

MEMORY MOSAICS

*- A Cultural Collage Strategy for Architectural Revitalization
in Kvillebäcken*

Thanks to...

Chalmers University of Technology,
for the education, resources and freedom you
provided.

Daniel,
for taking every page of the thesis seriously
and giving valuable advice.

Naima,
for your effective and timely guidance and all
kinds of help.

Family and friends,
for all your support and encouragement.

Each other,
for our persistence and mutual support that
made this thesis possible.

Master Thesis

Students: Yirong Li, Biao Chen

Year: 2024-2025

Institution: Chalmers University of Technology

Department: Architecture and Civil Engineering

Thesis direction: Architectural Experimentation

Before and After Building

Supervisor: Naima Callenberg

Examiner: Daniel Norell



CHALMERS

YIRONG LI

Master of Science <i>Chalmers University of Technology Architecture and Urban Design</i>	<i>2022-2025 Sweden</i>	Internship <i>Kraaijvanger Architects</i>	<i>2024-2025 Netherlands</i>
Exchange Program (Master) <i>Delft University of Technology Architecture, Urbanism and Building Sciences</i>	<i>2023-2024 Netherlands</i>	Internship <i>Kumiki Architecture Design Office</i>	<i>2024 Netherlands</i>
Bachelor of Science <i>Istanbul Technical University Architecture</i>	<i>2017-2022 Turkey</i>	Teaching Assistant <i>Chalmers University of Technology</i>	<i>2023/2025 Sweden</i>
Exchange Program (Bachelor) <i>Technical University of Munich Architecture</i>	<i>2019-2020 Germany</i>	Internship <i>Istanbul Sisli Municipality</i>	<i>2022 Turkey</i>
		Internship <i>China Construction Third Eng. Bureau</i>	<i>2021 China</i>
		Internship <i>China Northeast Architectural Design & Research Institute Co. Ltd.</i>	<i>2019 China</i>

Email: yironglimm@gmail.com

BIAO CHEN

Master of Science <i>Chalmers University of Technology Architecture and Urban Design</i>	<i>2022-2025 Sweden</i>	Internship <i>Kraaijvanger Architects</i>	<i>2024-2025 Netherlands</i>
Exchange Program (Master) <i>National University of Singapore Architecture and Urban Design</i>	<i>2023-2024 Singapore</i>	Internship <i>NOAHH/Network Oriented Architecture</i>	<i>2024 Netherlands</i>
Bachelor of Engineering <i>Guangzhou College of South China University of Technology Architecture and Urban Design</i>	<i>2014-2018 China</i>	Teaching Assistant <i>Chalmers University of Technology</i>	<i>2023/2025 Sweden</i>
Exchange Program (Bachelor) <i>China University of Technology Architecture and Urban Design</i>	<i>2016-2017 Taiwan</i>	Architect & Assistant Designer <i>PT Architecture Design Co. Ltd.</i>	<i>2019-2021 China</i>
		Internship <i>Architectural Design and Research Institute of South China University of Technology</i>	<i>2017-2018 China</i>

Email: near-biao@outlook.com



TABLE OF CONTENT**Introduction**

<i>Abstract</i>	9
<i>Purpose&Aim</i>	10
<i>Delimitation</i>	10
<i>Thesis question</i>	11

Discourse

<i>Method&Process</i>	14
<i>Background</i>	16
<i>Terminology</i>	24

Observation

<i>First Impressions</i>	34
<i>Library</i>	37
<i>Scenario</i>	57
<i>Intended Vessel</i>	58

Experimentation

<i>Concept Collage</i>	66
<i>Design Strategy</i>	68
<i>Design Approach</i>	69
<i>Design Axonometric</i>	70
<i>Facade & Rendering</i>	72
<i>Physical Model</i>	114
<i>Discussion/Reflection</i>	116

Bibliography	118
---------------------	-----

Images	120
---------------	-----

ABSTRACT

Gothenburg, as one of Sweden's most important industrial cities, preserves 20th-century industrial architecture that carries unique historical memories. The Kvillebäcken district in the north stands as a prime example—its industrial buildings, shaped by the principles of adhocism, have accumulated fragmented, collage-like spatial layers that form a stratigraphy of memory. These memories resonate persistently on-site, making the area a living testimony to the material culture of the industrial era. However, with the decline of manufacturing, the rise of commerce, and shifting demographics, Kvillebäcken is undergoing an organic transformation into a multifunctional mixed-use community. Yet the municipal "Backaplan" redevelopment plan seeks to demolish this industrial heritage outright, which would sever its inherent urban fabric and collective memory. Within the discourse of sustainable urban development, the question of how to reactivate these "outdated" yet narratively rich industrial spaces has become an urgent issue.

This paper proposes the "Memory Mosaic" regeneration strategy, which creatively transforms industrial heritage through three operations: First, by analyzing the structural stratigraphy of industrial buildings, their ad hoc characteristics are extracted and translated into a refined

design vocabulary—a process of translatio that reinterprets historical forms for contemporary needs. Second, the traces of everyday community life are decoded as spatial ciphers, with selective restoration and functional interventions preserving the "lived memory" (imitatio) of the place. Finally, through typological aemulatio, the industrial heritage is reconfigured into a three-dimensional narrative collage, interweaving material memory with cultural functions. In practice, existing on-site structures serve as a "background canvas," optimizing interior spaces while maintaining the original commercial community, allowing old and new to coexist in layered symbiosis and sustaining the neighborhood's vitality.

This strategy offers a sustainable approach to urban fabric regeneration that does not erase collective memory. The authors hope this framework can address the awkward predicament of industrial heritage in modern cities—providing an alternative that is neither museum-like preservation nor bulldozer-style eradication, but rather a dynamically balanced form of rebirth.

Key words:

Industrial Heritage, Adaptive Reuse, Adhocism, Collage, Translatio, Imitatio, Aemulatio, Sustainable Revitalization

PURPOSE/AIM

Throughout the course of history, alongside architectural heritage of outstanding historical value, there exist numerous mundane and seemingly ordinary "everyday heritage" that equally deserve attention and preservation. We often overlook the countless moving memories and stories that unfolded beneath the roofs of large-scale industrial buildings. Local residents have left profound imprints here - working, communicating, playing, and enjoying life, engaging in rich interactions with their surroundings. However, with the transformation of urban economic models, many large industrial buildings remaining from last century's industrial era now face abandonment or demolition. They urgently need to find ways to coexist with modern society to avoid being completely forgotten. While urban renewal is inevitable, the demolition of industrial buildings often leads to the erosion of collective memories held by surrounding communities.

This study proposes an innovative industrial heritage revitalization strategy based on the "Memory Mosaic" concept. By systematically extracting material traces from these buildings and translating them into multi-layered spatial narratives, we aim to establish a sustainable renewal framework for these endangered industrial structures. This approach not only preserves the collective memory of place but also, through creative spatial reorganization, enables historic buildings to find new life in modern cities, achieving an organic balance between industrial heritage preservation and urban development.

THESIS QUESTIONS

How can the fragmented industrial heritage and spatial characteristics of Kvillebäcken be creatively translated and integrated with its multifunctional identity to prevent memory erasure caused by demolition and reinforce its unique sense of place?

DELIMITATIONS

This project deliberately excludes consideration of current economic conditions and the existing retail functions within the buildings to allow greater design freedom. It will not address compliance with Gothenburg municipality's building codes and regulations. Additionally, the impact of interventions on the surrounding existing structures is beyond the scope of this discussion. Due to the lack of specific information about Backaplan's future urban renewal plans and the unpredictability of future data, the design cannot definitively respond to these plans. Instead, it will rely on informed speculation and estimation of potential future scenarios in the Backaplan area.

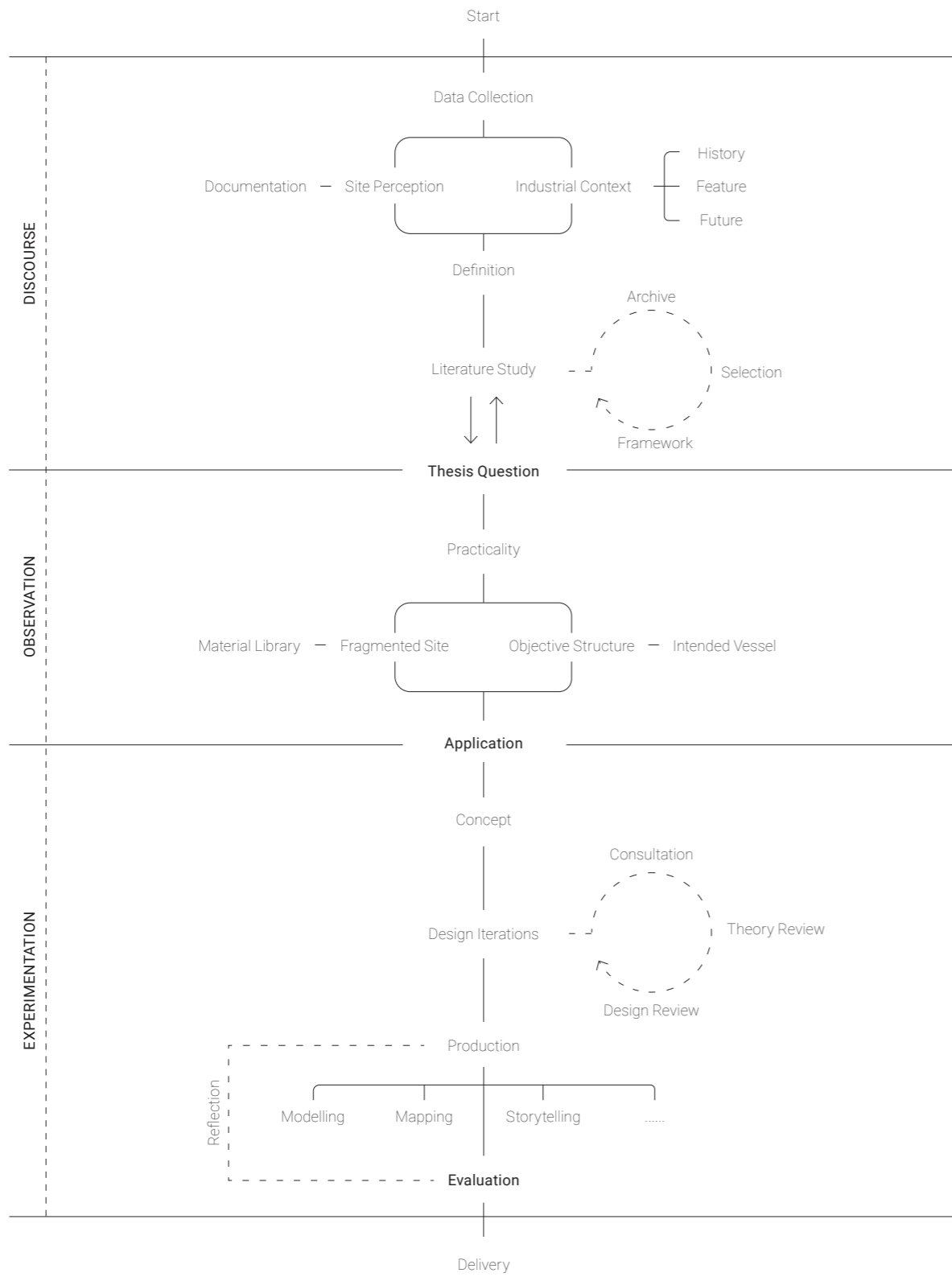
┌

┐

└

┘

METHOD AND PROCESS



/Dynamic Design Methodology

The reading sequence of this thesis follows the process of the author's design development, guiding readers through three distinct phases. The first phase, "Discourse," focuses on gathering information about Gothenburg's industrial history and the Kvillebäcken site. Through in-depth exploration and perception of the site, combined with extensive literature review, we identified theoretical frameworks that best align with the site and conducted a systematic study and organization of these theories. The second phase, "Observation," builds on the four key theories we compiled. Here, we meticulously documented and categorized the industrial heritage fragments on the site that carry multicultural significance. We also selected site structures that met criteria to serve as "vessel" for these fragments, gradually constructing our design scenario. The third phase, "Experimentation," involves translating the outcomes of the previous phase through design, transforming them into carriers that record the site's memory and reinforce its sense of place.

It is important to note that this process is not linear; it is interspersed with numerous reflections and revisions, embracing the need to start over when necessary and continuously adjusting directions to ensure the coherence and consistency of the thesis.

BACKGROUND

/Industrial Heritage

In the 19th century, Gothenburg became a major center of industrialization in Sweden, with industries such as shipbuilding, textiles, and food processing rapidly developing. However, with globalization and deindustrialization, the city's shipyards and textile factories disappeared, leaving behind large factory buildings as significant evidence of Gothenburg's old industrial era. Although many of these buildings have been demolished, this does not imply that Sweden does not value these 'ordinary' industrial heritage buildings. Instead, local efforts through academic exchanges and surveys support discussions and reflections in related fields. For instance, the Industrial-historical forum established in 1992 aims to rescue and protect industrial heritage, and in 1997, the Swedish National Heritage Board was commissioned by the government to study in detail the industrial scale, management models, and environments of 12 important industrial heritage sites, and the formal investigative body "Delegation för industrisamhällets kulturarv" appointed by the government in 1999 are strong evidences (Rittsél, 2023).

Additionally, the Gothenburg government has published and improved the "Kulturhistoriskt värdefull bebyggelse" between 1999-2017 with the goal of 'preserving cultural heritage and bringing it to life' and 'enhancing local cultural identity,' which will also be an important literature for this study. The preservation and transformation of industrial heritage have become an inevitable trend, aligning with the European Union's 17 sustainable goals, including 'sustainable cities and communities' and 'responsible consumption and production.' In recent years, with the enactment of various environmental regulations, there have been many successful and unsuccessful cases of industrial heritage transformation in Sweden with different focuses. Activating industrial heritage involves not only functional innovation but also considering the potential and challenges of the context itself.

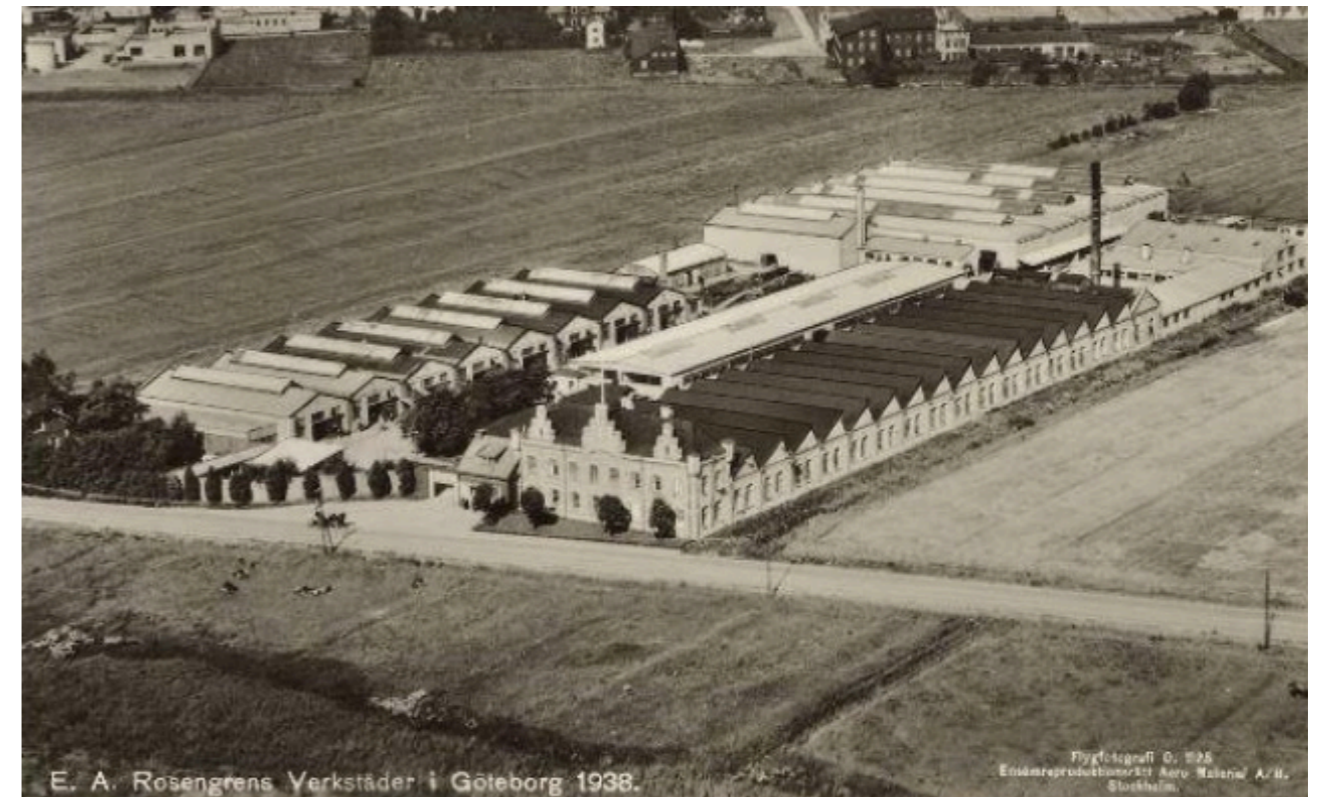


Fig. 1: Rosengren's safe factory was located on the same site where Stora Coop Backplan stands today.

Kvillebäcken area, located north of central Gothenburg, has played a significant role in the industrial development of Gothenburg, documenting the city's transformations and progress. From the mid-19th century, this area has been a crucial transportation hub, with the Kvillebäcken ferry exit connecting Hisingen with Lilla Bommen. Over time, residential and industrial activities emerged, including the long-standing but now demolished Gothenburg Porcelain Factory established in 1898. From the 1900s to the 1950s, eastern Kvillebäcken was known for its charming small industrial buildings, such as paint factories and mechanical industries.

In the 1960s, the area saw the opening of its first large supermarket, EPA, on the site of the former safe factory, now the location of Coop Forum. By the 1970s, these buildings began to transform into commercial and trade areas, benefiting from their central location and relatively low rents, facilitating the shift from industrial to commercial activities. Therefore the neighborhood is planned as a car-oriented area. Although these buildings have undergone extensive renovations and been given new facades and functions, they still carry more historical value for the area than one might expect.

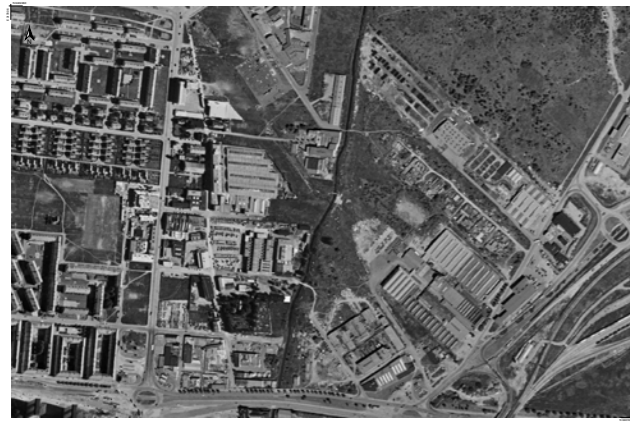


Fig 2: Aerial photo over Kvillebäcken area, 1960



Fig 3: Aerial photo over Kvillebäcken area, 1975

Fig 4: The EPA hypermarket (1969). Photograph by Jens Lauridsen.



As this area has undergone various functions and eras, its architectural characteristics have continuously evolved, with corresponding adjustments and responses in both facades and interior spaces. These visible changes reflect how users have ingeniously utilized existing resources to promptly and effectively address and improve current inadequacies. This approach, akin to Adhocism, not only imbues the site with a unique character but also gradually integrates over time, ultimately forming a harmonious and unified organic whole.

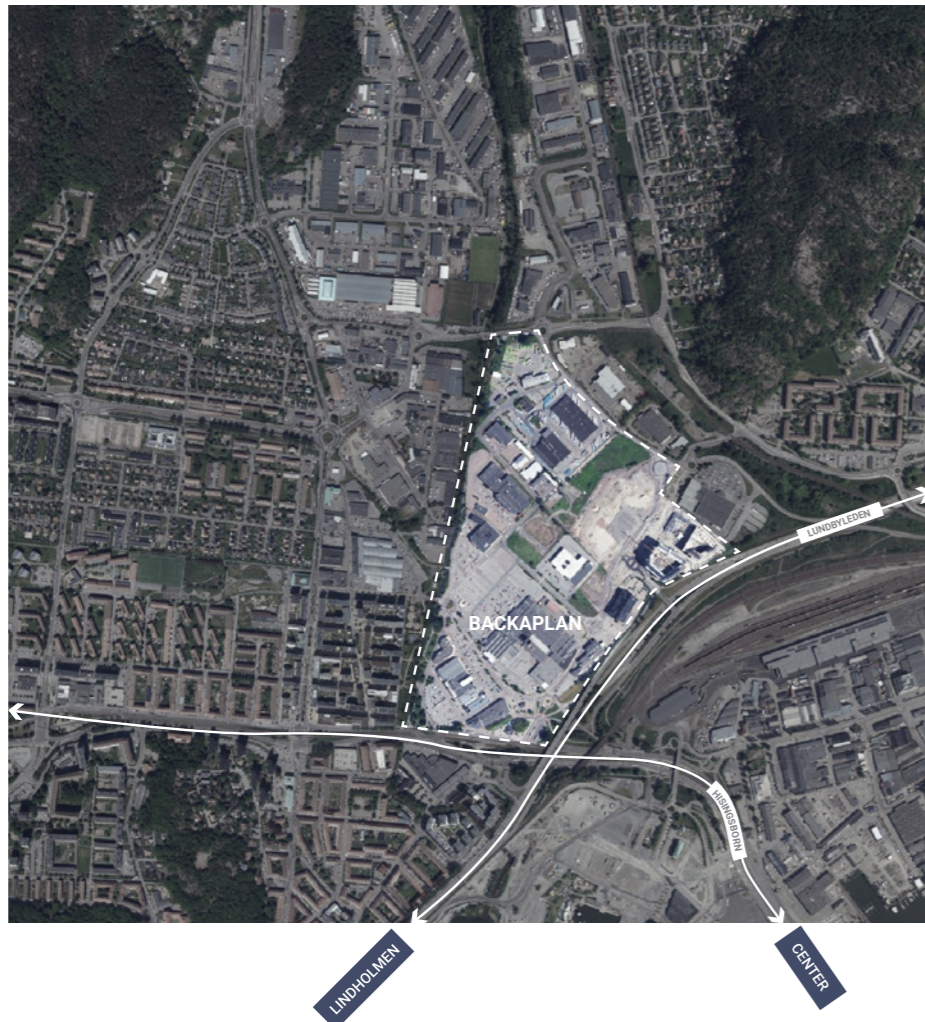


Fig. 5. Aerial photo over Kvillebäcken area (edited by the author)



Fig. 6. Aerial photo over Gothenburg area (edited by the author)

- **Future Backaplan Project:** Described as one of the largest urban development projects in the Nordic region, Backaplan's development is expected to include new housing, commercial, educational, and entertainment facilities, aiming to create a vibrant integrated community. The area will accommodate up to 20,000 residents, with a similar number of people working there in the future.(OM Backaplan, n.d.)(translated by author)
- **Green Spaces and Recreational Areas:** The government plans to build Kvilleback Park along the river, increasing the area's green spaces and public recreational facilities.
- **Färgfabriksgratan Street:** Located on the edge of the Backaplan planning area and part of the Kvillebäcken district, it suffers from insufficient planning and lacks effective connections.

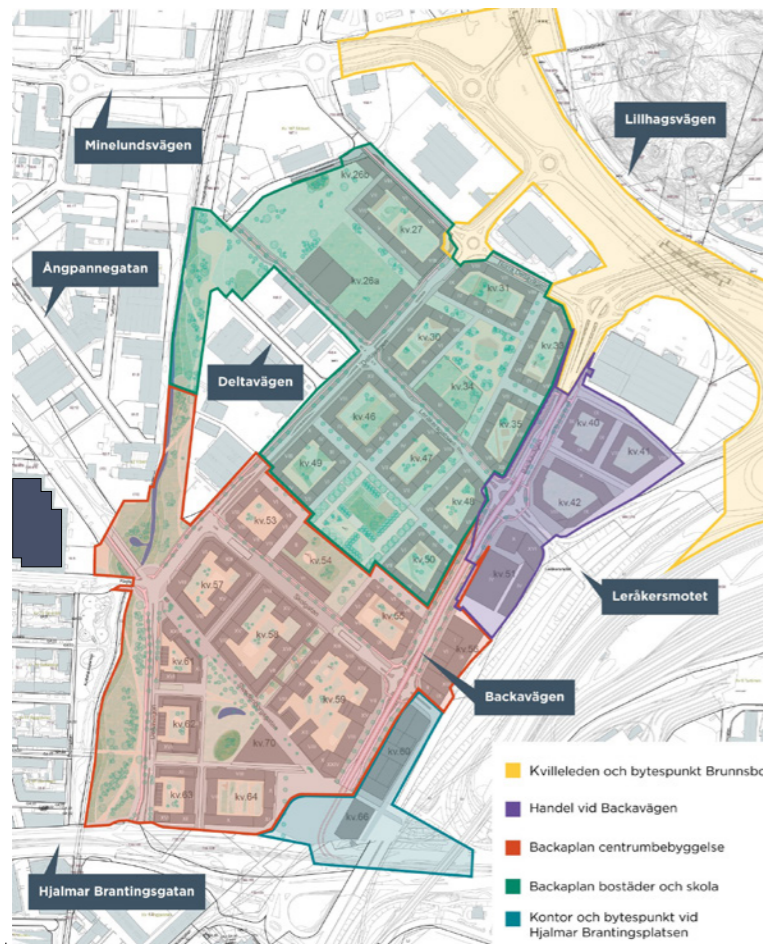


Fig.7: Various detailed plans for the backaplan area (edited by the author)



Fig.8: Aerial photo over Kvillebäcken area (current situation)



Fig.9: Aerial photo about Backaplan future plan

/Conclusion

Östra Kvillebäcken not only preserves a wealth of industrial heritage but also stands as a vital "witness" to the region's history, vividly showcasing Gothenburg's cultural diversity. Today, the area is home to numerous property owners, featuring a variety of architectural styles and thriving commercial activities. However, with the advancement of future urban planning initiatives, particularly the Backaplan project, parts of the area have become disorganized and dilapidated, with some plots even facing demolition. This has sparked deep concerns about the future development and integration of the existing urban fabric. It is crucial to ensure that the memories of the local community retain a place in future plans and to prevent their marginalization.

As Romain Rolland once said, "Culture is a bridge, not a fortress." Therefore, establishing a community cultural center that carries these memories, promoting and coordinating these changes, and bridging the gap between the past and the future to build a more harmonious and inclusive society will be key to strengthening the connections and harmony within the area.

TERMINOLOGY

/Adhocism

A Reflection on Spontaneous Architecture and Historical Traces

Adhocism,* a term coined by Charles Jencks in 1968, originally emerged in architectural criticism but has since been applied to various human endeavors. It denotes a principle of action characterized by speed, economy, purpose, and utility. As Jencks (1972, p. 9) explains, it is a method of creation that relies heavily on "resources which are already at hand," repurposing existing systems or situations in innovative ways to solve problems quickly and efficiently. This approach is often likened to a "eureka" moment, where new forms emerge from the hybridization of previously separate systems. Jencks (1972, p. xix) describes this process as "the origin moment of new things," where the resulting style is inherently heterogeneous, much like surrealism, with its "incongruous marriage" of disparate elements.

However, as Glenn Adamson questions, adhocism often reacts to what is immediately available, sometimes resulting in "a kind of whimsical variant" rather than a systematic improvement (Haldane, 2020). This observation is particularly relevant when examining the unconscious ad-hoc additions found in industrial or commercial areas. These additions, often driven by functional needs, are typically raw, chaotic, and highly specific to their context. They are not easily replicable or scalable, nor do they conform to a unified aesthetic or scale. Instead, they are improvised solutions that use surplus industrial materials, popular trends, or cultural expressions, creating a stark contrast to more refined architectural structures. Over time, these ad-hoc elements accumulate, contributing to the unique character and identity of a place.

As noted in *Kulturhistoriska Inventeringar Och Värderingar* (2024), industrial areas are inherently dynamic, with layers of historical traces that are just as important as authenticity or originality. These traces, such as "diverse sheds, lifting devices, cisterns, pipelines, fences, and railway tracks," form an "industrial historical grammar" that is crucial for understanding the environment. These ad-hoc elements, often informal and user-driven, are imbued with local memories and emotions. They serve as expressions of the community's identity and distinguish the area from others. Frampton (1983) emphasizes that these "traces of the past are considered as anchors and references for a new use," ensuring that new designs respond meaningfully to the site's history. Preserving these traces is a way to honor the existing community while welcoming new residents brought by urban renewal.

Edensor (2005, p. 7) likens these temporary traces to "certain words" on a decaying notice board—fragments of stories that remain even after partial erasure. If an area is updated or demolished, these traces can preserve the memories and narratives of the place. As Plevoets and Van Cleempoel (2019, p. xvii) argue, "the existing building contains a sense of connection with the past and a link to the future." This idea is echoed in Jane Jacobs' famous statement that "new ideas need old buildings" (Behovet Av Äldre Byggnader, n.d.), highlighting the importance of historical structures in fostering creativity and diversity.

/Conclusion

During our initial site visit, we noticed numerous temporary elements, such as added second-floor entrances and staircases, and terraces constructed from loading planks. These temporary structures are not only functional additions but also vivid manifestations of the site's history and local character. Architectural design should respect these historical traces and use them as a foundation for new development. This is not merely about preserving old buildings but also recognizing the significant contribution these structures make to the diversity of a place. However, under government-led urban planning, many such areas are facing the threat of demolition. To address this issue, we propose transforming the site into a "container of stories" or a "3D framework" to preserve the diversity that is at risk of being lost. This approach not only strengthens local identity but also promotes social inclusivity, ensuring that the past remains an integral part of the future.

Authors employ this theory as the selection criterion for the "Library" in Part II's "Observation" study, where we systematically document and catalog the site's ad hoc construction elements that embody these characteristics. These documented elements will serve as transformable spatial prototypes to inform the Design* phase in Part III "Experimentation".



Fig. 10:

*The 'Adhocist' chair, designed by architect Nathan Silver and featured on the cover of his co-authored book *Adhocism*, is an iconic 1970s design exemplifying early recycling and 'bricolage' through its assembly of repurposed materials—steel gas pipes, tractor parts, wheelchair components, and bicycle elements—with the Victoria and Albert Museum's version being the original prototype.*

/Site & Place

A Reflection on Memory, Experience, and Architecture

In architectural vocabulary, the difference between a 'site' and a 'place' is experiential. As Maheshwari (2021) explains, the Earth is filled with countless 'spaces,' all of which can be considered sites. However, when a site is touched by memory and shaped by personal experience, it transforms into a place. Memories play a crucial role in shaping our interactions with the environment, and conversely, the environment helps to shape and build our memories. This reciprocal relationship between memory and space is central to understanding the concept of place. As Donlyn Lyndon notes in *Spatial Recall: Memory in Architecture and Landscape*, "Place, as I understand it, refers to spaces that can be remembered, that we can imagine, hold in the mind, and consider" (Rich, 2013).

In simpler terms, a site becomes a place when it is imbued with the memories and experiences of those who inhabit it. It is through the daily lives of local residents that a site gains its identity, allowing people to distinguish it from other spaces. This process is reminiscent of the film *Inception*, where constructed scenes evoke personal memories. Similarly, in architecture, historical buildings act as "save points" in the collective memory of a community. They anchor memories, allowing residents to recall past events and experiences. For instance, walking down a familiar street and encountering a recognizable building or addition can trigger a flood of memories, creating a moment where the past and present converge.

The concept of a "Memory Palace" further illustrates the connection between memory and physical space. As described in *Art of Memory* (2023), a Memory Palace is an imaginary location in the mind where mnemonic images are stored. It often involves a mental journey through a familiar place, such as a building or town, with specific locations (or loci) serving as anchors for memories. This idea underscores the importance of architectural spaces as vessels for memory. Our experiences within buildings and urban environments shape our memories, and when these spaces are destroyed, the memories they hold risk being lost. If a place is demolished, it reverts to being a mere site, and the physical anchors of memory—buildings, streets, and other elements—disappear.

This is why preserving architectural spaces is crucial; they are not just physical structures but repositories of collective memory. Our goal is to design buildings that function as tangible Memory Palaces, where people can visually and spatially reconnect with their memories.

As Plevoets and Van Cleempoel (2019, p. 91) state, "The product of the overlap between place and time is memory." Time is a constant, but sites are transient. When a site disappears, so too do the memories associated with it. Therefore, preserving elements of a site can help revive the memories of those who experienced it, ensuring that the past remains alive in the present. This approach is particularly important in the face of urban renewal, where historical sites are often replaced by new developments. By integrating the intrinsic collective memory and historical elements of a site into new designs, we can create spaces that honor the past while serving the needs of the present.

Plevoets and Van Cleempoel (2019, p. xvii) emphasize the value of retaining old buildings, whether they are historically significant or simply outdated, for their "essential history, their intrinsic sense of collective memory, and the physical contribution they make to the built environment." In our design, we aim to weave the site's collective memory and historical elements into the architecture in innovative ways, creating a montage of scenes that immerse users in a sea of memories. This approach serves as a countermeasure to the inevitable loss of memory caused by urban renewal. By embedding the past into the present, we hope to create spaces that not only preserve memories but also foster a sense of continuity and belonging for both existing and future communities.

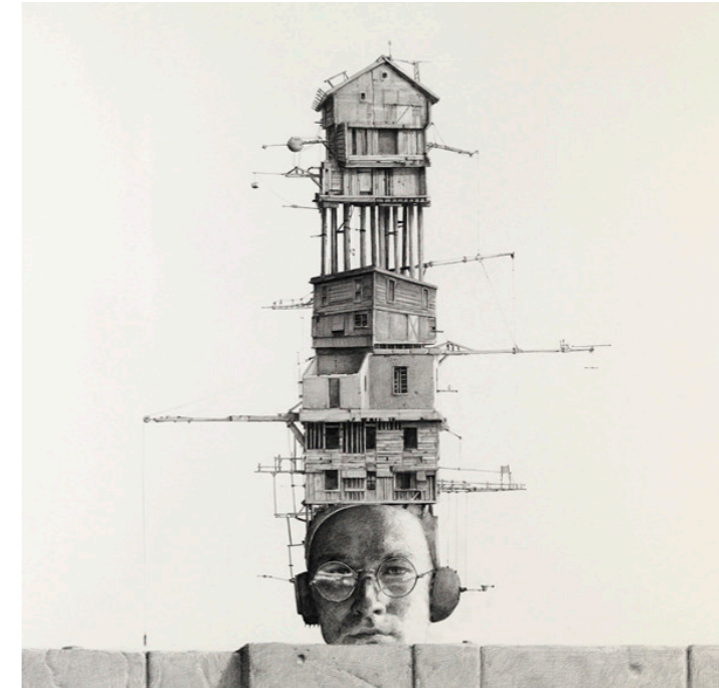


Fig. 11:
Ethan Murrow's 2011 work, *All Mine* (crayon on paper, 91x91 cm) from his *Série Doppler Doppelgänger*, depicts a surreal, fragmented structure emerging from a figure's head like a memory palace. This intricate drawing symbolizes how personal memories and experiences transform ordinary sites into meaningful places.

/Conclusion

The transformation from site to place is a process deeply tied to memory and experience. Architecture plays a vital role in this process, acting as a physical anchor for memories and a medium for storytelling. By designing spaces that function as Memory Palaces, we can ensure that the memories of a place endure, even as the physical landscape evolves. This approach not only preserves the past but also enriches the present, creating spaces that are both meaningful and inclusive.

In the following research phase, the authors thoroughly investigate the spirit of place, attempting to achieve cross-spatial memory transfer through architectural design. This practice does not only completely preserve the community's collective memory but also break through physical constraints to build an unprecedented Memory Palace for residents - allowing the soul of place to continue existing in new spatial vessels.



Fig 12: Pablo Picasso, Still Life With Chair Caning (1912)
 This was the "first deliberately executed collage – the first work of fine art – in which material appropriated from everyday life, relatively untransformed by the artist, intruded upon the traditionally privileged domain of painting."

/Collage

A Reflection on Fragmented Experiences and Architectural Narratives

In Questions of Perception, Steven Holl captures the essence of how we experience the built environment: "A city is never seen as a totality, but as an aggregate of experiences, animated by use, by overlapping perspectives, changing light, sounds, and smells" (Shields, 2014, p.2). Collage is fundamentally a technique of material recombination. Steven's observation resonates deeply with our experience of exploring a specific area. It is nearly impossible to perceive the area as a cohesive whole; instead, we encounter it as a series of fragmented moments, much like the individual elements of a collage. These fragments, whether they are architectural details, cultural symbols, or sensory impressions, come together in our minds to form a composite image—a mental collage—that reflects our interpretation of the area's diverse cultural and historical layers. This approach mirrors the fragmented and non-linear nature of human consciousness, where memories and dreams are pieced together from disjointed images to form a coherent story.

Collage and montage are quintessential techniques in modern and contemporary art and filmmaking. As Shields (2014, p.ix) explains, collage involves combining pictorial motifs and fragments from disconnected origins into a new synthetic entity, assigning new roles and meanings to the parts. This technique suggests new narratives, dialogues, juxtapositions, and temporal durations, allowing the collaged elements to lead "double-lives" between their original essence and their new roles within the poetic ensemble. In our exploration of the area, we encountered numerous disjointed and seemingly unrelated ad-hoc elements—old and new, concrete and abstract, large and small in scale. Inspired by the principles of collage and montage, we aim to reassemble and recontextualize these elements into a new sequence, using their inherent stories to create fresh narratives while preserving the area's historical continuity.

Edensor (2005, p. 7) describes memory as a spatial phenomenon that involves "crossing, folding, piercing" rather than sequential organization. This concept aligns closely with the collage technique, where elements are not arranged in a linear fashion but intersect and overlap in complex ways. As we move through space, memories flash back randomly, creating a layered and dynamic experience. This interplay between memory and space is central to our understanding of the area, and it informs our approach to designing a space that reflects its fragmented yet interconnected history.

When collage evolves into a design methodology, it demonstrates systematic capacity in processing site memory. Shields (2014, p. ix) further emphasizes that architecture serves as a frame and setting for human activities, making it a "varying and variously completed entity, an ever-changing collage of activities, furnishings, and objects." Architecture, in this sense, is not just a static structure but a dynamic container for life. The activities, arrangements, and atmospheres within a building are constantly evolving, much like the elements of a collage. By incorporating the lives, cultural attributes, and material elements of the soon-to-be-demolished area into our design, we aim to create a space that functions as a living collage. This approach allows us to fuse the area's diverse histories, cultures, and collective memories into a single architectural entity. The building itself becomes a collage, a visual and spatial representation of the area's multiplicity.

Conversely, collage practice ultimately cultivates distinctive spatial perception modes and interpretations. Just as each viewer of a collage brings their own perspective and meaning to the artwork, each user of the architectural space will interpret it differently. These interpretations, shaped by individual experiences and memories, are the true essence of the collage approach. They transform the space into a living, evolving narrative, where the past and present coexist in a dynamic dialogue. By embracing the collage technique, we can create a space that not only preserves the memory of the area but also invite new stories and meanings to emerge, ensuring that its history continues to resonate in the future.

/Conclusion

The collage technique offers a powerful framework for understanding and designing spaces that reflect the fragmented, layered, and dynamic nature of human experience. In this paper, we show how, by reassembling disjointed elements into a cohesive and open-ended narrative, we can create architecture that honors the past while embracing the present and future. This approach not only preserves the memory of a place but also invites new interpretations, ensuring that the space remains alive and meaningful for generations to come. In the design phase of this research, the authors will employ architectural elements processed through "translatio, imitatio, aemulatio" to conduct celebratory creation using collage techniques. Behind these seemingly spontaneous formal operations lies a systematic exploration and essential restoration of the spirit of place - a multidimensional design practice that simultaneously addresses aesthetic expression, functional requirements, two-dimensional composition, and spatial experience.

- 1- Collage As Artifact,
- 2- Collage As A Tool for Analysis and Design,
- 3- Architecture as Collage ...

(Shields, 2014, p. 3)

In other art forms, such as music and painting, copying has long been regarded as a serious and creative activity. As Scott notes, "the designer may find a source of sustained inspiration through the act of 'copying'" (Plevoets & Van Cleempoel, 2019, p. 31). This principle applies equally to architecture. All artistic works, whether paintings, sculptures, or music, are built upon the foundations laid by predecessors, and architecture is no exception. By mastering fundamental principles and then innovating, architects can honor history while responding to modern technological and societal demands.

The concepts of translatio, imitatio, and aemulatio define the nature of the relationship between a copy and its model, representing a progression of increasing freedom from the original. As Plevoets and Van Cleempoel (2019, p. 32) explain, translatio signifies adhering closely to a model, aiming for similarity; imitatio strives for equality rather than mere resemblance; and aemulatio seeks to surpass the model, both aesthetically and functionally. These terms describe a process of adaptive reuse, where historical buildings are reinterpreted and transformed to meet contemporary needs while respecting their past. This approach prioritizes similarity over contrast, uncovering the past, present, and hidden elements of a building and reinterpreting them in innovative ways.



Fig.13: Michelangelo skillfully added a floor to the Palazzo Farnese, originally designed by Sangallo the Younger, redefining the proportions and visual focus of the façade with a delicate touch.

Translatio: Translation as Creative Adaptation

Translatio involves a critical and creative stance toward the model. Unlike traditional restoration, which often focuses on literal replication without considering societal or temporal changes, translatio is akin to translating poetry. As Scott observes, "Translation in poetry is akin to the work of bringing a building from a past existence into the present" (Plevoets & Van Cleempoel, 2019, p. 34). This process requires preserving traditional construction techniques, materials, and proportions while reinterpreting them for contemporary contexts. It is not a straightforward replication but a creative reimagining, much like translating Chinese poetry into English. The Chinese translation principles of faithfulness (信), expressiveness (达), and elegance (雅) provide a useful framework. Faithfulness ensures accuracy and respect for the original; expressiveness allows for flexibility in form; and elegance seeks to achieve a refined and harmonious result. Similarly, translatio in architecture balances respect for the past with innovative expression.



Fig.14: In the Gallery of Honour and the Night Watch Hall of the Rijksmuseum in Amsterdam, the polychrome decorations of these rooms were selectively reconstructed, while the walls displaying artworks were painted in a monochromatic deep blue.

Aemulatio: Surpassing the Original

The final step, aemulatio, goes beyond mere imitation, aiming to surpass the original both aesthetically and functionally. As Plevoets and Van Cleempoel (2019, p. 35) explain, this approach involves preserving and restoring the original structure while introducing contemporary elements that enhance its relevance. The new materials and structures are carefully chosen to complement the original, ensuring continuity while meeting modern needs. The goal is to create a design that "reflects the lost without imitating it" (Neues Museum, n.d.). This approach not only preserves the historical essence of the building but also elevates it to meet contemporary standards of beauty and utility.

Imitatio: Selective Restoration and Adaptation

The second step, imitatio, involves a more liberal adaptation of the original space, often through selective restoration. As Plevoets and Van Cleempoel (2019, p. 34) describe, this approach retains similarities to traditional elements but introduces subtle differences, such as changes in materials or colors. These modifications are designed to highlight and emphasize specific aspects of the design. For example, new structures might use simplified or abstracted forms to reinforce architectural continuity. These changes are often subtle, requiring careful observation to discern, but they play a crucial role in creating a dialogue between the old and the new.



Fig.15: For the Tate Britain at Millbank, they enhanced and renovated the rotunda at the Millbank entrance by drawing on the original design's ceremonial qualities, materiality, and proportions, introducing a new spiral staircase that enriches the spatial experience.

/Conclusion

The progression from translatio to imitatio and finally to aemulatio represents a nuanced approach to architectural adaptation and innovation. By respecting the past while embracing the present, architects can create spaces that honor historical continuity while meeting modern demands. Whether through the faithful reinterpretation of translatio, the selective adaptation of imitatio, or the innovative surpassing of aemulatio, these principles provide a framework for balancing tradition and innovation. During the design phase, we employ these three design approaches to translate the distinctive spatial elements of the site, evolving art form that bridges the past and the future.

┌

┐

└

┘



FIRST IMPRESSIONS

Exploring Backaplan is like a grand "shopping carnival," where a dazzling array of "elements" captures our attention. We meticulously gather the unique spatial features and cultural symbols of the area, setting aside concerns about final feasibility to focus on uncovering their potential design value and narrative possibilities.



An improvised creation blending industrial character with individuality outside the site became the inspiration for this study.

LIBRARY

As mentioned in the regional analysis, the sense of harmony in Backaplan stems from the uniformity of its functional planning and the similar approaches residents take to solving problems.

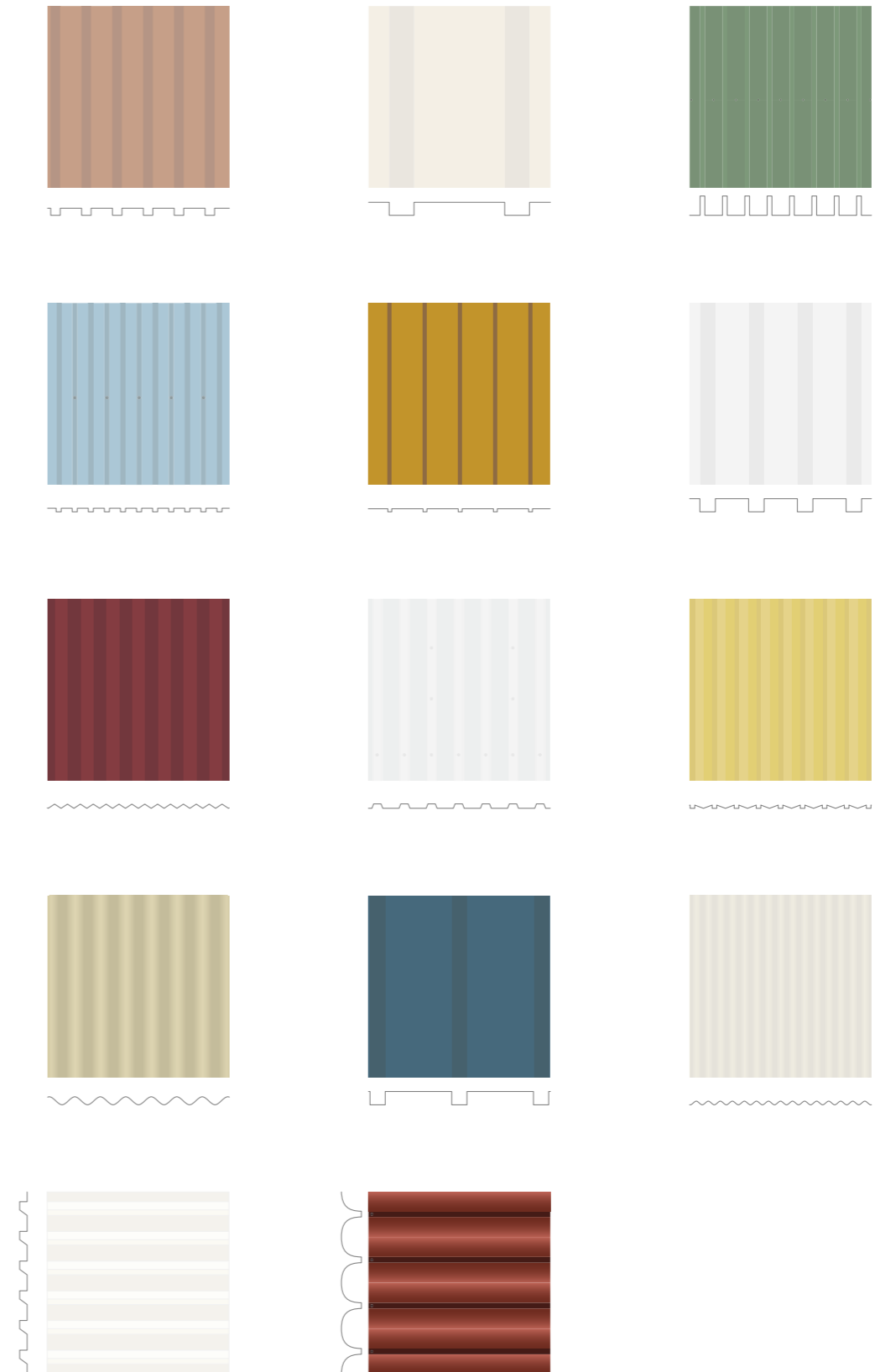
During the site investigation, we quickly noticed that Färgfabriksgränd 1 and its surrounding buildings predominantly use corrugated metal panels—an economical and flexible material—as the main element for facade collage. Although these materials appear similar at first glance, a closer examination allowed us to categorize them by different dimensions, proportions, colors, textures, shapes, and combinations, forming the basis of a “material library” for our subsequent design proposals.

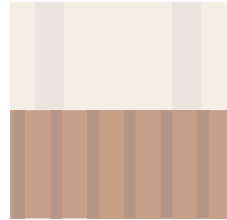
In addition, we observed another spatial phenomenon: ad hoc additions created to accommodate new functions or circulation needs. These were not part of the architect’s original design intent but rather the ingenious improvisations of residents in their daily lives. It is precisely these seemingly fragmented “puzzle pieces” that bring the originally massive industrial architecture down to a human scale, bridging the temporal gap between history and the present.

/Material

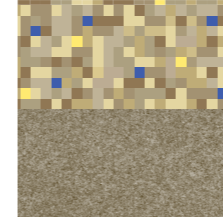
The site features extensive use of corrugated sheeting, a material choice that combines construction efficiency with design versatility. These panels demonstrate remarkable diversity in their technical specifications - particularly in corrugation depth (ranging from 16mm to 50mm) and panel spacing (varying between 60mm to 150mm) - parameters that effectively become a medium for architectural self-expression.

Beyond standard right-angled profiles, the sheeting incorporates unconventional configurations including sinusoidal waves, accordion folds, and triangular perforations. Material selections extend beyond conventional galvanized steel to include fiber-reinforced polycarbonate transparent variants. While vertical orientation remains predominant, several structures innovatively employ horizontally-mounted corrugated panels to achieve distinctive visual rhythms and enhanced rainwater runoff performance.





The simultaneous deployment of corrugated sheets with staggered spacing generates intricate textural interplay and dimensional depth.



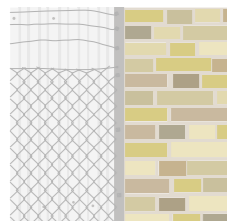
Ceramic tile mosaics animate the façade with artisanal patterning, their fragmented compositions producing a distinctive tectonic artistry.



Fiber-reinforced translucent corrugated panels are strategically employed in daylight-sensitive zones, achieving functional illumination while introducing a delicate play of filtered light.



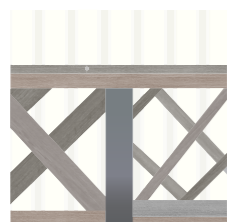
The chromatic dialogue between brickwork and glazed ceramic cladding creates audacious polychromatic juxtapositions.



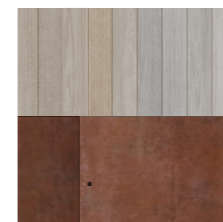
As a foundational substrate, corrugated sheeting is frequently combined with metal mesh or brick cladding through overlaying and stacking techniques, yielding dynamic façade articulations.



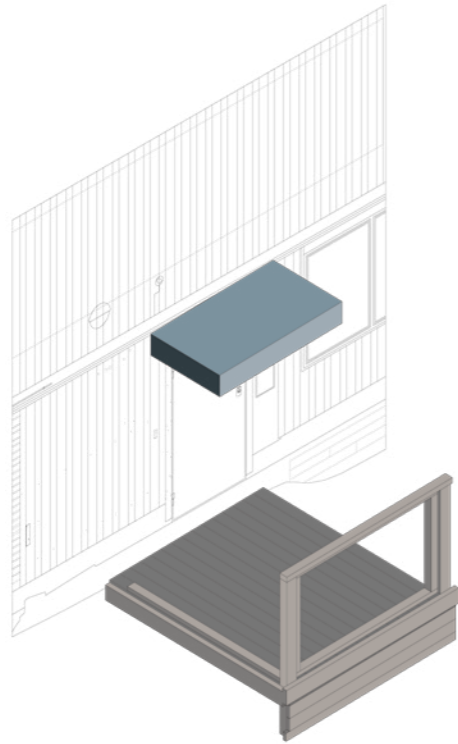
Artisanal handicrafts mounted atop the metal mesh screens introduce vernacular craftsmanship into the architectural narrative.



Thin wooden battens, applied as minimalist embellishments over corrugated surfaces, impart organic warmth through their tactile grain patterns.



The interplay of linear wood slats and patinated steel panels achieves a nuanced material synthesis where rustic charm converses with industrial modernity.



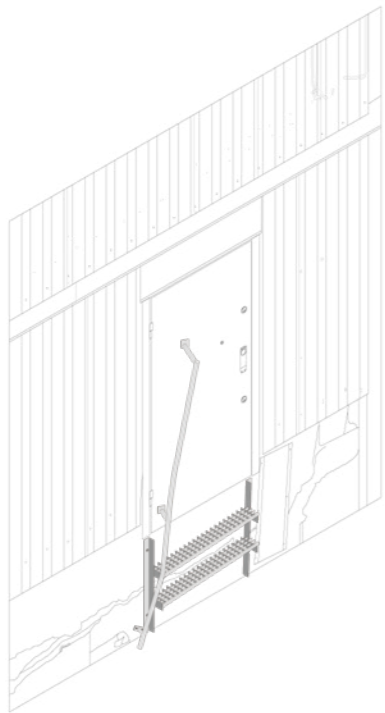
/No.1

The ancillary structures extend the compositional logic of the existing facade. The terrace system and cantilevered awning gracefully resolve the 0.3-meter site elevation change through stepped treatments, while their 1-meter overhang precisely defines semi-private activity zones. These ergonomically optimized transitional spaces (width $\geq 1.5\text{m}$) not only accommodate social needs like rest and spontaneous conversation, but also foster community identity through the tactile interplay of wooden decking and perforated steel railings.



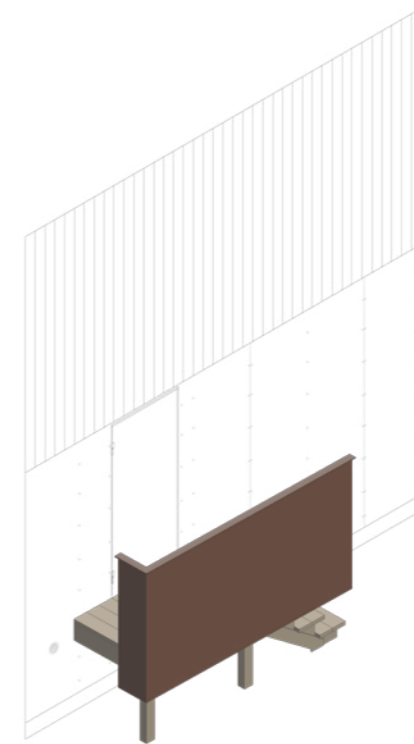
/No.3

The design incorporates a diversified vertical circulation system, potentially motivated by three key considerations: accommodating individualized user behavior patterns, fulfilling logistical requirements for goods transportation, and enhancing the spatial identity of the main entrance. This multi-passage configuration implies functional autonomy between different levels. The dramatically scaled black doorframe disrupts facade continuity with a deconstructivist approach, while the spatial tension between stairways and window openings constitutes the most powerful architectural statement of spatial dominance.



/No.2

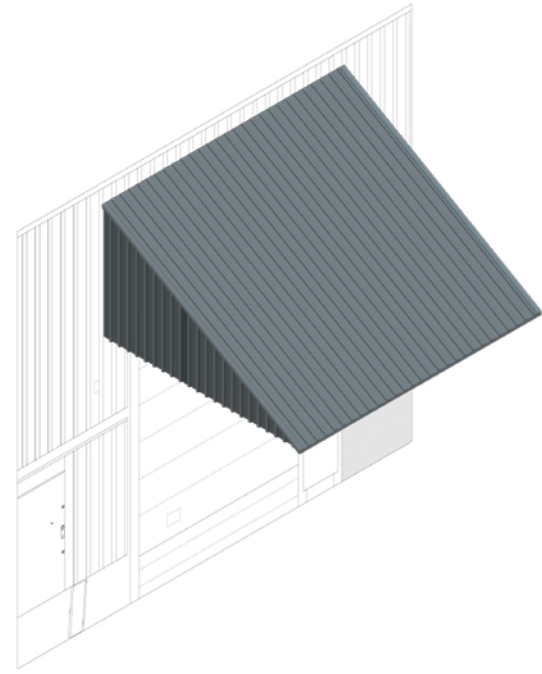
The ancillary structures adopt a minimalist design approach that prioritizes functionality over formal embellishment, deliberately eschewing conventional considerations of ornamental detailing and spatial privacy typically associated with entrance design. The material palette demonstrates rigorous consistency, manifesting an uncompromising functionalist design philosophy through its austere materiality.



/No.4

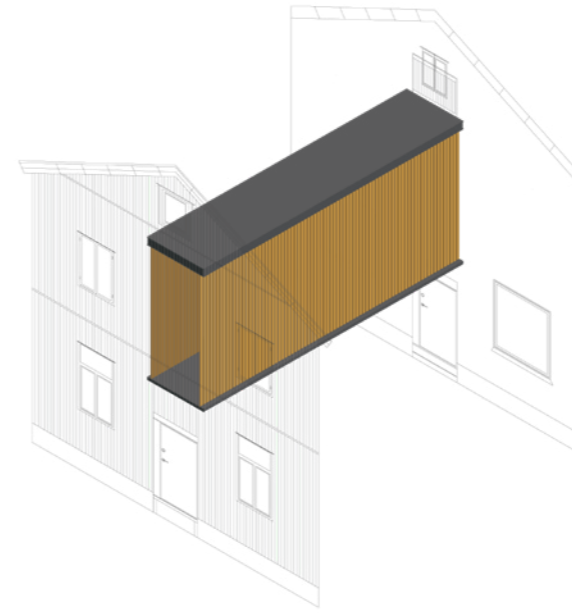
The facade emphasizes a unified compositional aesthetic, employing a design approach that interweaves solid and void elements to create a three-dimensional jigsaw-like visual effect. The entrance treatment is subtle yet powerful, maintaining a sense of concealment while artfully hinting at the staircase's presence, akin to a veiled metaphor. The solid handrail design reinforces spatial privacy, while the large side opening reveals a dialectical consideration of the "privacy" concept. Material application maintains a high degree of consistency with the facade language, where the combination of wooden strips and steel plates extends to the staircase area, forming a cohesive visual system.





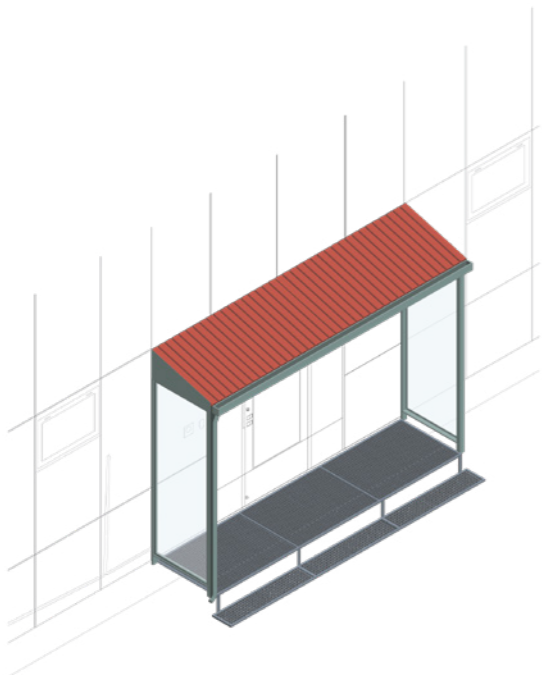
/No.5

The cargo entrance canopy is designed with a dramatic scale, its monumental volume creating a striking contrast with the adjacent staff entrance, thus aligning more closely with the inherent character of industrial architecture. While the canopy material maintains harmony with the facade, its internal structure exhibits a remarkable lightness that contrasts with the exterior massing, demonstrating a sophisticated handling of architectural tension.



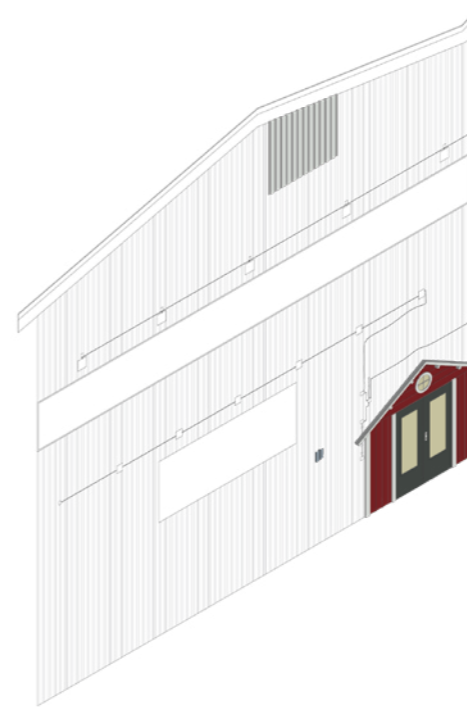
/No.7

The design extends the color palette of the flanking facades, enhancing the visual connectivity between the buildings. By ingeniously utilizing the neglected side spaces, it revitalizes the underutilized area below, creating new spatial value. This approach not only achieves effective visual guidance and focus but also imbues the previously abandoned space with renewed significance.



/No.6

The floating staircase design exhibits a lightweight visual characteristic, with its scale responding to the street's intimate atmosphere. By simulating the spatial configuration of residential entrances, it creates a pleasant sense of place. The use of orange corrugated panels subtly evokes memories of traditional tiled roofs, while its structural rhythm and scale precisely continue the original facade's cadence, achieving a harmonious coexistence between old and new elements.



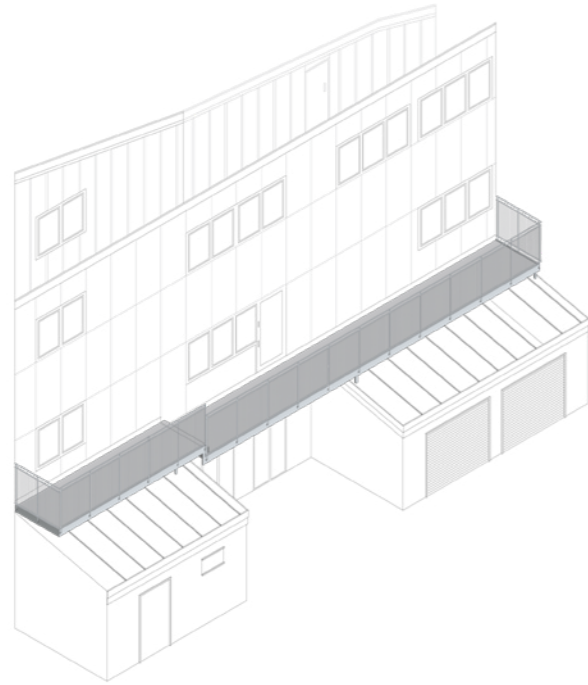
/No.8

Through exaggerated scale contrast, the design attempts to introduce a human scale within the industrial architectural context, countering the inherent indifference of industrial spaces. This deliberate scale intervention not only preserves traces of user activity but also transforms the originally distant warehouse space into an approachable place, achieving a humanized interpretation of industrial architecture.



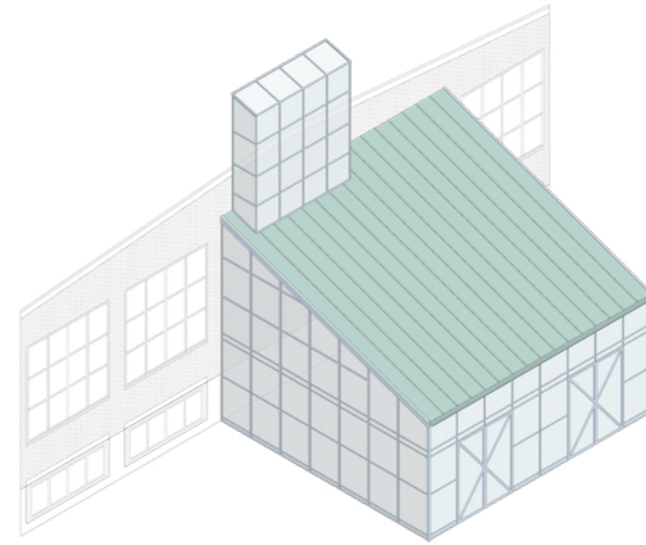
/No.9

Following renovation, the first floor underwent a complete functional transformation - evolving from windowless enclosed spaces (presumably storage areas) to fully glazed rooms with floor-to-ceiling windows. The newly added balconies, as a direct response to the functional upgrade, meticulously follow the roofline of the existing ground floor volume, creating a three-step level transition. The steel balconies and railings reject all non-essential ornamentation, maintaining the material's raw finish to establish a compelling material contrast with the renovated black facade.



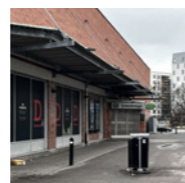
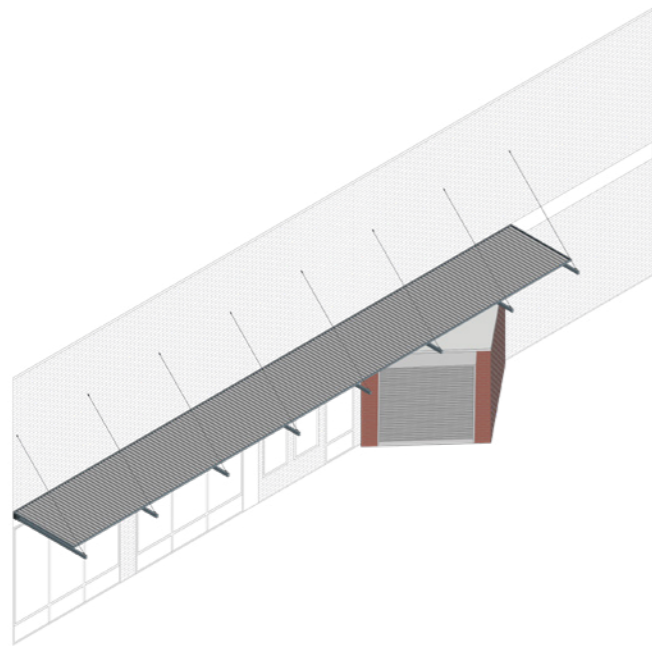
/No.11

As the original building was subdivided into multiple independent retail units, each functional division required dedicated access points. The glass volumes emerged as an ideal solution balancing aesthetic appeal and cost efficiency - the expansive glazing not only floods entryways with natural light but also creates a striking material contrast with the existing brick facade. This deliberate material juxtaposition, combined with overhead projecting signage, collectively forms a visually compelling commercial identity that enhances long-range visibility.



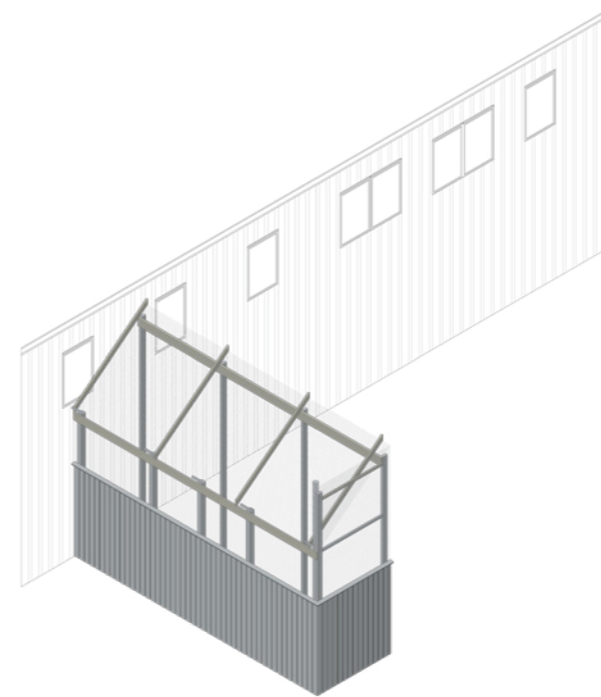
/No.10

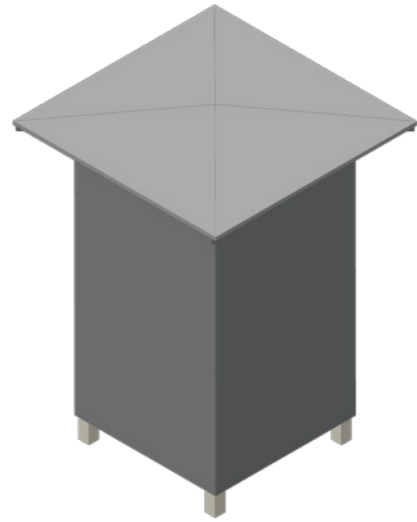
The Systembolaget outlet, tucked away in the alleyway, employs a protruding triangular facade to create striking geometric tension that effectively captures pedestrians' attention from the main street, enhancing its commercial visibility. The continuous canopy system spatially extends the storefront's commercial presence into the alley, establishing a cohesive circulation guide through architectural implication.



/No.12

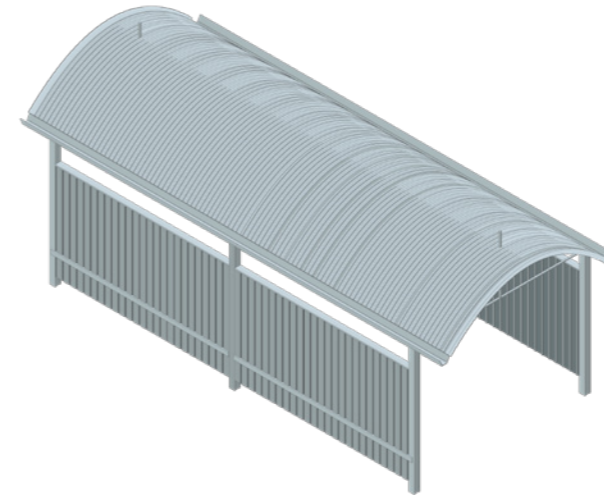
The parking entrance at the rear of Coop supermarket features a thoughtful interplay of solid and void boundaries. Here, the material composition of metal panels, wire mesh and wood creates a compelling dialogue - while the all-metal facade of the main building exudes formal rigidity, the permeable mesh system introduces spatial playfulness and approachability. Particularly noteworthy is the ventilated pitched roof structure inside, where irregular wood battens intersect with meshwork, demonstrating both the builder's sensitivity to contextual architectural vocabulary and subtle formal innovation.





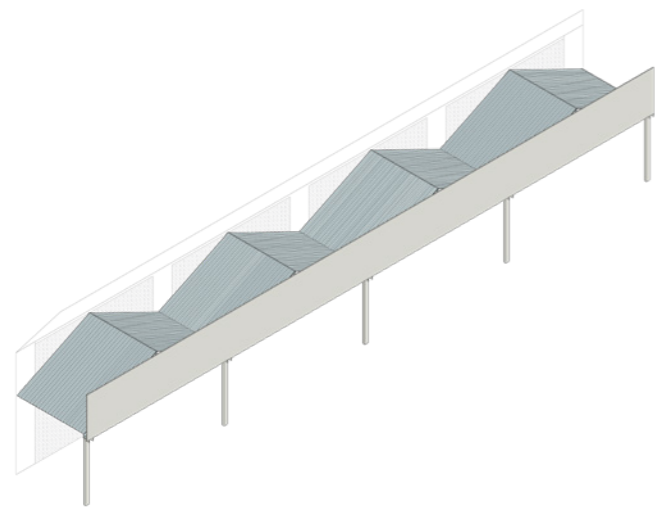
/No.13

Adjacent to Hj. Brantingsplatsen tram stop, a solitary black utility kiosk stands in the small plaza connecting transportation hubs. While its original purpose may have been electrical or hydraulic infrastructure, residents have spontaneously transformed it through spatial appropriation - merchants post advertisements, immigrant communities display cultural manifestos, street artists create impromptu graffiti, and passersby pause to read and interact. This infrastructure, initially devoid of social intent, has serendipitously evolved into a vibrant community information hub.



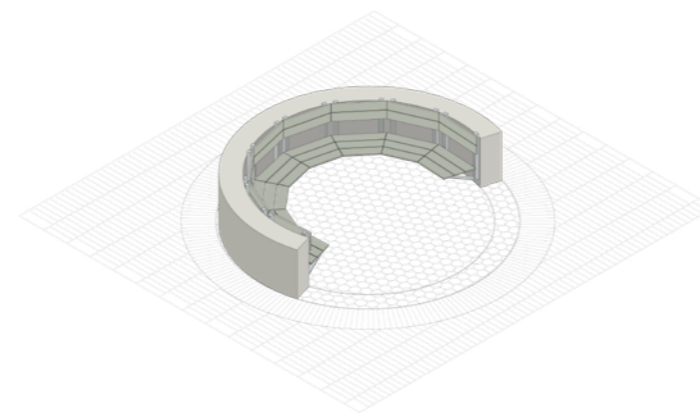
/No.15

The true distinction lies in the innovative application of arched corrugated panels, the undulating curves of the panels create a unique rhythmic aesthetic for the roof. The deliberate detachment between facade and roof not only establishes a distinctive architectural identity, but also strategically introduces natural illumination into the interior. Entirely unadorned, the structure proudly exhibits its essence through lucid tectonic expression.



/No.14

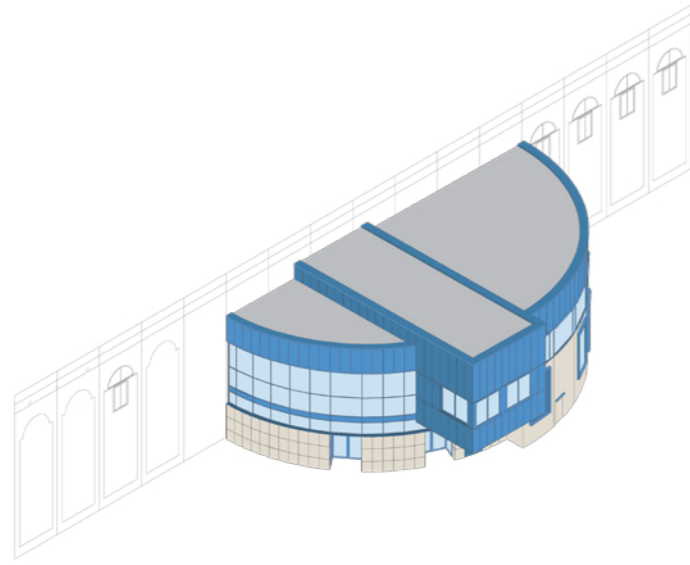
A continuous arcade structure is tactfully incorporated into the originally enclosed and monotonous side elevation, injecting new functionalities tailored for the shopping center into this lifeless space. Beneath the carefully designed canopy system, integrated utility zones including loading docks, truck parking bays, and temporary bicycle racks demonstrate a transformative spatial reprogramming. The most distinctive triangular corrugated canopy roof, whose form was meant to echo the main building's roofline, is now obscured by uninterrupted advertisement boards—a telling detail that vividly reflects the predominance of commercial culture in this community's spatial hierarchy.



/No.16

While the rest pavilion in the parking lot may not be an ideal solution, the mall has ingeniously utilized rough stone and concrete blocks to create a seemingly provisional yet contextually harmonious seating area under constrained conditions. These rugged materials not only avoid visual intrusion but establish a subtle dialogue with the surrounding pavement textures. Eschewing overt visual highlights, the design employs only concentric circular patterns in the paving to guide spatial experience with utmost restraint.





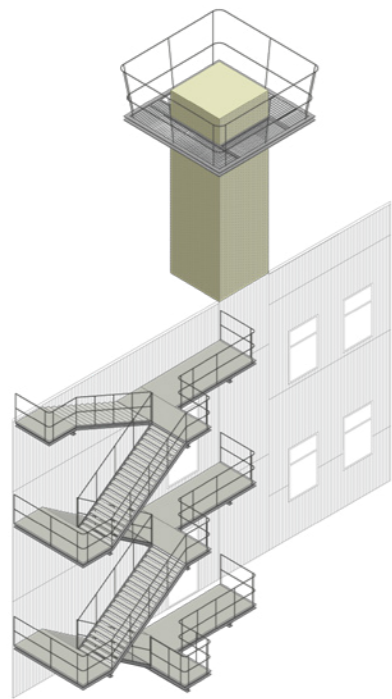
/No.17

The semicircular annex disrupts Biltema's orderly facade geometry with tectonic audacity, employing the brand's signature color to accentuate the main entrance. The interplay of diverse geometric forms and varied fenestration ratios within the semicircular volume suggests multifunctional purposes beyond mere entry. Contrasting with surrounding structures, the 50cm-wide metal cladding panels combined with iron-finished concrete base create a remarkably refined facade articulation.



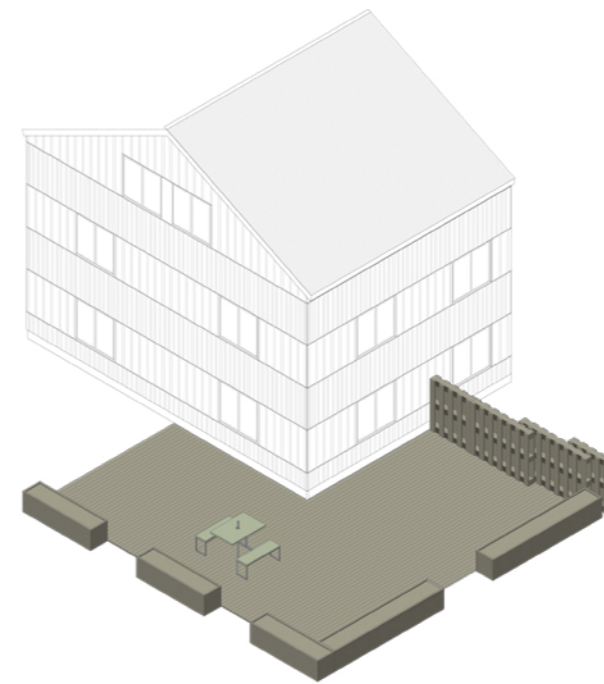
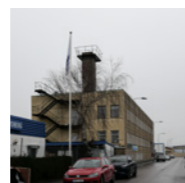
/No.19

Disembarking at Hj. Brantingsplatsen station, one is immediately confronted by this industrially green lighthouse. Soaring 3-5 meters above the street lamps, its distinctive triangular silhouette betrays its origins in the heyday of industrialization, while the omnidirectional lighting array silently proclaims the square's pivotal significance.



/No.18

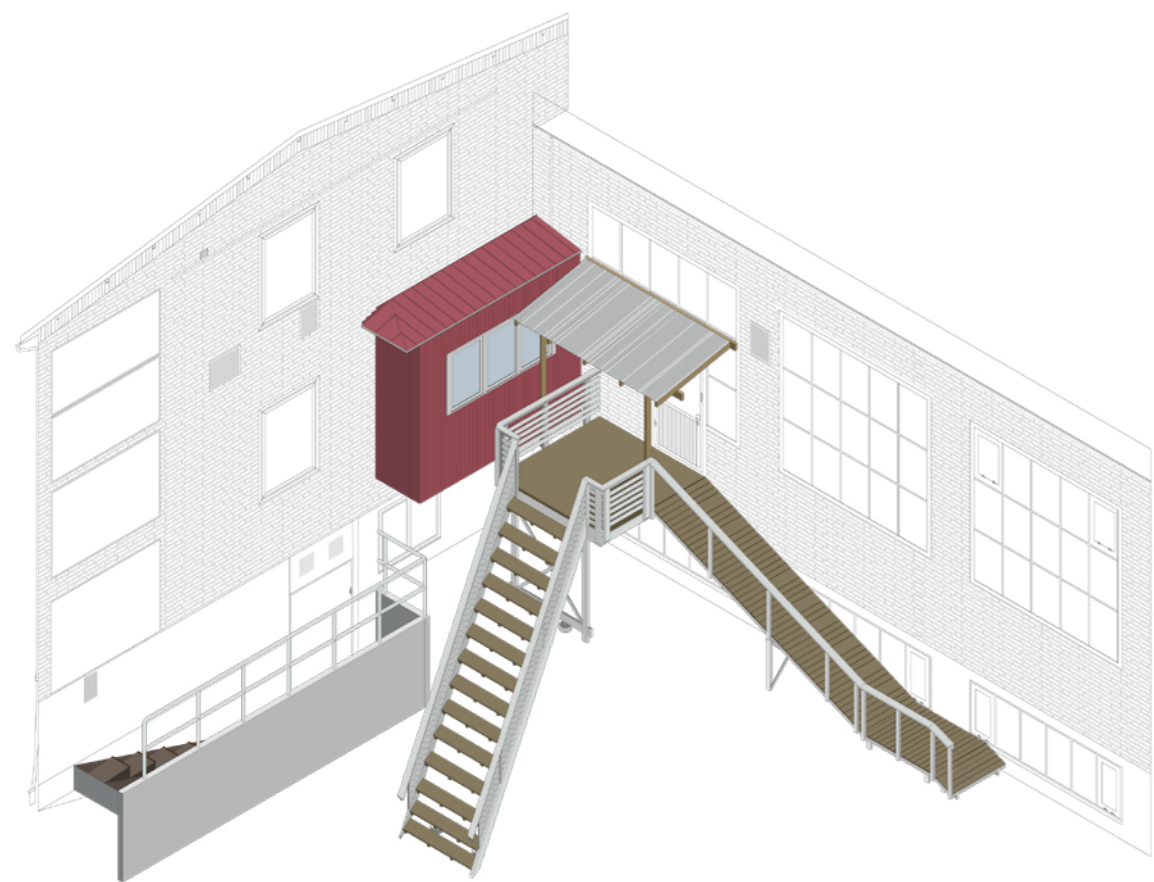
The exposed fire escape staircase lends raw vitality to the building's side elevation, where the rudimentary handrails and irregular platform widths tacitly speak to the urgency of its construction period. The enigmatic tower-like structure protruding abruptly from the roof, with its crumbling brick veneer revealing load-bearing truths, has become the building's defining feature. The surviving handrail fixtures at its summit may well hint at the untold stories of this tower's functional history.



/No.20

This provisional ground-floor terrace lays bare the residents' aspirations through unvarnished expression. With minimalist rigor, the builders employed standardized 10cm-wide wooden slats for decking, extending the same material to create planter boxes in a feat of construction economy. The terrace's opposite edge is demarcated by ubiquitous industrial readymades—wooden shipping palettes—establishing a poignant dialogue between industrial heritage and domestic life.

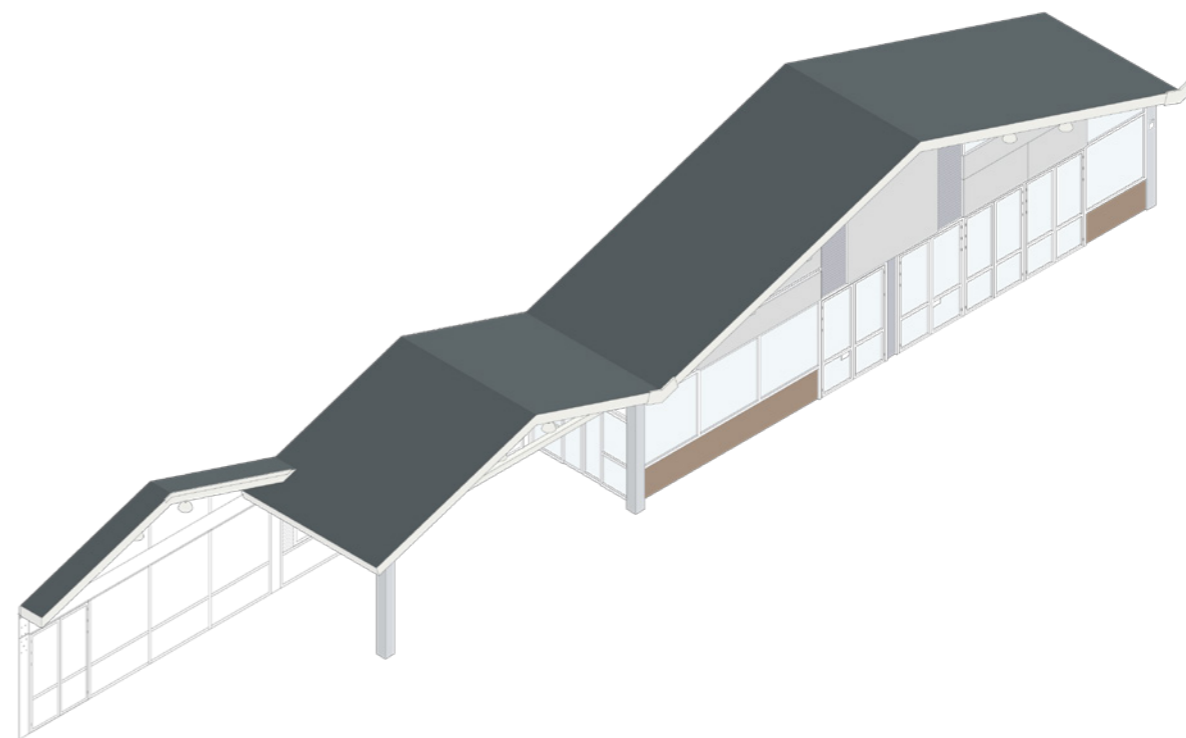




/No.21

Responding to functional requirements, the design restructures the building's spatial logic through the addition of new entrances. Diverse circulation systems (including staircases, ramps, and freight passages) redefine the connectivity between spaces at different levels, creating a rich system of transitional and secondary spaces. While maintaining facade independence, the additional structures serve as spatial mediators, effectively bridging the distance between the two buildings and enhancing spatial intimacy.

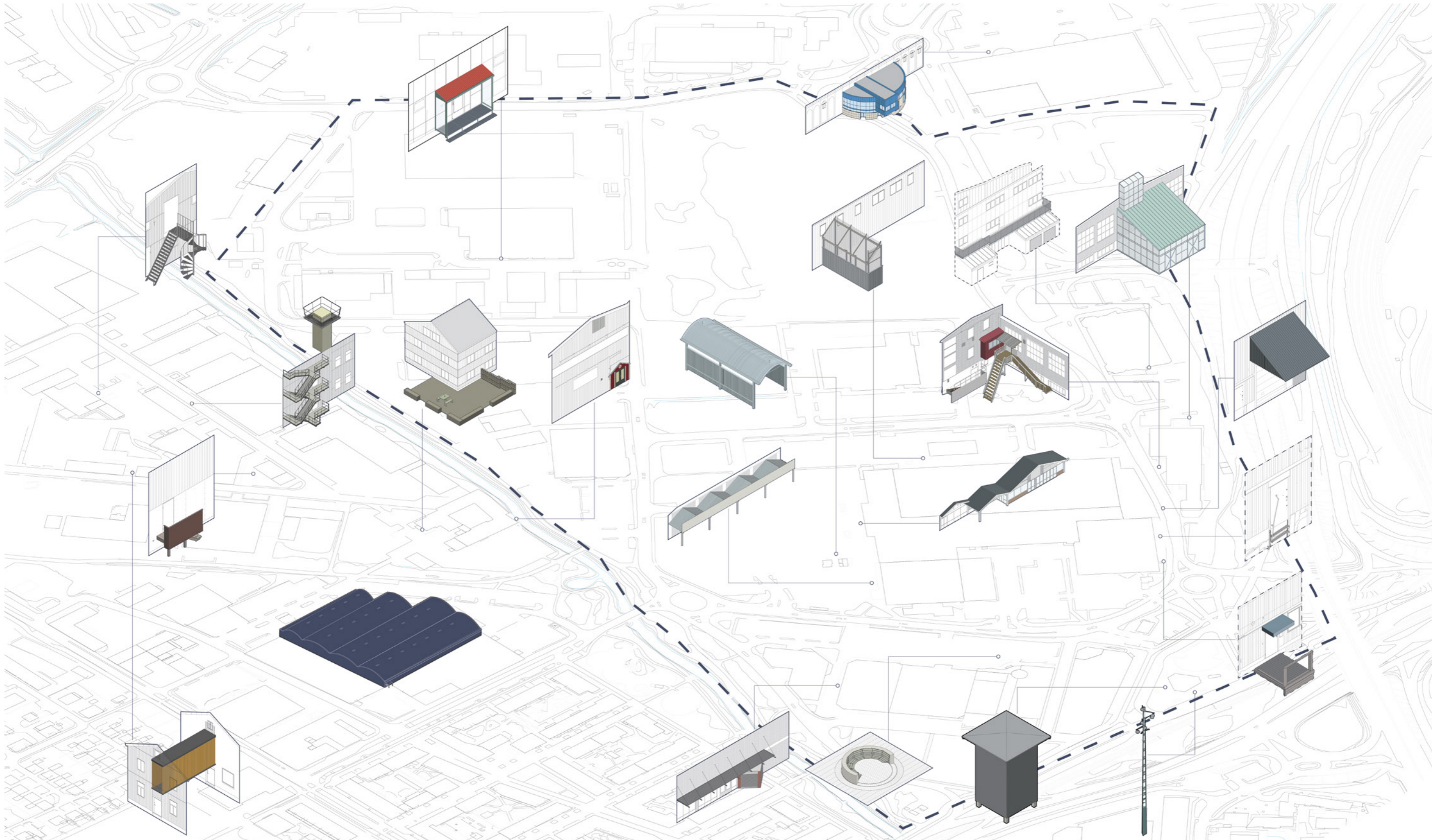
The added balconies employ a strategy of homogeneous color with heterogeneous materials, not only expanding the interior space but also creating a public realm with street-like ambiance through the interaction with the entrance at the ground floor terrace, achieving a balance between privacy and openness.



/No.22

Stora Coop innovatively recesses three arch spans at the main entrance within its continuous arcade facade, generating a semi-outdoor transitional space beneath the central vault. This intervention not only mitigates the visual abruptness of the adjacent parking lot, but also organically creates a post-shopping social hub where residents gather and bicycles are parked. The exposed corrugated panel ceiling above maintains visible industrial textures that anchor spatial memory.







SCENARIO

After systematically collecting and analyzing the abundant spatial prototypes surrounding the site, determining the appropriate representational approach emerged as the central design challenge. Through multiple iterations, authors ultimately adopted a "background canvas" strategy - selecting a simple and neutral architectural structure as a container to foreground the extracted memory fragments. This vessel needed to meet three critical criteria: familiarity to local residents (to avoid cognitive interference from unfamiliar forms), capacity to serve as a foundational stage for spatial layering, and immediate physical proximity to memory sources (given the strong place-dependency of memory retrieval). Based on these rigorous selection standards, the building at Färgfabriksgatan 1, situated on the fringe of Backaplan's urban renewal zone, was chosen as the experimental vessel for this study.

The research intervention operates on dual levels: organically implanting redesigned memory fragments within the architectural container while simultaneously conducting spatial remediation and functional upgrades to the container itself. This two-fold approach not only enriches the spatial narrative strata but, more importantly, transforms the building's formerly monotonous spatial experience as a home furnishings warehouse. By preserving key structural characteristics while introducing new functional modules, this industrial relic maintains its site memory while acquiring contemporary utility value.

Fig. 16: Aerial photo over Färgfabriksgatan 1, 1990

INTENDED VESSEL

/Location Advantages

Färgfabriksgatan 1 is located at the intersection of a new planning area and an old residential area in Backaplan, surrounded by a large flow of people. In the future backaplan project, this building will face the main pedestrian street of the new planning area.

/Industrial Heritage

This building, constructed around the 1950s, is an industrial heritage site that has evolved in function over the decades—from a warehouse initially to a car repair shop in the 70s, and then to a discount supermarket, toy, furniture, and lighting retailer in the 80s. This building not only reflects the industrial development of Gothenburg but also shows the evolution of the city's economic structure over time.

/Architectural Features

The building features large-span arch designs, with heights ranging from 5 to 8 meters and dimensions approximately 126m by 93m, covering a total area of about 10,000 square meters. The structure is composed of four large-span units, each span being 25 meters, providing high flexibility in space layout. Part of the interior is designed with two levels, while the rest maintains a full-height space. See details in the picture (next page)

/Conclusion

Färgfabriksgatan 1 stands as a significant industrial-era heritage in Gothenburg, strategically positioned at the epicenter between the planned new district and traditional residential areas, serving as a vital nexus connecting old and new urban fabrics. This privileged geographical endowment, combined with its adaptable spatial configuration, renders it an ideal vessel for collective memory preservation. Addition to that, authors will implement subsequent spatial interventions to methodically address the building's existing interior space deficiencies.



Fig.17. Aerial photo over Kvillebäcken area (edited by the author)

/Open Square

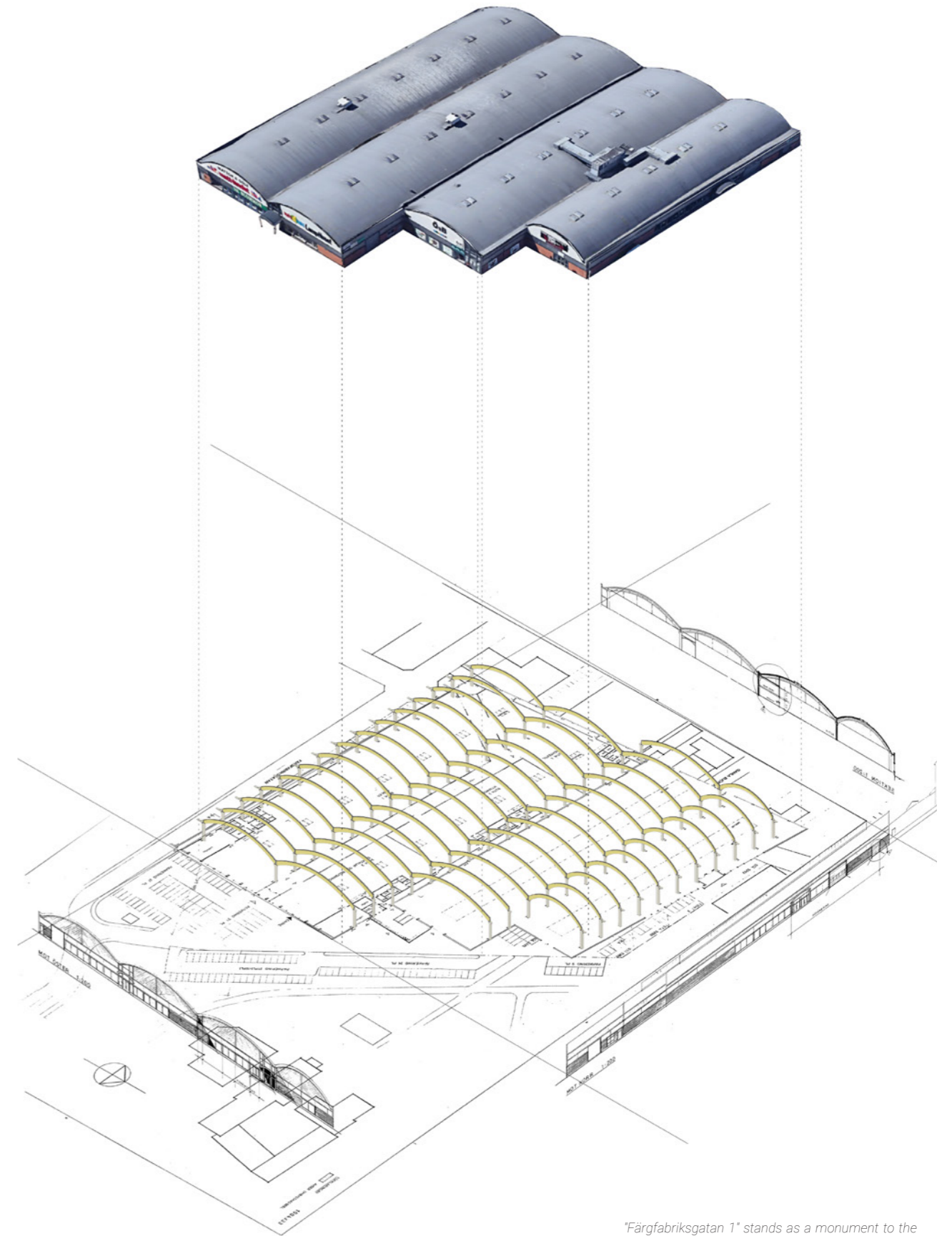
There is a spacious square in front of the building, which will be planned as a park in the future, enhancing the building's accessibility and public utility potential. Currently part of it is used as a parking lot.

/Transportation

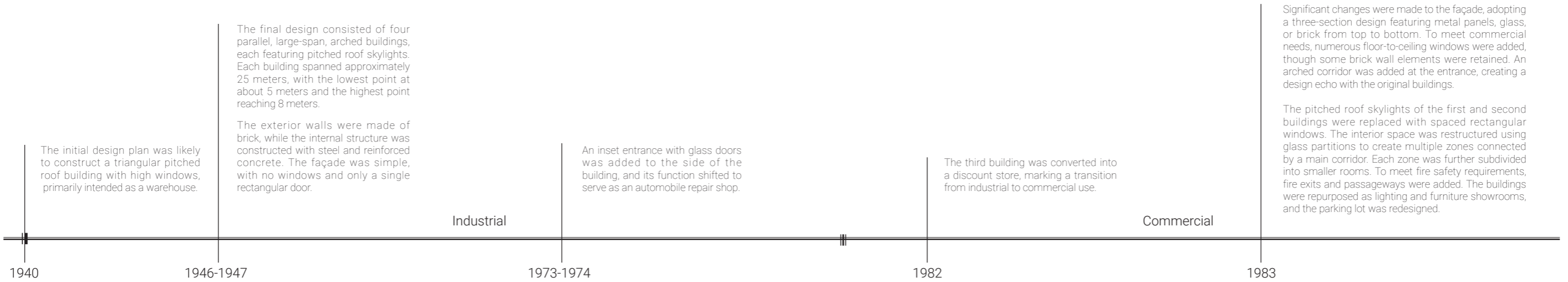
Färgfabriksgatan 1 is close to the Hj. Brantingsplatsen station, an important public transportation hub in Gothenburg that offers several bus and tram routes, providing convenient access to the city center and other key areas.

/Current Situation

The building currently houses a large home furnishing mall, with diversified commercial zones including lighting specialty stores, carpet display areas, children's toy sections, and furniture showrooms. This publicly accessible commercial configuration provides convenient conditions for field research. However, the space exhibits notable limitations: firstly, the simplistic spatial circulation results in inefficient customer flow; secondly, the building's existing generous floor-to-ceiling height remains largely unexploited, with untapped vertical spatial potential; lastly, the insufficient quantity and poor layout of skylights lead to inadequate natural lighting, requiring artificial illumination even during daytime.



"Färgfabriksgatan 1" stands as a monument to the ebb and flow of industrial life in Gothenburg, embodying the city's transformation from a manufacturing powerhouse to a vibrant commercial hub. As Charles Dickens once remarked, "Change is a constant," a theme that resonates through the very structure of this building....



The initial design plan was likely to construct a triangular pitched roof building with high windows, primarily intended as a warehouse.

The final design consisted of four parallel, large-span, arched buildings, each featuring pitched roof skylights. Each building spanned approximately 25 meters, with the lowest point at about 5 meters and the highest point reaching 8 meters.

The exterior walls were made of brick, while the internal structure was constructed with steel and reinforced concrete. The façade was simple, with no windows and only a single rectangular door.

An inset entrance with glass doors was added to the side of the building, and its function shifted to serve as an automobile repair shop.

The third building was converted into a discount store, marking a transition from industrial to commercial use.

Significant changes were made to the façade, adopting a three-section design featuring metal panels, glass, or brick from top to bottom. To meet commercial needs, numerous floor-to-ceiling windows were added, though some brick wall elements were retained. An arched corridor was added at the entrance, creating a design echo with the original buildings.

The pitched roof skylights of the first and second buildings were replaced with spaced rectangular windows. The interior space was restructured using glass partitions to create multiple zones connected by a main corridor. Each zone was further subdivided into smaller rooms. To meet fire safety requirements, fire exits and passageways were added. The buildings were repurposed as lighting and furniture showrooms, and the parking lot was redesigned.

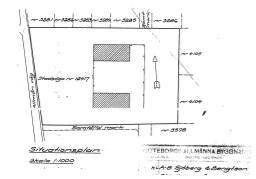


Fig. 18a

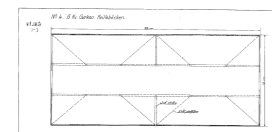


Fig. 18b

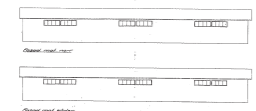


Fig. 18c



Fig. 18d

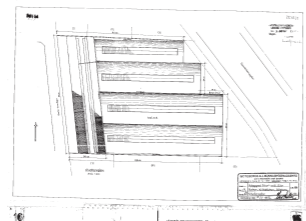


Fig. 18e



Fig. 18f

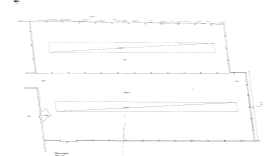


Fig. 18g

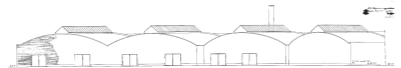


Fig. 18j



Fig. 18k



Fig. 18l

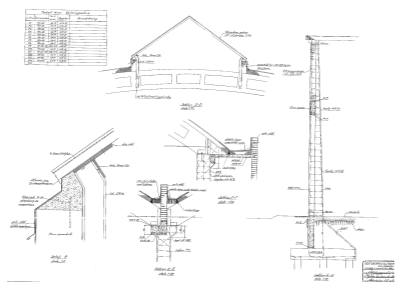


Fig. 18h

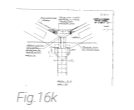


Fig. 16k

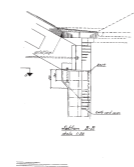


Fig. 18i

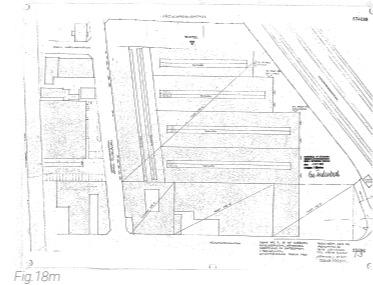


Fig. 18m

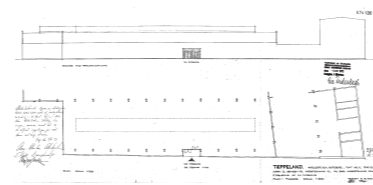


Fig. 18n

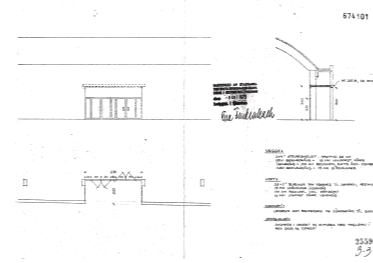


Fig. 18o



Fig. 18p

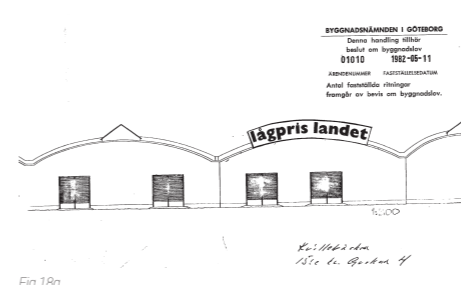


Fig. 18q

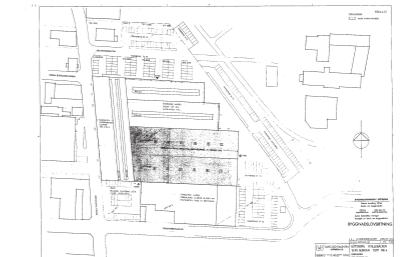


Fig. 18r

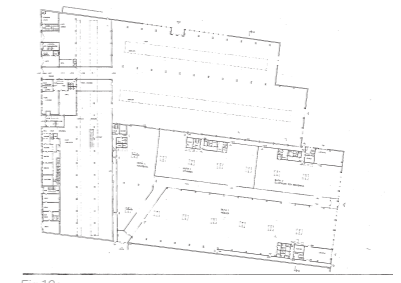


Fig. 18s



Fig. 18t



Fig. 18u



Fig. 18v

The pitched roof skylights of the third and fourth buildings were also replaced with rectangular windows. The fourth building's function changed to a carpet store, while the third and fourth buildings were converted into Mesta, a hardware store.

A partial second floor was added to the third building. The entrances were equipped with double-layered porches to improve insulation. There were proposals for large advertising boards, but these were rejected.

The first building was converted into a children's toy store. The interior layout remained largely unchanged, with additional sections partitioned off.

Partial spatial adjustments were made, and a second floor was added to portions of all the buildings.

A proposal was made to redesign the façade of the second building, including a longer porch and larger advertising boards. However, as the façade remained unchanged in subsequent years, this plan was likely not approved.

The previous layout, where multiple areas were connected by corridors, was replaced with wall partitions, leading to the removal of fire passageways. At the same time, larger second-floor spaces were added internally. The first and second buildings were completely separated into two independent structures.

Current situation: Today, these buildings primarily function as venues for the sale of various goods, retaining much of their original architectural structure. However, with the progress of the Backplan project, parts of the area have taken on a disorganized and outdated appearance, while the interior spaces are cluttered and poorly utilized.

Commercial

1984

1986

1992

1999

2002

2024

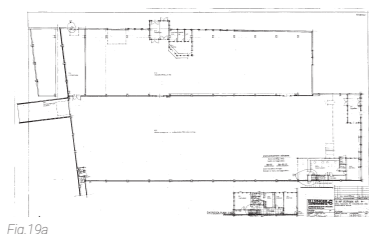


Fig. 19a

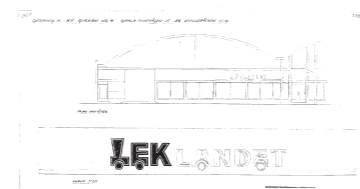


Fig. 19c

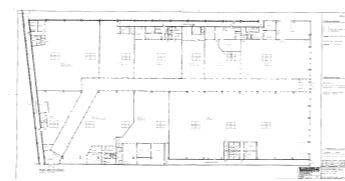


Fig. 19e

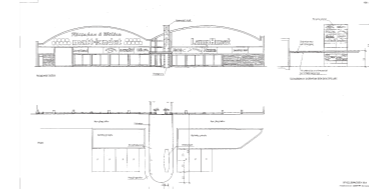


Fig. 19h



Fig. 19i



62

63

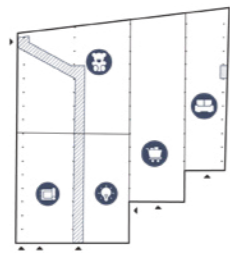


CONCEPT COLLAGE

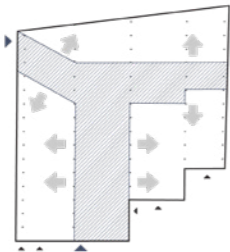
The designers envision transforming this space into a "collage utopia" embedded with memory mosaics. The architectural container itself gradually recedes, while its interiors and exteriors become saturated with layered spatial narratives through three design operations: *translatio* (reinterpreting historical elements), *imitatio* (replicating site traces), and *aemulatio* (transcendent reconfiguration). Familiar artifacts are revitalized as spatiotemporal mediums, injecting narrative tension into the mundane interiors. As visitors navigate through, they not only rediscover the architecture per se, but also initiate a cross-temporal mnemonic dialogue - where historical imprints of this land are continuously activated, creating resonance between spatial memories of different eras.

DESIGN STRATEGY

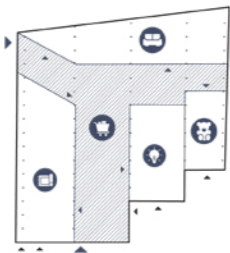
Together, these interventions reimagine the building as a dynamic communal hub. The widened passage and transparent roof panels improve circulation and daylight, while the reorganization of functions integrates retail with public space. Residents can enjoy exhibitions, leisure activities, and markets in an open and welcoming environment, while retailers benefit from new opportunities to engage with the community. In this way, the project not only revitalizes the spatial quality of the building but also preserves the memory of the demolished surroundings, ensuring that the site continues to carry forward its layered history within a renewed urban context.



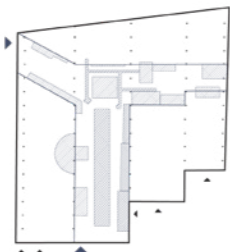
The original plan features a passage connecting two entrances and linking three main access points, which became a central focus of the transformation strategy. The building has long hosted diverse programs – carpet, lighting, grocery, furniture, and toy shops



The original passage was widened and linked to the three entrances, while the central section of the roof was replaced with transparent corrugated panels to enhance daylight and improve the overall spatial quality.



The original functions were preserved and reorganized, with the renovated central corridor transformed into a hybrid zone combining retail and public space. Additional internal entrances were introduced, allowing residents to enjoy the communal area while also providing direct access to the shops. Retailers, in turn, can use the public space for product displays and engagement.



The renovated space accommodates exhibitions, leisure activities, and markets, transforming the previously enclosed and narrow interior. Through this intervention, the building is revitalized while preserving the memory of the demolished surroundings.

DESIGN APPROACH

Through a systematic review of the literature "Adaptive Reuse of the Built Heritage", we have identified three core intervention strategies - translatio (translation), imitatio (imitation), and aemulatio (emulative reconfiguration) - as our methodological framework. It must be emphasized that these approaches are not hierarchical but constitute parallel methodological tools. In practice, the design team will selectively apply individual or combined strategies to a given heritage element based on its specific characteristics and renewal requirements, ensuring precisely tailored spatial interventions.

T ranslatio

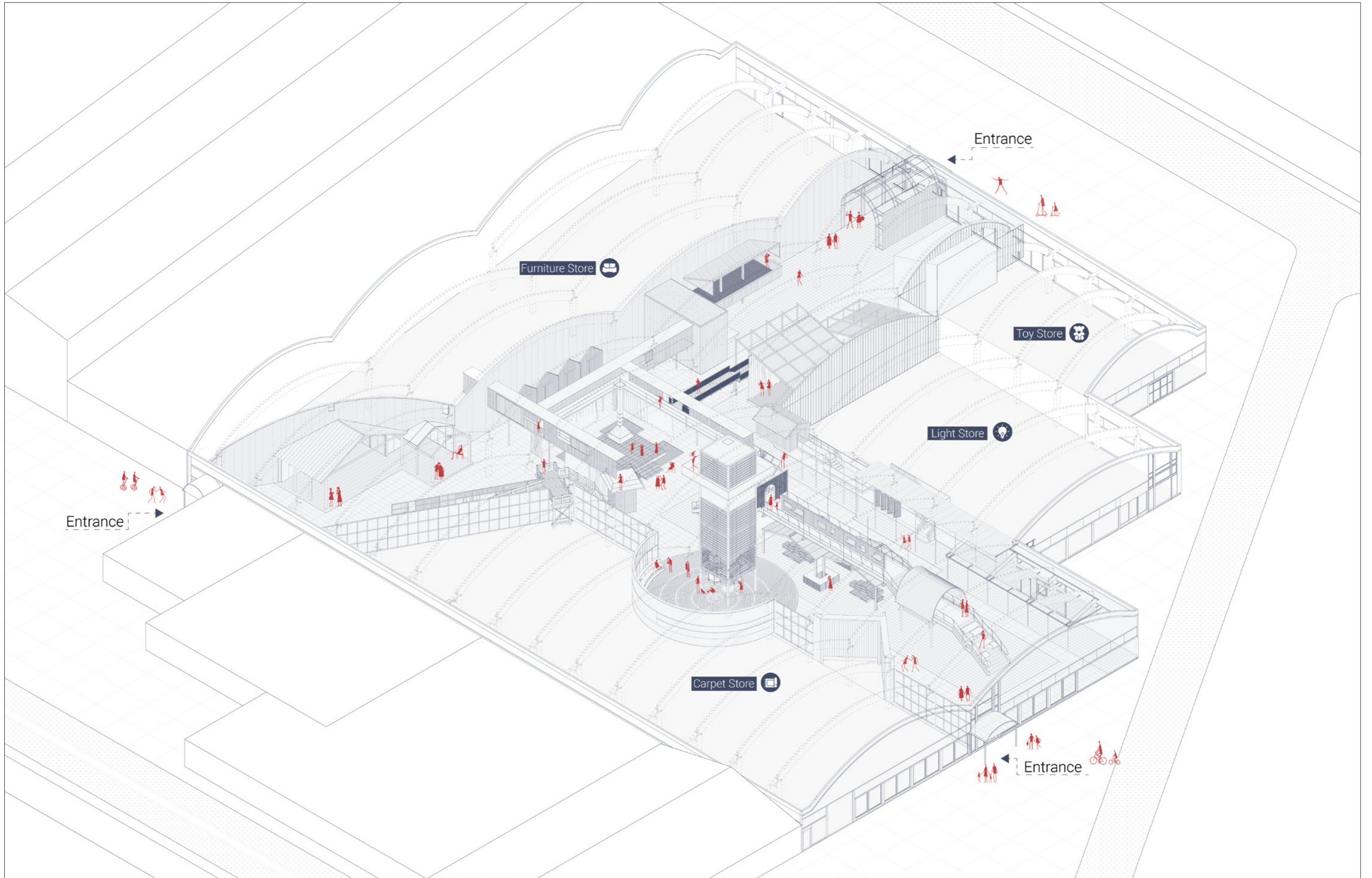
In this method, we will conduct an in-depth analysis of the additional structures' spatial logic and design language, extracting their core design elements. Subsequently, we will follow the prototype's design philosophy, reinterpreting them through innovative translation techniques.

I mitatio

This phase will select the site's most representative corrugated panel facade material as one of the primary design elements. By studying its application patterns and combinations on-site, we will employ simplified and abstract design approaches to reinforce the site's historical continuity and highlight its industrial heritage characteristics.

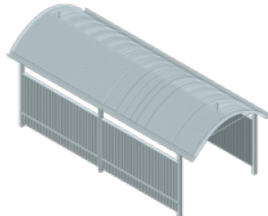
A emulatio

In this method, we will examine the site's potential shortcomings, including aesthetic, functional, and technical aspects. By incorporating unique design interpretations and critical thinking, we will create innovative design solutions while maintaining a dialogue with the existing architecture.

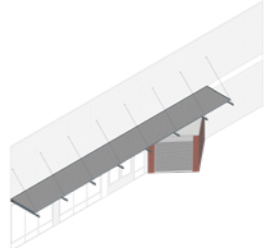




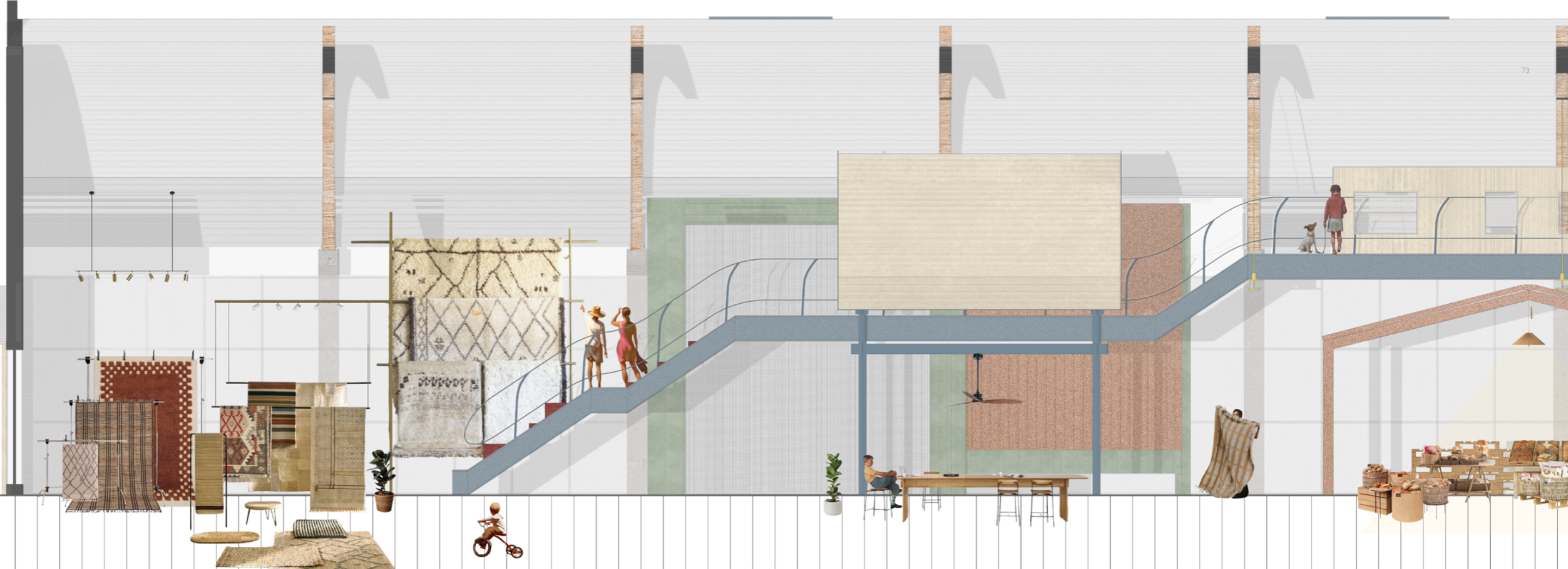
Tilted handrails – Their irregular form reflects the site's organic design language. Instead of strict geometry, they carry the traces of spontaneous, everyday interventions that shape the character of the place.



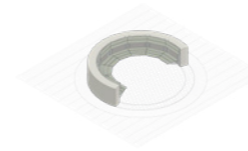
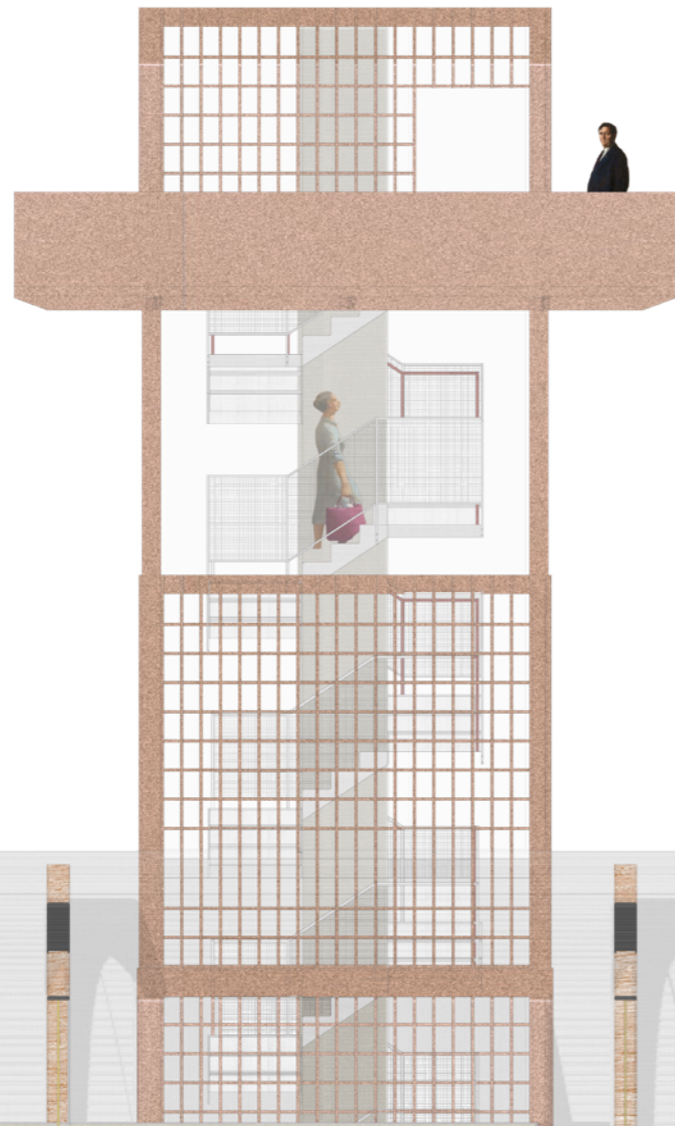
Arched structure – Released from its original frame, it becomes a symbolic marker of the main entrance, signaling both identity and renewal.



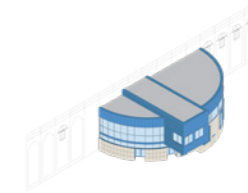
Triangular sightline – Used at the carpet shop entrance, its enlarged scale hints at the need for transporting large carpets while guiding visitors inward.



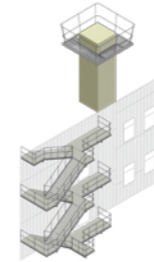
FACADE ANALYSIS



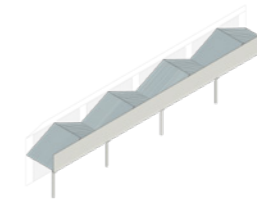
Small plaza — Using wood (replacing dark, decayed timber) and marble (instead of rubble), it becomes a daily meeting point for local residents.



Curved facade — Extends the semicircular plaza's boundary, showcasing varied corrugated panel sizes and material joints.

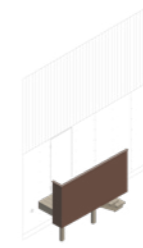


Unknown tower — Stripped of its facade, it gains an imagined new function as the building's highest point and lookout tower.

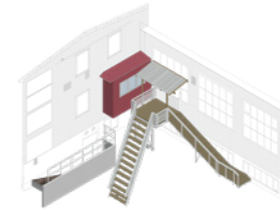


Sloped roofs contrast — A solid wall on one side contrasts with open, continuous sloped roofs on the other, fostering increased economic activity beneath.

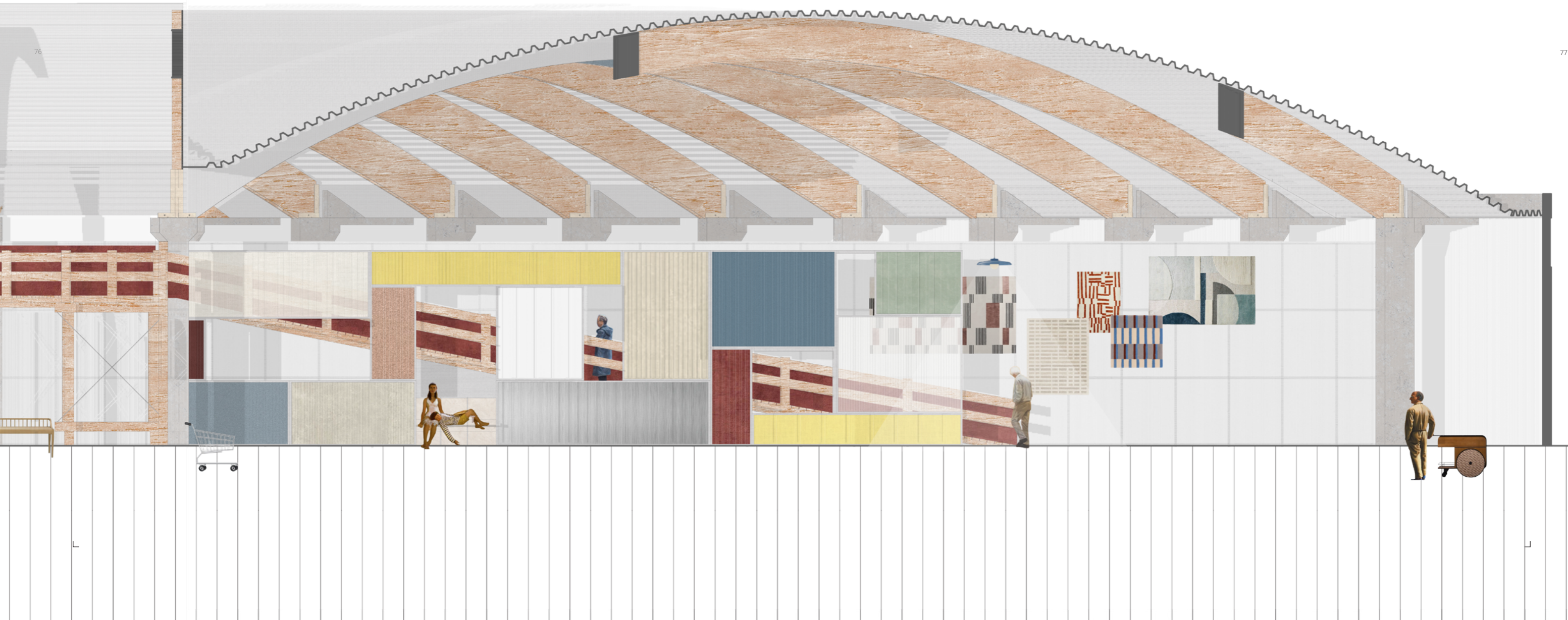




Subtle long staircase –
Faintly visible, it links the front
and rear spaces, facilitating
smooth circulation and
enhancing spatial continuity
throughout the building.



Long ramp – Provides users –
with an extended path to
closely observe the facade,
encouraging engagement
and a gradual experience of
the architectural details.





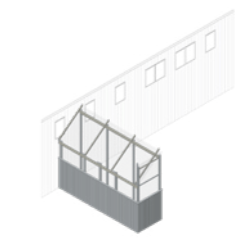
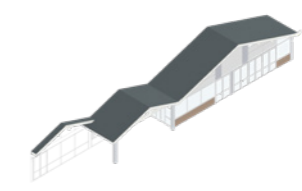


/Spatial fusion & multifunctionality

The south side of the building retains its original carpet store, featuring an 8-meter ceiling height that allows for multi-level carpet displays. The newly added red staircase, ramp, and dramatic entrance are all designed with this spatial generosity in mind. The central structure along the main axis offers a variety of community spaces, including an exhibition corridor, pop-up shops, stepped seating, and a viewing platform. Here, public activities and commercial functions seamlessly blend, creating a dynamic space with blurred boundaries.

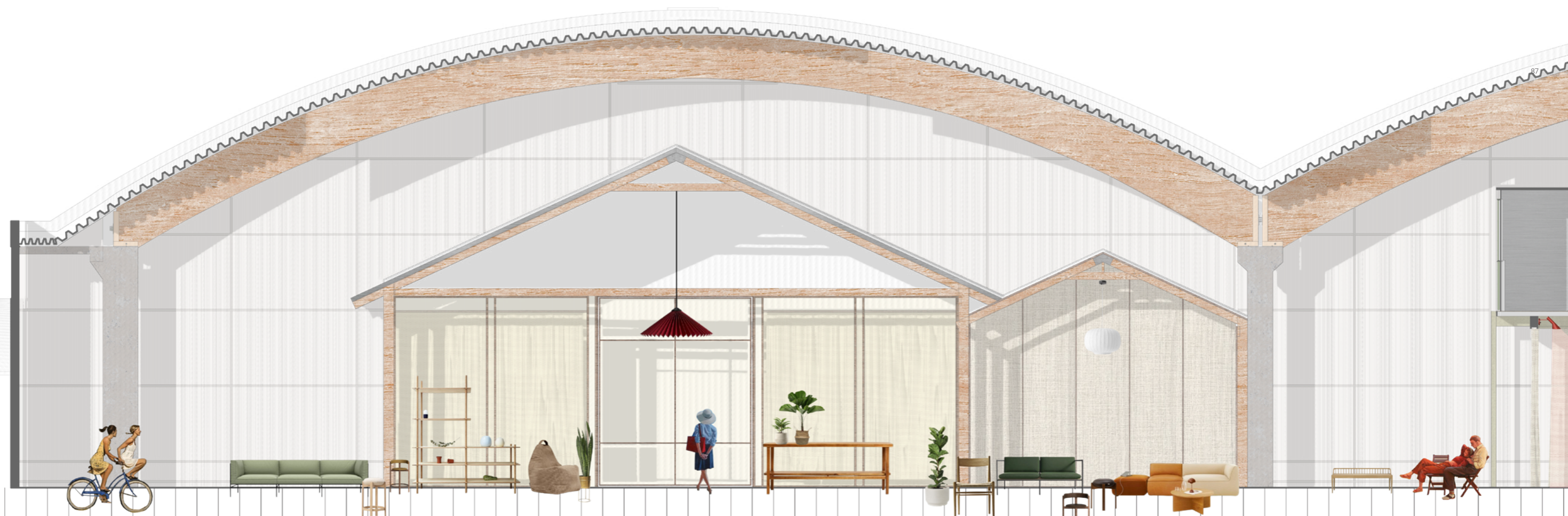




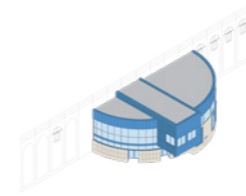


Stepped and shifting facade
– Creates an ideal display space for the furniture store, where the addition of textiles softens the large structure to better suit functional needs.

Exposed timber structure –
Boldly revealed in the semi-outdoor, light-filtering space, emphasizing the building's structural elements.



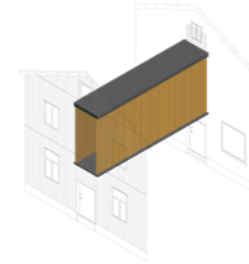
FACADE ANALYSIS



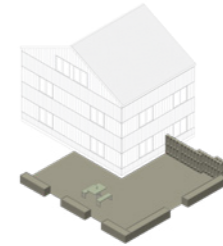
Protruding transparent volume
— Adds extra vertical circulation to the original building, enhancing connectivity without disrupting the existing structure.



Exaggerated scale contrast —
Creates diverse possibilities for store entrances and exits, enhancing accessibility and flow.

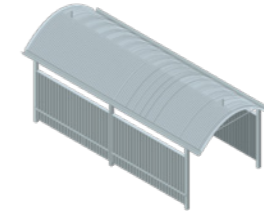


Elevated walkway — Connects multiple commercial spaces while defining the aerial boundary of the public area below.

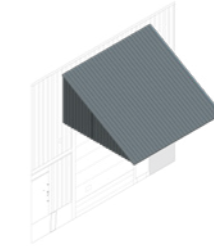


Varied-height wooden racks — Unintentionally transform into a public stage, inviting social interaction within the space.

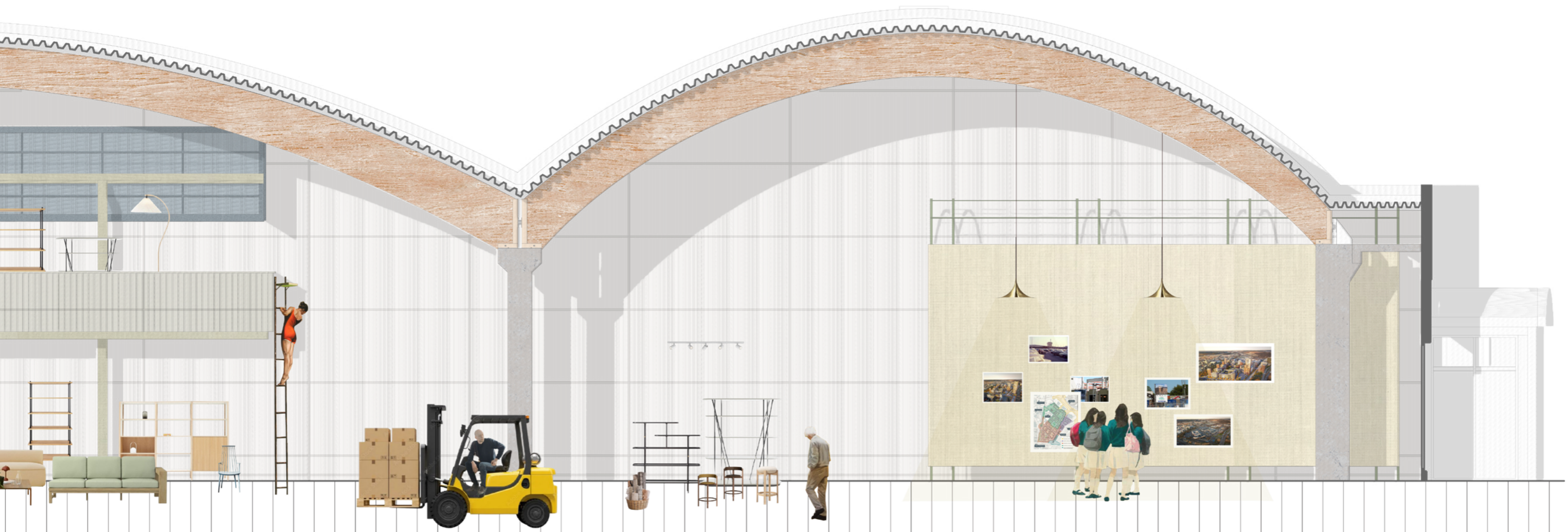




Exposed structure and side-shielding corrugated panels – Guide visitors to the building entrance while offering a dynamic visual experience.



Rotated giant sloped roof – By turning the massive roof 180 degrees, users gain clear views of the internal metal joints, creating a two-story furniture display area.







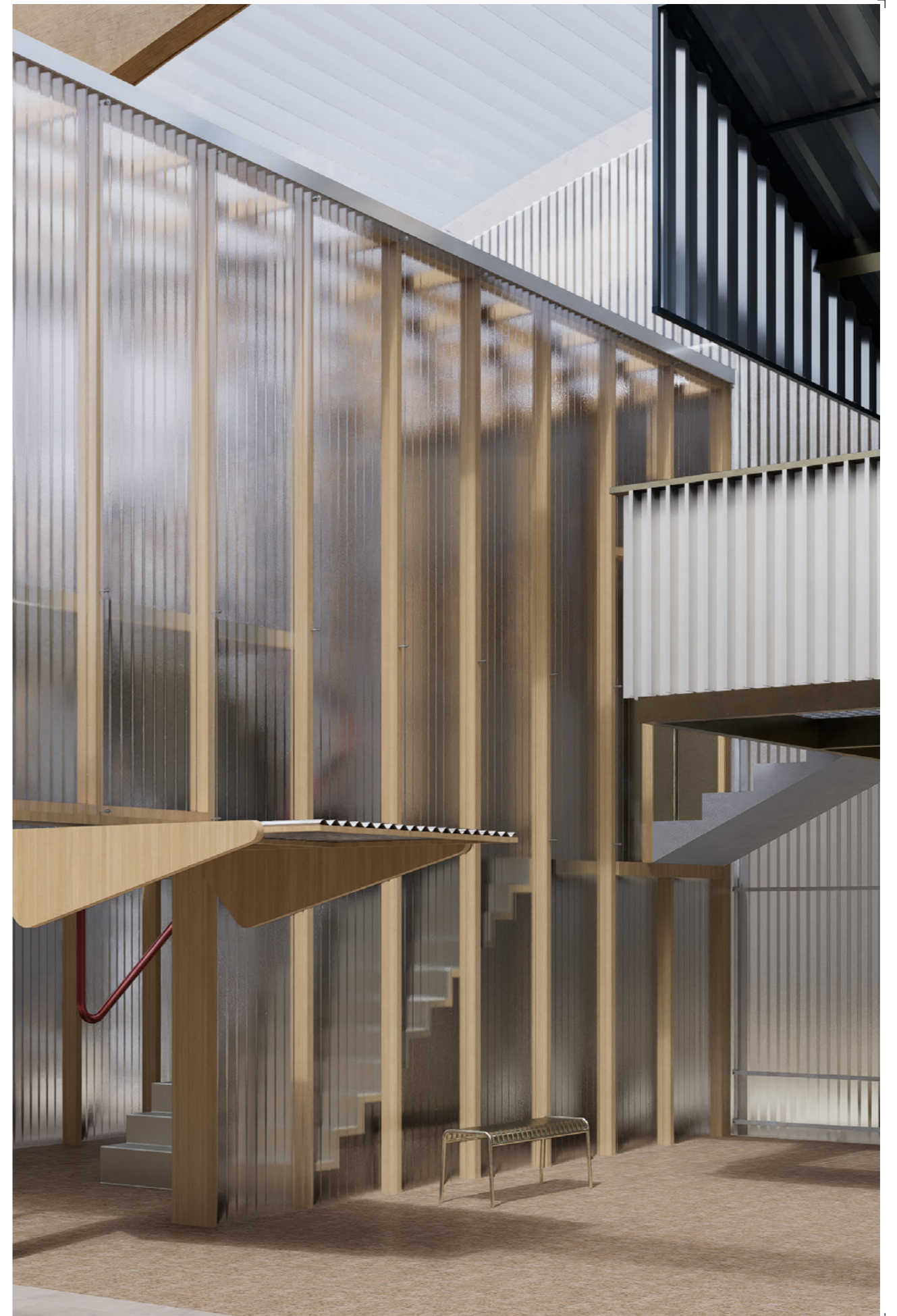
/Core Connectivity & Spatial Diversity

The public stage and elevated skybridge are strategically located at the intersection of the Y-shaped corridor, making this area the social and functional core of the building. The skybridge serves multiple purposes: it defines spatial boundaries, selectively screens views to create privacy, and connects four separate shops, facilitating seamless circulation throughout the complex. The interplay of different heights and volumes around this node adds richness and variety to the spatial experience, offering users multiple perspectives and moments of interaction.



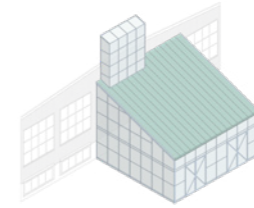
/Enhanced Display & Engagement

On the west side of the building sits the original furniture store, where carefully designed additions to the facade provide expanded possibilities for both product display and immersive customer experiences. These architectural interventions introduce texture and depth to the exterior, transforming the frontage into an active, inviting space that highlights the store's presence while encouraging exploration and interaction.

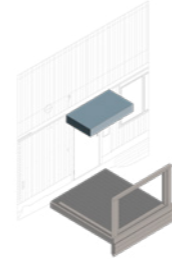




Iconic site lighthouse –
Disassembled and reassembled
as a lighting fixture within the
building, preserving its symbolic
presence.



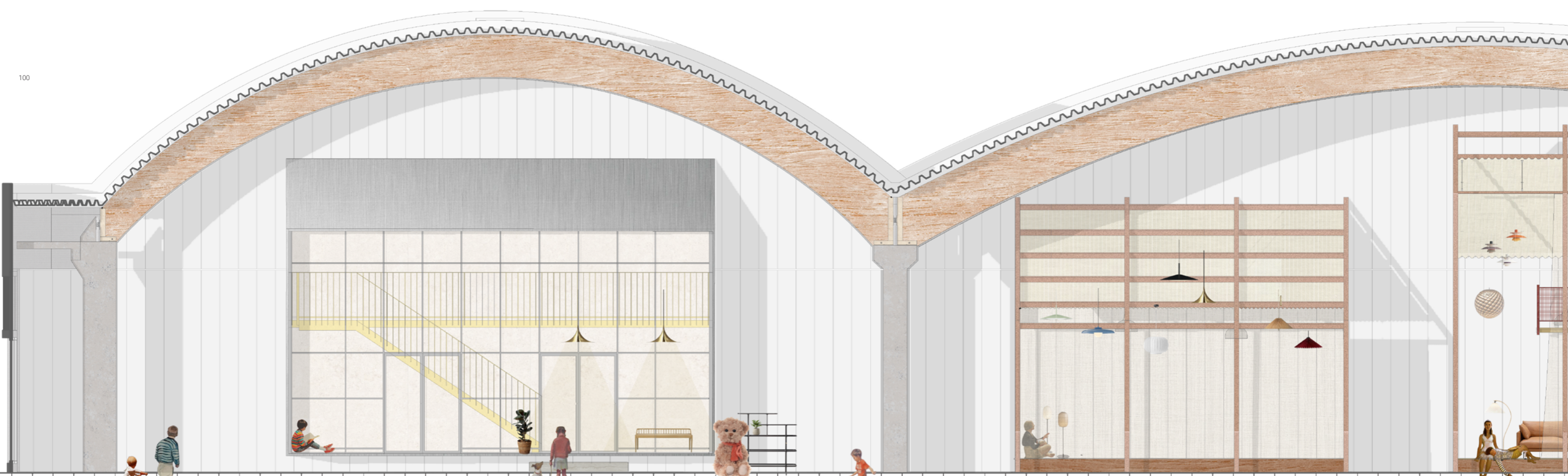
Additional metal volume –
Maintains visual transparency
while creating a striking new
entrance for the children's toy
store.



Stepped platform – Provides
a raised area with varied
heights, creating a secluded yet
open space for users to freely
experience and interact with the
lighting fixtures in different ways.



Semi-enclosed element –
Incorporates semi-transparent
curtains within the semi-open
structure to block excess
natural light, improving the
lighting display environment.



100

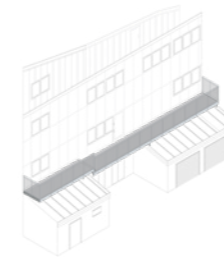
FACADE ANALYSIS



Unexpected meeting of staircase and addition – Here, the two elements intersect once more, creating a focal point where sightlines converge.



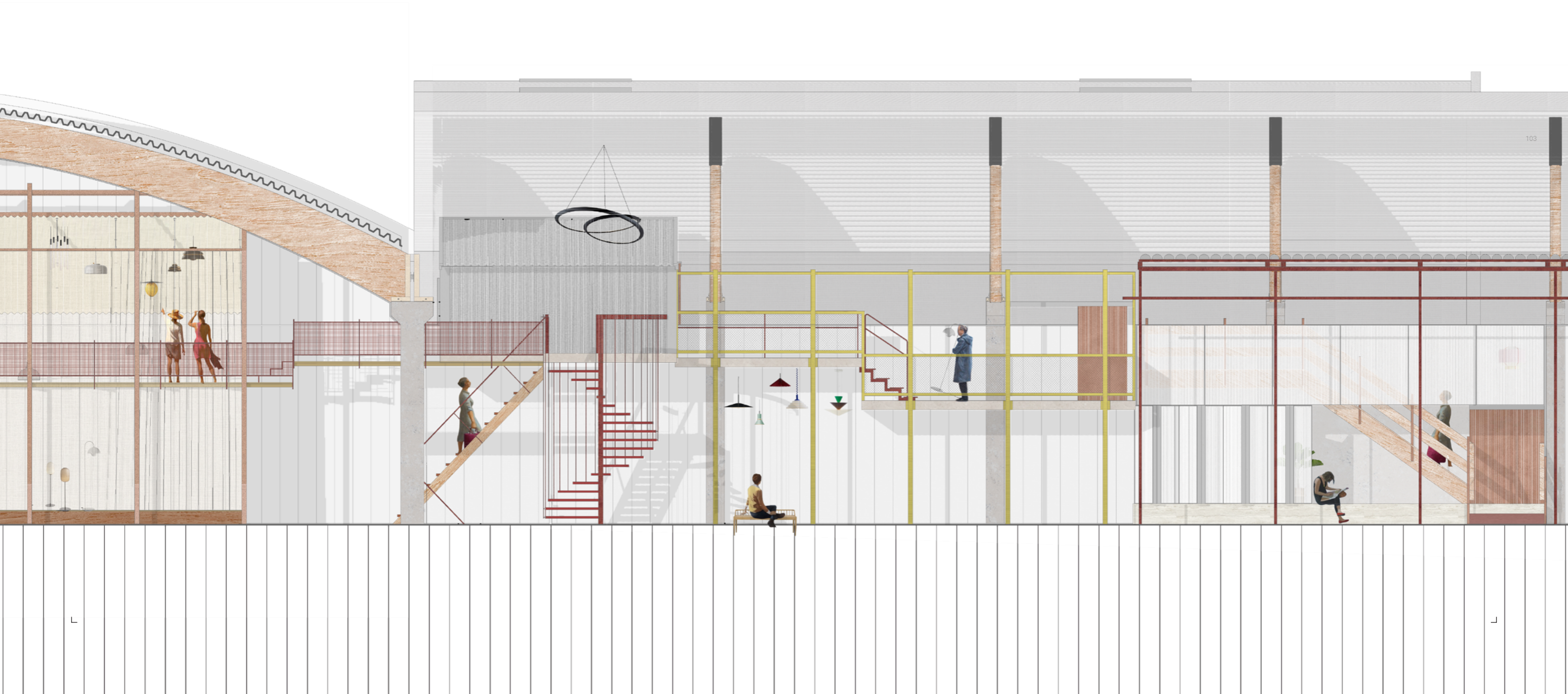
Recessed translucent stairwell – Transforms the originally protruding staircase into an indented, semi-transparent space, adding depth and complexity to the facade.

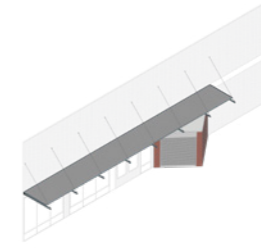


First-floor terrace – Divides the large facade into smaller spaces, adapting functions to meet the needs of first-floor staff and ground-floor customers.

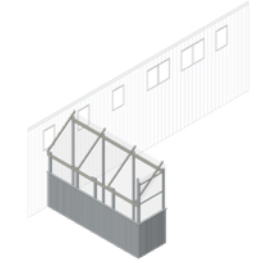


Bidirectional staircase – Combines metal and wood materials to highlight two contrasting characters, enriching the spatial experience and visual diversity.





Suspended red corridor
 – Adds opportunities for lighting displays and events, enlivening the facade with vibrant activity.



Exposed metal structure of the corridor – Clearly reveals the steel framework, showcasing both the structural mechanics and aesthetic qualities to users.



104







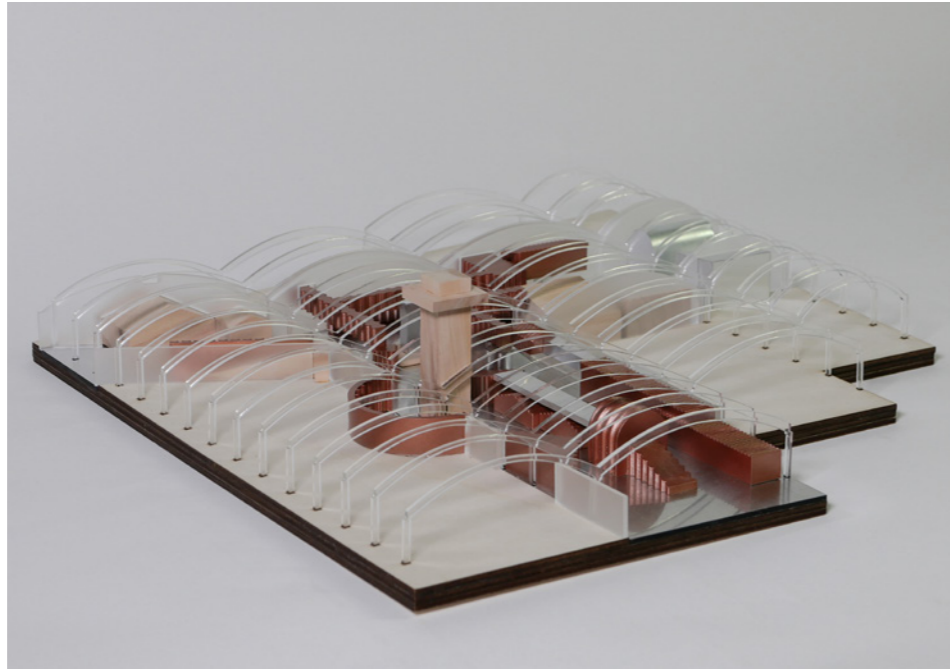


/Functional Facade & Interactive Spaces

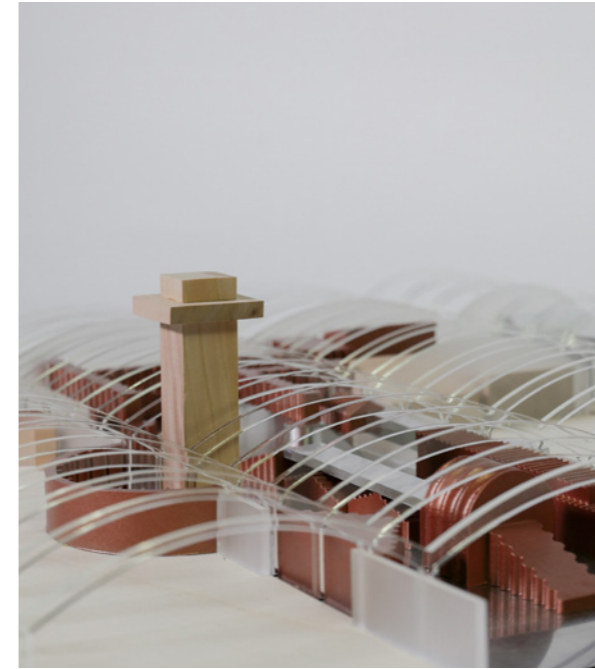
On the north side of the building, volumes at varying heights and depths respond to the needs of the children's toy store and lighting shop, creating diverse external spaces for lighting displays, spatial experiences, pedestrian rest areas, and entrances. These varying horizontal planes emphasize the internal spatial hierarchy, reflected in features such as stone steps doubling as seating, wooden deck lounge areas, and an elevated staff balcony above. The central red skybridge not only facilitates vertical circulation but also integrates seamlessly with the retail functions, offering close-up opportunities to appreciate the lighting exhibits.

Physical Model

In the initial concept of the physical model, we conceptualized specific objects and presented the complex design in an accessible manner by featuring three to four key materials. The originally continuous and repetitive arches in the building were replaced with lightweight transparent acrylic to reduce their visual presence, directing the audience's attention to the design itself and providing a clearer field of vision. The same approach was applied to the interior elevations, where frosted acrylic suggests the blurred boundary between commercial spaces and public areas.

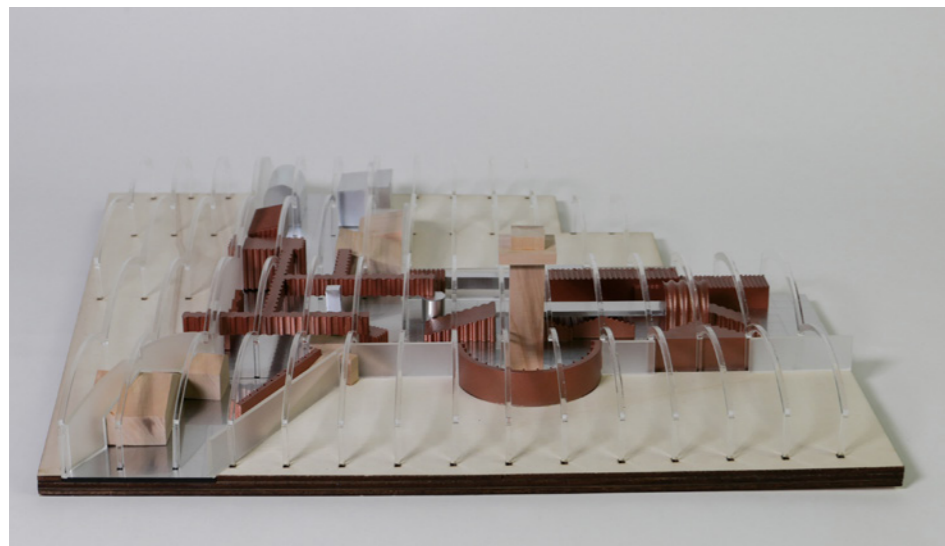


View from southeast point



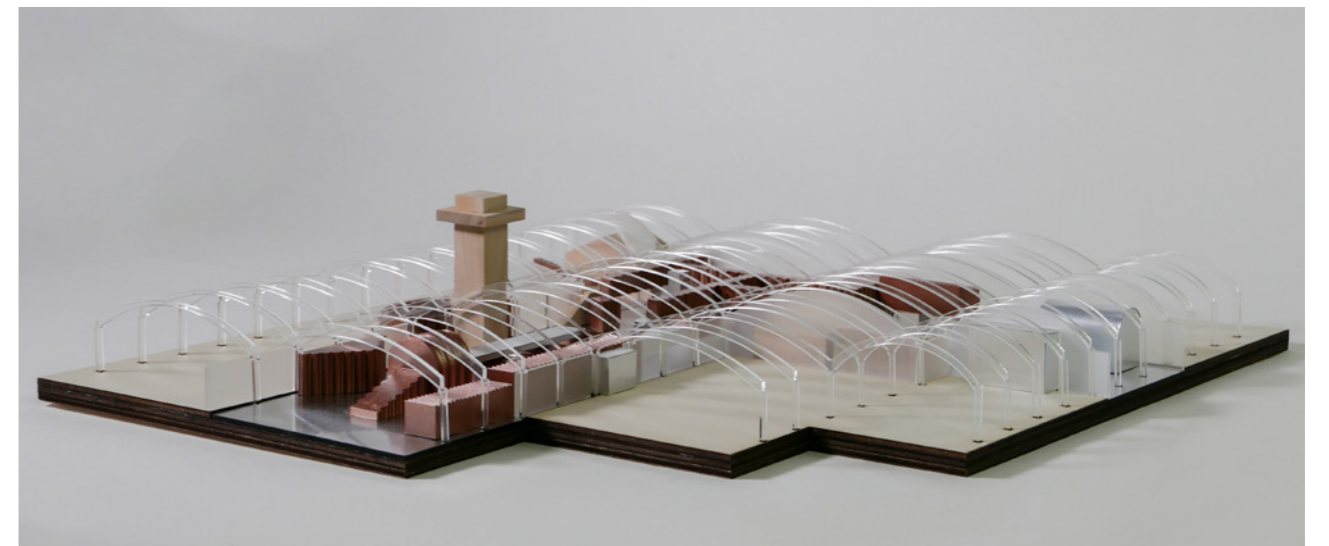
Model material

As three materials were emphasized as the focus of the redesign, we carried this idea into the model-making process: the bronze-colored volumes, symbolizing corrugated panels, were represented using varied shapes and sizes of corrugated forms; the silver metal volumes represent other metallic elements on the site; and wood, as one of the essential materials of the site, was also incorporated. These geometrically simplified elements, distinguished by materiality and surface treatment, translate the design proposal into a more legible visual language.



View from south point

Throughout the model-making process, we employed a variety of techniques including woodworking, 3D printing, spray painting, and laser cutting. Examining the finished model allowed us to perceive more clearly the sense of scale within the space, as well as the interaction and convergence between different elements.



View from northeast point

Discussion/Reflection

This thesis began as an exploration of how immigrant and local cultures can be integrated and expressed through architecture. Initially, we selected Kvillebäcken based on the assumption that it was a district deeply influenced by immigrant communities. However, as our on-site investigation progressed, we uncovered a different reality. Under the guidance of our supervisor and through our own observations, we found that the area was not primarily defined by immigrant patterns but was undergoing comprehensive redevelopment under the Backaplan plan. More importantly, we discovered a rich layer of adhocism embedded in the architectural fabric – layers of everyday interventions, repairs, and additions that narrate a vibrant history of the place. The building chosen for our design project is located on the edge of the redevelopment zone and was not slated for demolition, making it an ideal site to test regeneration strategies based on these findings.

We proposed the concept of the "Memory Mosaic," viewing the traces of adhocism as fragmented memories that can be recombined into new architectural narratives. Therefore, our design opposes approaches that either erase industrial heritage through demolition or freeze it into a static, museum-like state. Instead, our strategy is to subtly integrate memory into functional architecture – familiar details and materials unexpectedly emerging during everyday use, triggering recognition and recollection without compromising the building's practical functions. Through this approach, the project strives to sustain collective memory even as the physical structure transforms. This methodology differentiates our approach from traditional preservation or reconstruction practices by offering a more nuanced response that recognizes the value of "everyday heritage."

However, a key challenge lies in systematically collecting these ephemeral traces and translating them into usable architectural elements. Our method relied on documenting fragments photographically and transforming them into a design library – abstracted as lines, colors, materials, and patterns of everyday interventions. These were then gradually reinterpreted and integrated through the processes of *translatio*, *imitatio*, and *aemulatio*. While this approach proved effective, it remains only a first step. Due to time constraints, we were unable to explore alternative strategies or refine the process into a more comprehensive and replicable tool. This points to an important direction for further research, where the framework could evolve into a practical methodology for sustainable heritage regeneration – applicable not only to Gothenburg but also to other industrial or everyday heritage contexts threatened by redevelopment.

The significance of this work lies in its potential to broaden discussions on sustainable urban regeneration. For the field of architecture, it proposes a model that acknowledges the cultural value embedded in the seemingly ordinary and argues that memory and identity can be preserved without halting development. For society at large, it offers a way to reconcile urban growth with the intangible heritage embedded in everyday life, ensuring that redevelopment does not come at the cost of erasing heritage. Ultimately, the "Memory Mosaic" strategy presents a future in which cities can evolve dynamically while remaining rooted in the narratives that shaped them.

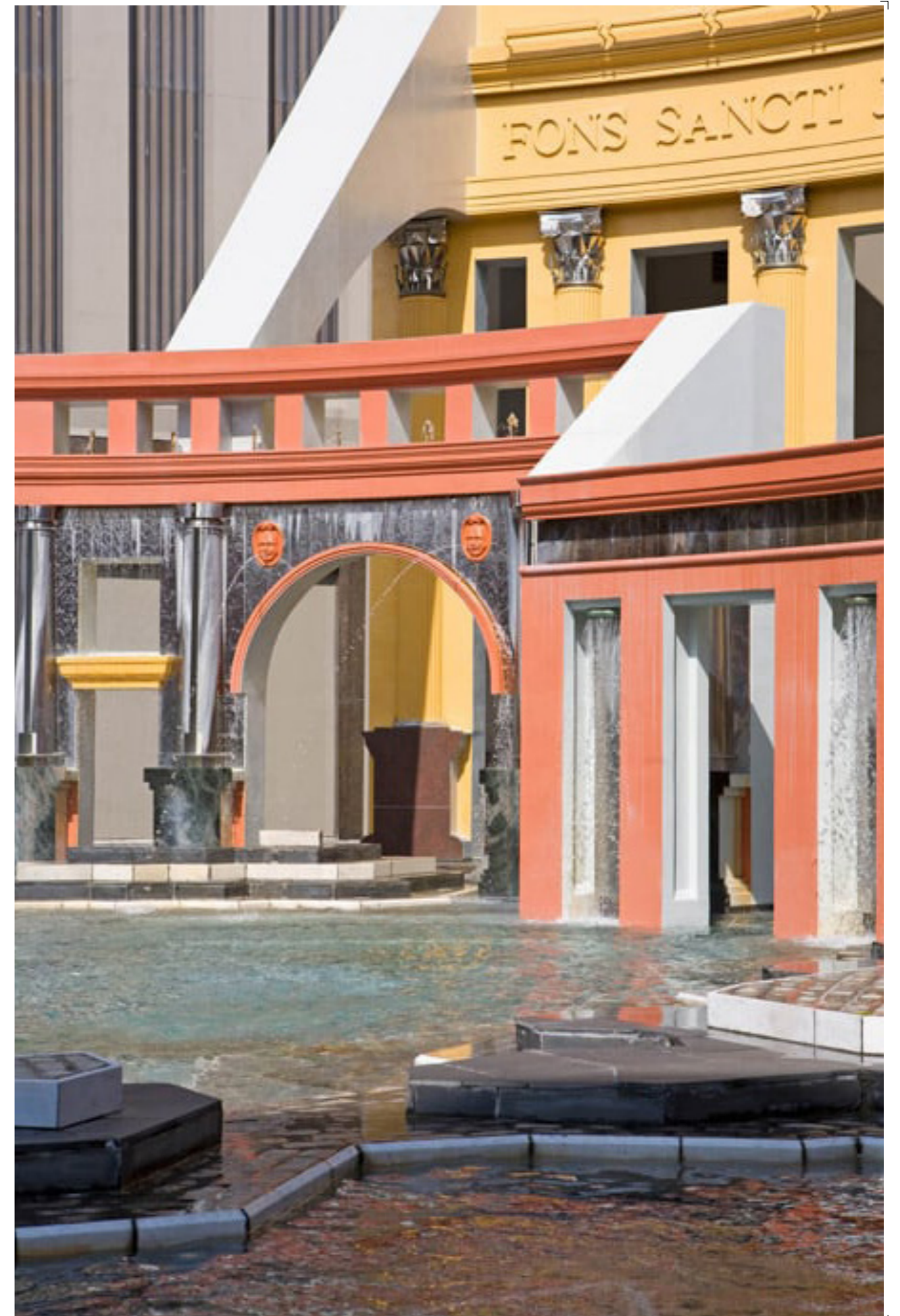


Fig 20. Postmodern architecture: Piazza d'Italia, New Orleans by Charles Moore

OM Backaplan. (n.d.). Göteborgs Stad. <https://goteborg.se/wps/portal/start/goteborg-vaxer/hitta-projekt/stadsomrade-hisingen/backaplan/om-backaplan>

Historien om den kassaskåpsfabrik som låg på samma tomt där Stora Coop Backaplan ligger i dag. ... (2020, October 30). https://www.helahisingen.se/historien-om-den-kassaskapsfabrik-som-lag-pa-samma-tomt-dar-stora-coop-backaplan-ligger-i-dag/#google_vignette

Reflektioner kring Backaplan efter en stadsvandring med Socialdemokraterna. (n.d.). Yimby Göteborg. https://gbg.yimby.se/2023/07/reflektioner-kring-backap_4176.html

Kulturhistoriska inventeringar och värderingar - idadicksson.se. (2024, September 18). idadicksson.se. <https://www.idadicksson.se/kulturhistoriska-inventeringar-och-varderingar/>

Rittsél, E. D. (2023). *Industrial heritage in Sweden – preservation and protection*. <https://tidsskrift.dk/fabrikogbolig/article/view/150598>

Museum, V. a. A. (n.d.). *Design for ad hoc Chair | Nathan Silver | V&A Explore the collections*. Victoria and Albert Museum: Explore the Collections. <https://collections.vam.ac.uk/item/O1380622/design-for-ad-hoc-chair-design-nathan-silver/>

Jencks, C., & Silver, N. (1972b). *Adhocism: the case for improvisation*. <https://ci.nii.ac.jp/ncid/BB15907901>

Haldane, J. (2020, July 20). *Adhocism: A Disputed Theory of Improvisation - The Architectural Review*. The Architectural Review. <https://www.architectural-review.com/essays/exhibitions/adhocism-a-disputed-theory-of-improvisation>

Edensor, T. (2005). The Ghosts of Industrial Ruins: Ordering and disordering memory in excessive space. *Environment and Planning D Society and Space*, 23(6), 829–849. <https://doi.org/10.1068/d58j>

Plevoets, B., & Van Cleempoel, K. (2019). Adaptive reuse of the built heritage. In *Routledge eBooks*. <https://doi.org/10.4324/9781315161440>

Behovet av äldre byggnader. (n.d.). Yimby Göteborg. https://gbg.yimby.se/2011/11/behovet-av-aldre-byggnade_3070.html?lang=en

Maheshwari, P. (2021, February 12). *How to build your memory lane*. RTF | Rethinking the Future. <https://www.rethinkingthefuture.com/narratives/a2533-how-to-build-your-memory-lane/>

Rich, S. C. (2013, November 15). The architecture of memory. *Smithsonian Magazine*. <https://www.smithsonianmag.com/arts-culture/the-architecture-of-memory-14396375/>

Art of Memory. (2023, April 3). *How to build a memory Palace*. *Art of Memory*. <https://artofmemory.com/blog/how-to-build-a-memory-palace/>

Shields, J. (2014). *Collage and architecture*. In *Routledge eBooks*. <https://doi.org/10.4324/9781315883199>

Fig.1: E. A. Rosengrens verkstäder i Göteborg 1938. (By Göteborgs stadsmuseum). (1938). Kringla. <https://www.kringla.nu/kringla/objekt?referens=GSM/delobjekt/401906>

Fig.2-3: Min karta. (n.d.). Retrieved April 10 2025, from <https://minkarta.lantmateriet.se/>
 Note: The image has been modified by the author to illustrate specific features

Fig.3: [Historien om den kassaskåpsfabrik som låg på samma tomt där Stora Coop Backaplan ligger i dag.]. (2020). https://www.helahisingen.se/historien-om-den-kassaskapsfabrik-som-lag-pa-samma-tomt-dar-stora-coop-backaplan-ligger-i-dag/#google_vignette

Fig.4: The Global Goals. (n.d.). [Goals Archive]. Retrieved January 15 2025, from <https://www.globalgoals.org/resources/>
 Note: The image has been modified by the author to illustrate specific features.

Fig.5-6: Min karta. (n.d.). Retrieved April 10 2025, from <https://minkarta.lantmateriet.se/>
 Note: The image has been modified by the author to illustrate specific features

Fig.7: Om Backaplan. (n.d.). Göteborgs Stad. <https://goteborg.se/wps/portal/start/goteborg-vaxer/hitta-projekt/stadsomrade-hisingen/backaplan/om-backaplan>
 Note: The image has been modified by the author to illustrate specific features.

Fig.8: Reflektioner kring Backaplan efter en stadsvandring med Socialdemokraterna. (n.d.). Yimby Göteborg. https://gbg.yimby.se/2023/07/reflektioner-kring-backap_4176.html
 Note: The image has been modified by the author to illustrate specific features.

Fig.9:Framtidens backaplan. (2024, November 13). Framtidens Backaplan. <https://framtidensbackaplan.se/>
 Note: The image has been modified by the author to illustrate specific features.

Fig.10: Haldane, J. (2020, July 20). *Adhocism: A Disputed Theory of Improvisation* - The Architectural Review. The Architectural Review. <https://www.architectural-review.com/essays/exhibitions/adhocism-a-disputed-theory-of-improvisation>

Fig.11: Murrow, E. (2011). *Série Doppler Doppelgänger - All Mine* [Pencil on paper].

Fig.12: Shields, J. (2014). *Collage and architecture*. <https://doi.org/10.4324/9781315883199>

Fig.13: Palazzo Farnese: Façade. (n.d.). Web Gallery of Art. <https://www.wga.hu/frames-e.html?/html/m/michelan/5archite/late/2farnese.html>

Fig.14: Plevoets, B., & Van Cleempoel, K. (2019). *Adaptive reuse of the built heritage: Concepts and cases of an emerging discipline*. <https://www.taylorfrancis.com/books/adaptive-reuse-built-heritage-bie-plevoets-koenraad-van-cleempoel/10.4324/9781315161440>

Fig.15: Binet, H. (2019). *Tate Britain*. Caruso St John Architects. <https://carusostjohn.com/projects/transforming-tate-britain/>

Fig.16: ArkivDigital: Svenska Aero-Bilder X:XXXX X:3915_0 1990-1990 Image 34. (n.d.). ArkivDigital. <https://app.arkivdigital.se/>

Fig.17: Översiktsplan för Göteborg. (n.d.). [Map of Göteborg]. Retrieved April 13 2025, from <https://oversiktsplan.goteborg.se/>
 Note: The image has been modified by the author to illustrate specific features.

Fig.18a~t, 19a~i: Göteborgs Stad. (n.d.). Stadsbyggnadsförvaltningens. <https://goteborg.se/wps/portal/start>
 Note: The image has been modified by the author to illustrate specific features.

Fig.20: Brake, A. G., & Brake, A. G. (2015, September 11). *Postmodern architecture: Piazza d'Italia, New Orleans by Charles Moore*. Dezeen. <https://www.dezeen.com/2015/08/21/postmodern-architecture-piazza-d-italia-charles-moore-new-orleans/>



Memory Mosaics

2024-2025

Yirong Li, Biao Chen

Chalmers University of Technology
Architecture and Civil Engineering
Architectural Experimentation
Before and After Building

Supervisor: Naima Callenberg
Examiner: Daniel Norell



CHALMERS