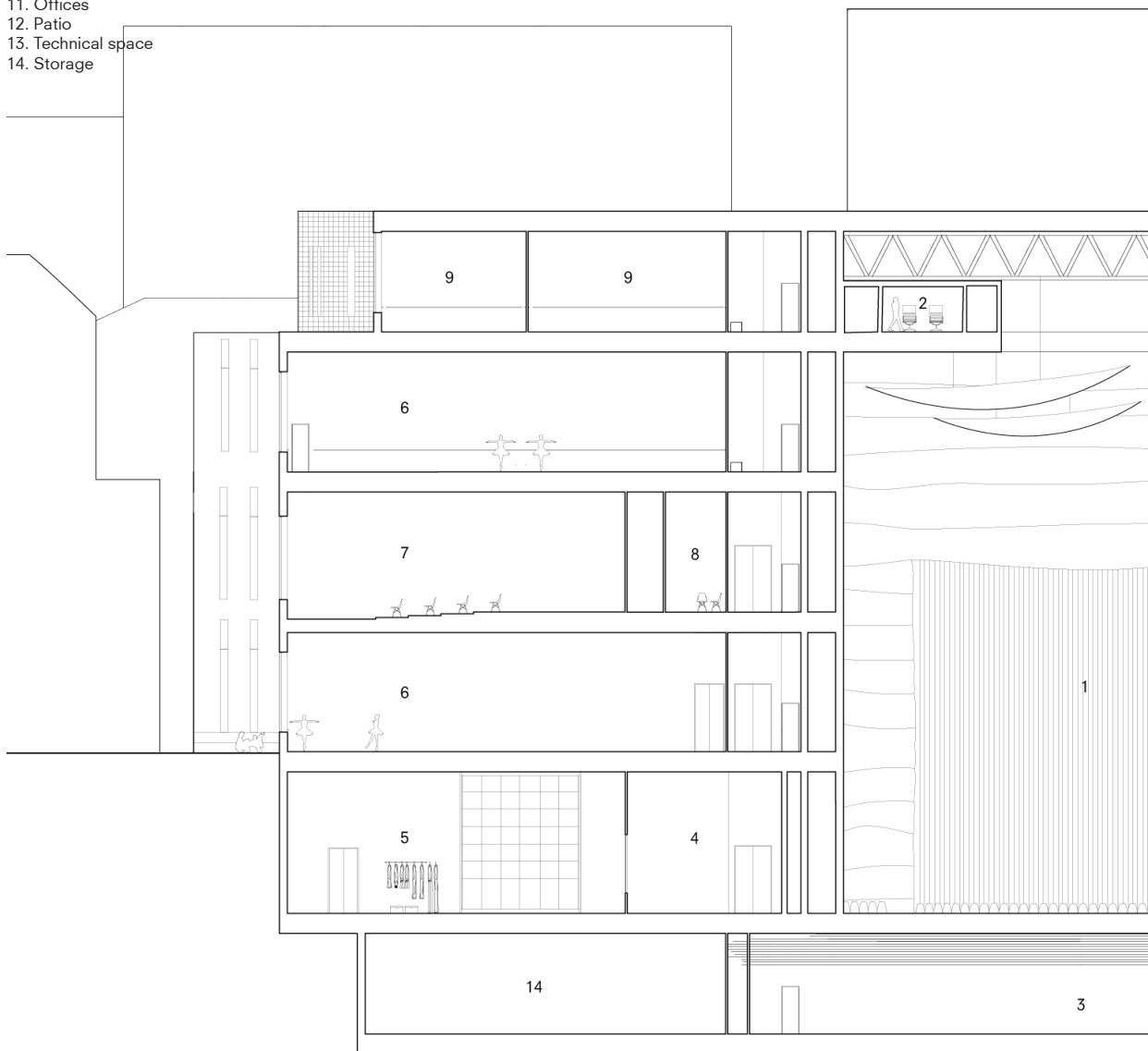
south-east



st facade

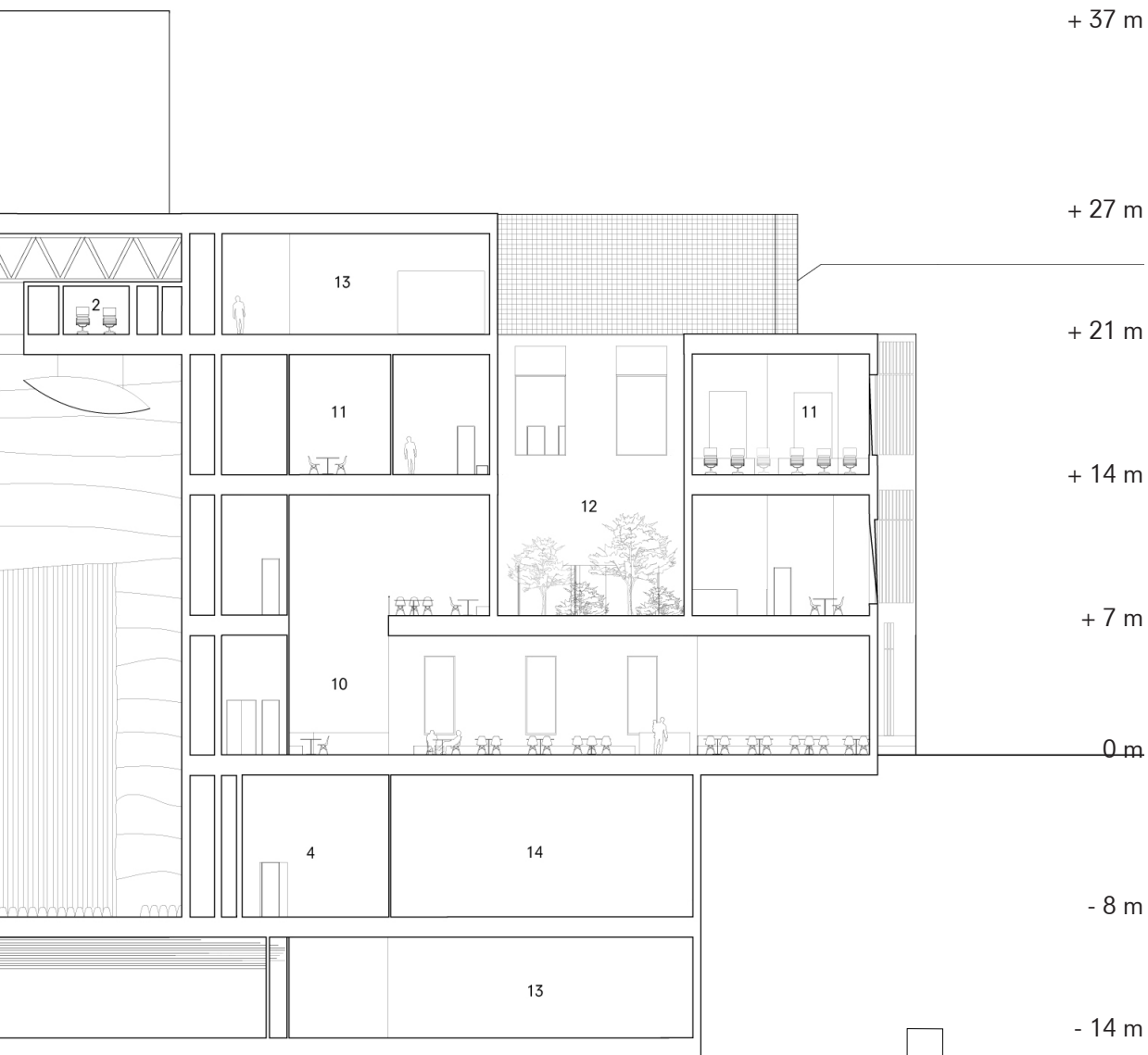


1. Horseshoe hall
2. Technical gallery
3. Under-auditorium space
4. Foyer
5. Costume atelier
6. Ballet rehearsal room
7. Choir rehearsal room
8. Individual rehearsal room
9. Warm-up studio's
10. Cafe
11. Offices
12. Patio
13. Technical space
14. Storage



Staff circulation is organised along both sides of the auditorium, with crossing points on levels -1 and 3 to support efficient movement between technical, rehearsal and production areas. The auditorium itself is enclosed by a double wall construction to provide the required acoustic separation from the surrounding programme.

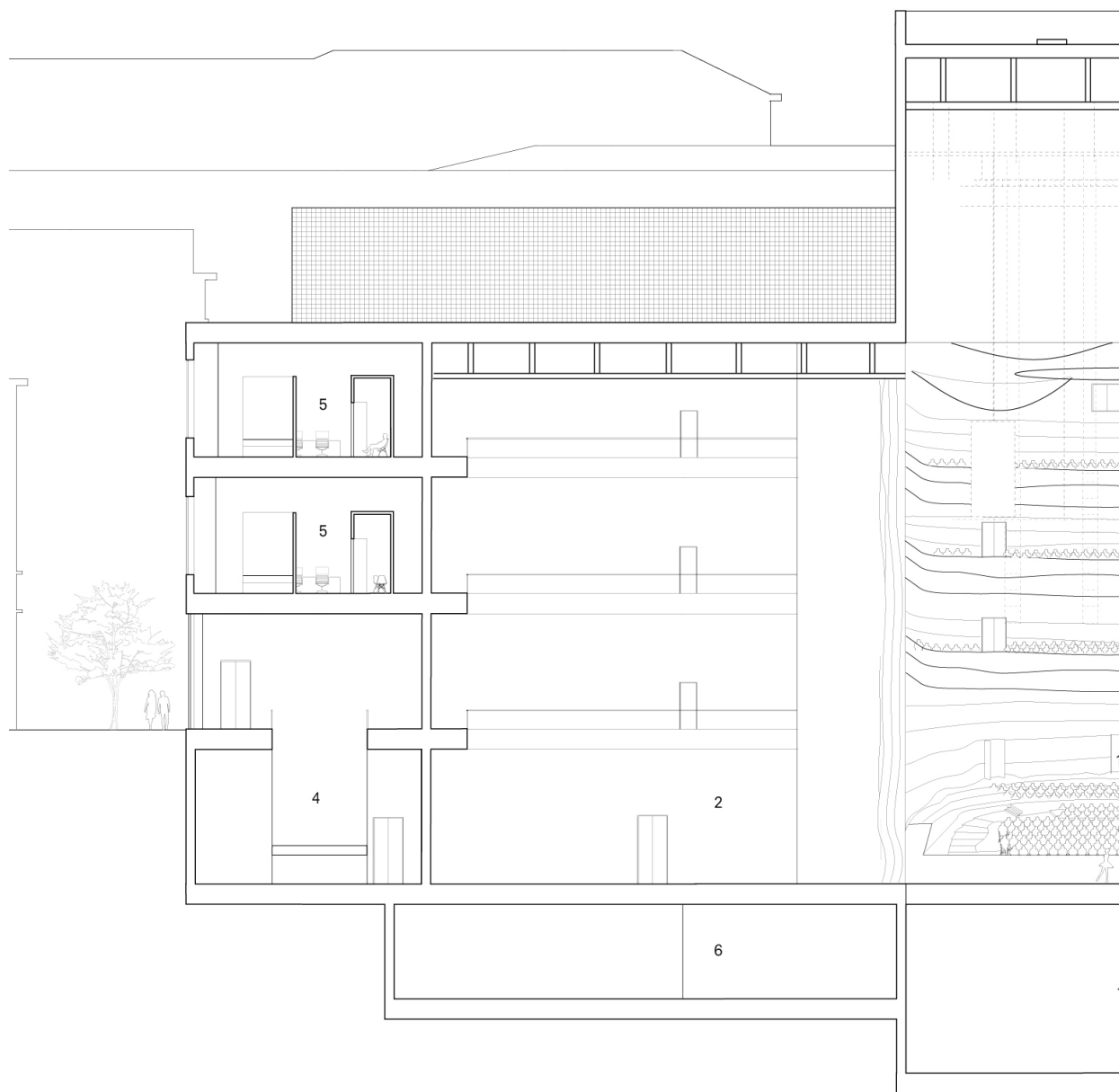
cross-s

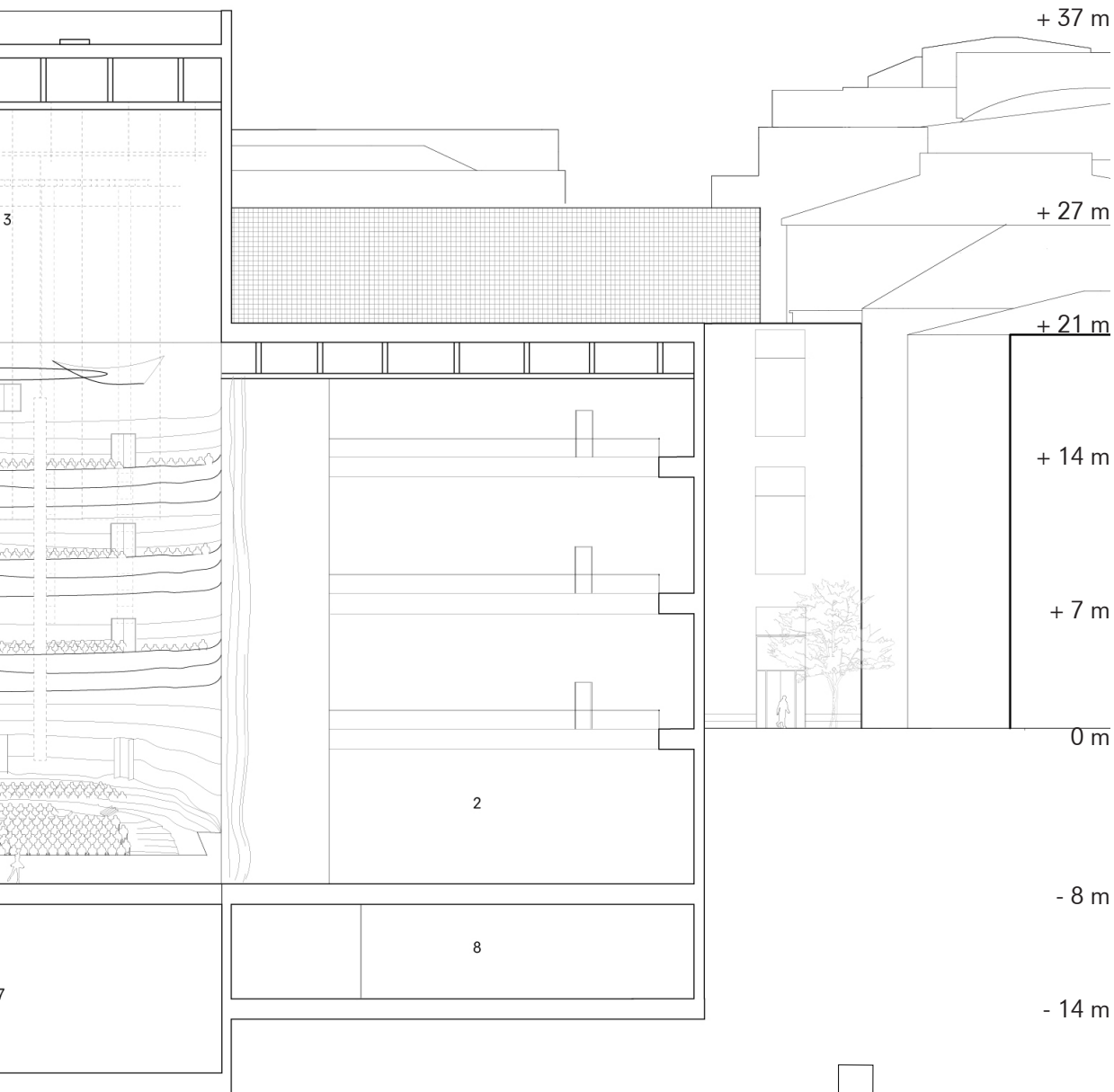


section



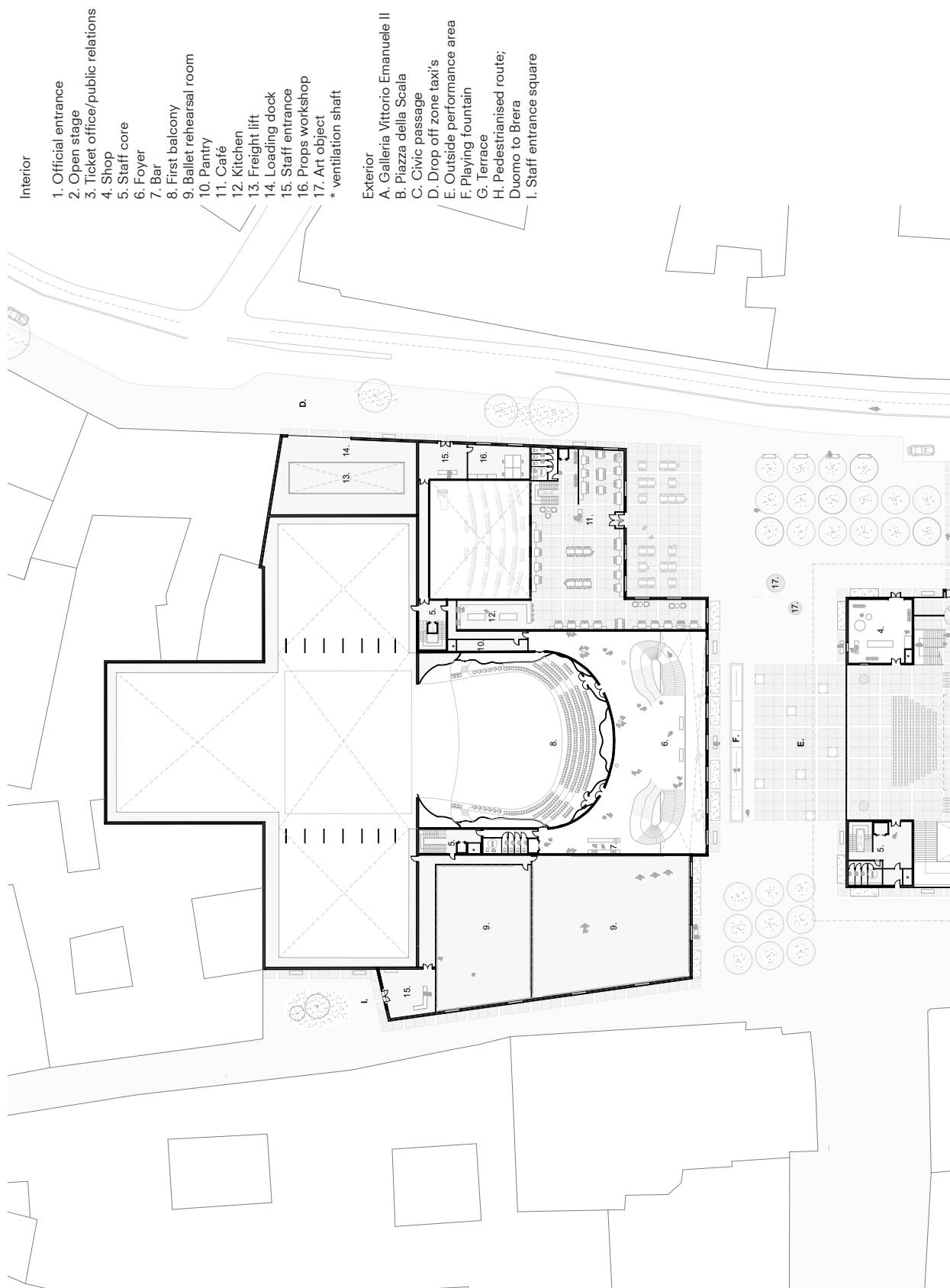
1. Horseshoe hall
2. Side stage
3. Fly tower
4. Loading dock
5. Offices
6. Technical space
7. Scenic pit





section

0 2 10 25 m

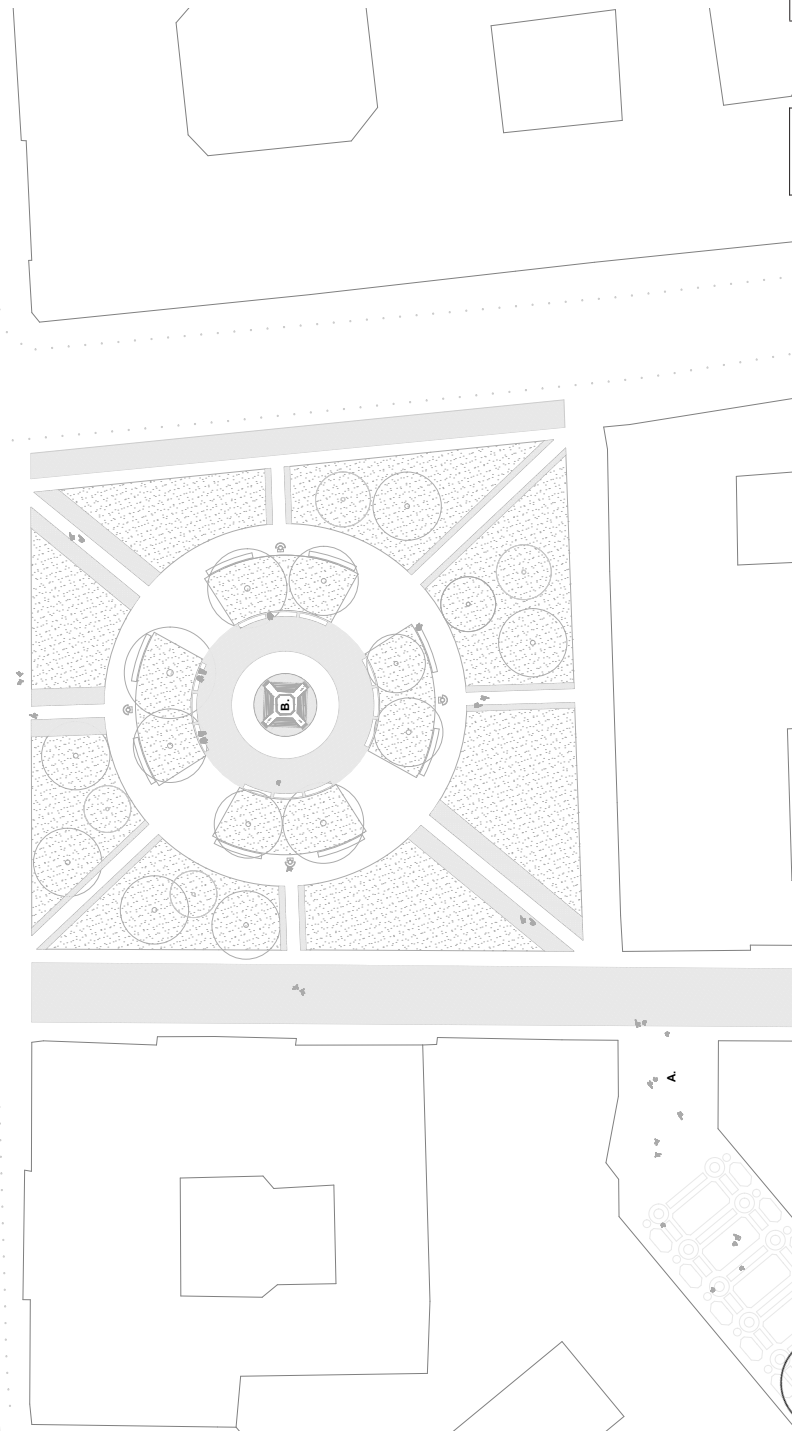
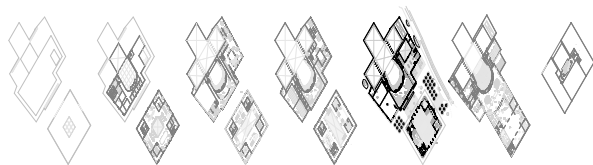
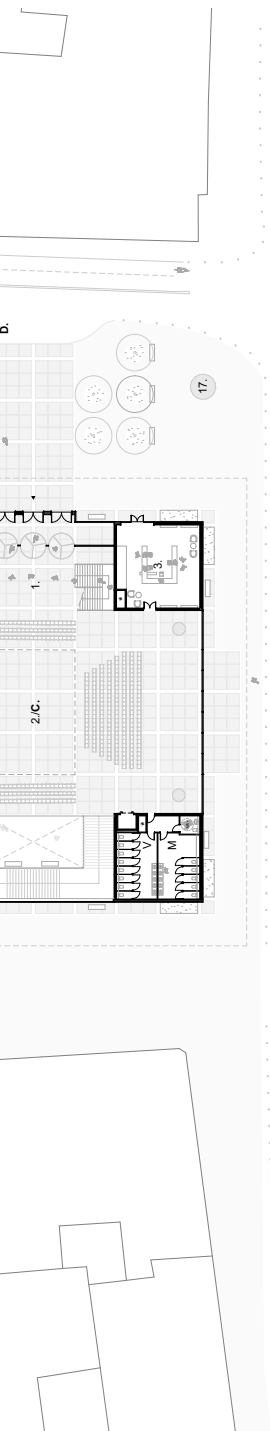


Interior

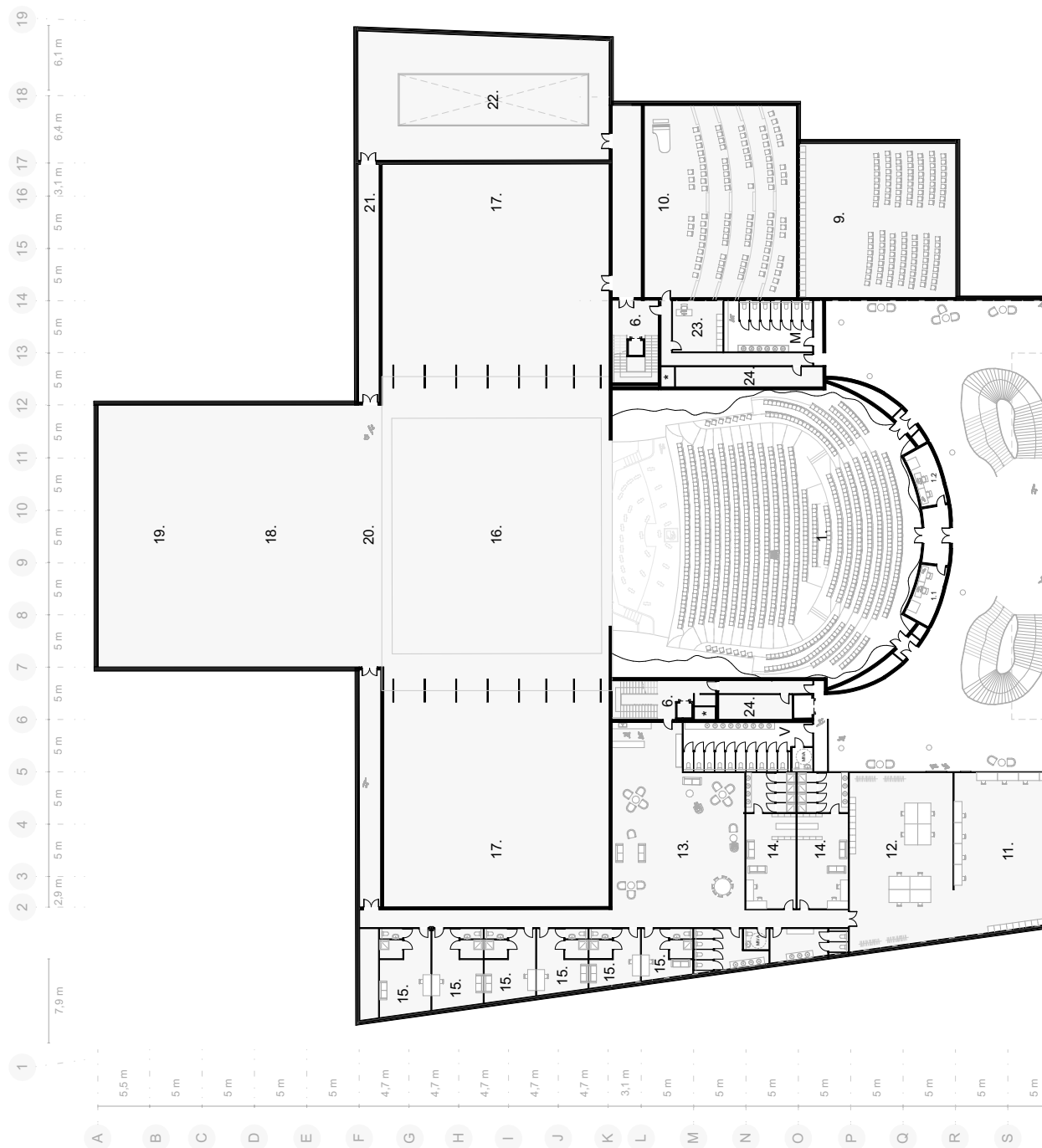
1. Official entrance
2. Open stage
3. Ticket office/public relations
4. Shop
5. Staff core
6. Foyer
7. Bar
8. First balcony
9. Ballet rehearsal room
10. Pantry
11. Café
12. Kitchen
13. Freight lift
14. Loading dock
15. Staff entrance
16. Props workshop
17. Art object
- * ventilation shaft

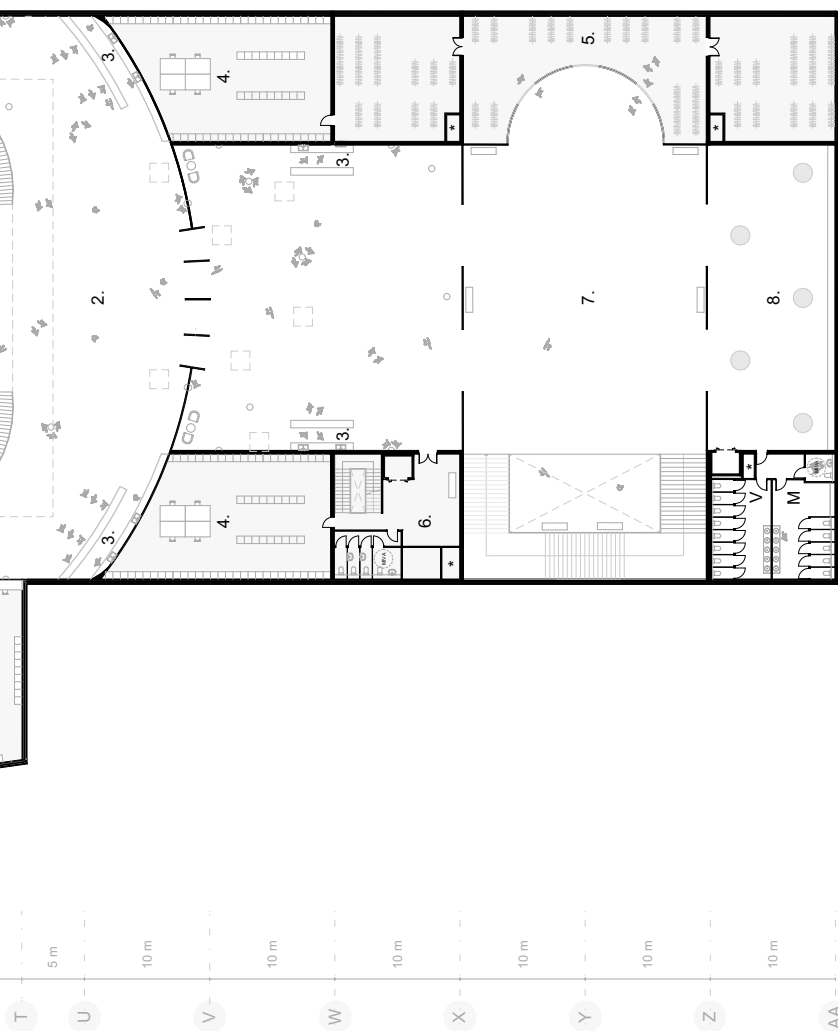
Exterior

- A. Galleria Vittorio Emanuele II
- B. Piazza della Scala
- C. Civic passage
- D. Drop off zone taxi's
- E. Outside performance area
- F. Playing fountain
- G. Terrace
- H. Pedestrianised route; Duomo to Brera
- I. Staff entrance square



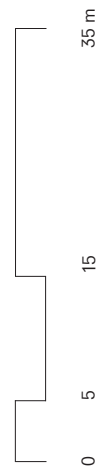
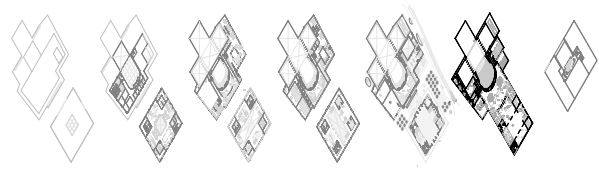
1. Horseshoe hall
- 1.1 FOH control room
- 1.2 Sound managers
2. Grand foyer
3. Bar
4. Climatized archives
5. Cloakroom
6. Staff core
7. Multifunctional reception space
8. Costume exhibition and point shoe wall
9. Storage day/pre-performance furniture
10. Orchestra rehearsal room
11. Wig and make-up workshop
12. Costume atelier
13. Green room
14. Shared dressing room
15. Soloist dressing room
16. Stage
17. Side stage
18. Back stage
19. Scene assembly
20. Cross-over route
21. Loading dock
22. Freight lift
23. Stage management office
24. Pantry



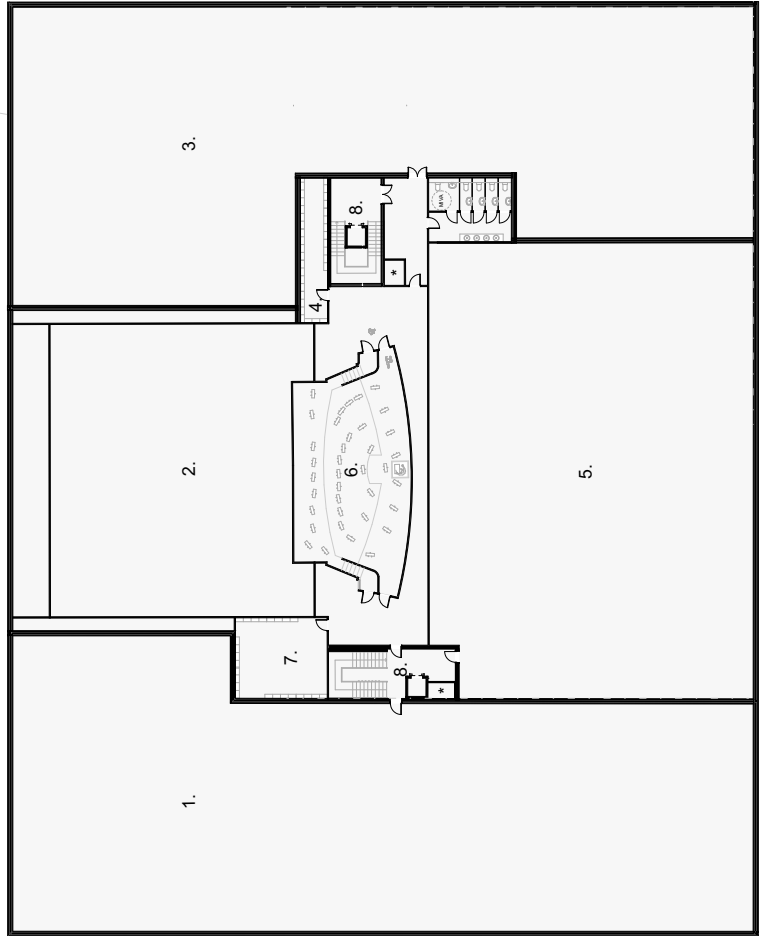
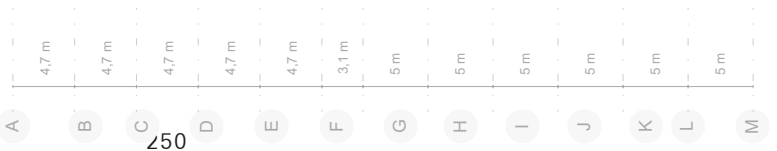


The -1 level is where the gradual flow towards the auditorium takes place. Visitors arrive from the grand stairs and are guided towards the main hall. Along this route, costume exhibitions, framed views into archives and workshops, and daylight entering through skylights and voids create moments of pause and orientation. Four bars and generous social areas support gathering before the performance and during intermission. Deliberate moments of compression and decompression, use of materials and artificial lighting curate this experience.

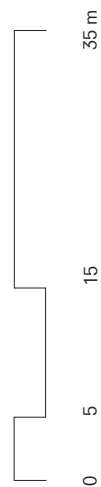
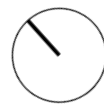
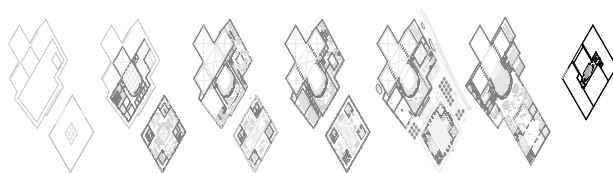
-1



1. Storage
2. Scenic pit
3. Technical space
4. Music library
5. Under-auditorium space
6. Orchestra pit
7. Instrument storage room
8. Staff core

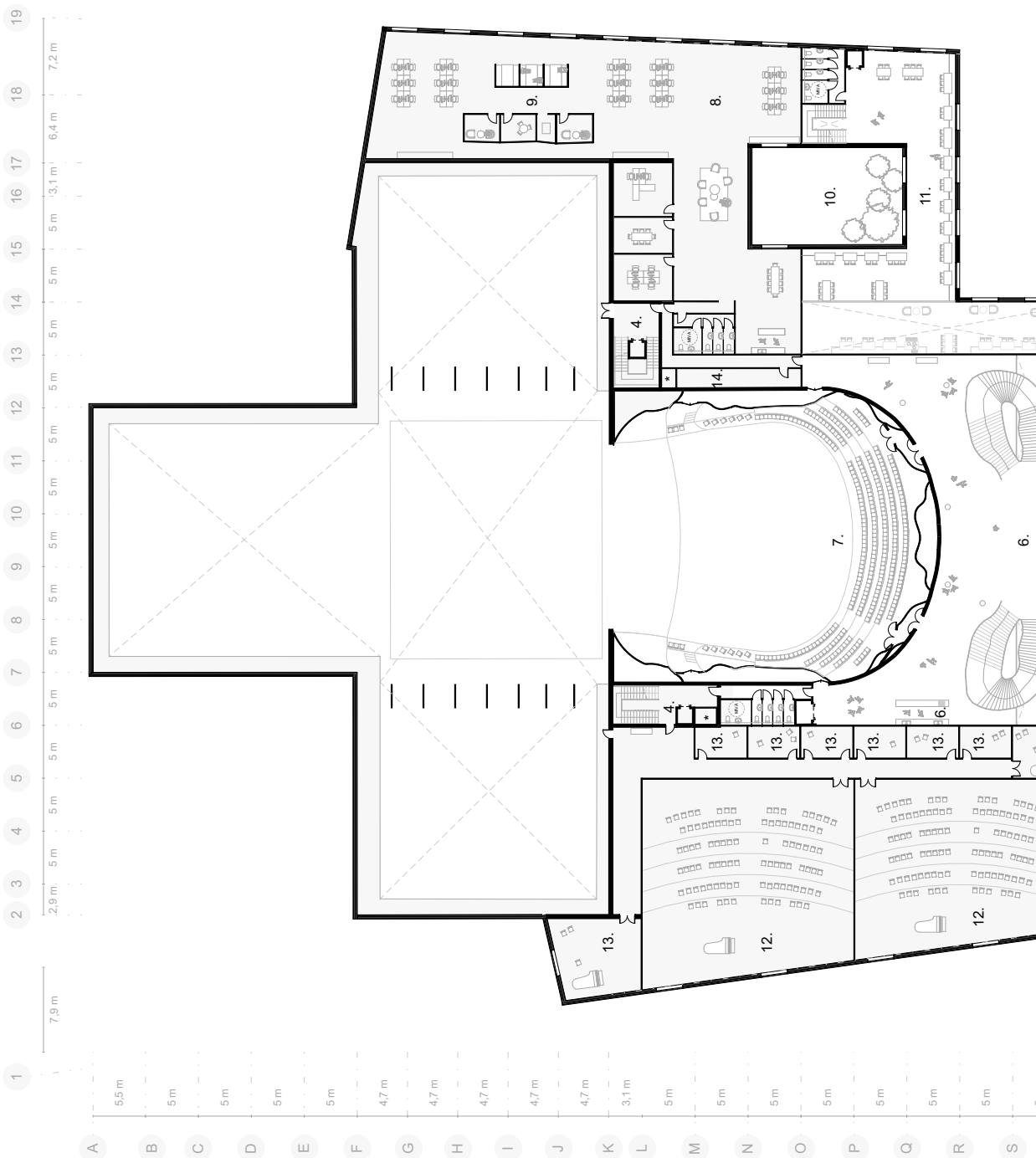


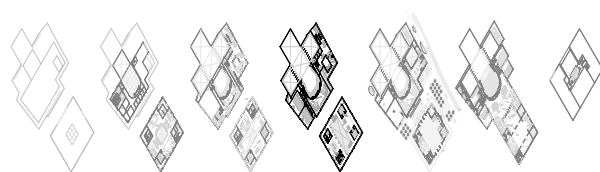
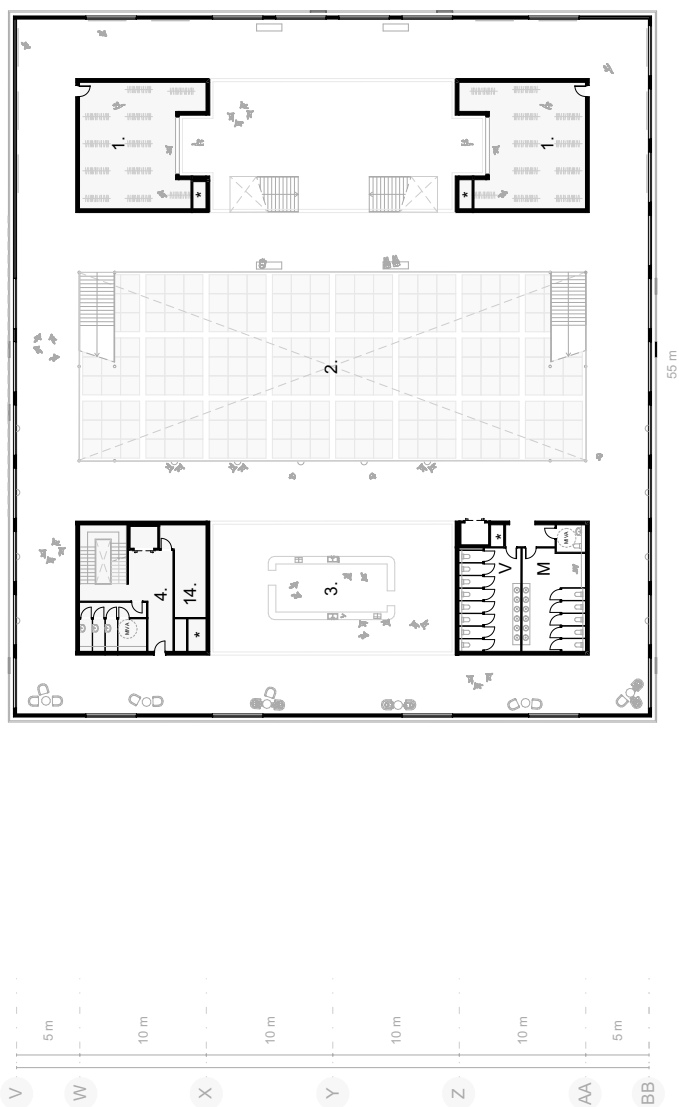
The -2 level accommodates understage storage and technical spaces. It also provides access to the orchestra pit, together with an instrument storage room and the music library.



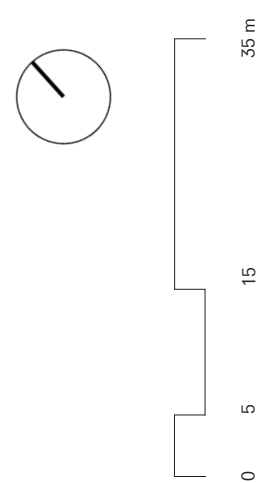
-2

1. Cloakroom
2. Foyer open stage
3. Bar
4. Staff core
5. Foyer first balcony
6. Bar
7. Second balcony
8. Offices
9. Meeting rooms
10. Café
11. Café
12. Choir rehearsal room
13. Individual practice room
14. Pantry



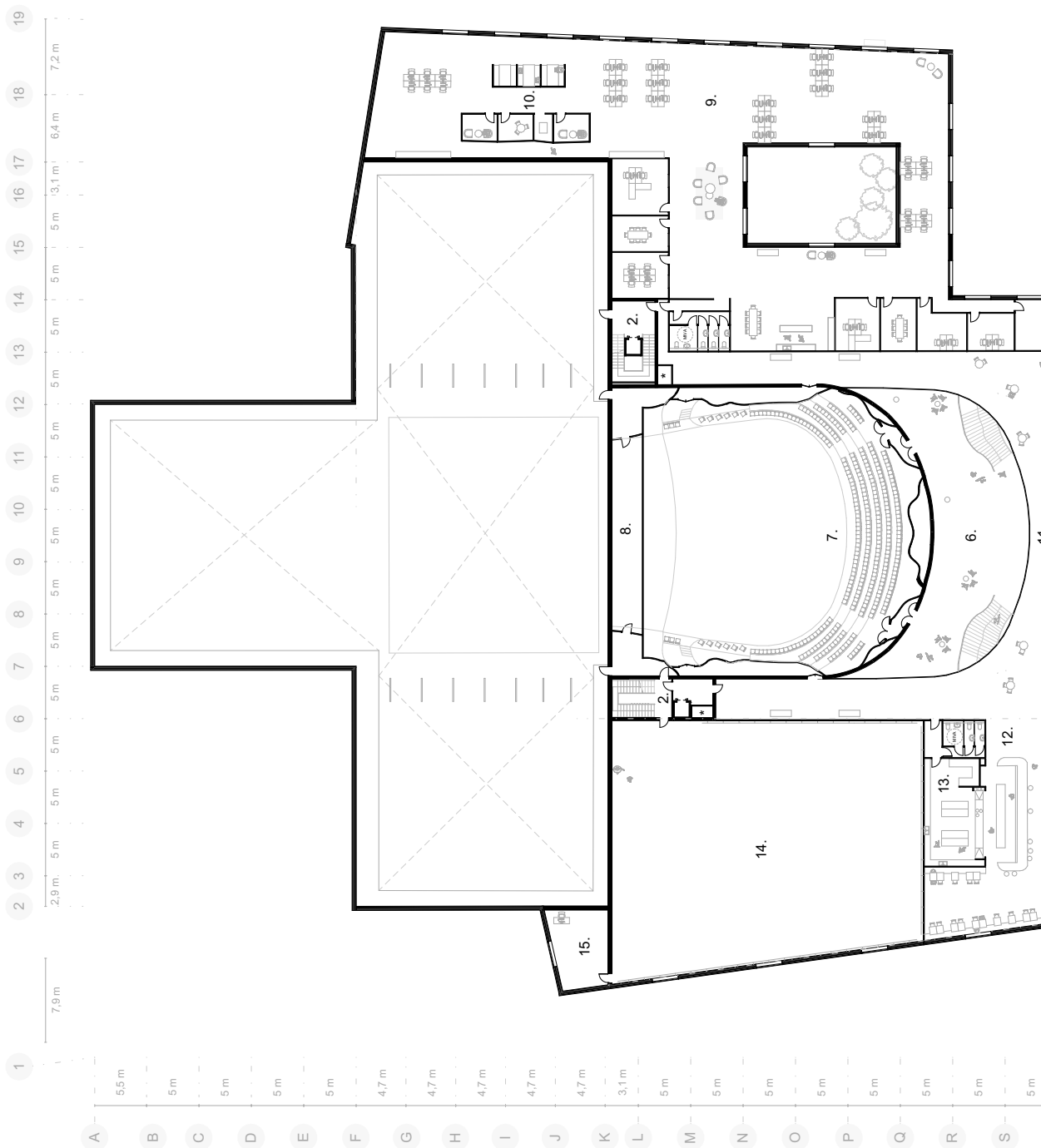


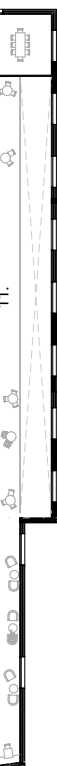
The first floor contains the foyer space for the open performance stage. It is organised as a spacious open layout around the cores, with seating areas along the facades that offer views towards the city. During the day, the same space can function as a calm public interior for reading.



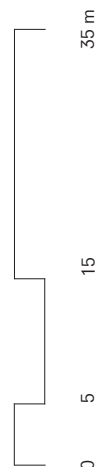
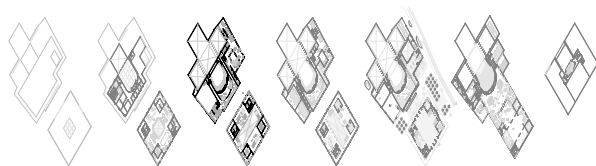
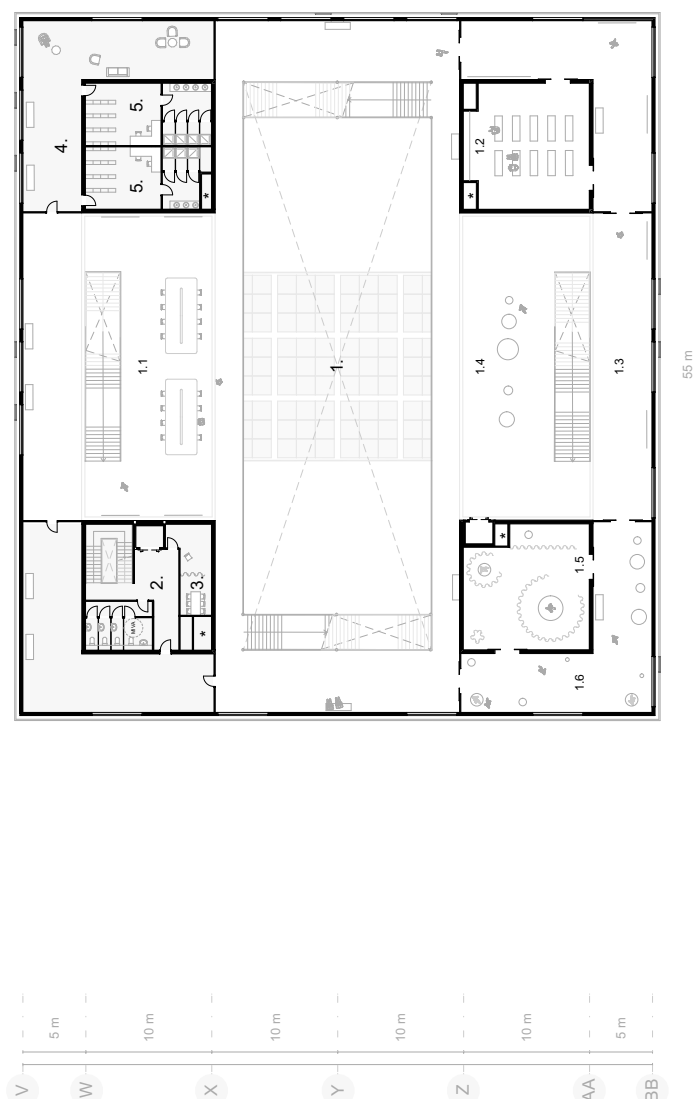
1st floor

1. Museum
- 1.1 Workshop space
- 1.2 Cinema
- 1.3 Photography exhibition
- 1.4 Props exhibition
- 1.5 Voice and resonance chamber
- 1.6 Costume exhibition
2. Staff core
3. Podcast studio/recording room
4. Green room
5. Shared dressing room
6. Entrance third balcony
7. Third balcony
8. Followspot operator room
9. Offices
10. Meeting rooms
11. Coffee bar
12. Staff restaurant
13. Kitchen
14. Ballet rehearsal room
15. Office ballet master





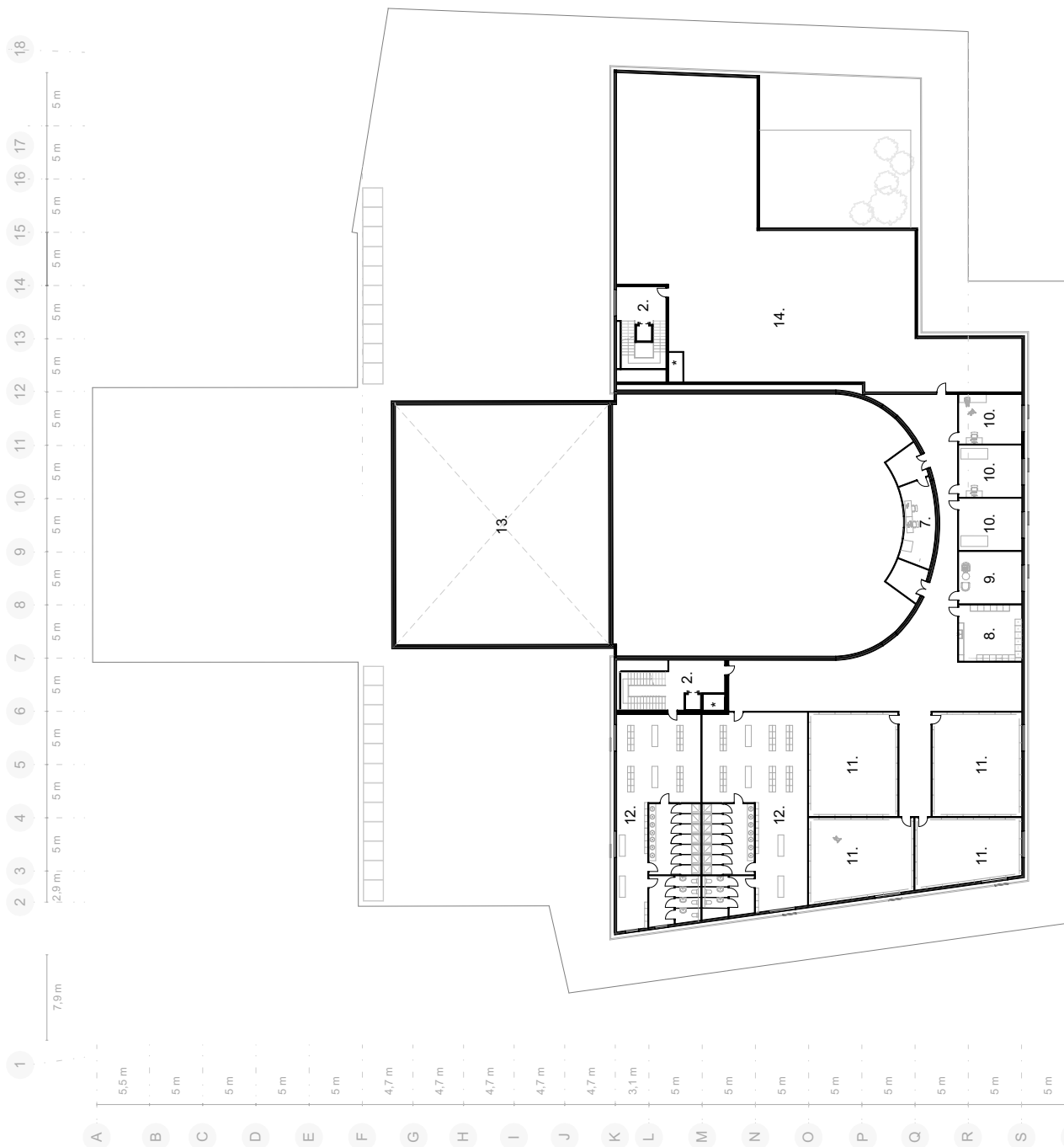
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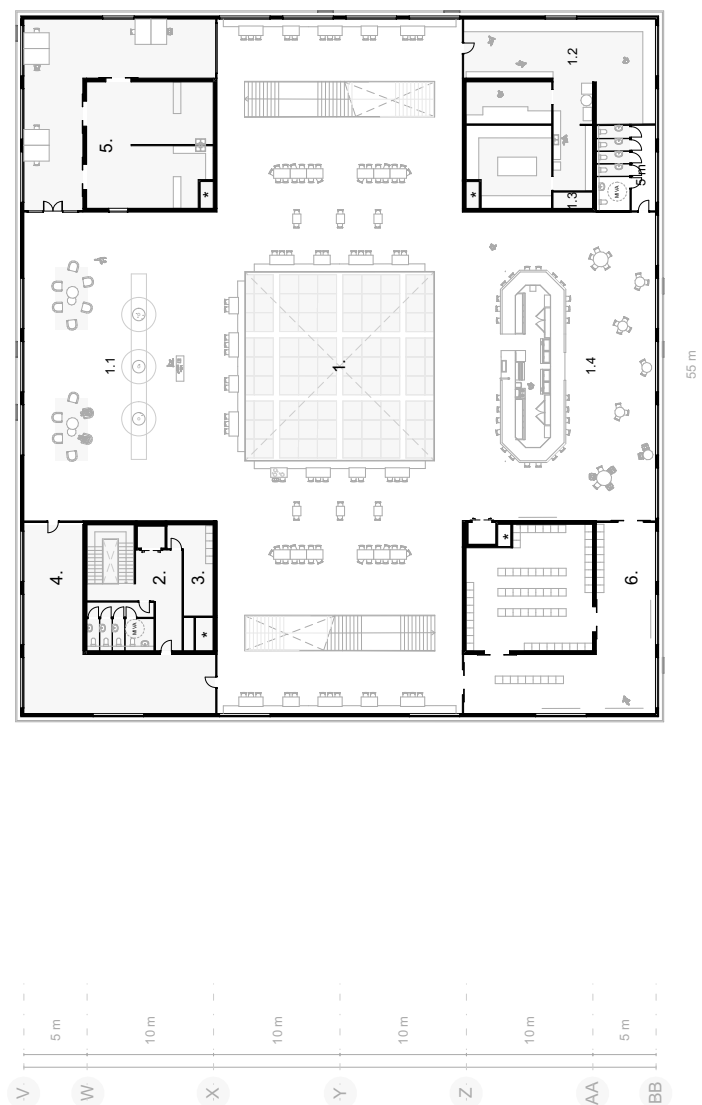
The museum is expanded and given a more prominent architectural role within the building. It now incorporates contemporary exhibition techniques to communicate the history, craft and cultural significance of opera and ballet.

2nd floor

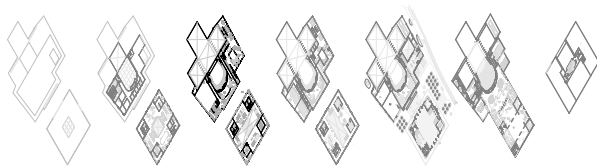
1. Restaurant
- 1.1 Bar
- 1.2 Waiting area
- 1.3 Kitchen
- 1.4 Changing room
2. Staff core
3. Storage
4. Technical space
5. Creative workshop
6. Archives (publicly accessible)
7. Technical gallery (lighting technician)
8. Laundry room
9. Breastfeeding/meditation room
10. Treatment room
11. Warm-up studio
12. Dressing room choir/orchestra
13. Fly tower
14. Technical space



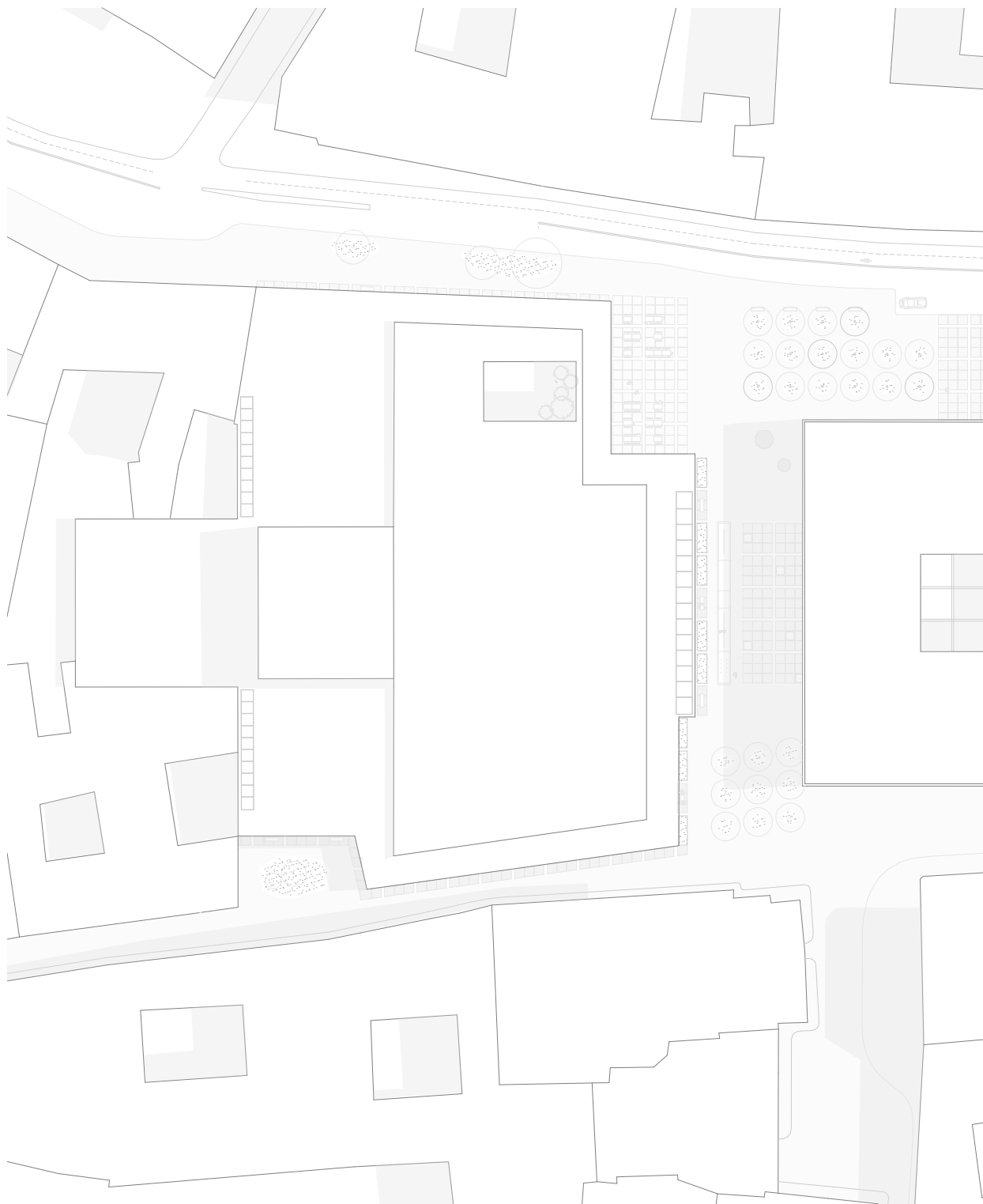
T
2.5 m
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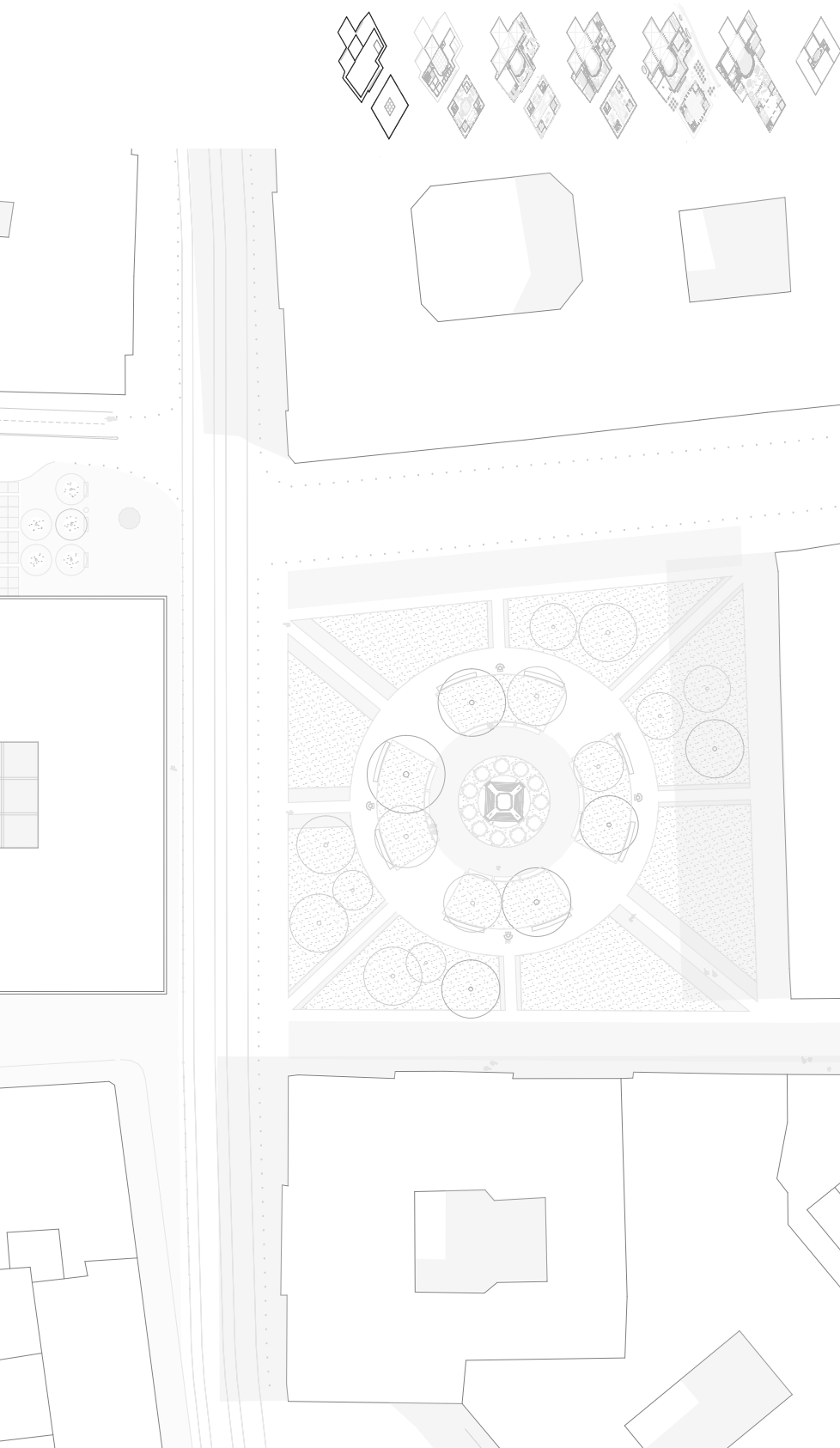


The restaurant is placed at the top of the civic palazzo, to provide a great 360 view to the piazza, the entrance square and the outside performance area. The public archives opened during the day, are located in one of the cores.



3d floor

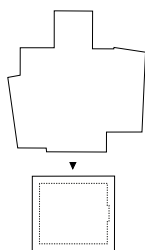


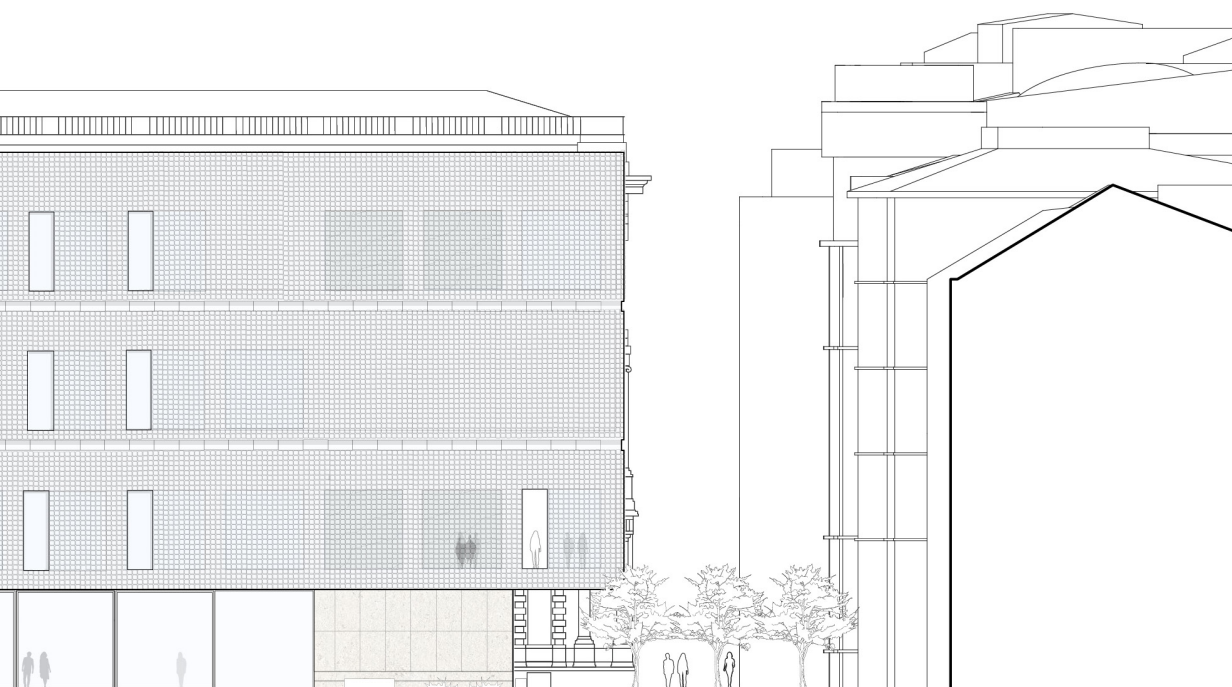


Roof plan



The north-west side directly faces the adjacent façade of the theatre block. As a result, the inward sightlines are carefully curated rather than fully open. From the grand foyer, visitors are offered framed views into selected programme spaces, such as the dye workshop, the second foyer and the museum.

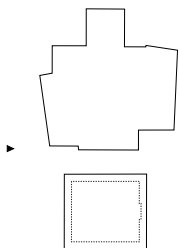
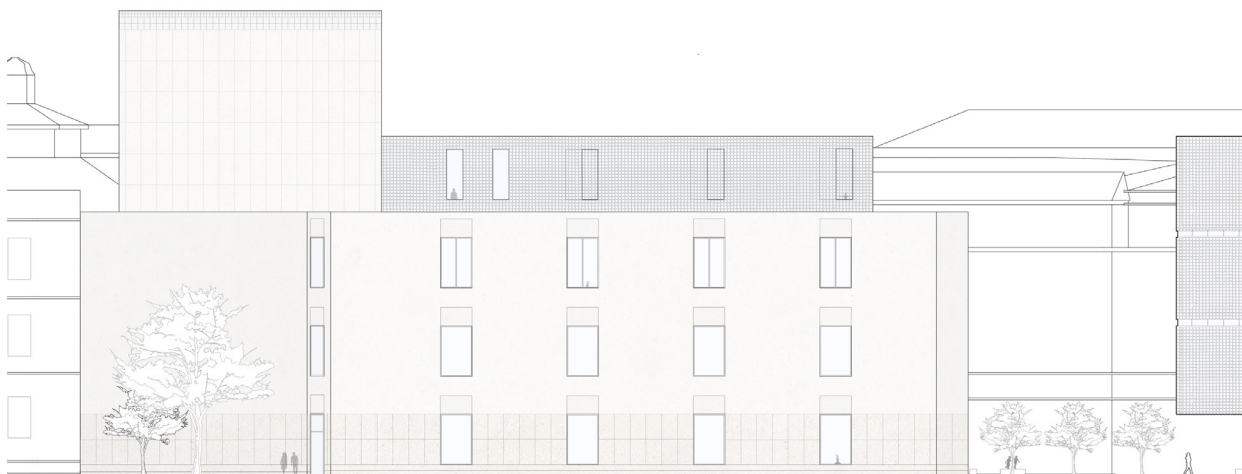


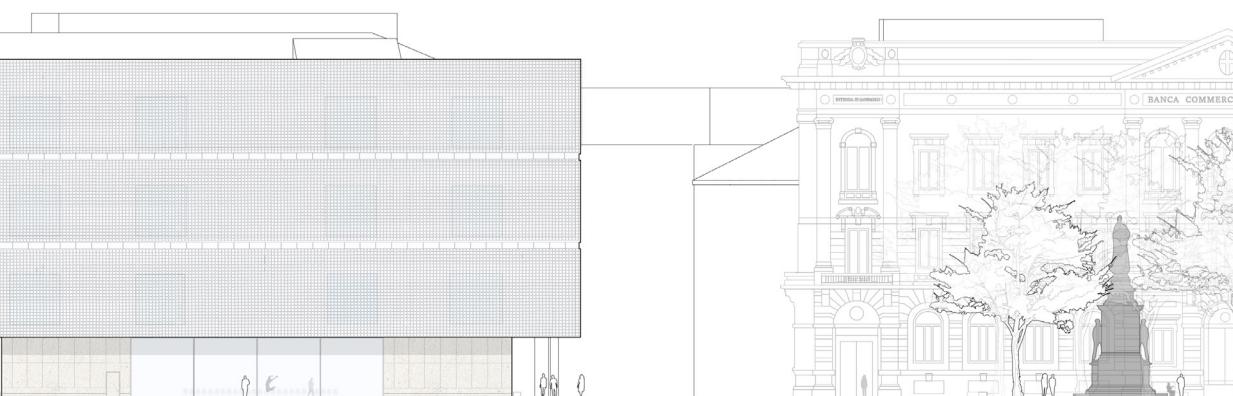


est facade



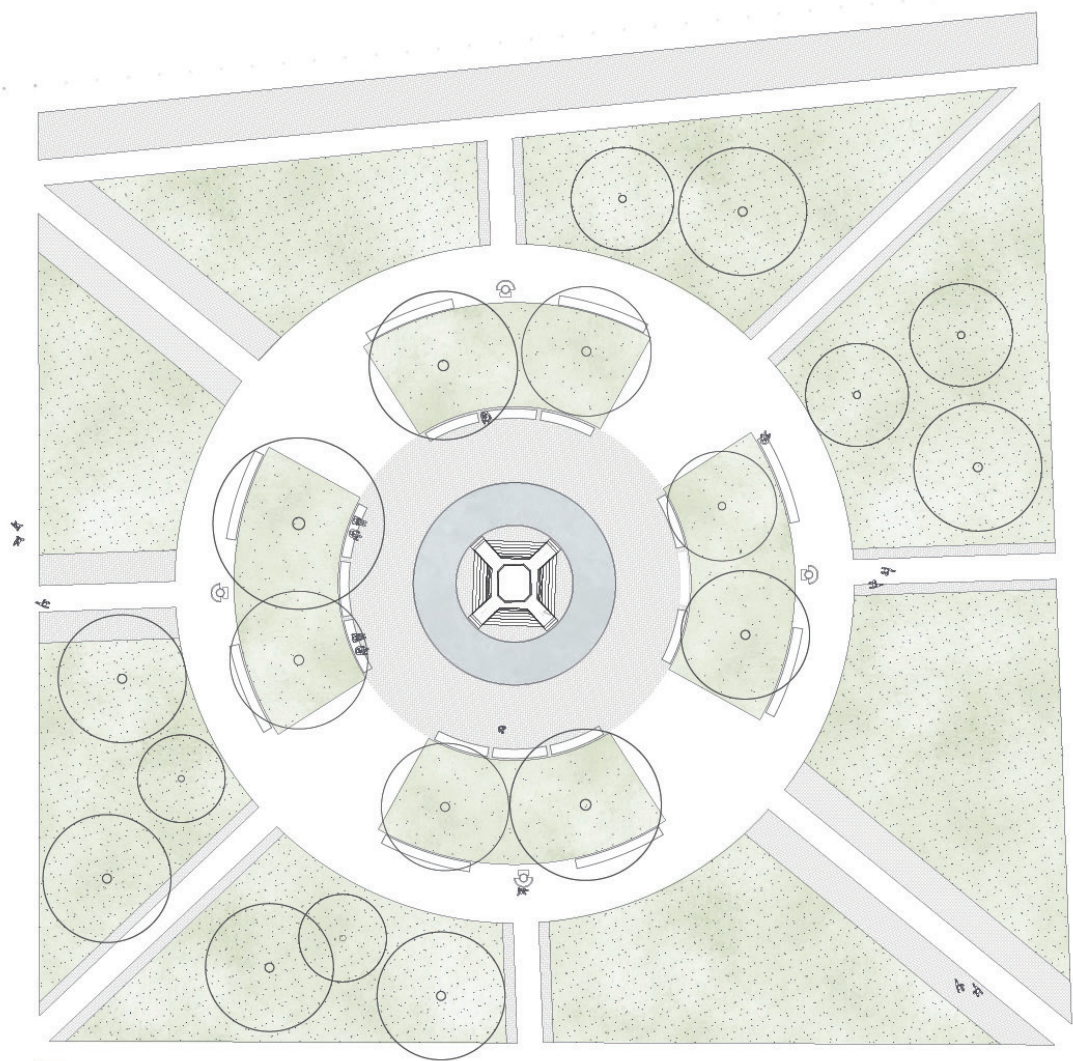
The south-west side of the building is not strongly emphasised through the public space design and therefore functions more as the back side of the theatre. Unlike the main public façades, this elevation contains no large openings in the glass block skin. The staff entrances are positioned here, accompanied by a small exterior entrance square. Rehearsal spaces are also located along this side of the façade, allowing their activity to be partially visible to passers-by.

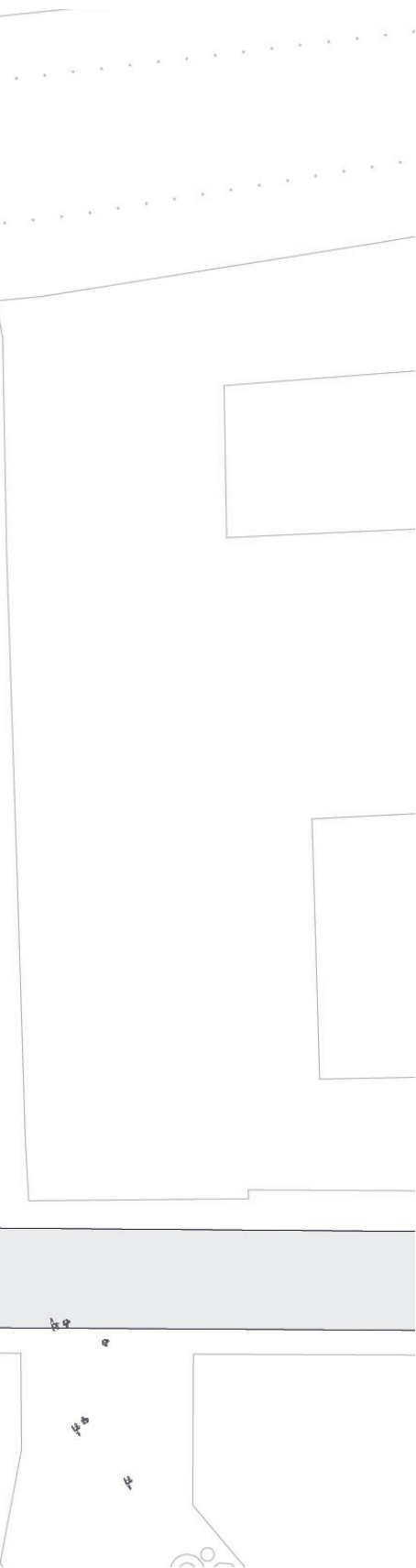




st facade

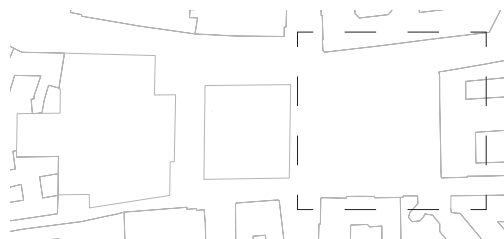




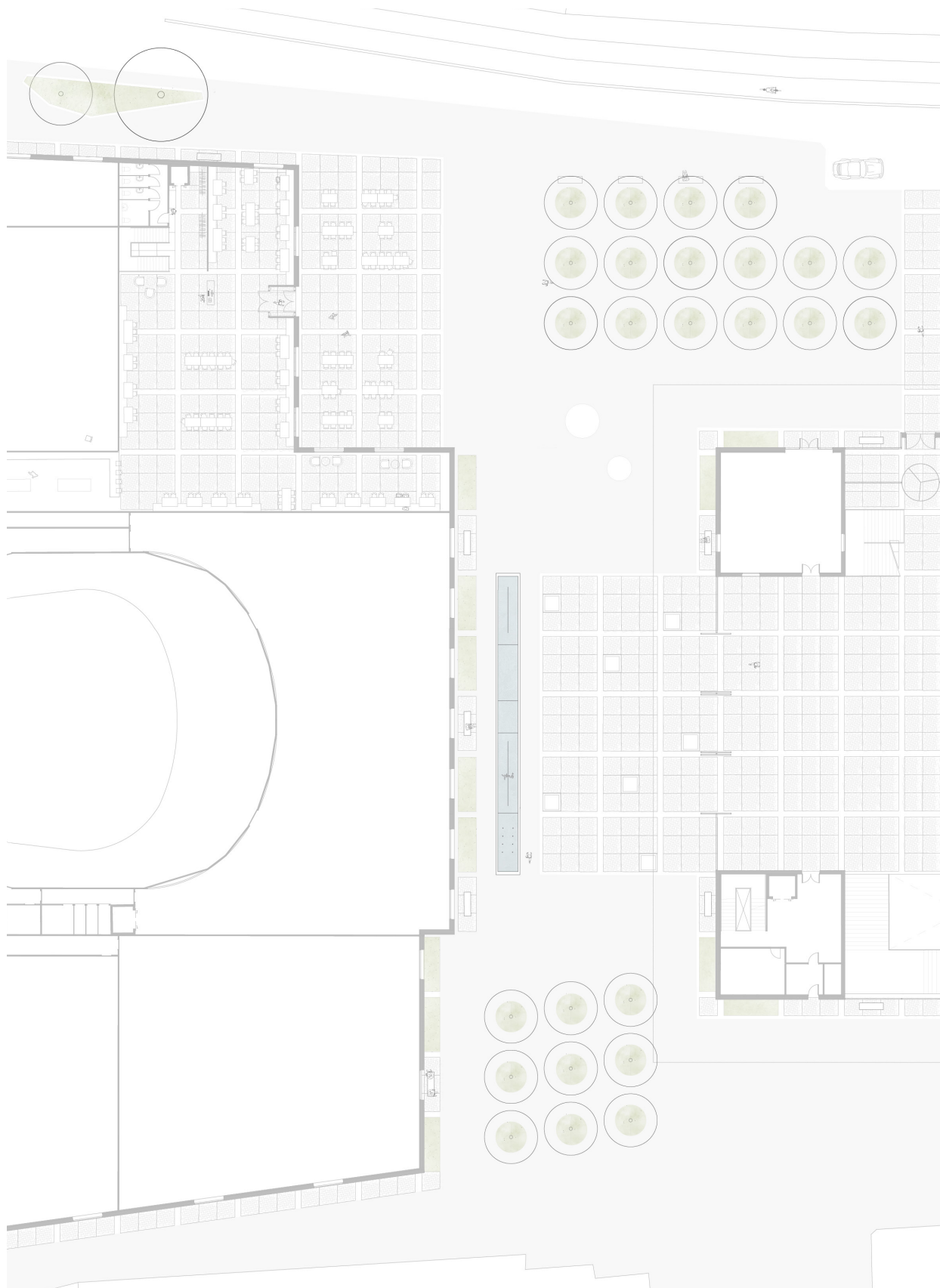


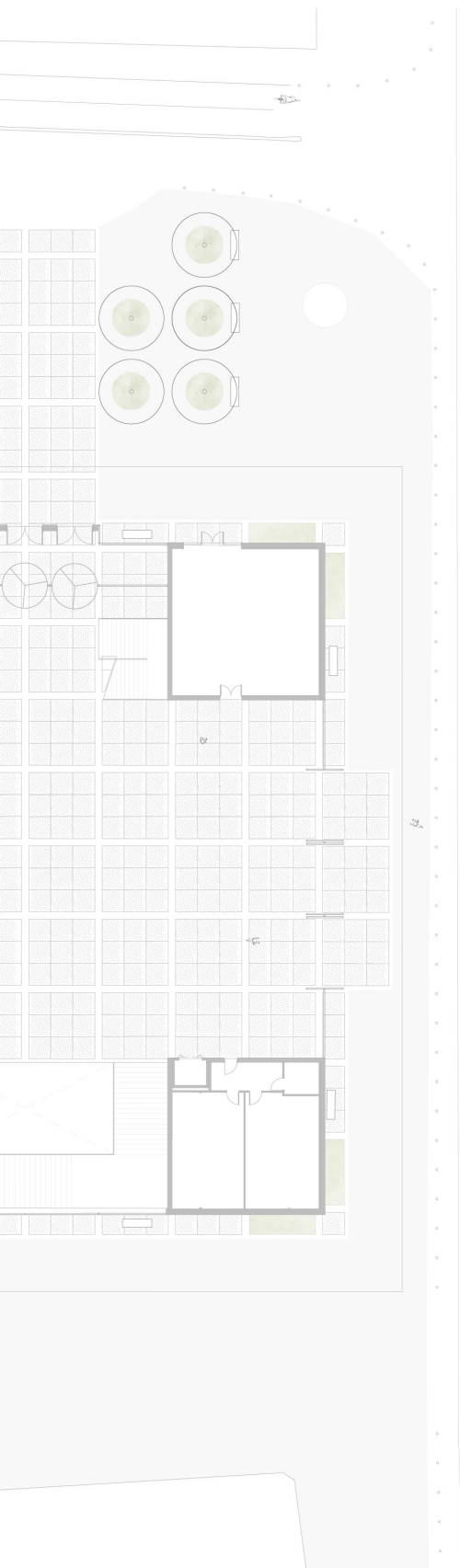
Piazza della Scala largely retains its existing spatial structure, but is adapted to become greener and more pedestrian-oriented. A new fountain is introduced around the statue of Leonardo da Vinci, while the paths between the Galleria and the main entrance of La Scala are widened to strengthen the primary pedestrian connection.

The pedestrianised road and continuous pavement visually and physically extend the square towards La Scala. As a result, the piazza no longer functions as an isolated urban island, but becomes directly connected to the opera house and its public sequence.



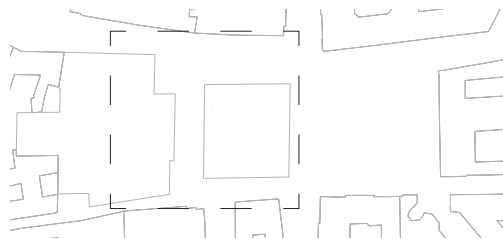
exterior design Piazza della Scala





The theatre has lacked a generous entrance zone due to the presence of the main road. For this reason, a new entrance square is introduced. Around the drop-off zone, a line of trees subtly screens the parking spaces required for taxis and permitted cars, while maintaining the functional accessibility of the theatre.

Behind the building, an outdoor performance square creates space for informal gatherings and performances. A water fountain makes the public space more inviting for children during Milan's hot summers. The café terrace is positioned close to the play area, allowing people to visit La Scala and enjoy its surroundings without necessarily attending a performance.

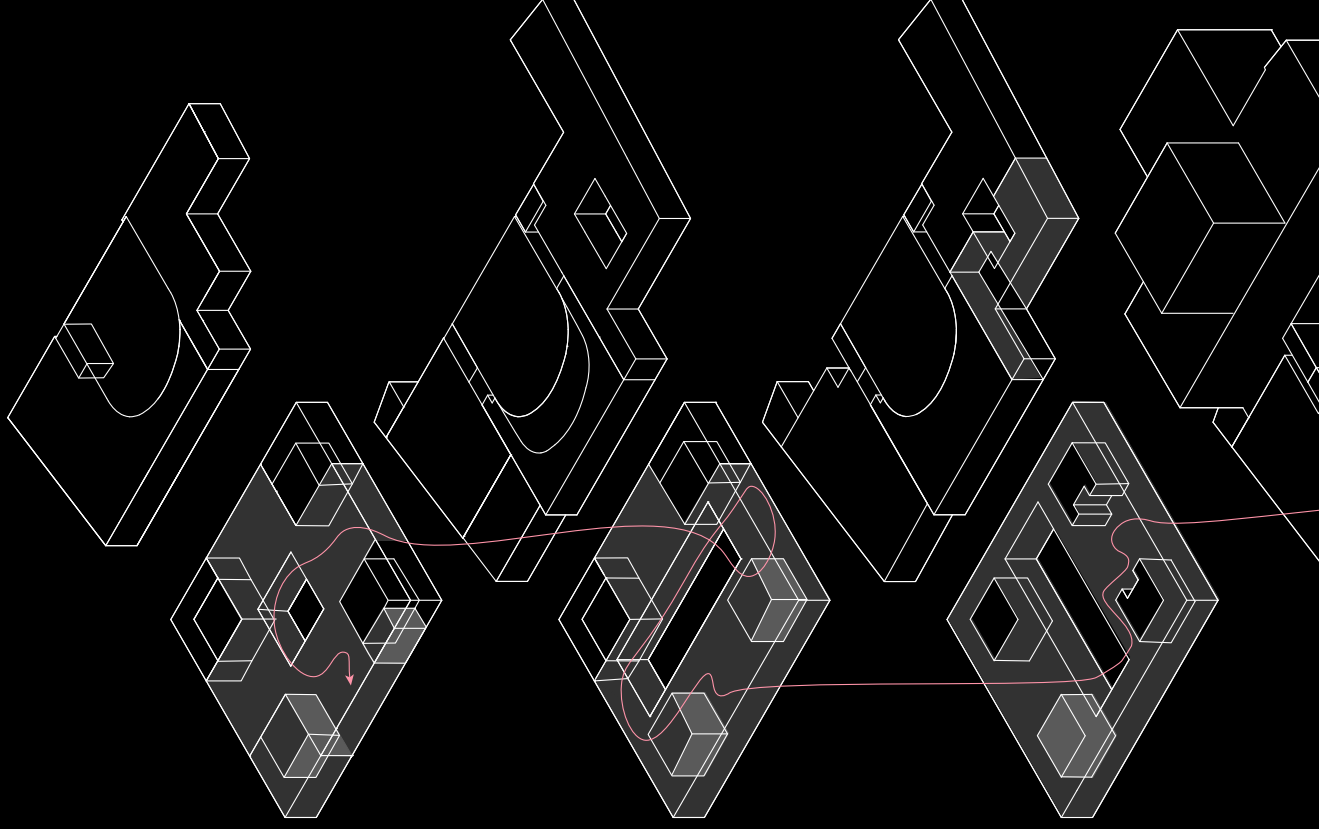


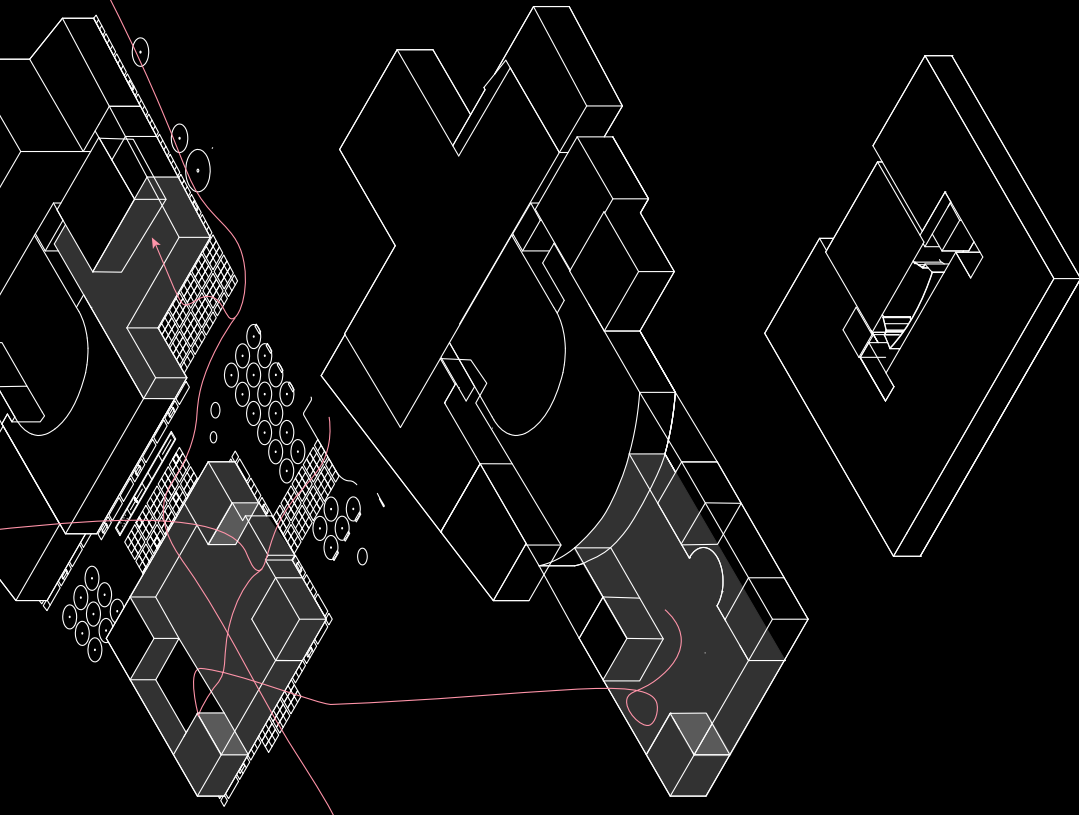
exterior design building site

restaurant
archives

museum
workshop space

foyer
cloakrooms





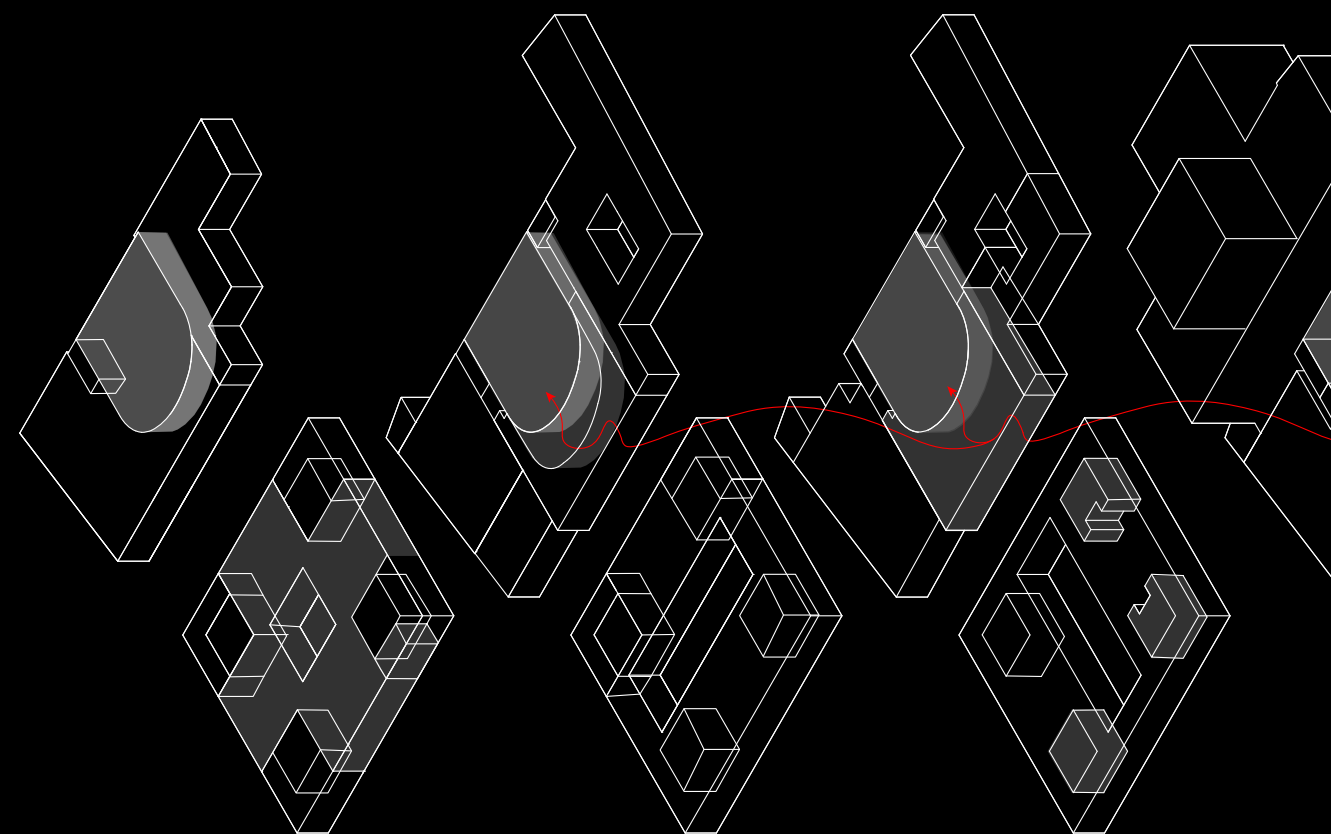
passage
performance space
(ticket)shop

café

event space for talks
or studying/working

day flow

Publicly accessible

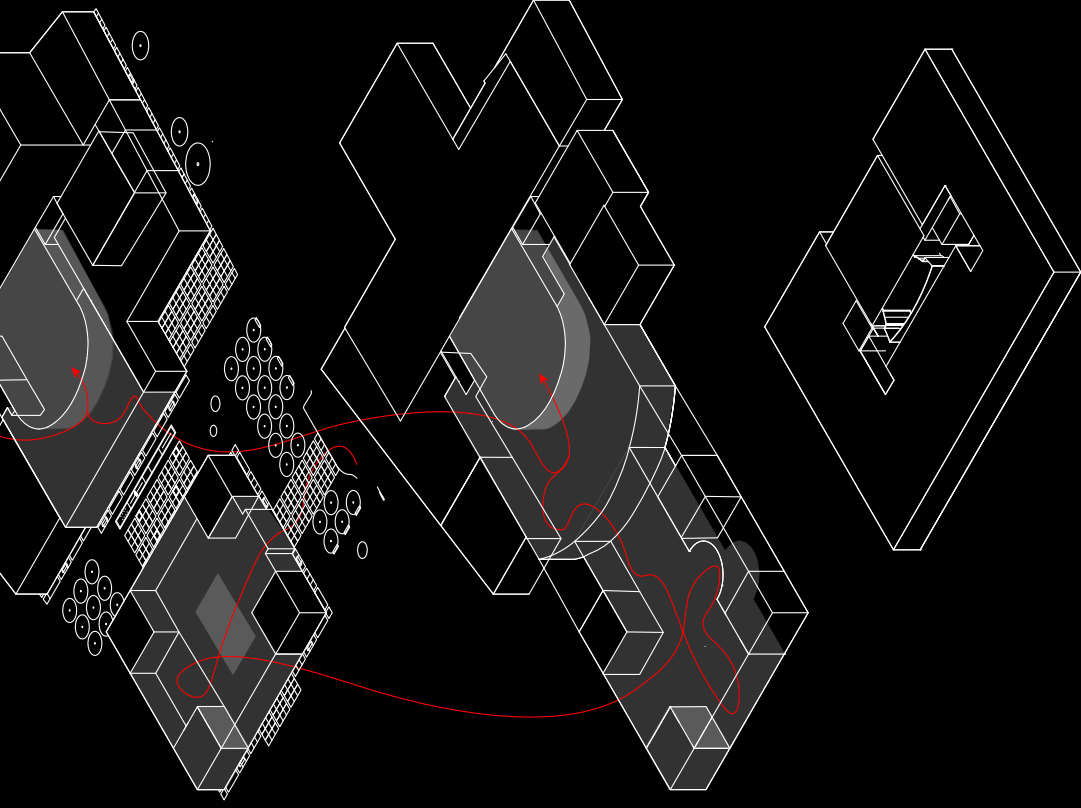


performance space

grand foyer
cloakroom
main auditorium

evening flow

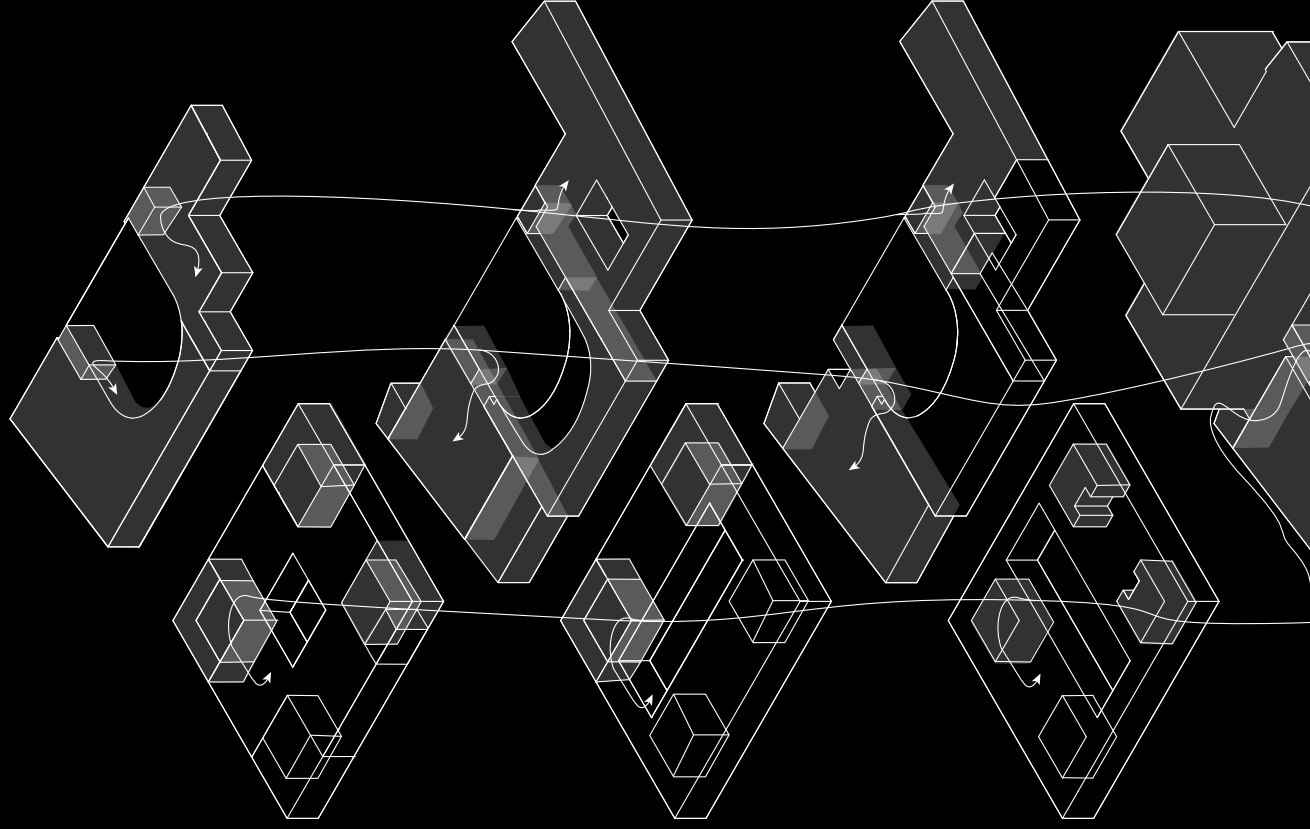
Publicly accessible



restaurant
dressing rooms
warm-up spaces

rehearsal studio's
offices

rehearsal rooms
offices

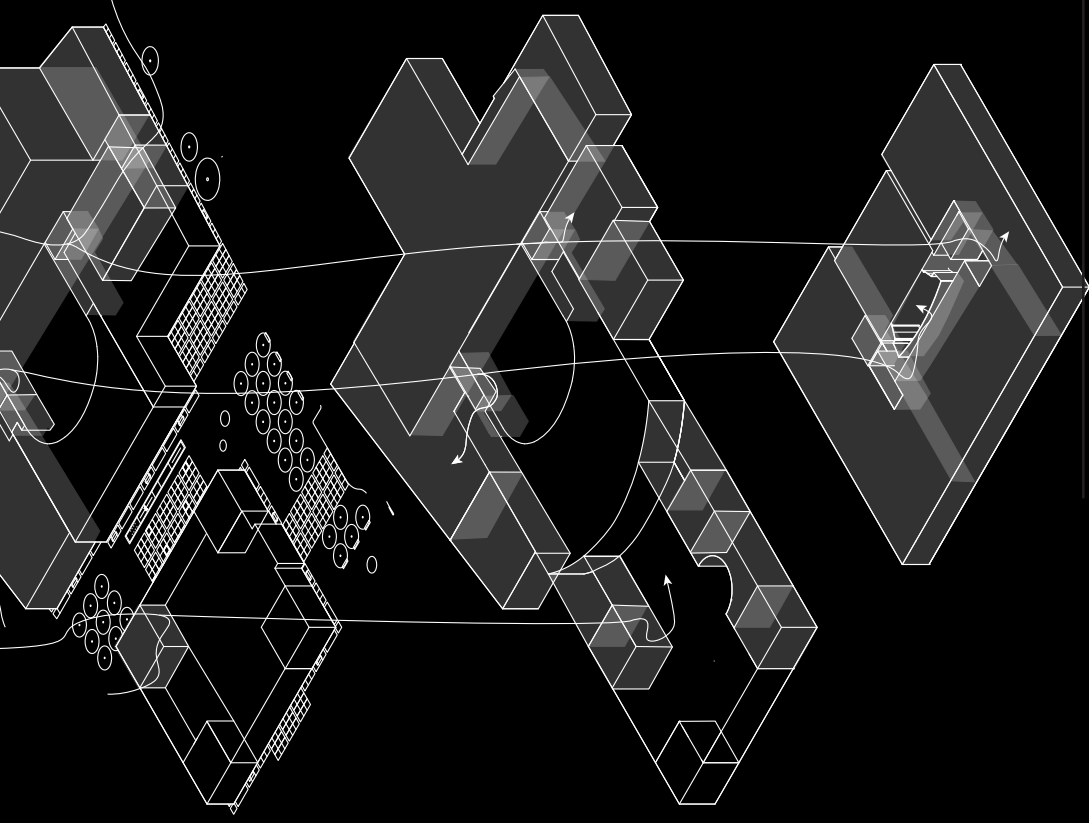


flytower
rehearsal spaces
workshops

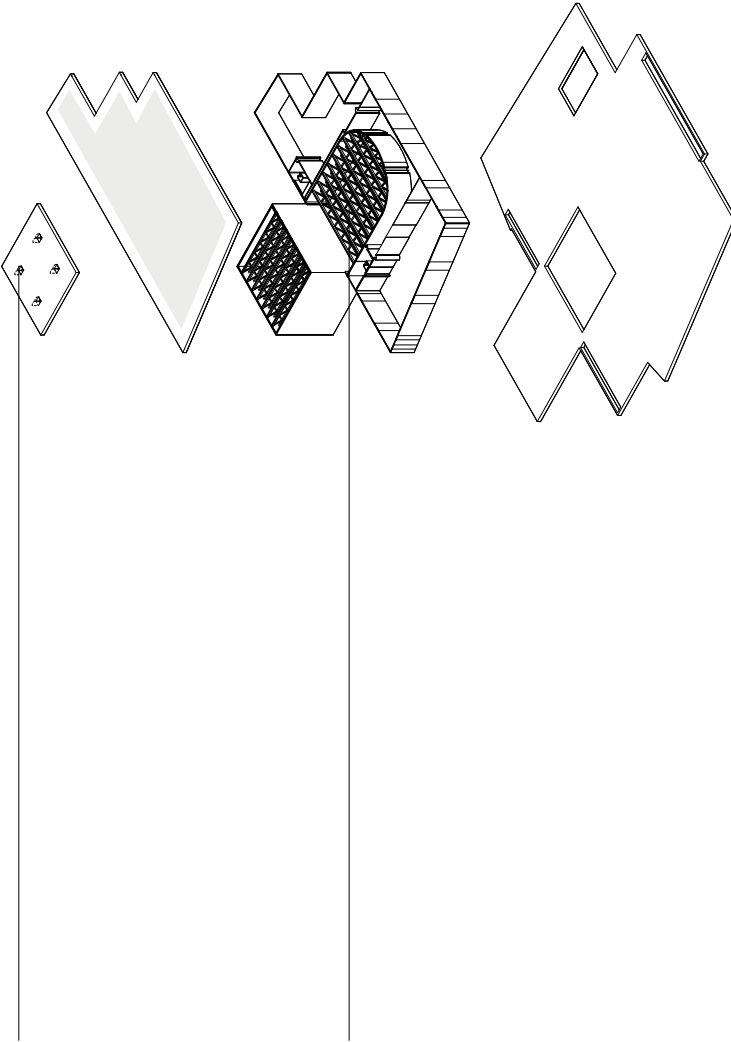
stage
back/side stage
archives
dressing rooms
rehearsal room

back of house flow

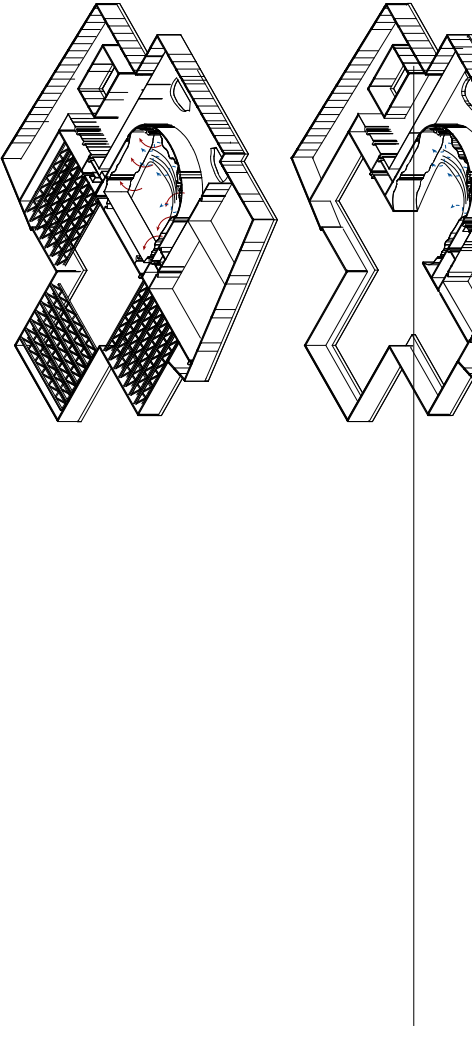
Private spaces



Operable windows flytower
For mechanical heat and fire
safety



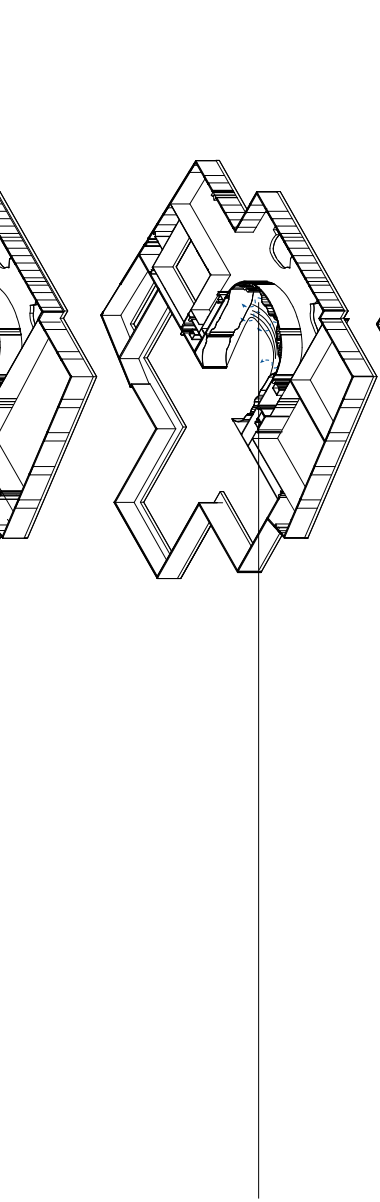
Steel roof trusses supported
by reinforced concrete walls
and cores
concrete walls give mass for
acoustics, fire resistance,
lateral stability and long
span flexibility



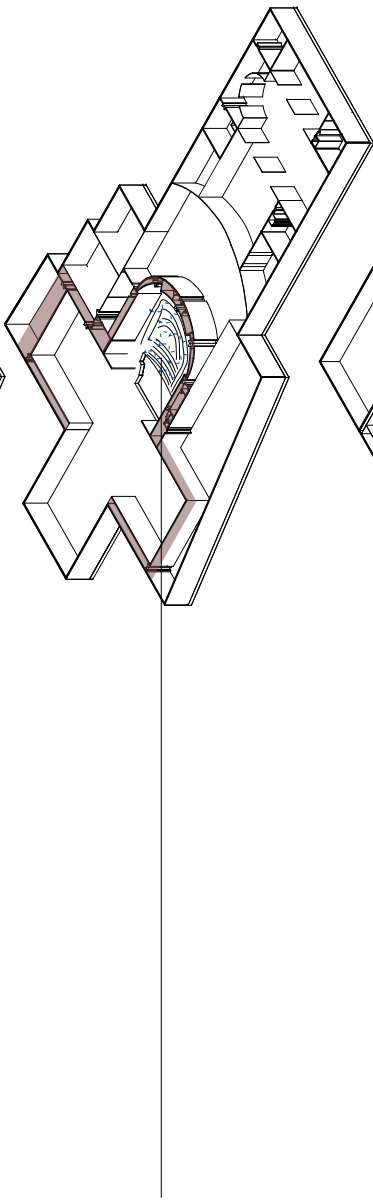
Robust mechanical
ventilation backstage
Equipment must be
acoustically isolated

Separated ventilation
system for offices (type C)

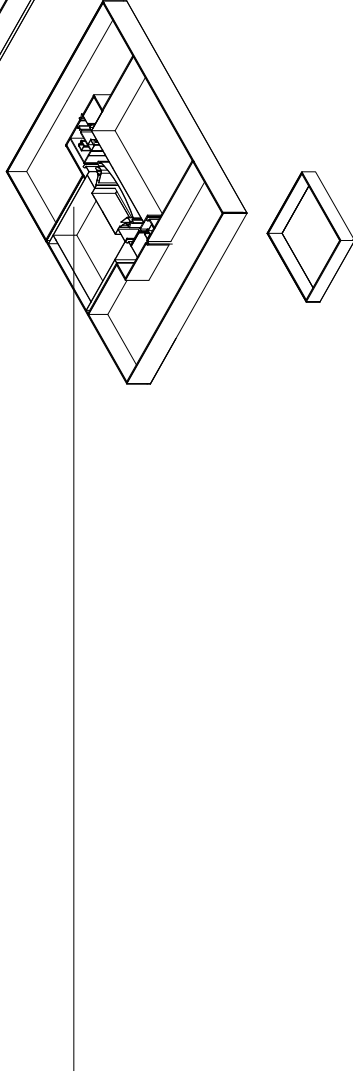
Acoustic design auditorium walls
Curved timber wall lining and balcony fronts help distribute sound, seats and audience bodies contribute to absorption



Mechanical ventilation system for auditorium (type D)
Fresh air is supplied at low velocity from beneath the audience seating, creating quiet displacement ventilation.



Acoustic separation between backstage and main auditorium
Heavy walls, acoustic doors and buffer zones. No direct links between technical spaces and horseshoe hall.



Operable roof vents
Enable night cooling through
stack ventilation.

Moss-sedum roof
Supports biodiversity and
rainwater retention.

Composite steel deck +
concrete floor slabs

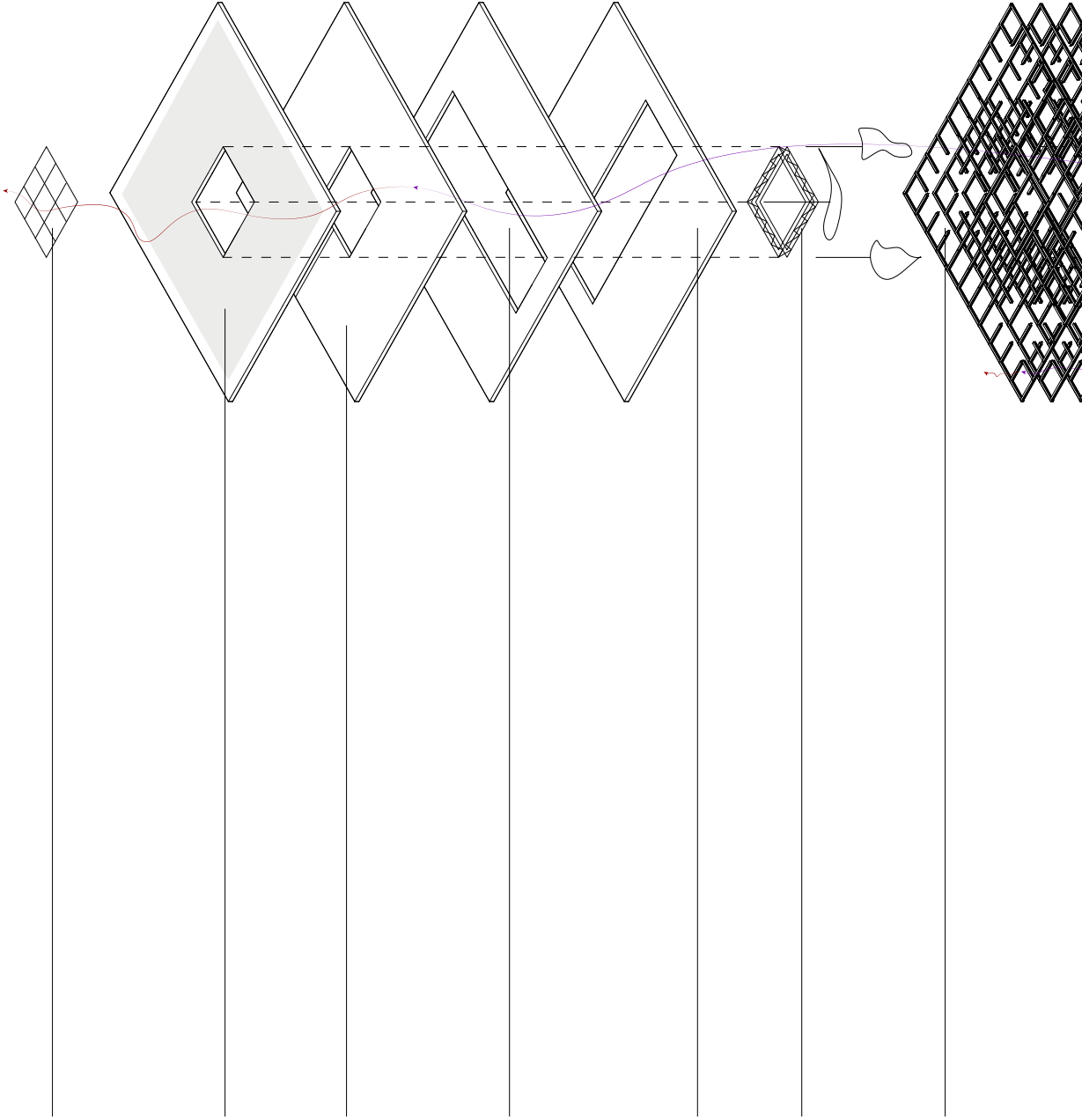
Series of public voids with
stairs
First void: 40 x 5 m
Second void: 45 x 15 m
Third void: 15 x 15 m
Roof opening: 15 x 15

Acoustic public interiors
Café and foyer areas
include additional acoustic
ceiling and wall panels.

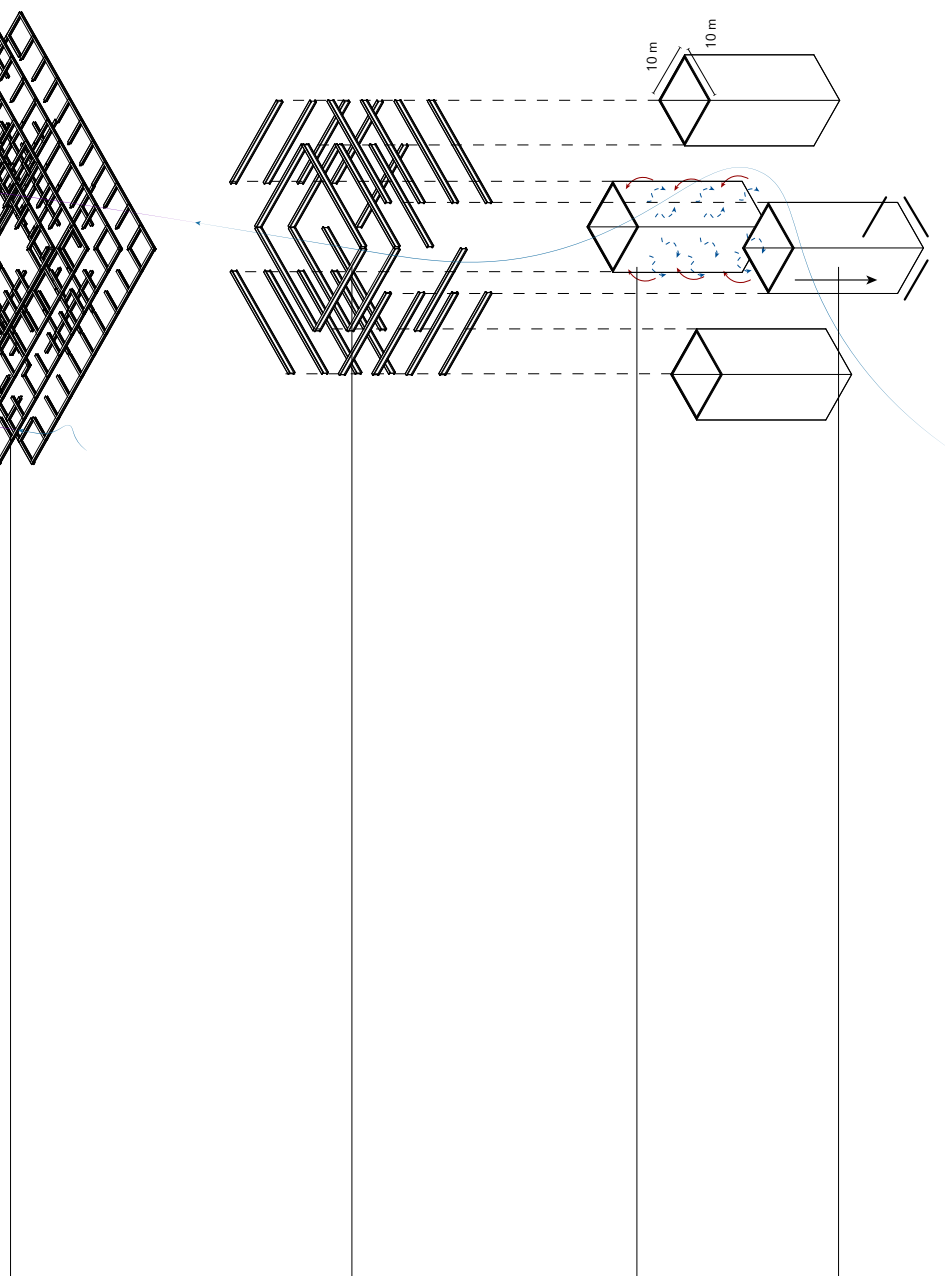
Temporary truss system
Provides open stage with
temporary decor and light.

Secondary HEA450 beams
5 x 5 m grid with additional
edge beams around façades
and voids.

Double glass block façade



Beams glass enclosure, and glass
as a ventilated solar buffer



Primary welded steel
transfer beams
Approx. 1.2 m deep; span
20–25 m between concrete
cores.

Reinforced concrete cores

Low-velocity supply air is
distributed through wall-
integrated nozzles.

Carry vertical loads, resist
wind loads, and integrate
lifts and service zones.

axonometry construction

Construction and ventilation concept

The civic volume is supported by four 10 × 10 m reinforced concrete cores. Instead of using a conventional column grid, the floors are carried by a steel transfer structure spanning between these cores. The primary structure consists of approximately 1.2–1.5 m deep welded steel transfer beams spanning 20–25 m. These beams form the main structural grid and allow the central public interior to remain open and flexible.

A secondary grid of HEA 450 beams carries the composite steel deck and concrete floor slabs. Where voids interrupt the regular floor grid, trimmer beams frame the openings and collect the interrupted secondary beams. Along the façade, the 5 m edge zones are carried by cantilevering HEA 450 beams, which are tied together by a perimeter edge beam. In this way, the structure supports both the large open civic space and the more complex series of voids, routes and façade zones.

The four concrete cores also function as vertical service and ventilation cores. Fresh air is supplied at low velocity through wall-integrated nozzles distributed along the cores. Instead of relying on one large supply and one large extract point, the air is introduced through multiple smaller openings to create a more even distribution across the large public volume. Used and warmer air is extracted at higher level through the cores. This supports a quiet and controlled ventilation strategy while keeping large ducts out of the open civic interior.

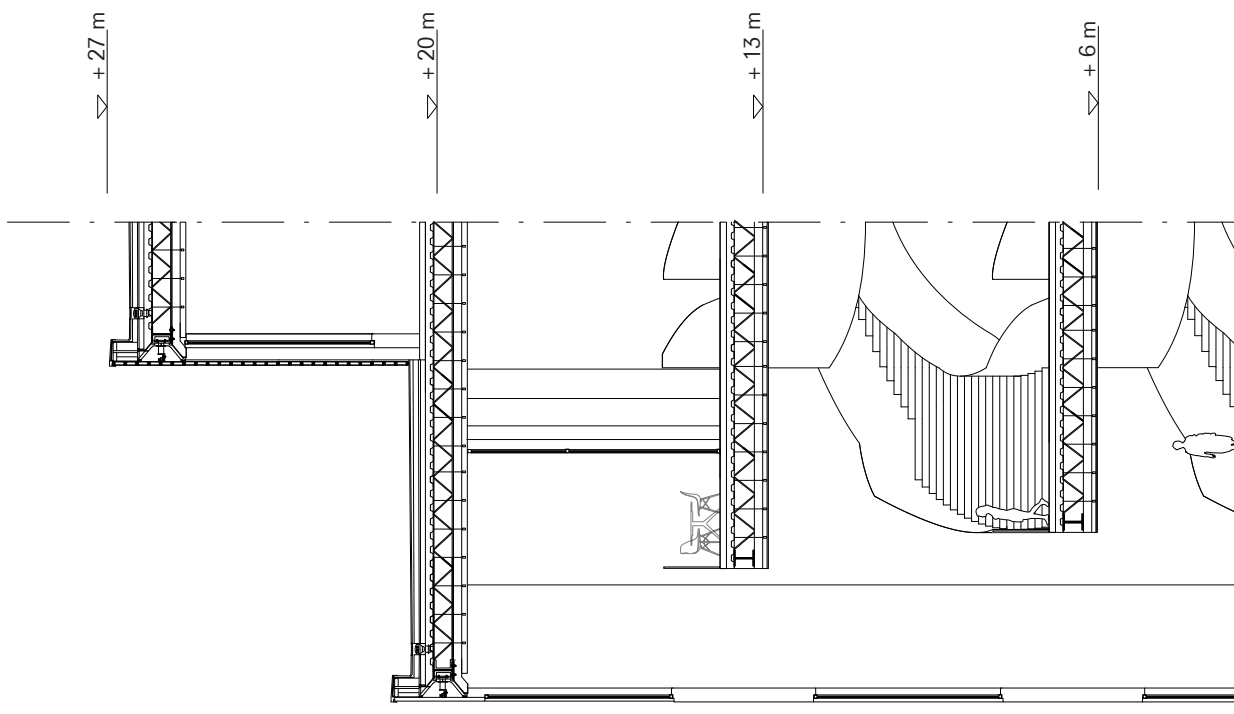
The theatre block is also organised as a hybrid structure. The auditorium and stage tower are formed as massive reinforced concrete boxes, providing acoustic separation, fire resistance, and lateral stability. Above the auditorium, stage, side stages, and backstage areas, long span steel trusses create column free spaces for performance, scenery movement, and technical installations. The steel roof structure is supported by the concrete structural walls and cores, while secondary steel framing supports catwalks, lighting bridges, technical grids, and roof build ups.

The remaining floors of the theatre block also contain shallower trusses, allowing larger spans for the rehearsal rooms and the grand foyer. These trusses are supported by concrete walls.

Top
executed
as a
double-
skin
system
with glass
bricks

Facade
executed
in smooth
natural
stone

Plinth
executed
in natural
stone with
relief

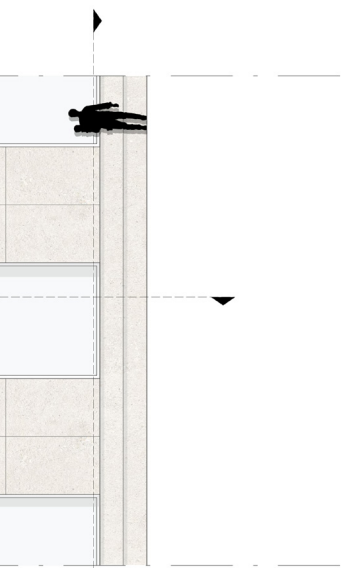


▽ + 27 m

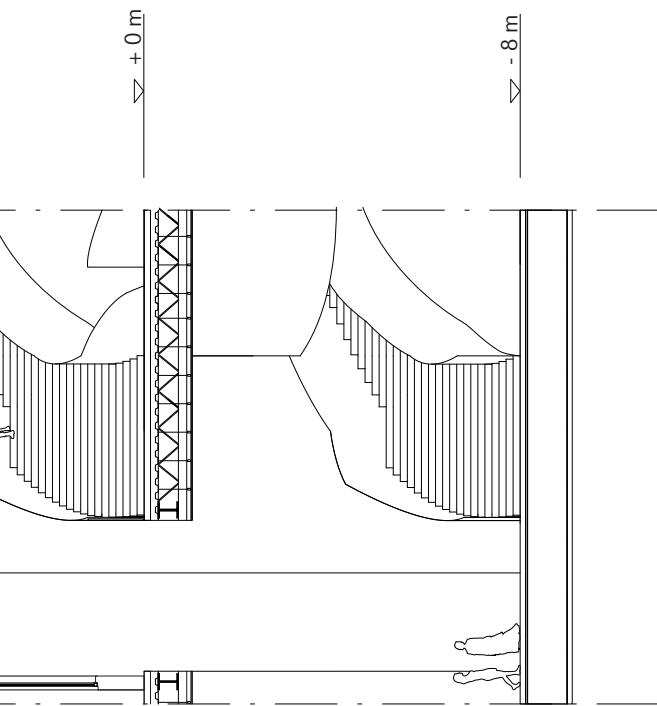
▽ + 20 m

▽ + 13 m

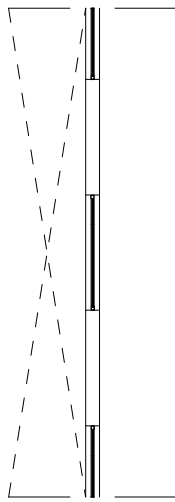
▽ + 6 m



Elevation

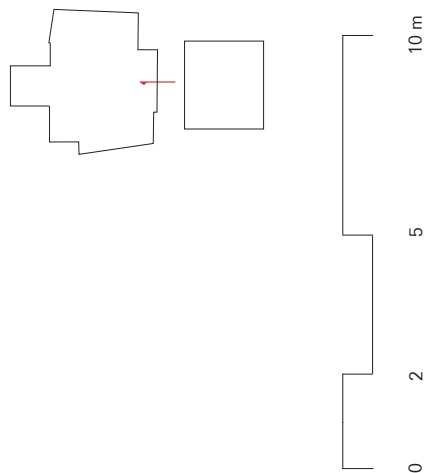


Floor plan

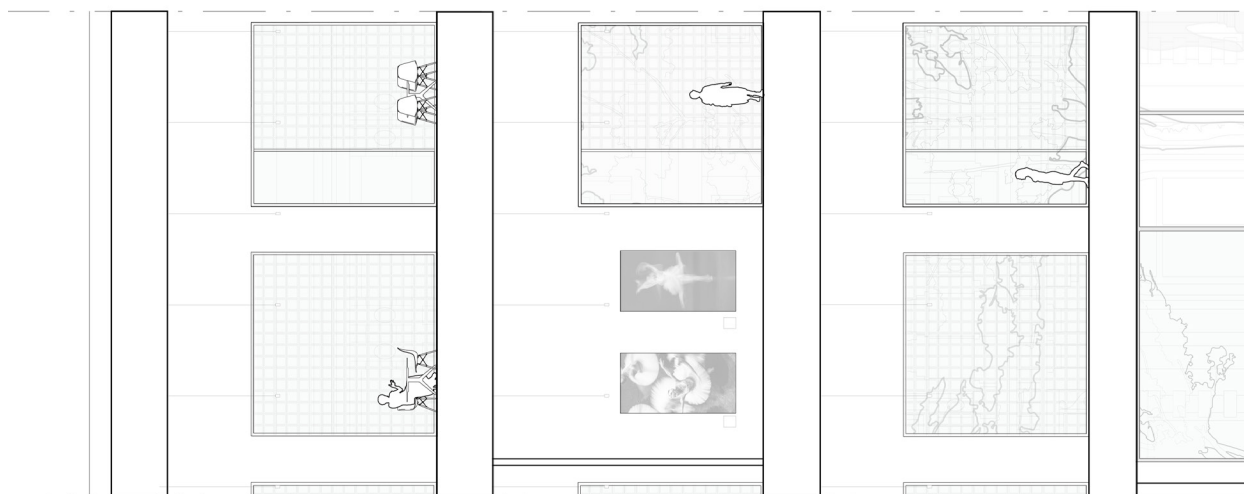
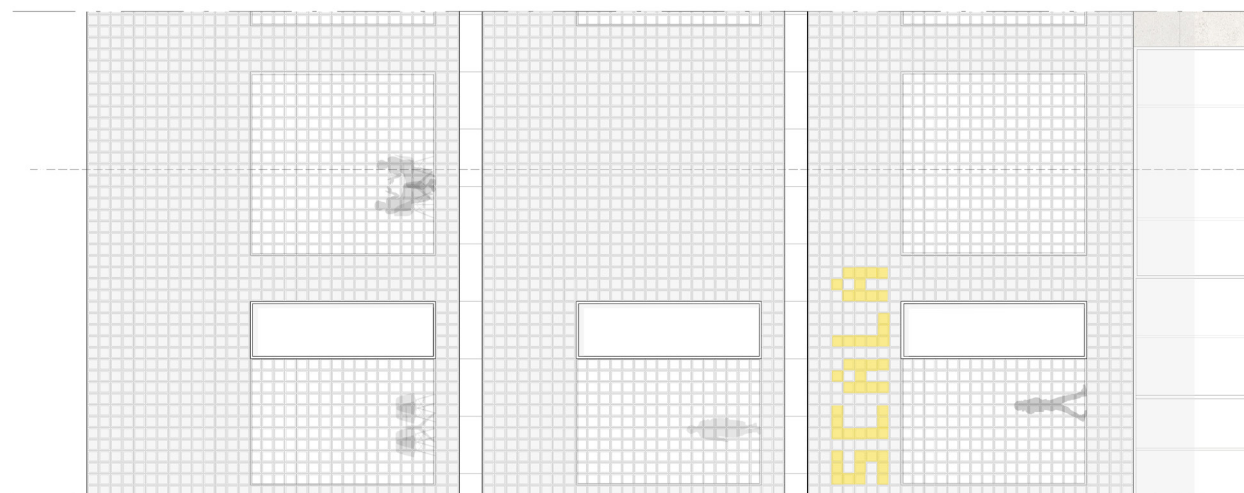
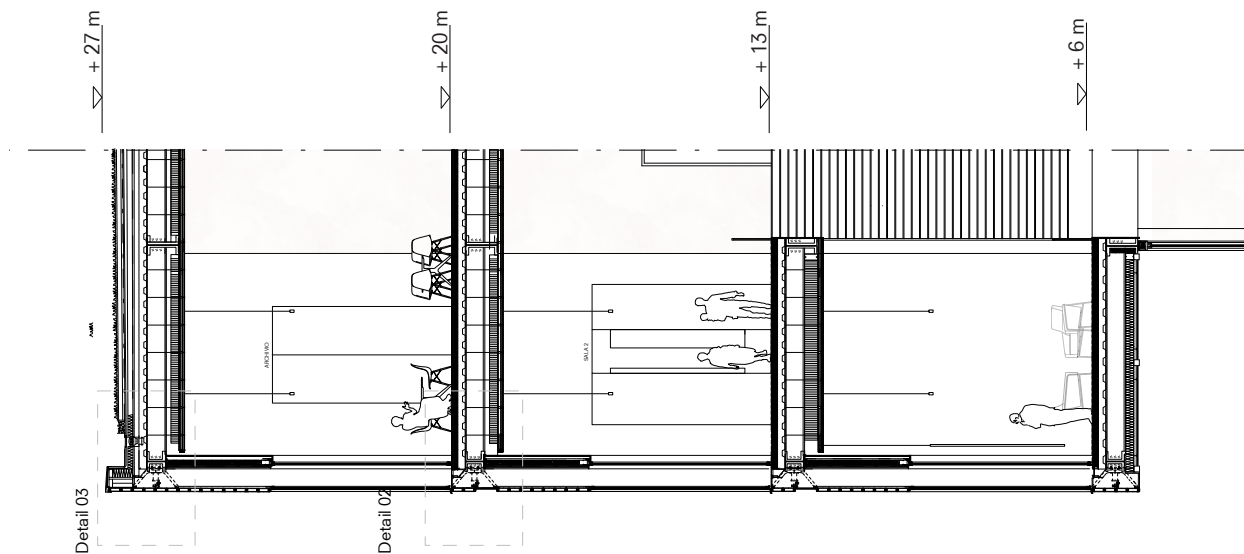


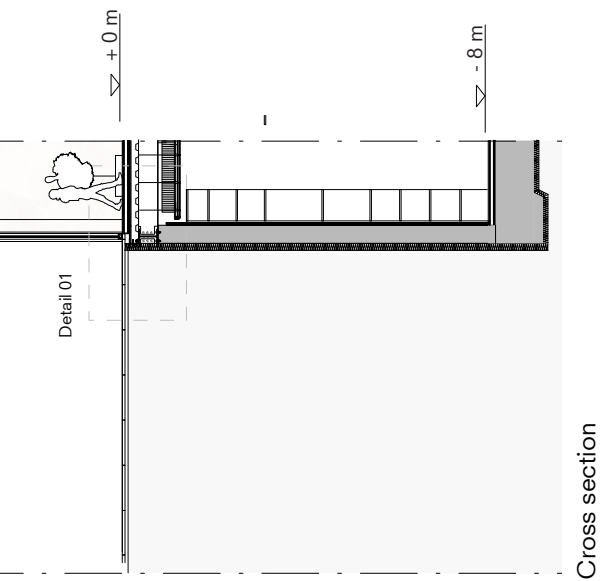
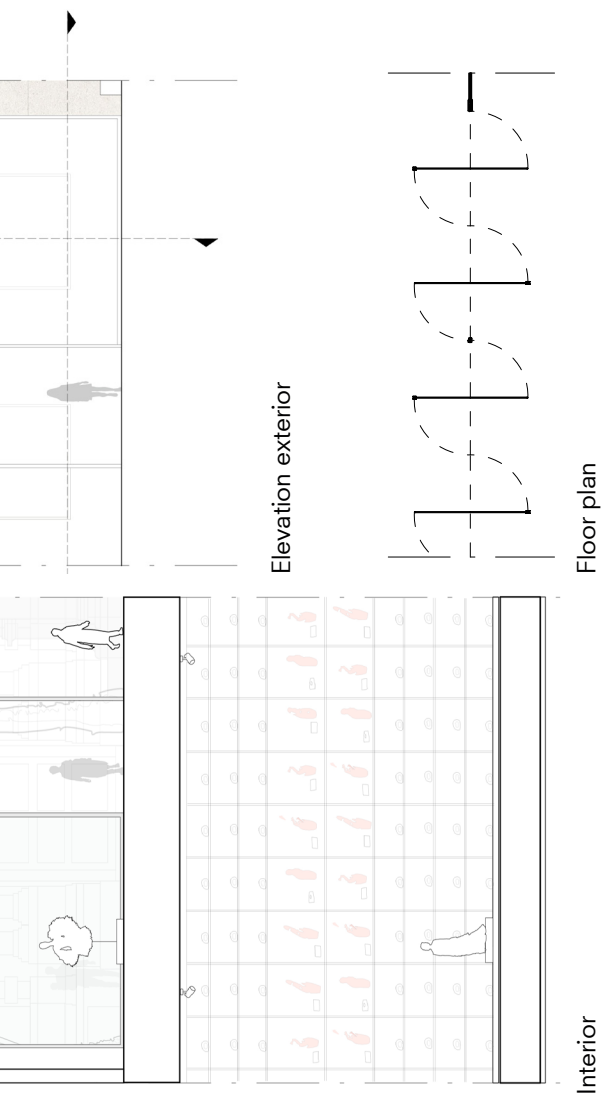
Section

The theatre block has a natural stone façade that allows it to fit within the surrounding urban block and the architectural character of Milan. Deepened façade elements above the large windows add depth and shadow. The third floor is set back and finished in the same façade material as the civic palazzo. This material continuity strengthens the reading of both volumes as one cohesive architectural composition.



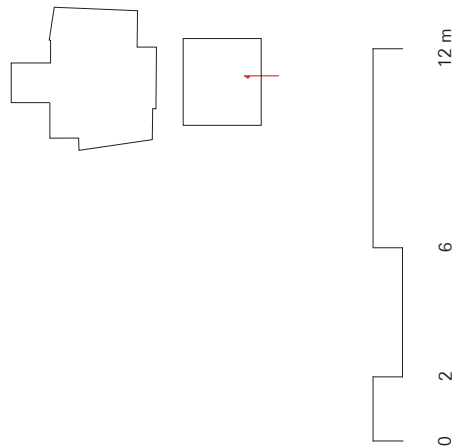
envelope fragment





The glass block façade has a distinctly different identity: light, contemporary and more porous than the theatre block. Horizontal elements between the floors add depth and shadow, while the concealed floor slabs and roof structure behind the glass blocks make the civic palazzo appear almost as a floating volume.

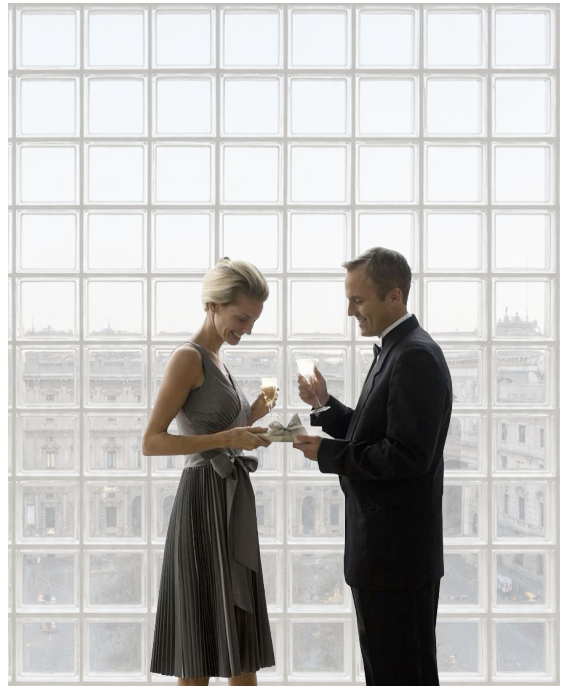
Behind the glass block façade, a ventilated cavity is introduced between the first and second skin. This cavity reduces heat build-up by allowing warm air to rise and escape. Perforated aluminium elements support stack ventilation from bottom to top.



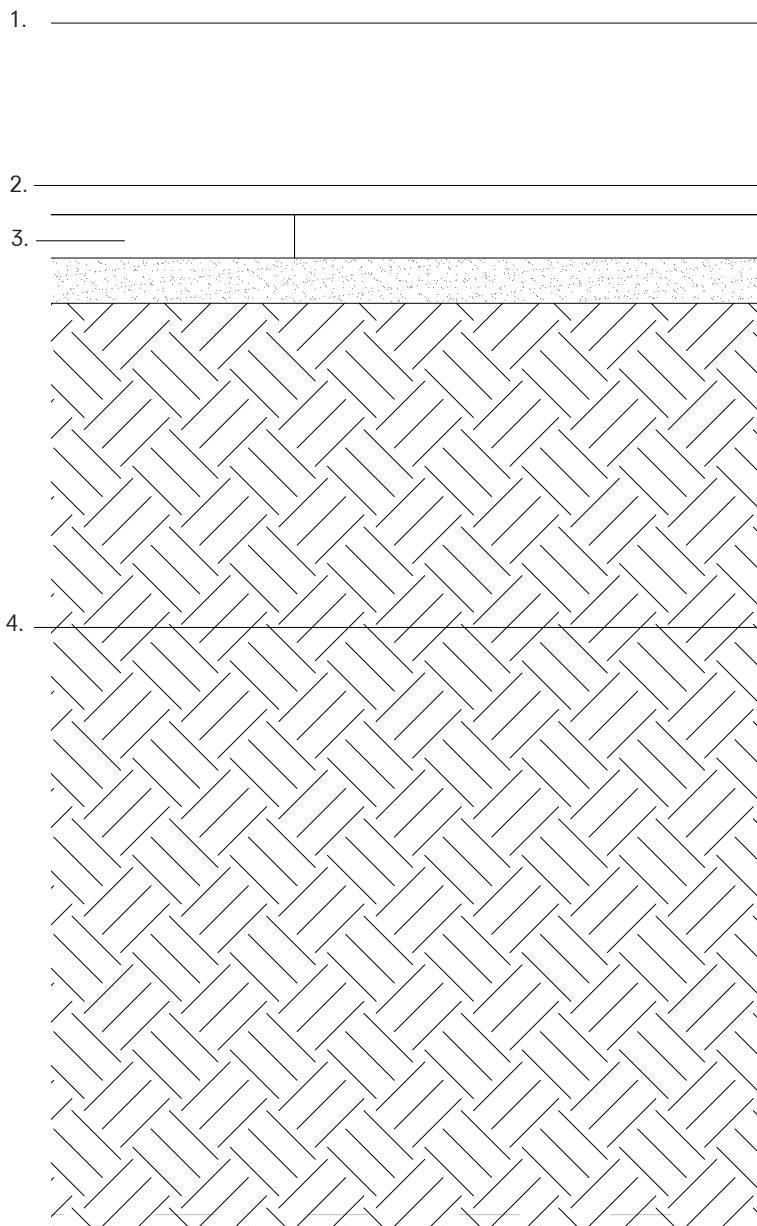
interior and envelope fragment

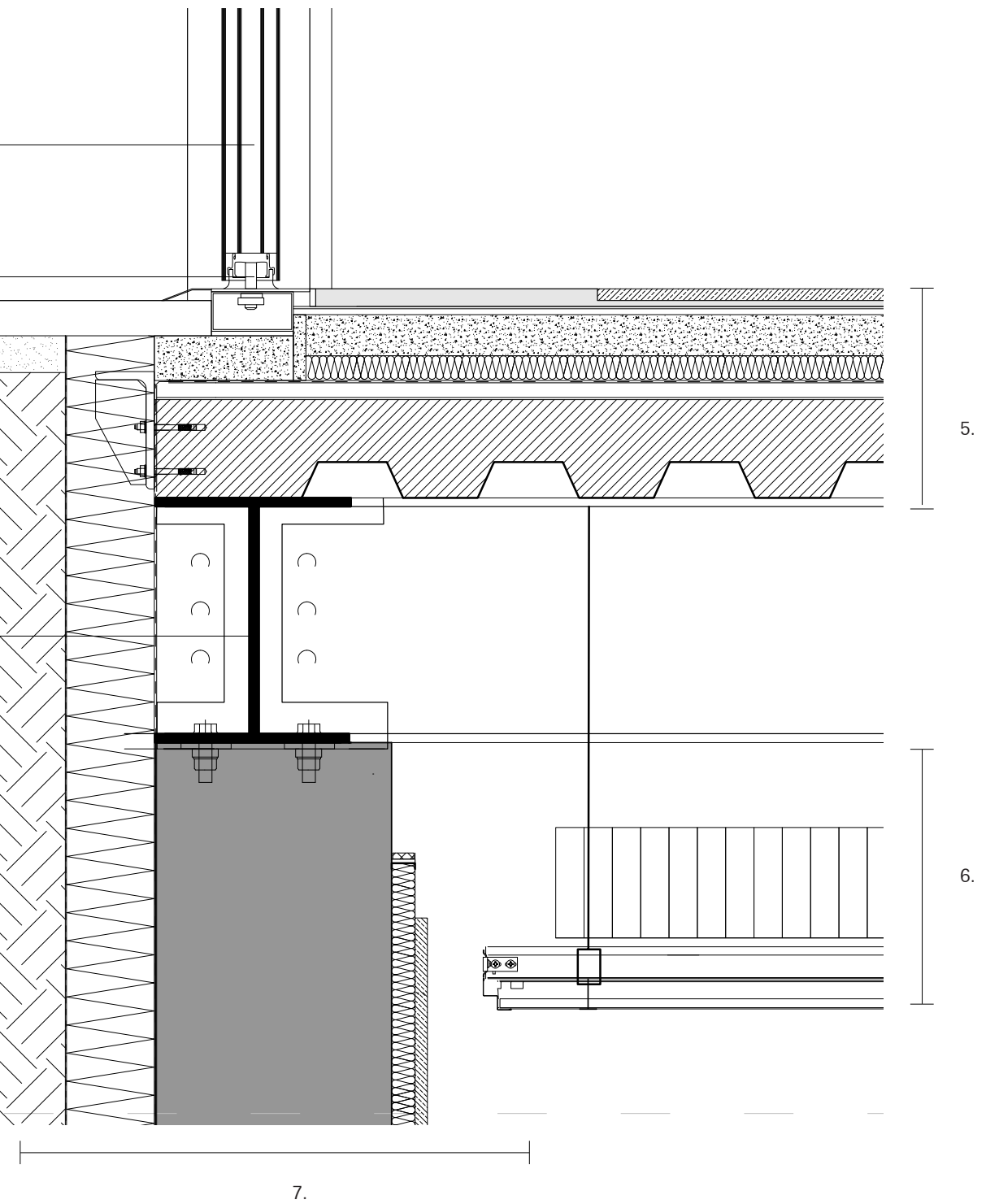
Glass blocks, or vetrocemento, have a clear precedent in Italian modernist and rationalist architecture. In this project, they are used to give the civic palazzo a communicative façade. With an opacity of approximately 60 percent, the glass blocks function as a filtered threshold: they reveal movement, light and silhouettes, without fully exposing the interior or compromising privacy. The façade relates to the light toned materials of the surrounding palazzi, while giving the building a contemporary expression. Integrated LED technology allows moving titles, programme information and the time to appear through the glass block façade. In this way, the building communicates with the city without becoming fully transparent. Larger window openings are integrated where direct views and higher levels of daylight are required.

The plinth is largely transparent, allowing the public interior to visually connect with the surrounding city. Only the cores are expressed as solid elements, finished in pink stone to give the base more weight and material warmth.



1. Laminated safety glass
2. Pivot door / threshold:
 - glass pivot door
 - slim aluminium bottom rail
 - bottom pivot spindle
 - recessed floor spring
- 5 mm stainless steel cover plate,
flush with floor finish
- automatic drop seal /
compression gasket
- thermally broken threshold
profile
3. Outside pavement grid
4. HEA450 beam, with fire
-resistant layer
5. Floor build-up:
 - 20 mm terrazzo tile
 - 10 mm flexible adhesive mortar
 - 4 mm decoupling membrane
 - 10 mm self levelling screed
 - 70 mm reinforced floating
screed
 - 0.2 mm PE separation layer
 - 40 mm acoustic insulation
 - composite steel concrete floor
6. Suspended ceiling build-up:
 - mineral wool
 - Vapor Syntax powder-coated
aluminium torsion spring panels
with soft sound backer
7. Basement wall build-up:
 - Dimpled drainage membrane
with integrated geotextile
 - XPS perimeter insulation
 - Waterproofing membrane
 - Reinforced concrete basement
wall (400 mm)
 - Mineral wool insulation layer
 - Vapour barrier
 - Adhesive layer
 - Natural stone cladding





1. Schuco aluminium window frame

2. Facade supporting mullion system, with perforated metal platform

3. floor build-up:
- 20 mm polished terrazzo floor finish with 80 x 80 mm dark green marble inserts, aluminium plinth
- 10 mm flexible adhesive mortar
- 4 mm decoupling membrane
- 10 mm self levelling screed
- 70 mm reinforced floating screed
- 0.2 mm PE separation layer
- 40 mm acoustic insulation
- composite steel concrete floor

4. Steel bracket system (based on Maison Hermes by Renzo Piano)

5. HEA450 perimeter edge beam + fire-resistant layer

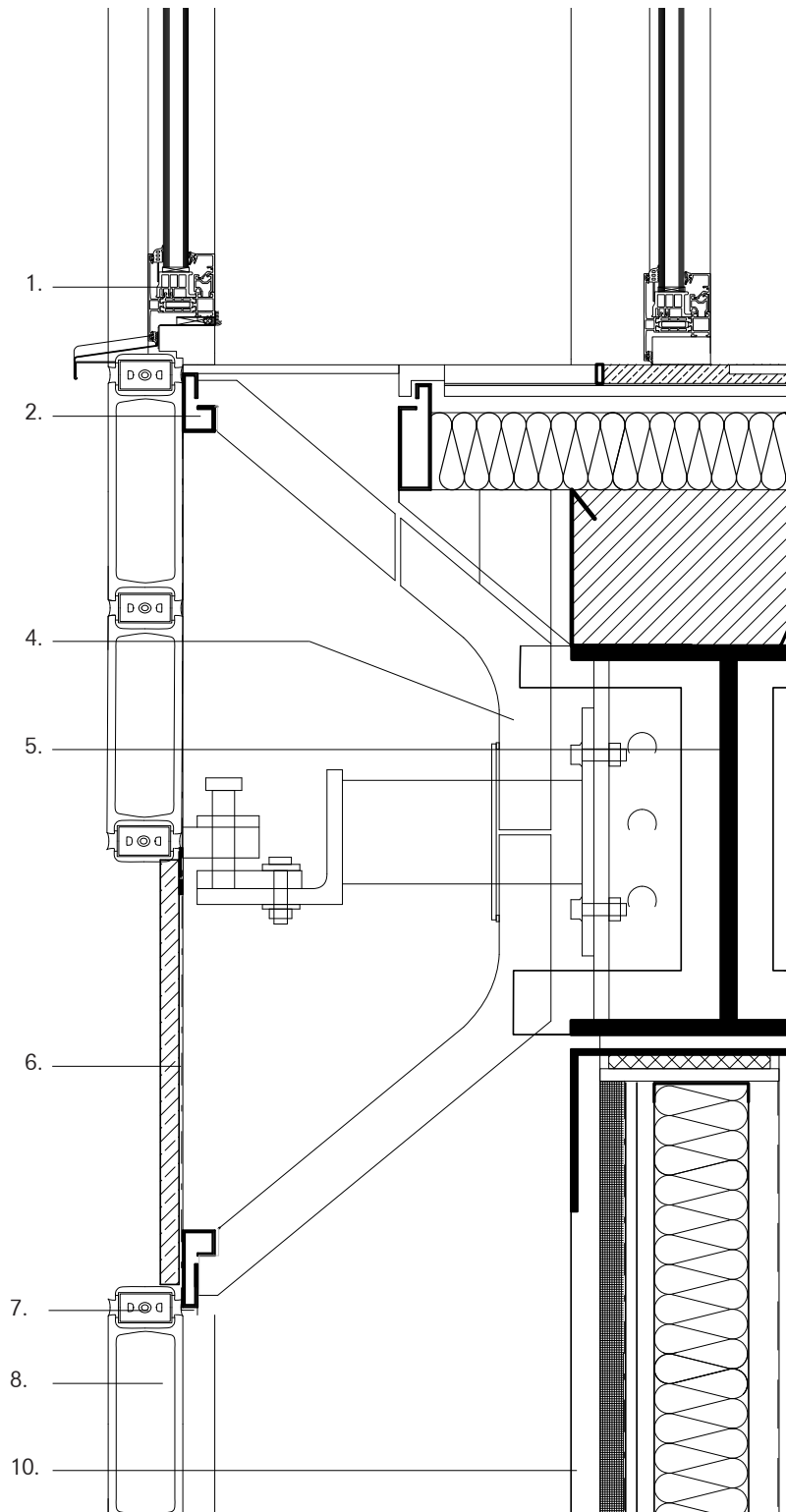
6. 20 mm beige natural stone

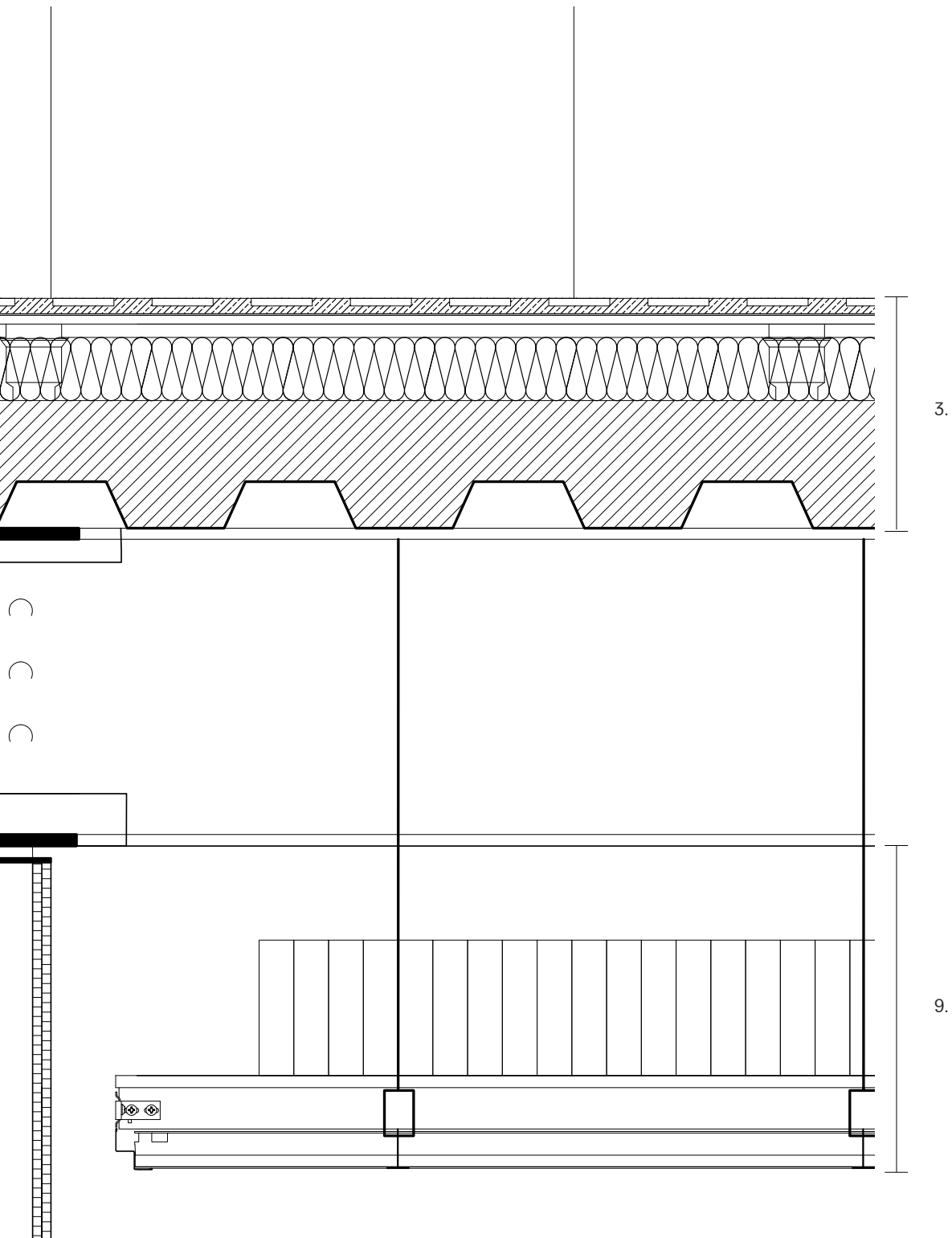
7. Aluminium channels

8. Glass block (240x240 x80mm)

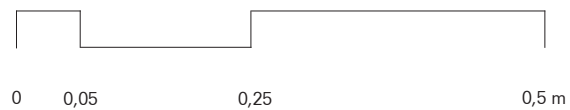
9. Suspended ceiling build-up:
- mineral wool
- Vapor Syntax powder-coated aluminium torsion spring panels with soft sound backer

10. wall build-up:
- 20 mm external cladding
- 25 mm ventilated cavity
- vapour open breather membrane
- 12 mm cement board sheathing
- 150 mm metal stud frame with mineral wool insulation
- vapour control layer
- 50 mm insulated cavity
- 2x 12.5 mm gypsum fibre board





2. floor



1. Metal coping - air outlet protected from rain ingress

9. Roof build-up:
 - moss sedum vegetation mat
 - growing substrate
 - filter fleece
 - water retention layer
 - protection mat
 - root-resistant waterproofing membrane
 - roof insulation (tapered with gutter)
 - vapour barrier
 - gypsum cover board
 - composite steel concrete roof deck

2. Glass block (240x240 x80mm)

3. Aluminium channels

4. Rockwool comfortboard 2x

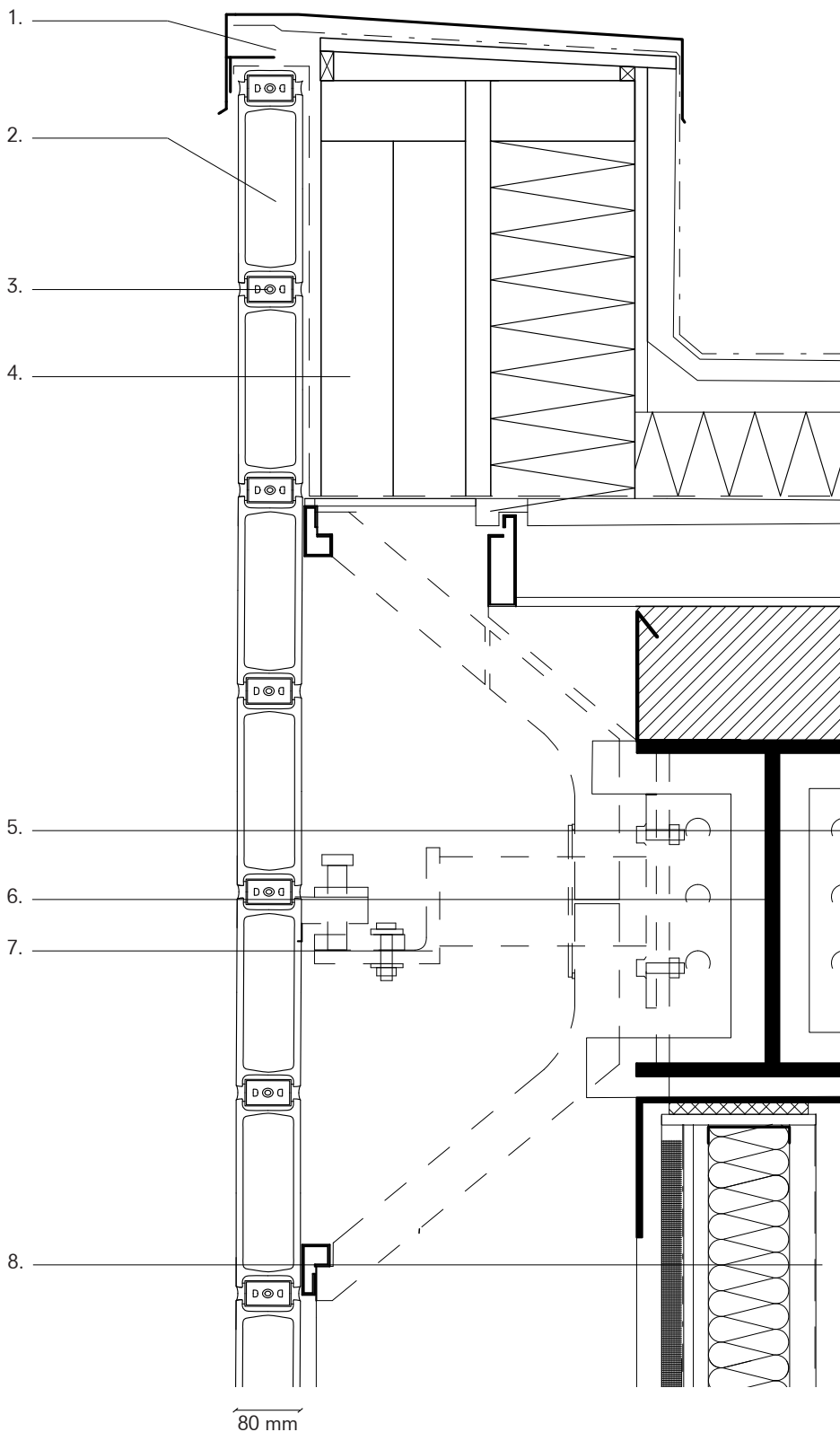
5. Steel truss

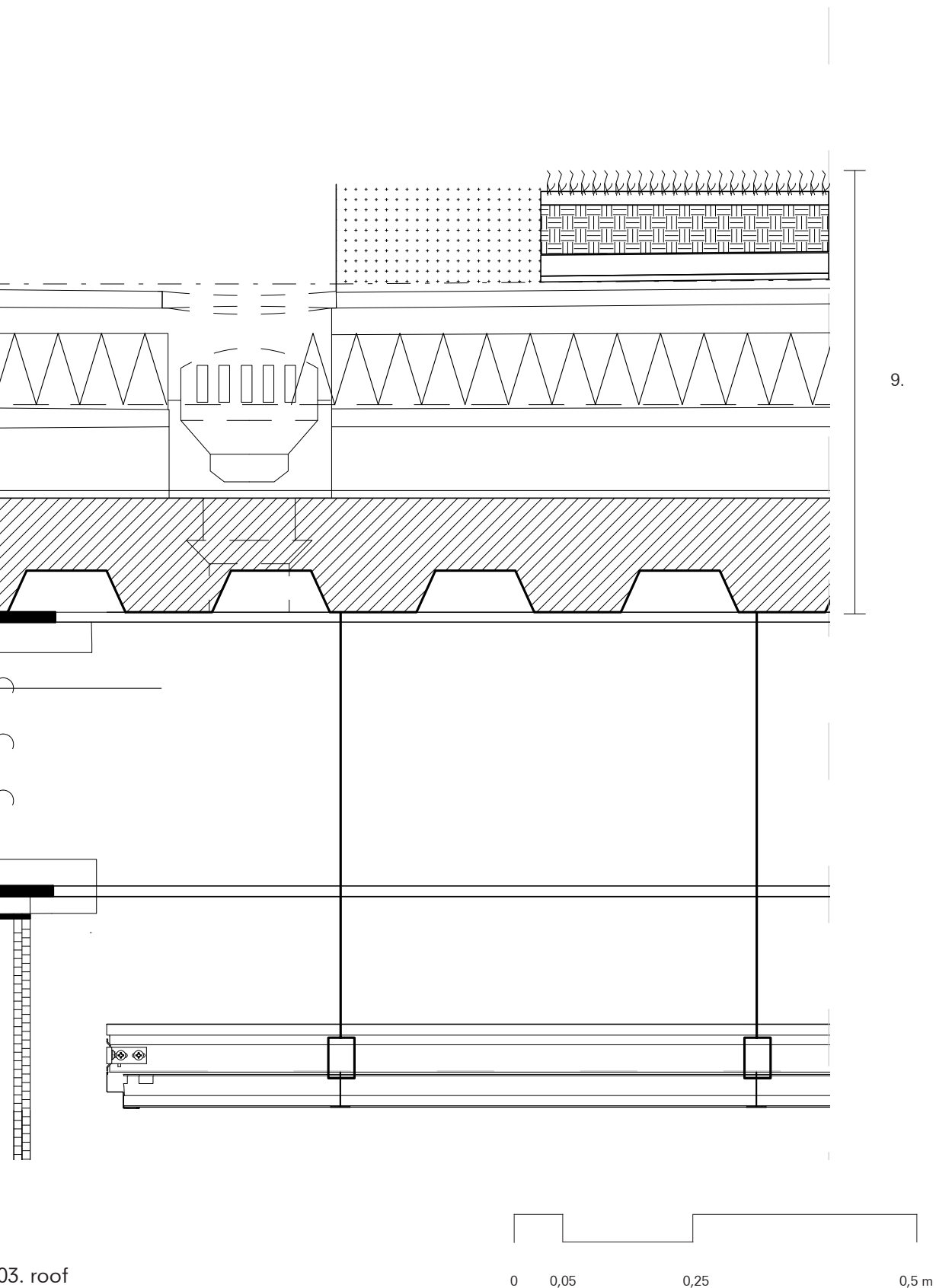
6. H beam 450x450 mm, with fire -resistant layer

7. Steel facade system (reference Maison Hermes Tokyo)

8. Suspended ceiling build-up:

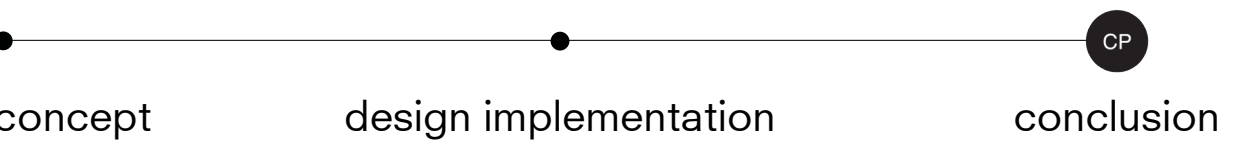
- mineral wool
 - Vapor Syntax powder-coated aluminium torsion spring panels with soft sound backer





This final chapter evaluates the project in relation to the research question and design objectives. The conclusion explains how the design answers the research and how the main ambitions are spatially implemented. The discussion reflects on the broader implications, tensions and limitations of the proposal, especially the balance between openness, ritual and institutional transformation. The reflection then considers the design process, the development of the project and the lessons learned throughout the graduation trajectory.





CONCLUSION

This graduation project investigated whether architectural flow can reconnect the opera and ballet house with the city. The project shows that this reconnection is possible when flow is understood not only as movement, but as a layered spatial, social, temporal and atmospheric system. Flow organises how people arrive, wait, gather, observe, learn, participate and move towards performance.

The project therefore proposes a new Scala that operates between two conditions: the city and the ceremony. On one hand, the building becomes more public, accessible and present in everyday urban life. On the other hand, it preserves the exceptional and ritualised quality of opera and ballet. The aim was therefore not to make opera ordinary, but to make the world around opera more generous, legible and connected to the city. The first design response is the reorganisation of the site by splitting the volume. Instead of treating the opera house as a closed object, the project opens the urban block and creates a more permeable relation between the building and its surroundings. This introduces public spaces of different scales, strengthens pedestrian movement and allows the opera house to become part of Milan's lived mental map. Participation can therefore happen in subtle ways: a parent sitting at the café while a child plays near the fountain, a passer-by catching a glimpse of a rehearsal room, or a tourist choosing the route through the building and unexpectedly ending up in the museum or a performance.

This approach is supported by Jan Gehl's

distinction between necessary, optional and social activities. While necessary activities happen regardless of spatial quality, optional and social activities depend strongly on the quality of the built environment (Gehl, 2011). The design therefore does not only provide access, but creates conditions for lingering, slow movement and informal encounter. Through the café, terrace, museum, workshops, foyer spaces and public route with multiple entrances, the opera house becomes a civic environment where low-intensity social contact can occur. These everyday moments are essential to civic belonging and help transform La Scala from an episodic performance building into a cultural meeting point.

The second design response is the civic foyer. Traditionally, the foyer is mainly active before and after performances. In this project, it becomes a public interior that can function throughout the day. It connects cultural, educational and social programmes, including the café, terrace, museum, exhibition areas, workshops and public seating zones. In this way, the building can receive not only evening audiences, but also tourists, students, children, professionals, museum visitors and people who encounter opera and ballet in a less direct way. The opera house therefore expands its audience without losing the aura of the evening performance, because different zones can shift in openness, atmosphere and control throughout the day.

The third design response is the choreography from city to ceremony. Before a performance

begins, the opera house already starts to transform the visitor's state of mind. The movement from the city into the theatre is not a direct transition, but a layered sequence of arrival, pause, visibility, encounter and withdrawal. The foyer, staircases, balconies, waiting spaces and auditorium do not only organise circulation; they narrate. Visitors arrive as individuals, but gradually become part of a temporary collective. This produces a specific form of intimacy, that is supported in subtle ways by the spaces.

This emotional transition is translated through interior measures. Compression and decompression of space create rhythm, intimacy and surprise. Directional lighting guides visitors from public openness towards theatrical concentration. Material transitions, warmer tones, textile layers and acoustic surfaces gradually soften the atmosphere towards the auditorium. During the day, these same spaces can remain open, bright and informal. In the evening, they become more focused, ceremonial and controlled. The building therefore does not have one fixed public identity, but shifts between urban openness and theatrical concentration.

The fourth design response is the selective visibility of production. Opera and ballet are usually experienced as finished performances, while rehearsal, costume production, technical preparation and learning remain hidden. In this project, front-of-house and back-of-house remain functionally separated where necessary, but visually overlap at specific moments. Framed

views towards rehearsal rooms, workshops, archives and production spaces reveal the labour behind the performance without disturbing operational efficiency. This makes the institution more understandable and less distant, while still protecting the concentration required for artistic production.

Architectural detail supports this larger concept. The glass block façade acts as a filtered threshold between the city and the interior life of the building. Movement, light and silhouettes become partially visible, without making the building fully transparent. The continuous pavement strengthens the connection between exterior public space and interior foyer, and the interior flow allows visitors to gradually explore the building. Materialisation, light, acoustics and detailing therefore do not act as separate finishing layers, but as instruments that support the soft transition between city and ceremony.

The main conclusion is that architectural flow can play a big role in reconnecting the opera with the city when it works across multiple scales. At the urban scale, it connects the building to Milan's pedestrian and cultural network. At the programme scale, it expands the opera house beyond performance-only use. At the social scale, it allows more types of visitors to enter, observe and participate. At the atmospheric scale, it turns circulation into a ceremonial and intuitive sequence. However, the building cannot function on its own. The client must also actively support this architectural openness through programming,

public events, educational activities, accessible museum formats and a clear behind-the-scenes strategy. In this way, the architecture creates the spatial conditions for a more civic opera house, while the institution gives these spaces cultural life over time.

The project conveys that more transparency does not have to weaken the magic of performance, as long as it is selective, filtered and spatially choreographed. Special evenings can preserve ritual and expectation, while open days, workshops, museum visits, informal performances or even a fashion show in the atrium can expand the cultural life of the building, speak to younger audiences and allow opera to become a civic gathering point again.

For this reason, the design should be understood as both an architectural proposal and an institutional proposition. It suggests a new approach to the opera house: one that becomes more embedded in daily urban life. The civic value of La Scala lies not only in the performance itself, but also in the spaces around the performance.

Through architectural flow, the opera is able to curate a sequence of public, educational, social and theatrical spaces where the people of Milan can gather, observe, talk, participate and, above all, be moved by the art of performance.

REFLECTION

Process

The guiding vision of this graduation project remained consistent throughout the process. Although the design itself developed significantly, the underlying ambition did not fundamentally change. From the beginning, the project was driven by the social value of a cultural and partially public institution, and by the question of how a large theatre building can contribute to the city beyond the moment of performance.

The prominent location in Milan and the research into the existing Scala strongly informed this approach. It is situated within a dense cultural and urban network, close to the Duomo, next to the Galleria and other important public spaces. The Bodies and Building assignment helped to understand the city as an interconnected system of public buildings. These buildings do not only function individually, but also contribute to a larger urban sequence of movement, encounter and representation.

After the massing studies, this theoretical argument translated itself into the spatial concept as well. The theatre was no longer approached only as a performance machine, but as a building with two complementary identities: the technical machine and the civic foyer. This distinction helped to clarify the project both spatially and conceptually. The machine refers to the highly specific, efficient and technical world of theatre production, while the civic foyer refers to the public, social and urban role of the building. It allowed the project to

focus on Milanese culture, rituals and performative behaviour.

Professional reflection

Professionally, the project strengthened my interest in the relationship between buildings and the urban spaces around them. I have always been interested in the bigger picture and in the way architecture shapes the experience of the city. For me, this project once again confirmed that buildings and their surroundings cannot be seen as separate elements. The visit to Milan and the analysis of La Scala immediately revealed this tension. The closed façade, the car dominated road, the piazza and the Galleria together created a complex and fascinating urban condition. Even before entering, the main challenge was already visible, the barrier between inside and outside.

The design therefore became a careful study of context. The idea of a fourth palazzo helped to position the building within Milan's architectural language, without simply copying the existing city. The urban massing studies and the research into symmetry were especially valuable, because they helped me understand how a large cultural building can feel both autonomous and embedded.

At the same time, the project could have benefited from earlier architectural development of the interior. While the urban argument became clear quite early, the functional organisation took a lot of time and therefore the interior atmosphere could have been integrated sooner and into more detail.

This would have allowed the spatial experience of the foyer, halls and circulation areas to become richer and through materialisation, guide the visitor flow more strongly. In the end, design choices had to be made in quite a short period of time, so better time management in that part of the process would have helped. In addition, the project would have benefited from a stronger focus on sustainability.

Personal reflection

The scale of the project was one of the biggest challenges. Designing a large opera and ballet building requires constant switching between urban logic, spatial experience, circulation, theatre technology, structure, climate and materialisation. Revising one part of the building often affected many other parts.

Although not always explicit, my personal fascination with theatre and dance also influenced the project. Years of visiting the Stopera, NDT, theatres and performances gave me a user's understanding of small spatial moments: entering together, waiting before a performance, moving through foyers, sensing anticipation and leaving the city behind for a short time. These experiences helped me design not only from technical requirements, but also from the rituals around performance and the user experience.

Looking back, I sometimes would have told myself to move faster and to avoid losing too much time in small details. At the same time, those details also taught me a lot. I became

fascinated by the technical and spatial precision of theatre buildings, where small decisions can have large consequences for use, atmosphere and performance.

Working on a graduation project individually means that the project becomes part of daily life. This has taught me to use personal time in a productive way: to observe, visit buildings, think, sketch and become inspired. These moments outside formal study time often informed the project in a valuable way.

I have also learned a lot from the teaching method of the studio. At times, it was challenging not to receive direct answers or directions. However, this also pushed me to make my own decisions and to argue for them more clearly. I learned to rely less on the immediate opinion of a tutor and more on my own design reasoning. This was sometimes uncomfortable, but it increased my autonomy as a designer.

Critical discussion

The most important personal challenge during this graduation project was the tension between designing with feeling and designing with data. I often start from intuition, atmosphere and spatial imagination. Complex Projects challenged me to translate this intuition more into arguments and measurable decisions, and to always have my story ready. Instead of seeing the project as something personal, I learned to ask myself more critically why a choice makes sense, what

it contributes and how it performs. I think this is a seriously important lesson to have learned, before I enter the professional field.

The challenge was to make the project not too practical or rational, but to combine efficiency with architectural quality. The tutors encouraged me halfway through the project to dare more in the design, to exaggerate certain aspects and to push the research topic further into the architecture. I remember that this felt a bit like something out of my comfort zone, but what I took from this is that a strong concept should not remain in the text or diagrams, but should become visible and spatially felt in the building.

In conclusion, this graduation project taught me how to work with the complexity of the big scale without getting out of touch with the smaller scale. It strengthened my ability to connect urban analysis, functional organisation, technical requirements and spatial atmosphere into one architectural argument. It taught me to test, structure, defend and present a project. And perhaps most importantly, it taught me that three quarters of a year can still feel too short in the end.

APPENDICES

Extensive research was conducted into the existing building of Teatro alla Scala. This research focused particularly on flow, programme and operational organisation, and informed several key decisions in the design proposal. The full research can be found in this appendix.

PLANNING

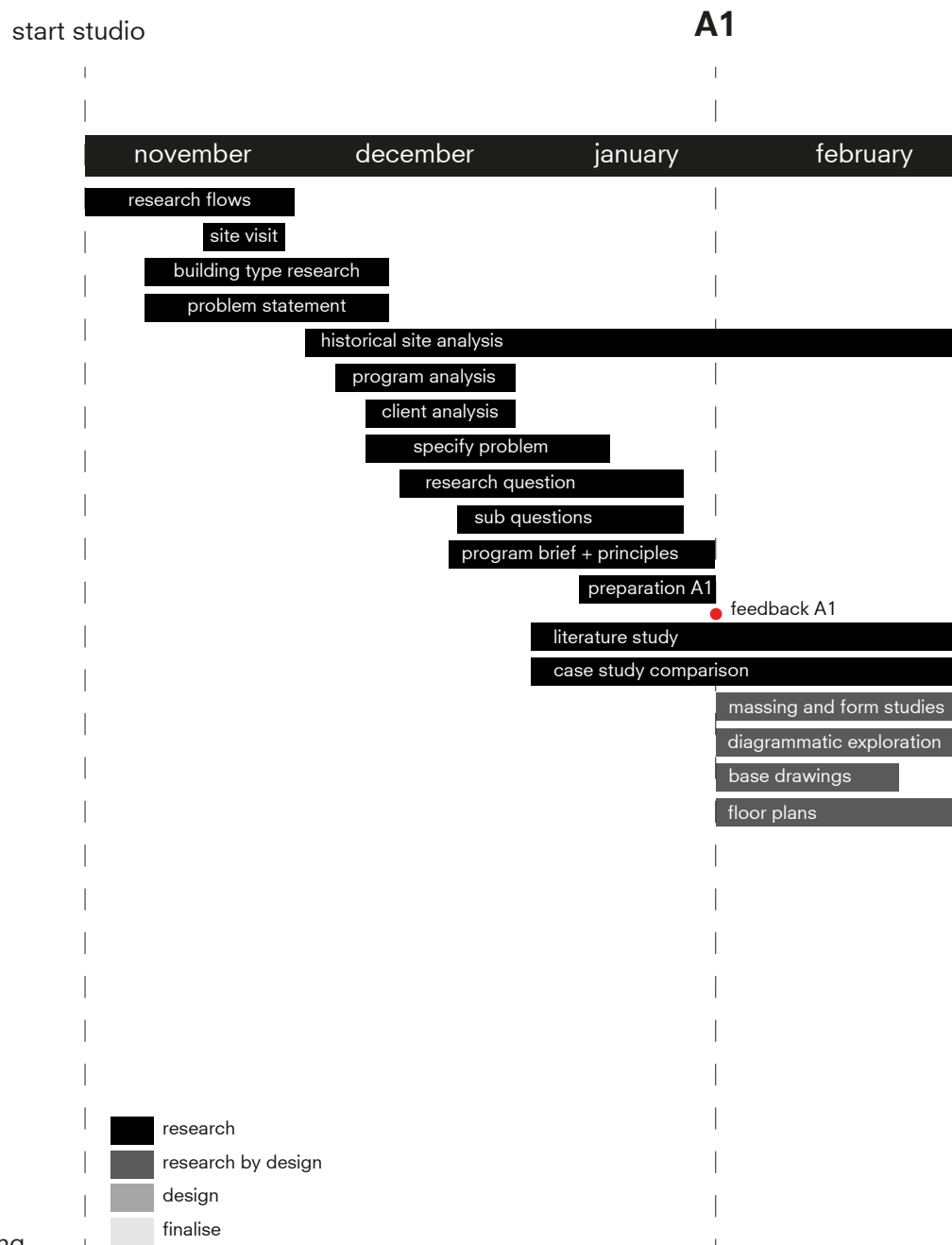
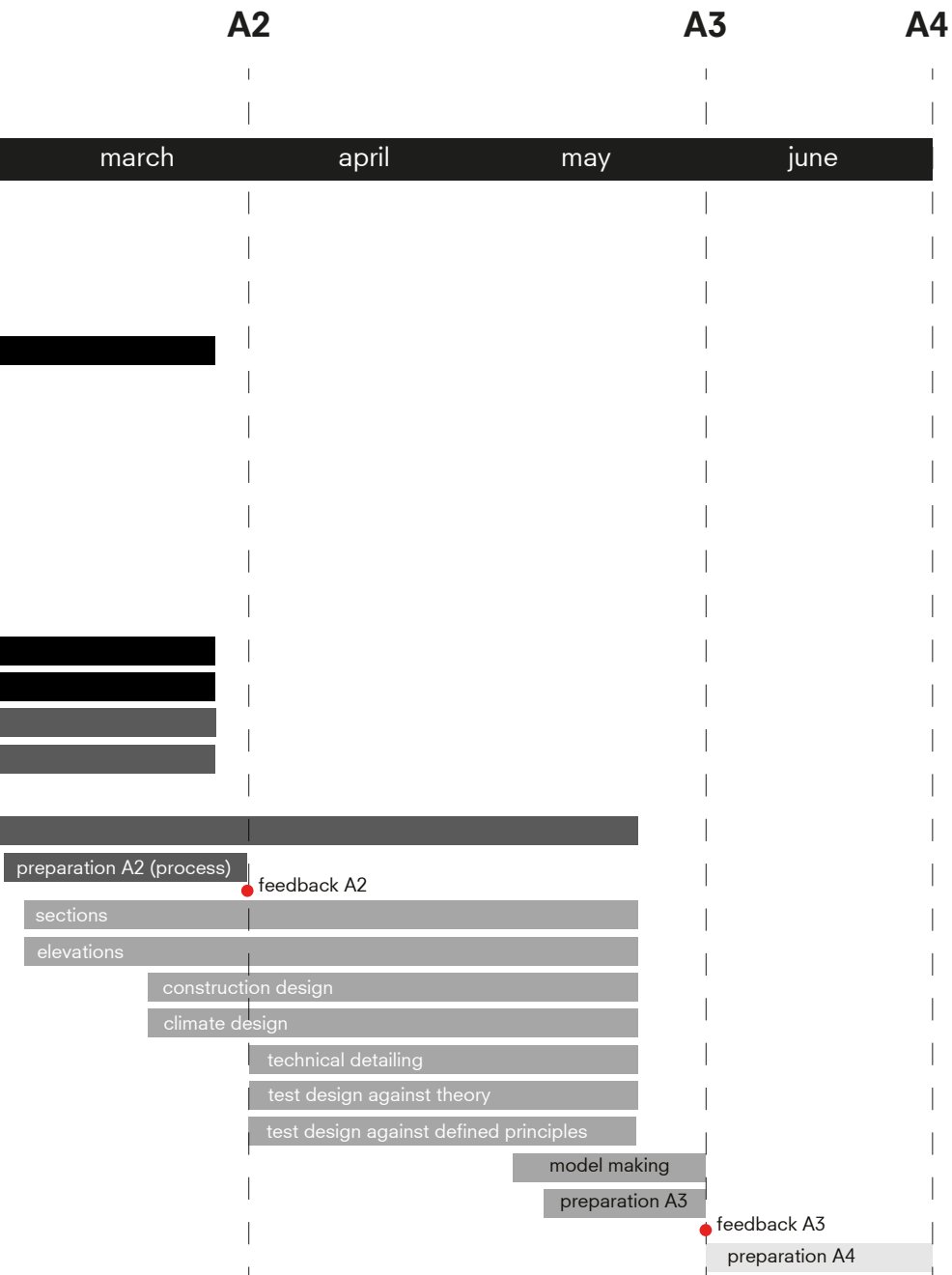


Figure 129 | Planning



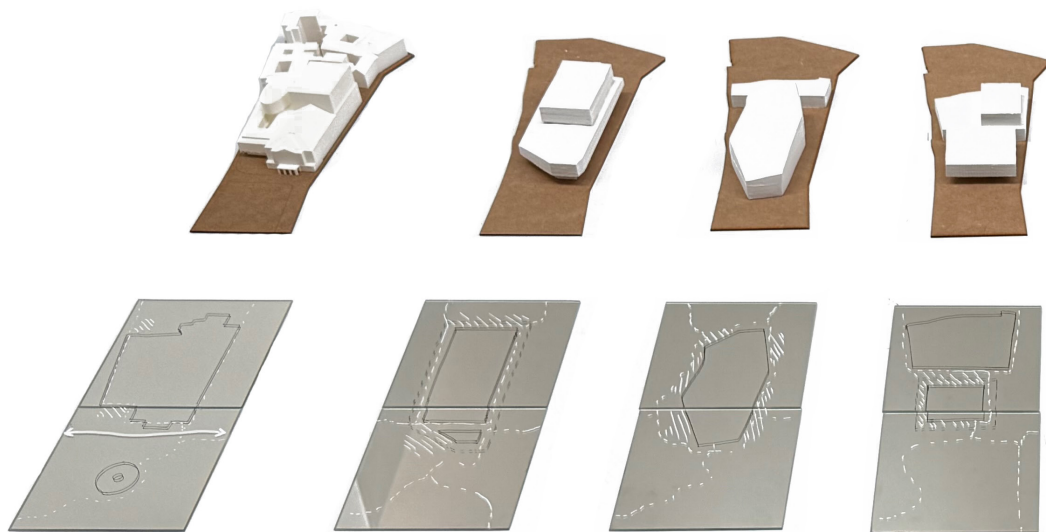


Figure 130 | 3x3 massing studies



Urban mass research

While researching the mass of the Opera and Ballet House, several early design explorations tested single block configurations. These studies investigated the opera as one continuous building mass, potentially integrated within the existing urban block.

However, these configurations resulted in an excessively large and monolithic building mass. In many ways this condition already exists in the current building. Although this may not be immediately perceived today due to the patchwork character of its façades, the overall scale of the complex causes the opera house to dissolve within the surrounding urban fabric.

This is in strong contrast to the historic frontal façade of La Scala, which remains clearly legible and recognizable within the city. Behind this façade, however, the building expands into a large mass, creating an impermeable object within the city. As a result, the opera house becomes difficult to read as a coherent architectural presence at the urban scale and functions primarily as a destination rather than as part of everyday urban life.

The continuous block limits urban movement, blocks visual connections through the city, and reduces contact points with the surrounding streets. In addition, it leaves little room for public urban space around the building, except for the square itself.



Figure 131 | Shape

The new shape should carefully integrate with the surrounding urban fabric and adjacent public spaces.



- + monumental
- + strong urban presence
- + integration with the existing urban block
- authoritarian
- closed facade
- impermeable urban block

Figure 133 | Existing shape



- + overhang creates transitional public zone
- + asymmetry establishes a dialogue with the square
- megalomaniac scale
- weak integration with the existing urban block

Figure 132 | Asymmetrical shape

- + strong urban presence
- + recognition point
- + shape generates multiple urban spaces
- blocks existing street continuity
- reads as an isolated object in the city
- 'icon' effect less aligned with Milanese urban character



Figure 135 | Freeform shape

- + overhang creates transitional public space
- + division into two volumes creates a clear spatial duality and responds to the geometry of the square
- + omnidirectional facade with multiple entry points
- requires underground connections



Figure 134 | Split up shape

Existing

- + practical linear program organisation
- + clear separation between FOH and BOH
- multiple historical expansions result in fragmented connections and excessive circulation space
- visitors experience only a limited part of the building
- minimal interaction between FOH and BOH

Linear

- + practical linear program organisation
- + clear separation between FOH and BOH
- + optimised connections, spaces, and circulation space
- no interaction between FOH and BOH

Backwards

- + unconventional configuration
- + increased interaction between FOH and BOH
- stage positioned at the square results in an illogical organisation of backstage spaces
- entrance lacks visibility

Split up

- + public palazzo combined with BOH functions creates a hybrid public building type
- + auditorium and backstage functions organised in one compact block
- lack of clear separation between FOH and BOH reduces operational efficiency



Figure 137 | Existing



Figure 136 | Linear



Figure 139 | Backwards



Figure 138 | Split up

Concept

Existing

- the shape of the existing scala leaves little to no space for lingering, passing by, or entering without ticket
- the shape primarily defines the public square and does not generate additional smaller urban spaces

Asymmetry

- + enables circulation around the building
- + creates additional public space connected to the piazza
- provides limited improvement in urban routing compared to the existing situation

Freeform

- + generates more intimate urban spaces that connect to the surrounding buildings
- weakens the strong geometry of the piazza

Split up

- + detached volume invites circulation around the building
- + piazza begins to interact with an additional square
- + more opportunity for visual connection between the facades of the opera and ballet building

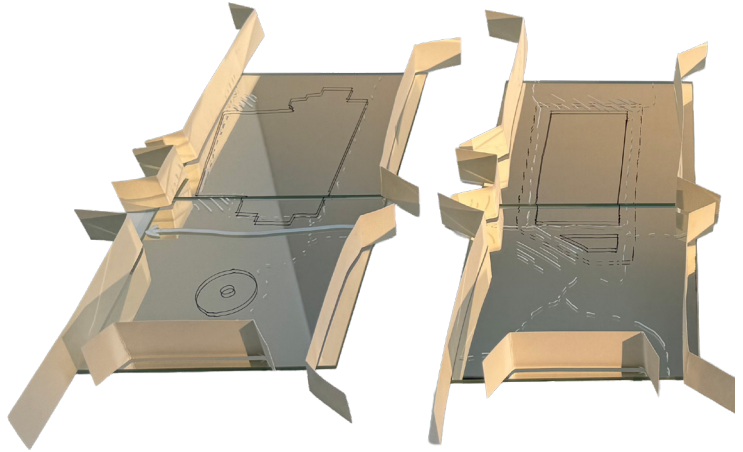


Figure 141 | Existing

Figure 140 | Asymmetrical

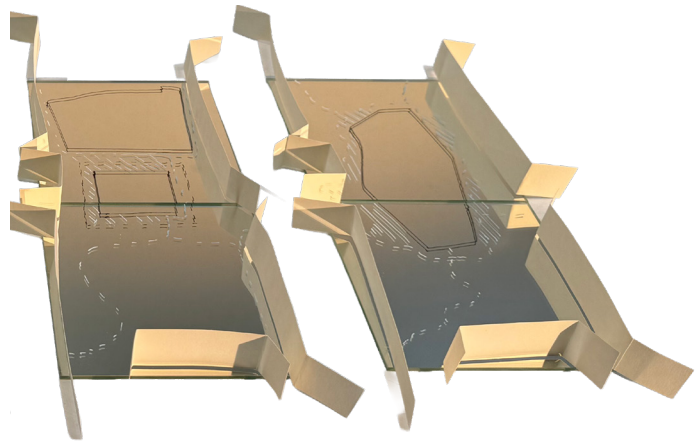


Figure 143 | Split up

Figure 142 | Freeform

Conclusion

These conclusion models combine program, concept and shape in a more detailed manner. Each model explores a different strategy for organizing the opera and ballet program within the urban context.

Traditional

This model is derived from the existing organisation of La Scala and proposes a contemporary interpretation of the traditional linear opera layout. The program follows a clear sequence of FOH, H, BOH, resulting in a straightforward and efficient theatre organisation within a single continuous building mass.

Mix

This model explores a more integrated relationship between FOH, H, BOH spaces. By partially mixing these functions, visitors gain insight into the processes behind the production of the opera and ballet, making the building more transparent and educational. The entire program is organised within a single block volume, allowing moments where public and production spaces visually interact.



Figure 144 | Traditional



Figure 145



Split up

This model investigates the possibility of splitting the program into two distinct volumes.

The traditional opera hall and its backstage infrastructure complete the existing urban block and form the 'theatre machine'. A second, more contemporary palazzo-like volume accommodates most of the public functions, including foyers, museum spaces and the experimental hall. Within this volume, selected BOH functions are also exposed to visitors, creating moments of interaction between production and audience.

Both volumes are connected through an underground level, allowing efficient technical connections while maintaining spatial independence above ground. The visitors are guided through a spatial sequence that gradually unfolds the experience of the opera house. This strategy reduces the scale of the building mass and introduces passages, routes and visual connections that reconnect the opera house with the surrounding city.

I Mix

Figure 146 I Split up





Figure 147 | Urban sequence model

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ChatGPT by OpenAI was used as a supportive tool during the preparation of this report. It was used for language refinement, sentence restructuring, and improving the clarity of written sections. In addition, ChatGPT image editing tools were used to make minor visual adjustments to presentation renders.

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