

This study investigates how the Groninger Museum (1994, under the direction of Alessandro Mendini) organizes fragmentation and cohesion through its plan and circulation. Although the museum is often discussed as an iconic example of postmodern architecture, the relationship between fragmentation and spatial organization, with regard to the architectural discourse of the 1990s and the present, has been little studied.

The comparison with the Kunsthal Rotterdam (1992, Rem Koolhaas / OMA) shows how architectural fragmentation can be integrated into a coherent spatial system. The Groninger Museum organizes fragmentation through autonomous pavilions and authorship; the Kunsthal creates cohesion through a continuous system of circulation and infrastructure.

In both buildings, circulation functions as an organizing principle that structures fragmentation while simultaneously facilitating the relationship between the building and its context. The comparison reveals two strategies for transforming fragmentation into a coherent whole: collage versus continuum and authorship versus system.

By placing these two projects in dialogue, this study emphasizes how architects in the early 1990s explored new approaches to spatial organization beyond the modernist ideal of unity.

Het Groninger Museum, Groningen
By: Alessandro Mendini

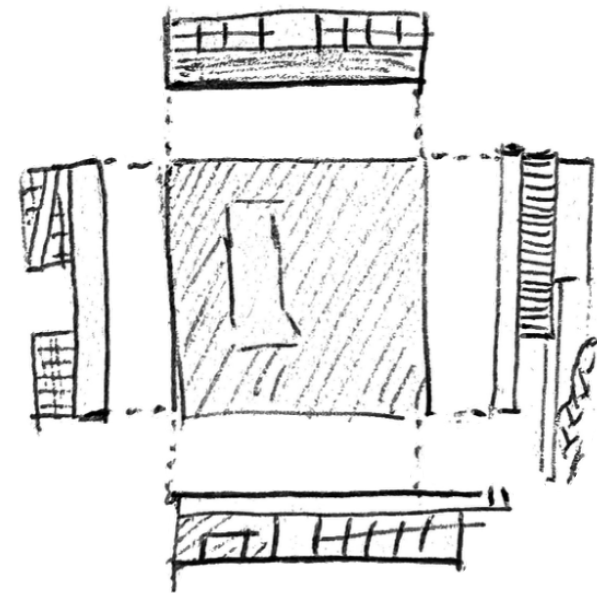
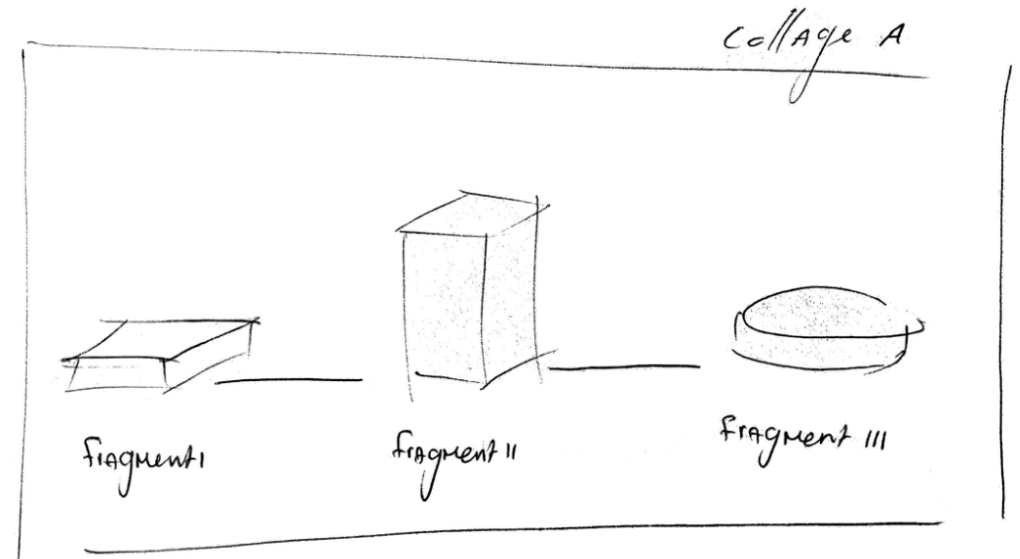


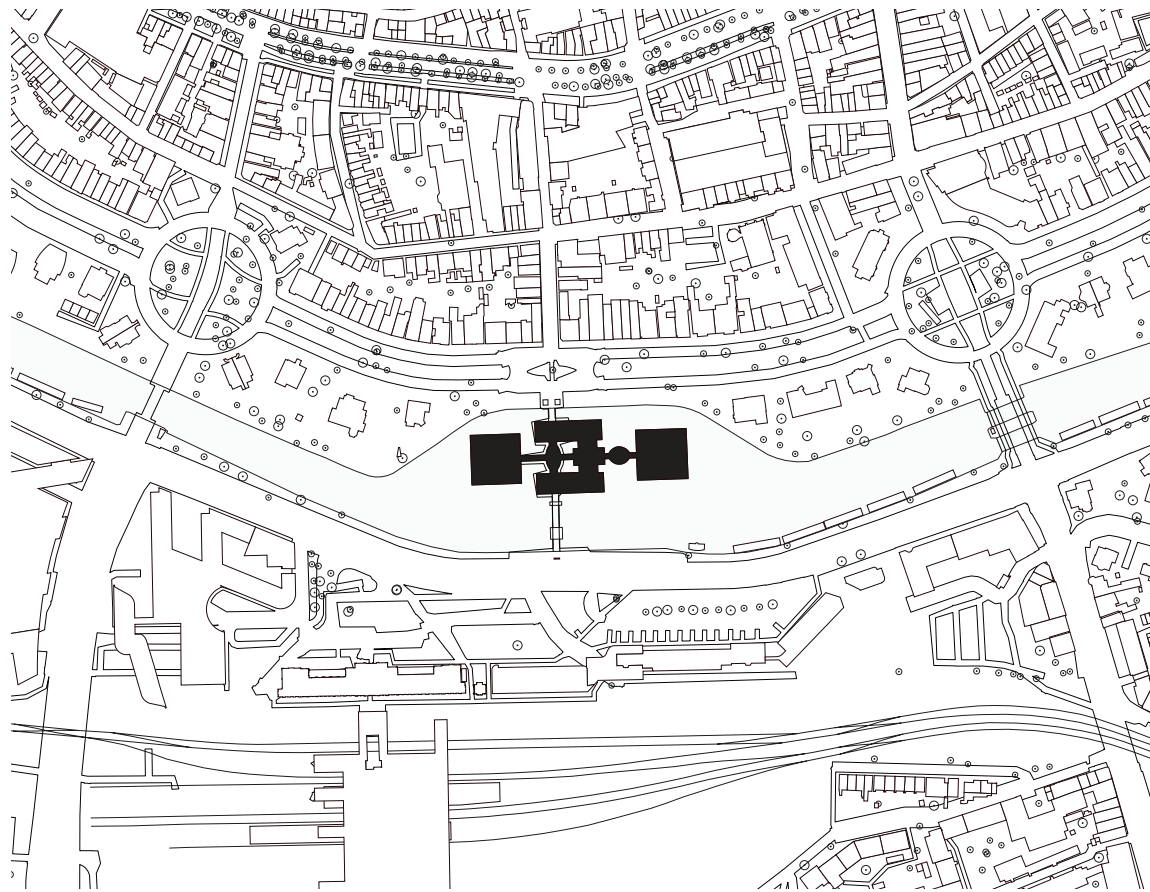
De Kunsthal, Rotterdam
By: Rem Koolhaas, OMA

Fragmentation, Spatial Coherence and Circulation in Museum Architecture after 1990

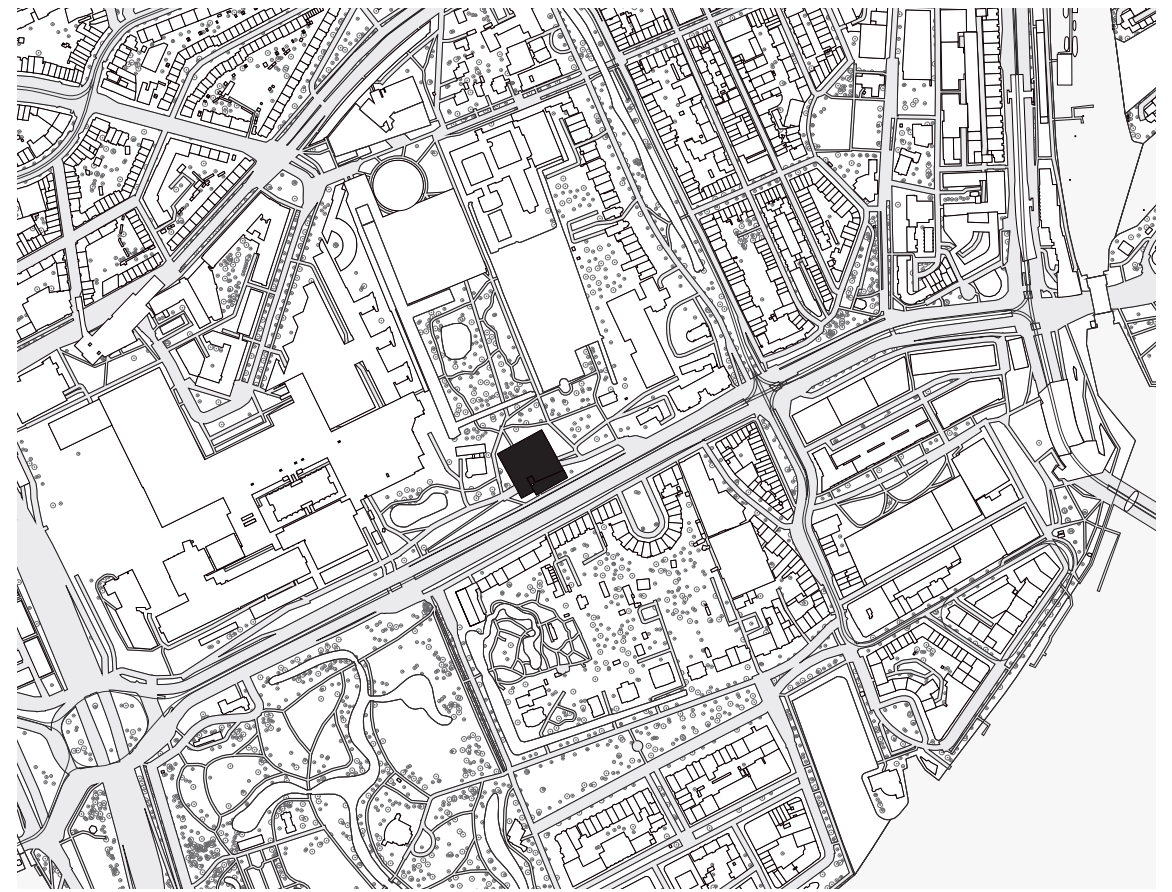
A Comparison between two distinct Examples of Dutch Museum Buildings

Hilal Catalbas





Site Plan Groninger Museum, Groningen 1:5000



Site Plan Kunsthal, Rotterdam 1:5000

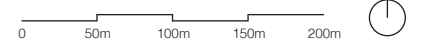


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Course

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F.2



F.3



F2. Alessandro Mendini stairs Groninger Museum – From: Marten de Leeuw - GroningerMuseum
 F3. Kunsthal – Photoarchive HC. 2026

Fragmentation, Spatial Coherence and Circulation in Museum Architecture after 1990

A Comparison between two distinct Examples of Dutch Museum Buildings

I experience the architectural operation of the Groninger Museum and the Kunsthal as related to one another: buildings with different characters and different modes of presentation, yet which leave a comparable impression on the observer and their surroundings within the same period. Whereas in the Groninger Museum the blue mosaic staircase forms the connecting node, in the Kunsthal this role is taken by the perceptual ramp.

The striking appearance of the Groninger Museum attracted my attention from a great distance. My first reaction was: what is actually happening there? The Kunsthal Rotterdam, by contrast, has a rather ordinary appearance at first glance. My fascination grew precisely during the visit to the building itself. As I moved through the Kunsthal, I kept thinking: what is actually happening here?

This personal experience formed the starting point for the research in this paper.

The Groninger Museum is one of the most outspoken museum buildings in the Netherlands. Since its opening in 1994, the building has attracted attention for its striking architecture, consisting of a collage of different volumes, materials, and styles. The design, realized under the direction of the Italian architect Alessandro Mendini, forms a clear icon in Groningen and a statement within the museum architecture of the late twentieth century. Whereas many museums strive for architectural neutrality, the Groninger Museum instead presents itself as a collection of architectural fragments. These fragments were designed by different architects and designers who were involved in the project by Mendini.¹

This fragmentary composition raises questions, even from a distance, about the way the building functions and is experienced. Although the museum is often discussed as an iconic example of postmodern architecture, the relationship between fragmentation and spatial organization receives relatively little attention.

At the same time, circulation plays an important role in the design, both within the building and in its relationship to the urban context. The museum is located at a strategic point between the railway station and the city center of Groningen and therefore functions as a link within the urban infrastructure. Particularly notable is the spatial organization of the building: the underlying -1 level forms a connecting layer with a more classical, symmetrical floor plan structure, while the floors above emphasize different architectural identities. The public route through the museum area intersects with the semi-submerged internal circulation of the building, creating a particular relationship between urban and internal movement.

To better understand this relationship, the Groninger Museum is compared in this study with the Kunsthal Rotterdam, designed by Rem Koolhaas and realized by Office for Metropolitan Architecture in 1992. The Kunsthal makes exceptional use of circulation, creating a continuum of spaces that is strongly based on infrastructure and movement as organizing principles.

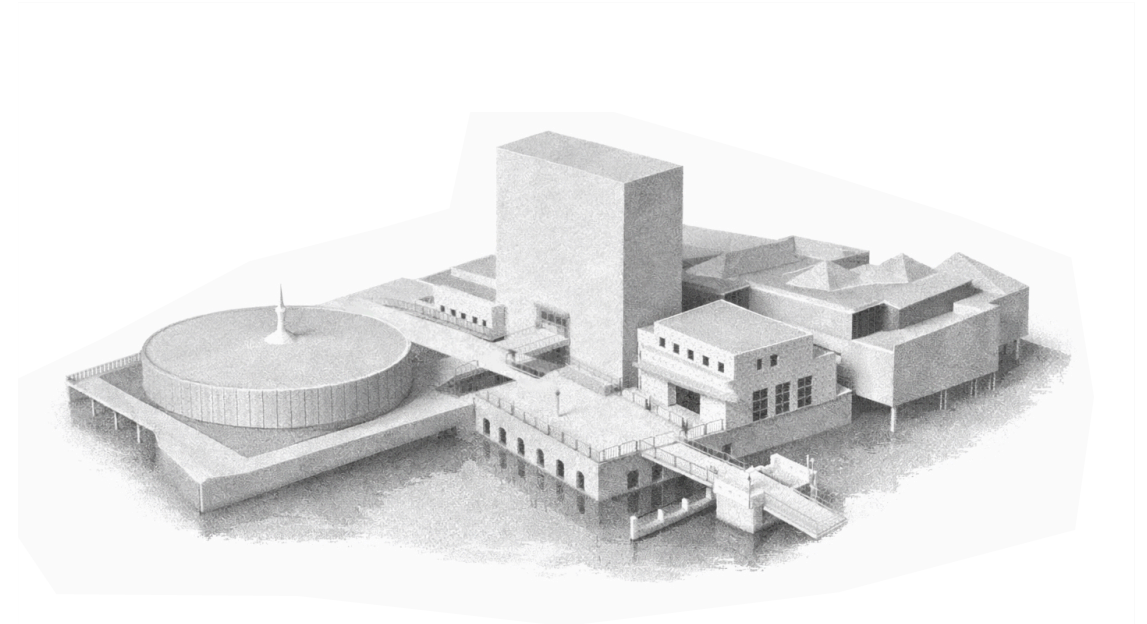
Although the two buildings appear very different at first glance, they both make use of fragmentation and circulation to create a specific spatial experience. Both museums are crosswise integrated into their existing surroundings while simultaneously forming a pronounced part of the urban infrastructure. This combination of similarities and differences makes a comparison between the two projects relevant and forms the starting point for the research in this paper.

The central research question is: *How do the Groninger Museum and the Kunsthal Rotterdam organize fragmentation and cohesion through floor plan and circulation, and how do these spatial strategies position themselves within the architectural discourse after 1990?*

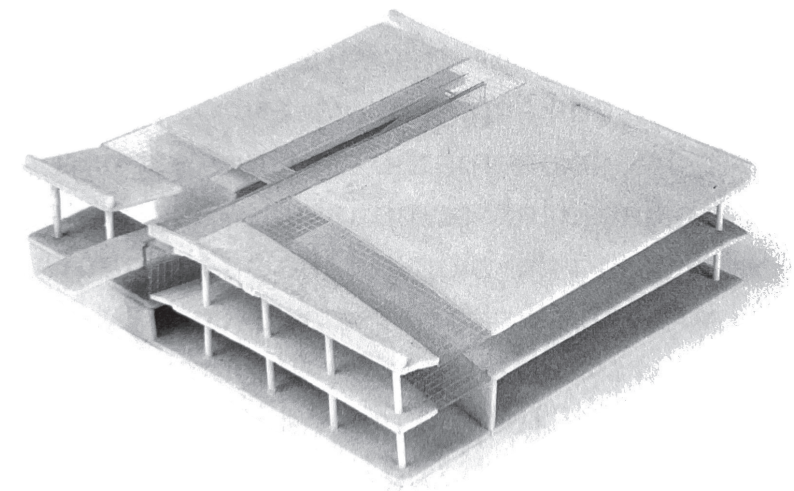
The Groninger Museum forms the central subject of this research, while the comparison with the Kunsthal is used as an analytical instrument to better understand the museum's spatial strategies.

This research consists of three parts: the first part discusses the historical context of the Groninger Museum; the second part analyzes fragmentation, floor plan, and circulation in a parallel comparison with the Kunsthal; the third part positions both buildings within the architectural discourse of the 1990s.

F. 4



F. 5



F. 4 Sketch Groninger Museum volumes – From HC. 2026
F. 5 Sketch model - From: Pataky, T. (2023)

¹ Groninger Museum, Groninger Museum: Alessandro Mendini (Groningen: Groninger Museum, 1994), 14–17.

Theoretical Framework

This research focuses on the relationship between fragmentation, circulation, and spatial cohesion in museum architecture. With a focus on the Groninger Museum, a parallel comparison is made with the Kunsthal Rotterdam in order to better understand how fragmentation and cohesion can be applied in different ways within architecture, and what impact these strategies have within the architectural discourse of the 1990s. To this end, the design principles of the architects involved are first considered. The theoretical framework combines insights from postmodern architectural theory, museum architecture, and theories of spatial configuration.

Museum architecture forms a particularly interesting field within this discourse. As Sharon MacLeod argues, museums in the late twentieth century are increasingly designed as architectural statements in which architecture itself plays an active role in the visitor's experience. As a result, museums no longer function solely as spaces for displaying art, but also as spatial narratives in which visitors are guided through different architectural situations.²

In addition to stylistic fragmentation, the spatial organization of buildings also plays an important role in this research. According to Bill Hillier, architecture can be understood as a configuration of spatial relationships that determines how people move through a building. Within this configuration, circulation forms an essential element that connects different spaces and thereby creates spatial cohesion. Within this theoretical framework,

fragmentation is therefore not seen solely as a visual or stylistic phenomenon, but also as a spatial strategy that can generate cohesion through circulation and infrastructure.³

In this period cultural buildings, including museums, increasingly became instruments for cities and institutions to express their identity and ambition in the 1990s. Building on this, Deyan Sudjic argues that architecture in this period functions not only as a functional container, but also as a cultural and symbolic statement. Museums are often designed as distinctive architectural compositions that communicate institutional identity and cultural meaning. In this way the architectural form and spatial organization becomes part of the visitor's experience, allowing architecture itself to become a medium of cultural expression.⁴

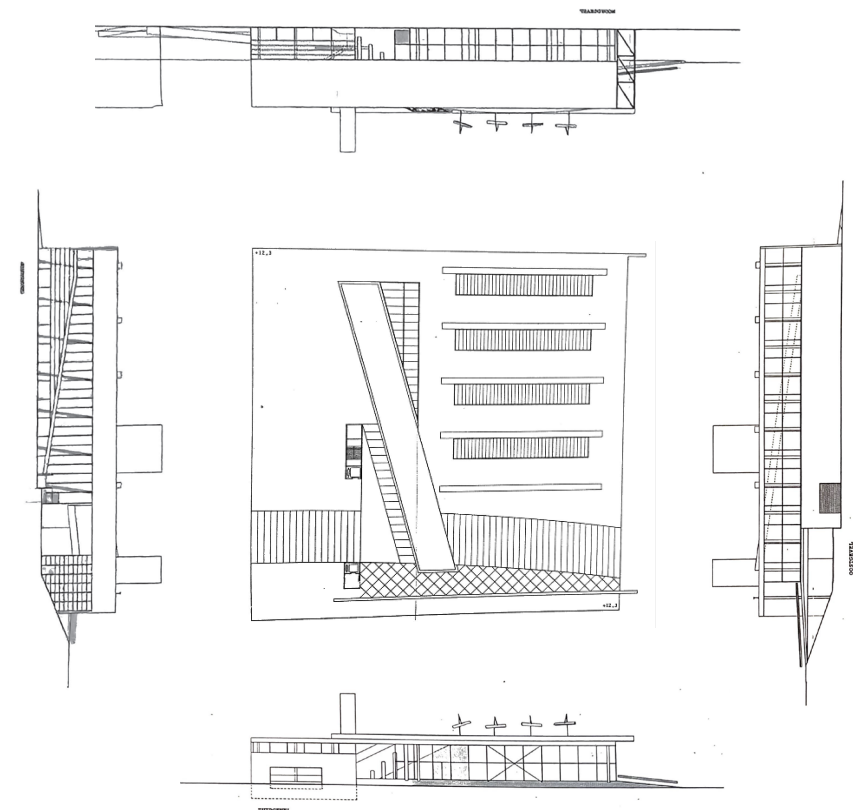
An important critique of this modernist approach was formulated by Robert Venturi. He advocates for an architecture that embraces complexity and ambiguity. According to him, architecture can become richer when different elements and meanings coexist. These ideas formed an important basis for later postmodern architectural projects in which fragmentation and collage play a central role.⁵

Building on this, Charles Jencks further developed these ideas within postmodern architectural theory in the 1990s. Jencks describes how architecture after modernism increasingly makes use of stylistic plurality and symbolic references. According to him, postmodern architecture is characterized

by the combination of different architectural languages within a single building.⁶

Within this theoretical framework, fragmentation and circulation can be understood as two complementary strategies. Fragmentation introduces a multiplicity of architectural identities and spatial situations, while circulation connects these fragments and thereby creates spatial cohesion. This combination forms an important starting point for the analysis of both the Groninger Museum and the Kunsthal Rotterdam.

F.6



F.6 Collage made out of visuals Pataky, T. (2023) – From HC 2026

² Sharon MacLeod, *Reshaping Museum Space: Architecture, Design, Exhibitions* (London: Routledge, 2005), 3-6.

³ Bill Hillier, *Space Is the Machine: A Configurational Theory of Architecture* (Cambridge University Press, 1996), 26-31.

⁴ Deyan Sudjic, "The Museum as a Collage," *The Architectural Review* (1994): 52-57.

⁵ Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1966), 16-22.

⁶ Charles Jencks, *The Language of Post-Modern Architecture*, 6th ed. (London: Academy Edition, 1991), 13-20.

F.7



F.8



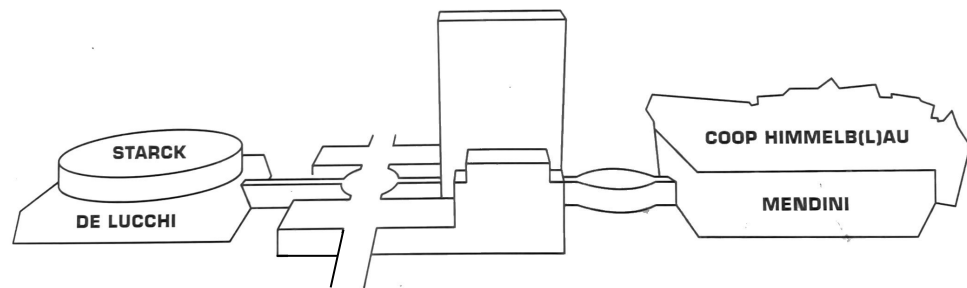
F.9



F.10



F.11



F.7 The original museum building on the Praediniussingel (1) – From: T. Van der Wal

F.8 The original museum building on the Praediniussingel (2) – From: Wikipedia

F.9 Alessandro mendini – From: Viva

F.10 Frans Haks – From: Fotoarchive Pieter Boersma 1985

F.11 Pavilions, volumes with designers – Scan From: Groninger Museum

Historical Context of the Groninger Museum

In the 1980s, a broader cultural development took place in which museums were increasingly used as instruments for urban profiling and cultural identity. New museums were no longer designed as neutral buildings, but as architectural icons that played an active role in the representation of the city.⁷

Museum director Frans Haks played a crucial role in the development of the Groninger Museum as it exists today. Based on his strong interest in art and design, he developed a plan for an entirely new museum building. The museum was intended not only to function as an exhibition space, but also as a cultural statement capable of generating international attention. Haks aimed to create an institution that functioned as a platform for experimentation within contemporary art and design and that clearly distinguished itself from traditional, neutral museum architecture.⁸

In 1987, the municipality of Groningen received a donation of 25 million guilders from the energy company Gasunie on the occasion of the company's 25th anniversary. This amount was made available for the construction of a new museum building and made the realization of the Groninger Museum possible.⁹

The location also played an important role in the development of the project. The original museum building on the Praediniussingel was considered by Haks to be too small and outdated, which led to a search for a new location from the 1980s onward. Ultimately, it was decided to situate the museum on an

island in the Verbindingskanaal, opposite the Central Station. Due to this position, the museum forms a connection between the station and the historic center of Groningen. Travelers moving from the station to the inner city pass the building almost automatically, allowing it to function as a gateway and urban landmark.

For the design of the new museum, Haks collaborated with Alessandro Mendini, who was closely associated with the Italian design group Studio Alchimia. Mendini was known for his experimental approach to architecture and design, in which color, ornament, and historical references played an important role. Haks was familiar with his work within Italian postmodernism and deliberately chose him as the chief architect of the project. In 1988, Haks organized an exhibition of Mendini's work in the museum in order to introduce his design approach to both the public and local policymakers.

The choice of a foreign architect can be understood within a broader development in museum architecture in the late twentieth century, in which cultural institutions used architecture to position themselves internationally and develop an iconic identity.¹⁰

Instead of designing a single homogeneous museum volume, Mendini developed a composition of different pavilions and volumes. For this purpose, he invited several architects and designers, resulting in an architectural collage of diverse styles and identities. This fragmented composition is often interpreted

⁷ Suzanne MacLeod, *Reshaping Museum Space: Architecture, Design, Exhibitions* (London: Routledge, 2005), 3-6.

⁸ Franciska de Beer, "5 x de invloed van Frans Haks op het Groninger Museum," *Kunstpunt Groningen*, 10 nov 2016.

⁹ Groninger Museum, "Gebouw", 2026.

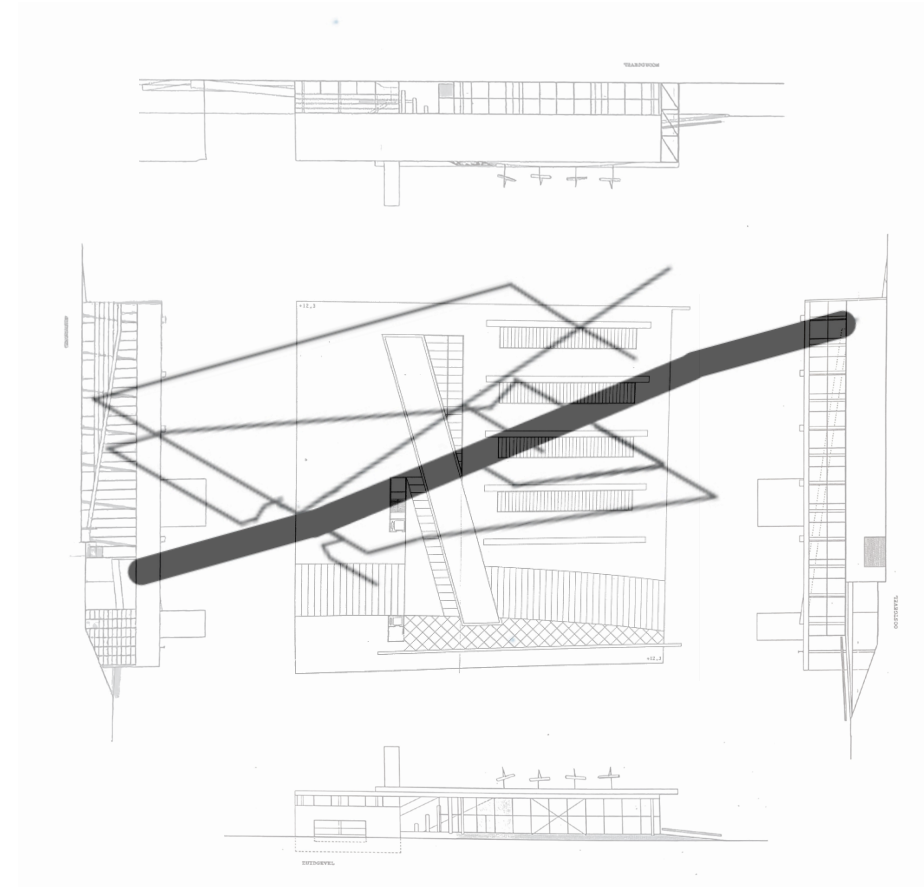
¹⁰ Charles Jencks, *The Language of Post-Modern Architecture*, 6e ed. (London: Academy Editions, 1991), 9-13.

as an example of postmodern architecture, in which collage, heterogeneity, and symbolic references form important design strategies. By involving different designers in individual parts of the museum, an ensemble emerged in which multiple styles and design approaches coexist. The building can therefore be read as a spatial collage in which various cultural references come together.¹¹

F.12



F.13



¹¹ Mendini, A. (1994), pp. 22-27.

F.12 "Groninger museum voorlopig ontwerp concept" – From: Kunstpunt Groningen
 F.13 Collage with own circulation sketch – From: HC 2026

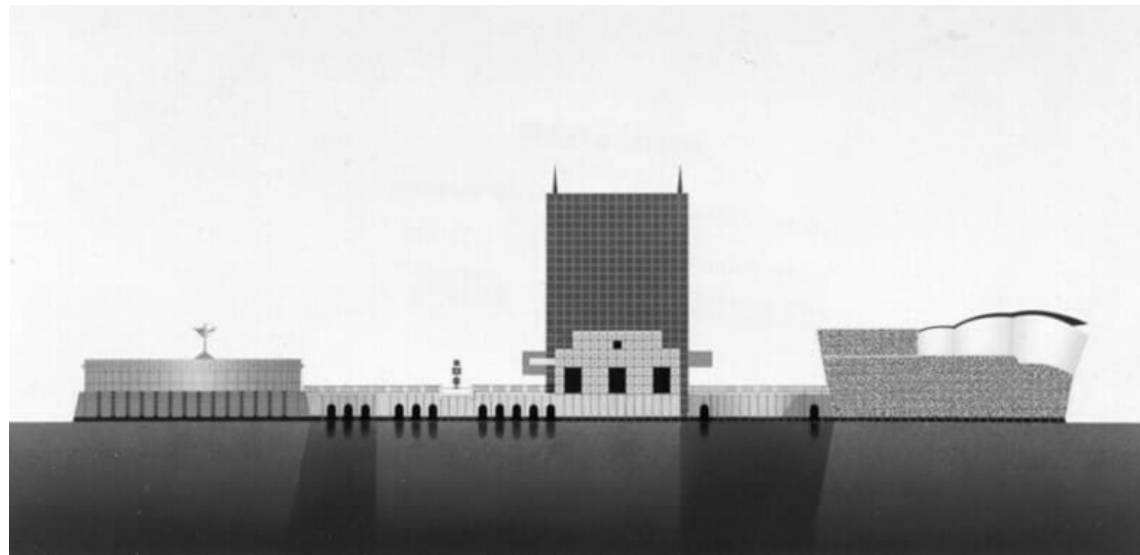
The Groninger Museum: collage as an ideological principle

Within the discourse of the 1990s, fragmentation was often employed as an alternative to the modernist ideal, which emphasized unity and typological consistency. The collage-like architecture of the Groninger Museum, consisting of fragmented volumes, introduces a form of multiplicity that relativizes the modernist notion of the architect as a singular genius. Here, fragmentation is not the result of functional requirements but a deliberate design strategy. Within postmodern architecture, this approach can be understood as collage-architecture, in which different styles, references, and architectural forms coexist without being unified into a single homogeneous whole.¹² The relationship between architecture and

collection reinforces this principle. Philippe Starck's pavilion for the Asian ceramics collection references the material and aesthetics of the ceramic objects through craquelé motifs in the floor. Michele De Lucchi's brick volume aligns with local architectural traditions and regional identity. In contrast, Coop Himmelb(l)au's radical space for the presentation of old art largely lacks traditional wall surfaces and disrupts conventional museum display models.¹³

In this way, the building embodies a collective, interdisciplinary design approach. Different styles, materials, and designers coexist without merging into a single homogeneous entity, allowing the museum to be read as an architectural expression of cultural fragmentation.¹⁴

F. 14



“And that is what is postmodern; it is not of one.”

– Roos Gortzak, art historian and director of the Groninger Museum.

¹² Mendini, A. (1994). *Groninger Museum*. Groningen: Groninger Museum, pp. 8-15.

¹³ Mendini, A. (1994), pp. 22-27.

¹⁴ MacLeod, S. (2005). *Reshaping Museum Space: Architecture, Design, Exhibitions*. London: Routledge, pp. 6.; Sudjic, D. (1994). *The museum as a collage*. *The Architectural Review*, pp. 52-57.; Jencks, C. (1991). *The Language of Post-Modern Architecture* (6th ed.). London: Academy Editions, pp. 11.

The Kunsthal: infrastructure and movement as organizing principles

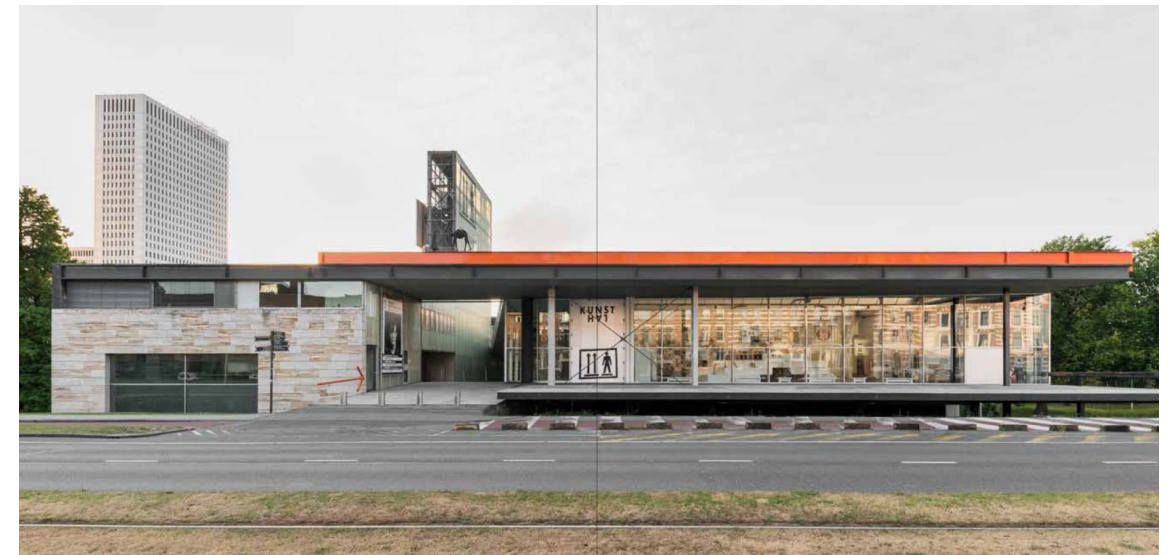
In contrast, the design of the Kunsthal is strongly based on infrastructure and movement as organizing principles. Fragmentation manifests itself here in a different way than in the Groninger Museum.

Instead of separate volumes, the building creates an interplay of diverse spatial elements, materials, and perspectives within one continuous architectural system. The traditional museum type, with a clear hierarchy of galleries, is replaced by a network of circulation routes that connect different levels and programs.¹⁵ The building is located on a complex urban site between the lower-lying Museumpark and

the higher Westzeedijk. This topographical situation forms the starting point for the spatial organization. Rather than neutralizing these height differences, the design integrates them into the circulation of the building. Ramps, stairs, and passages connect the different levels into a continuous spatial sequence.¹⁶

The Kunsthal can therefore be understood as an infrastructural architecture in which circulation is not merely a connecting element, but the primary organizing principle. Exhibition spaces, the auditorium, restaurant, and other functions are placed along this structure, resulting not in a fixed museum route but in a network of possible paths through the building.¹⁷

F. 15



“This is actually the whole concept, two axes through a box.”

– Michel van de Kar, architect and associate OMA

¹⁵ OMA / Koolhaas, R. (1992). *Kunsthal Rotterdam*. Rotterdam: OMA, pp. 12-18.

¹⁶ Pataky, T. (2023). *Rem Koolhaas and the New Europe*. London: Routledge, pp. 78-82.

¹⁷ OMA / Koolhaas, R. (1992). *Kunsthal Rotterdam*, pp. 22-27.

F. 14 Zijaanzicht Groninger museum – From: Groninger Museum

F. 15 zijaanzicht Kunsthal – From: Pataky, T. (2023).

The Groninger Museum: collage of volumes

The Groninger Museum, also referred to as the museum island, manifests itself as a pronounced architectural collage. The museum consists of four separate volumes and a central yellow-golden tower. Each volume was designed by a different designer or artist, selected by Mendini, including Philippe Starck, Michele De Lucchi, Frank Stella, and Coop Himmelb(l)au. The different pavilions are linked to specific parts of the collection. This results in an ensemble of autonomous components rather than a single homogeneous architectural object.¹⁸

This structure makes fragmentation not only a formal characteristic but also author-related. Fragmentation here forms the starting point of the design.

Although Alessandro Mendini acted as the coordinating architect, he did not position himself as the dominant author. On the contrary, he allowed another architectural element to be placed on top of his own volume. In doing so, he emphasized the collective character of the project and broke with the modernist idea of the singular designer.¹⁹

Where modernist museums strive for unity and typological consistency, the Groninger Museum presents itself as a collection of autonomous building volumes, each with its own architectural language, materiality, and construction.²⁰

F. 16



Collage of authorship: tea & coffee piazza

Mendini described the composition of the museum as a tea set on a tray: a collection of separate objects that together form an ensemble. The half-sunken substructure of the museum island functions as the tray on which the various architectural "cups" are placed.

The cohesion does not arise from uniformity, but from positioning and underlying relationships. The central yellow tower functions as a vertical orientation point and a compositional anchor that visually connects the different fragments without eliminating their autonomy.²¹

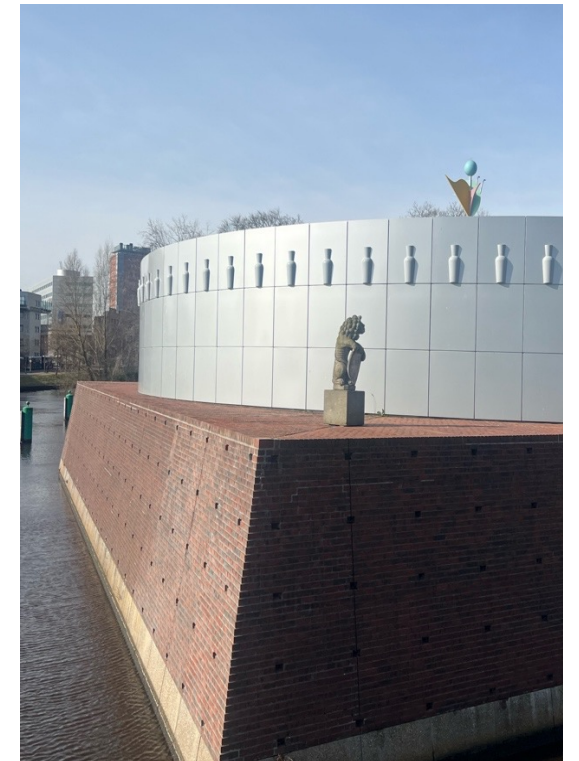
Philippe Starck was commissioned to design a space for the Asian ceramics collection. His approach is conceptually and materially inspired by the program. Craquelé patterns are incorporated into the floor, referring to the cracked glaze of ceramics. Here, the architecture itself becomes a carrier of the content of the collection. The volume is not a neutral exhibition box, but a spatial interpretation of the object it houses.

Michele De Lucchi was asked to design a volume for the historical collection and archaeology. His design explicitly refers to materiality and place. Based on the idea that Groningen has a strong brick tradition, he chose a brick façade. Although an Italian brick was ultimately used rather than a Groningen brick, the gesture remains meaningful: the volume seeks to connect with local identity through material expression. Brick also plays a role in the interior, among other things in a monumental brick pillar that gives the space an earthy, almost archaic monumentality.

For the department of old art, *Frank Stella* was first approached, after which *Coop Himmelb(l)au* realized the volume. This part of the museum was spatially radical: the space contained hardly any traditional walls on which art could be hung, causing artworks to appear to float in space. The design emphasized the autonomy of architecture in relation to museological conventions, but it also created tensions between expression and functionality. Eventually, this radicality was partially reversed. This volume clearly demonstrates how the museum experimented with the boundaries of museum typology.

Alessandro Mendini designed the volume for modern and contemporary art.²²

F. 17



F. 18



¹⁸ Mendini, A. (1994). *Groninger Museum*. Groningen: Groninger Museum, pp. 8-15.

¹⁹ Mendini, A. (1994), pp. 22-27.

²⁰ MacLeod, S. (2005). *Reshaping Museum Space: Architecture, Design, Exhibitions*. London: Routledge, pp. 3-6.

²¹ Venturi, R. (1966). *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, pp. 16-22.

²² Mendini, A. (1994), pp. 44-47; 48-51; 20-23.

F.16 Tea & coffee Piazza – From Groninger Museum

F.17 Photoarchive HC 2026

F.18 Photoarchive HC 2026

The Kunsthal: an architectural machine: Rem Koolhaas describes the Kunsthal Rotterdam as an architectural machine in which program, movement, and spatial experience are closely intertwined. He compares the spatial composition to montage in a film: scenes and individual fragments together form a whole. The spatial elements in the building are diverse and sometimes even contradictory. Heavy concrete surfaces meet light travertine panels, expensive materials are combined with cheap ones, and closed volumes open up into unexpected perspectives.²³

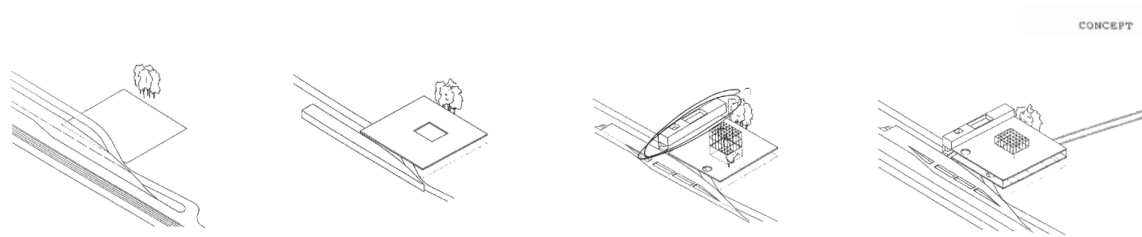
which different spatial fragments, or scenes, exist next to one another. He describes this rather as a form of "sampling," comparable to the sampling of fragments in music: individual elements remain recognizable but become part of a larger whole.

The result is a spatial system that allows multiple interpretations and experiences. Architecture here functions in a narrative and dynamic way, inspired by film and by a fragmentary approach to space and program.²⁴

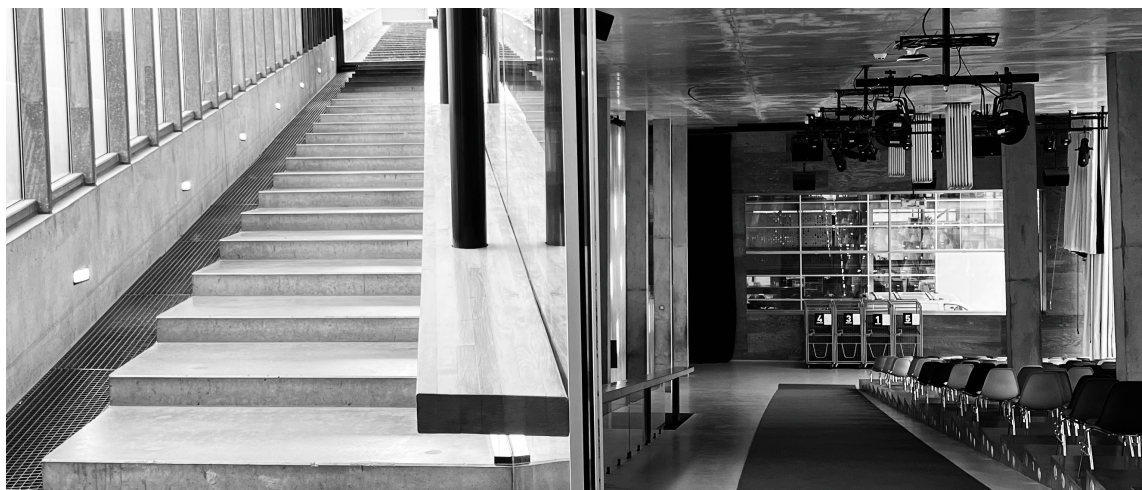
Fragmentation, however, does not appear here as a collection of separate volumes. According to Michel Van de Kar, the building can better be understood as a continuum of spaces in

Koolhaas thus shifts the focus from architecture as a static object to architecture as a dynamic system that actively shapes the movement and perception of visitors.

F. 19



F. 20



²³ Koolhaas, R., & Mau, B. (1995). *S, M, L, XL*. New York: Monacelli Press, pp. 432.

²⁴ Charles Jencks, *The Language of Post-Modern Architecture*, 6th ed. (London: Academy Edition, 1991), 40-46.

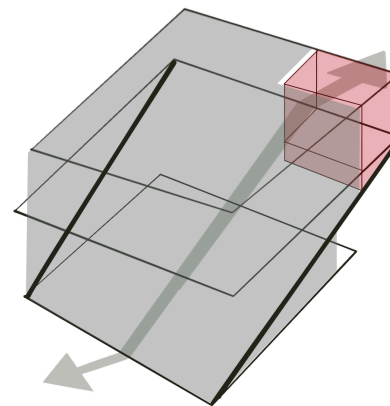
²⁵ Koolhaas, R., & Mau, B. (1995). *S, M, L, XL*. New York: Monacelli Press, pp. 512-518.

²⁶ Pataky, T. (2023), pp. 84-87.

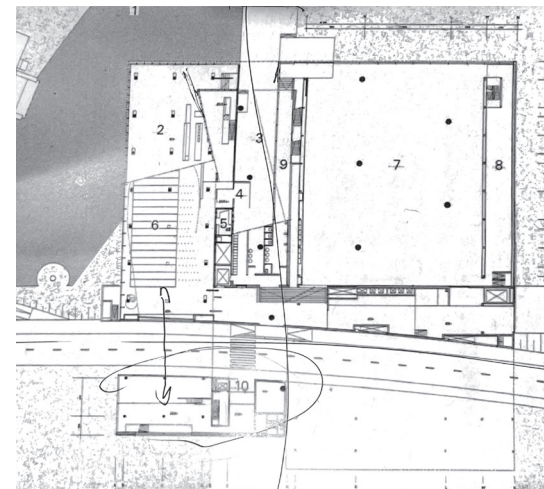
Fragmentation as spatial continuity

Although fragmentation is not the primary compositional principle of the Kunsthal, there are elements within the building that function as separate fragments. The clearest example is the office volume, which exists within the building as an autonomous block and largely falls outside the visitor route. This volume houses the offices of curators, exhibition makers, and the management, as well as supporting functions such as workshops.²⁵

F. 21



F. 22



F.19 Concept sketches Kunsthal – From: Archive Kunsthal OMA

F.20 Photoarchive HC 2026

F.21 Visual Kunsthal - From: HC 2026

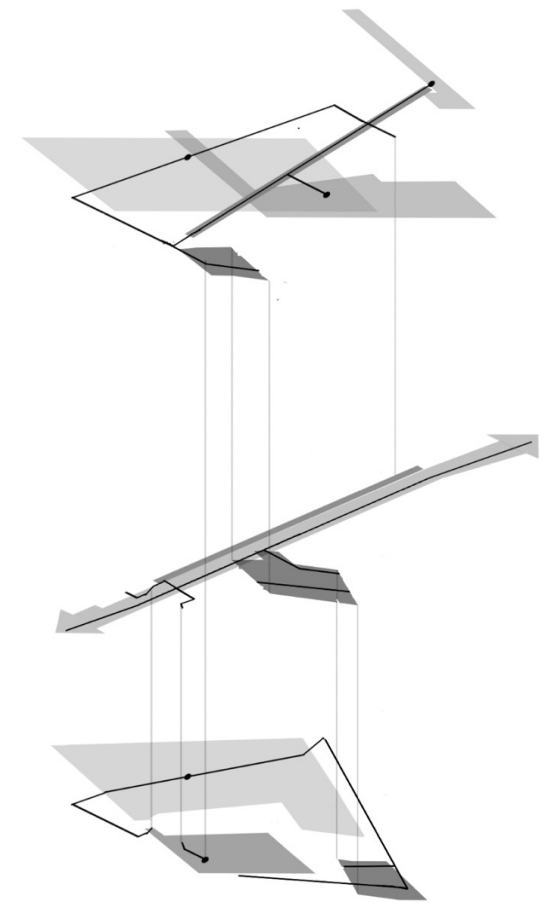
F.22 Sign on floorplan by Van de Kar – From: HC

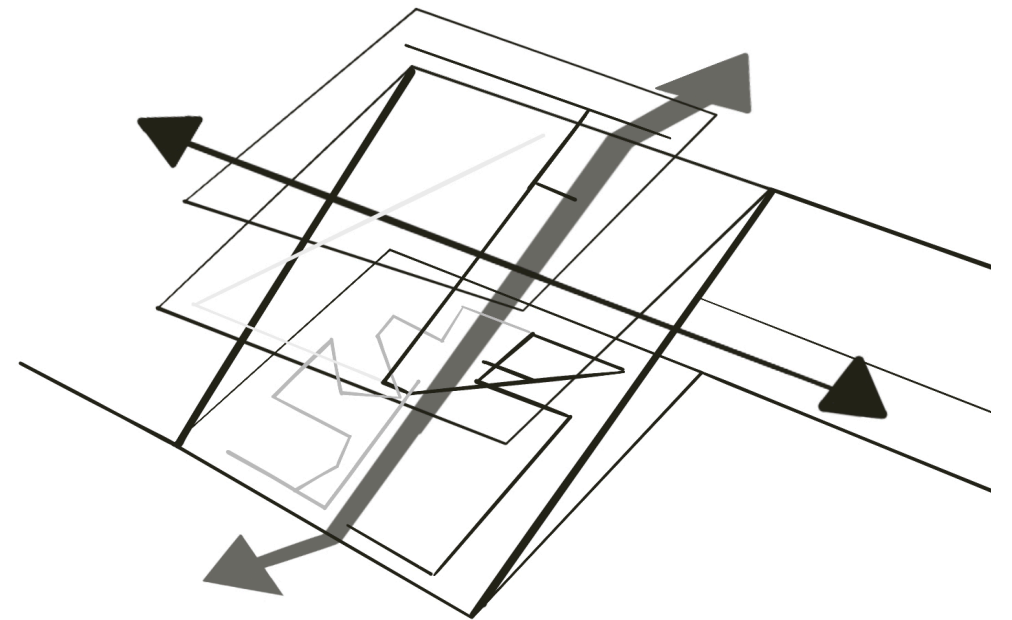
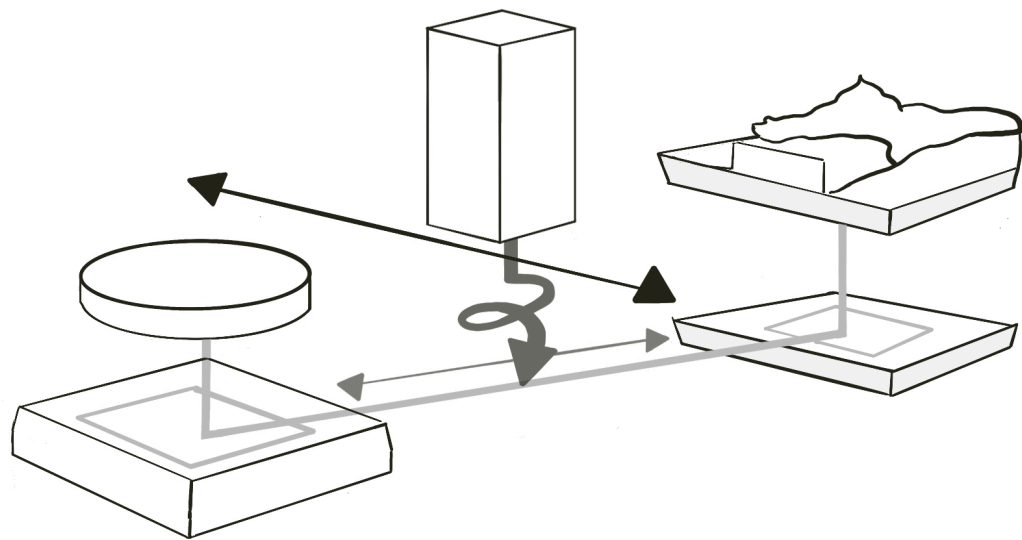
F.23 Visual Kunsthal - From: HC 2026

The rest of the building functions more as a coherent system of spaces. From various positions within the building, multiple spatial situations are visible simultaneously.

For example, from the auditorium one can look toward the ramp, the exhibition halls, and outside at the same time. These overlapping perspectives create an experience in which different spatial fragments are present simultaneously.²⁶

F. 23





The Groninger Museum: sequential binding of fragments

Despite the pronounced heterogeneity of the building components, the Groninger Museum functions as a single institutional whole. The cohesion does not arise from formal homogeneity, but from the organization of the floor plan and circulation. The yellow-golden tower functions as the core and reception area. Visitors are welcomed here; on the left side are the museum shop and a logistical space (not accessible to the public), while on the right side the museum café with kitchen is located, a space that is also accessible independently of the museum. Within this entrance area, a clear separation becomes visible between public circulation and institutional logistics.

The entrance forms a crucial spatial moment. Instead of a classical ascent to an elevated temple of art, the visitor descends via a monumental bright-blue mosaic staircase to the -1 level. This downward movement is both symbolically and spatially significant: the museum unfolds below ground level and does

not reveal itself in a single comprehensible view, but through a sequential experience.

Below ground level lies the connecting layer, the "tray" of the collage. Here the separate volumes are linked by a long, symmetrical corridor that functions as the backbone of the building. From the central tower, this corridor branches toward the two pavilion buildings. This corridor is remarkably bright; it is one of the few places on the -1 level where abundant daylight enters. As a result, the corridor takes on the character of an illuminated connection between the different pavilions, the different worlds. It is a transitional space that does not neutralize the fragments, but instead makes their differences visible.²⁷

The bottlenecks surrounding the volume designed by Coop Himmelb(l)au demonstrate that circulation is not only a technical issue, but also an ideological one. When a space offers hardly any traditional wall surfaces on which to display art, not only is museum typology questioned, but also the way in which visitors orient themselves within the space.²⁸

"Circulation becomes part of the experiment here." – Gortzak

F. 26



²⁹ Hillier, B. (1996), pp. 205-210.

³⁰ Tschumi, B. (1996). *Architecture and disjunction*. MIT Press, pp. 140-145.

²⁹ Koolhaas, R., & Office for Metropolitan Architecture. (1992), pp. 12-18.

³⁰ Pataky, T. (2023), pp. 79-82.

The Kunsthal: continuum of space

Circulation forms one of the most important structuring principles of the Kunsthal Rotterdam. The building is organized by two major axes that determine movement through the volume. In addition, a system of ramps plays a central role in connecting the different levels.

In contrast to many museums, the original design of the Kunsthal does not have a single, clearly defined main entrance. The building can be entered at multiple points, depending on one's position in the city and the program of the exhibition.²⁹

This open structure makes it possible to use the building in different ways. Visitors can follow different routes, meaning that circulation is not strictly linear but rather forms a network of possible movements. One of the most important current entrances is

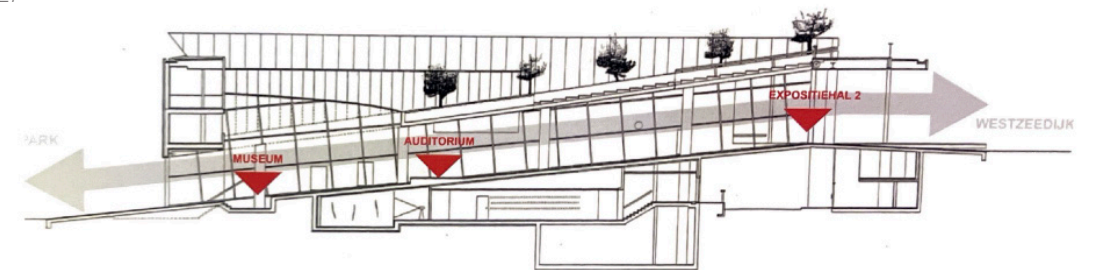
located at the end of the ramp, where visitors enter the building after a gradual transition from the public space on the park side.

Through the interplay of continuous routes and multiple entrances, the exterior can also become part of the visitor's personal route. Moving along the ramps or around the building creates a circulation that alternates between inside and outside, while simultaneously making the façade part of the spatial experience.³⁰

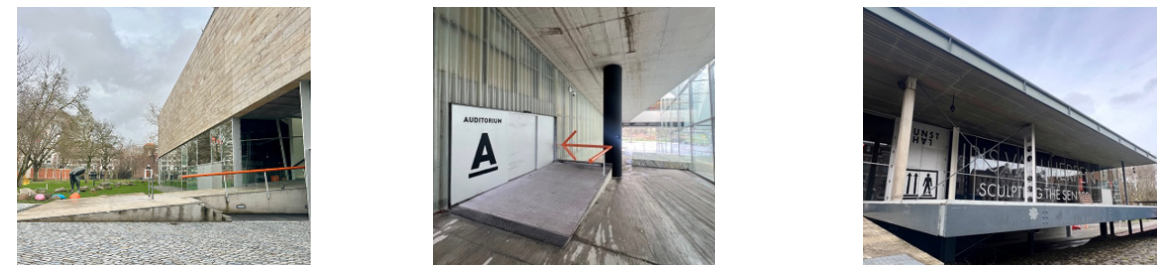
The façade reinforces this sense of continuity. Through the sectional articulation of the façade, a subtle reference to the building's internal circulation emerges. Lines and connections at the corners of the façades are not abruptly terminated but visually continued. As a result, the continuity of circulation is not only experienced spatially, but also architecturally represented in the material use and the composition of the façade.

"In the original concept, there were three entrances: the park side, the auditorium, and the Westzeedijk. Depending on the exhibition or the intended use, different entrances are used." – Van de Kar

F. 27



F. 28



F.26 Photoarchive HC 2026

F.27 Visual entrances Kunsthal – From: Archive Kunsthal OMA

F.28 Photoarchive HC 2026

Groninger Museum: temporality and institutional logic

The linking of individual volumes to specific themes, such as the department of contemporary art in the Mendini Pavilion, also has consequences for the spatial organization. As collections shift in meaning and over time, the routing must adapt to new interpretations.

As Alessandro Mendini and Frans Haks argue, the original spirit should be preserved while the collection evolves. This means that spatial coherence is not static, but can continuously be reinterpreted. The floor plan functions as a flexible framework within which new narratives can be constructed. Fragmentation here proves not to be an obstacle to continuity, but rather a condition for reinterpretation.³¹

The spatial organization also demonstrates how architectural autonomy and museum functionality relate to one another. Although the individual volumes possess a strong identity of their own, logistical functions, such as the transport of artworks and staff circulation, are carefully separated from the visitor route. In this way, expressive fragmentation can coexist with institutional efficiency.³²

Internal circulation and spatial composition: visitor experience

The Mendini Pavilion has an open construction, in which the visitor is guided from one gallery to another through large aluminum gate-like openings. These openings narrow toward the top, creating a subtle perspectival effect. This design evokes curiosity and reinforces the urge to continue moving forward.

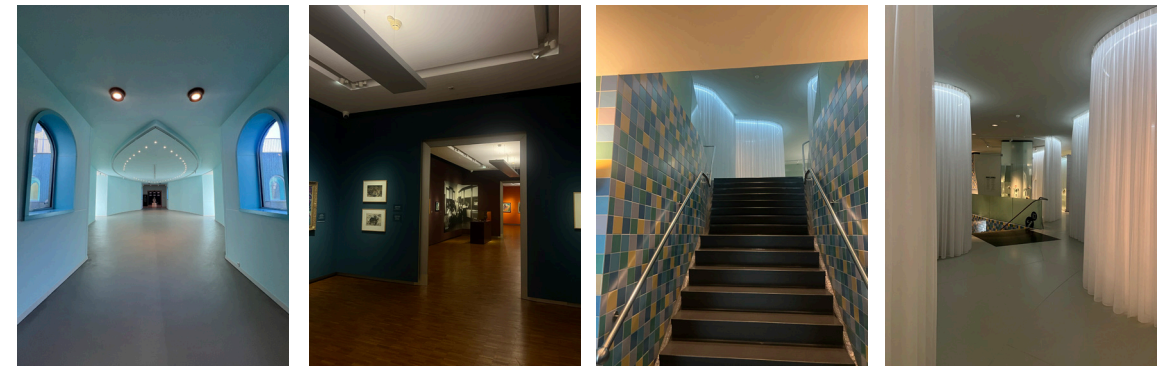
The pavilion consists of multiple levels that are visually connected through a large void. Because of the openness of this space and the absence of traditional corridor zones, the exhibition space itself becomes the means of circulation. The visitor moves through art, rather than merely past art, making the experience more strongly spatial. Sightlines from one side to the other reinforce the sense of spatial continuity, while color contrasts and material expression emphasize the autonomy of each gallery.

On the way to the second pavilion building through the bright corridor, smaller rooms are located halfway along the route, including a crystal-shaped gallery with additional exhibition spaces. These spaces temporarily interrupt and widen the route toward the other pavilion building.

The pavilion building designed by Michele De Lucchi and Philippe Starck contrasts strongly with the experience of the Mendini Pavilion and the volume by Coop Himmelb(l)au. The brick volume on the -1 level is organized around a central stair core, with a ring-shaped circulation around it through different spaces.

The staircase leads to the round head of the building at ground-floor level, where an open, flexibly divisible exhibition space is located. During the visit, this space was divided into several circular compartments with white curtains, temporarily transforming the openness into a more fragmented interior. Here it becomes clear how the floor plan and circulation constantly shift between openness and enclosure, between linear progression and circular movement.

F. 29



³¹ Mendini, A. (1994), pp. 12-15; Haks, F. (1999), p. 86.; Tschumi, B. (1996), pp. 150-155.

³² Hillier, B. (1996), pp. 215-220.

Kunsthal: Integration of urban infrastructure

The integration of urban infrastructure also affects the organization of programs within the building. Public functions such as the entrance, the restaurant, and the museum shop are located at strategic points along the main circulation routes. As a result, a situation emerges in which different forms of use overlap: museum visits, urban passage, and social encounters. This contributes to the hybrid character of the Kunsthal Rotterdam as a building that simultaneously functions as a museum, a public space, and a piece of urban infrastructure.³³

Internal circulation and spatial composition: Visitor experience

Surprising and Intuitive Routing

The experience of the Kunsthal is strongly defined by a sense of discovery. When entering a space, it is not always immediately clear where the route will lead or which spatial section will become visible. This uncertainty is part of the architectural strategy: the visitor is encouraged to navigate the building intuitively.

Upon entering the auditorium, the visitor is immediately confronted with a strong contrast between interior and exterior. The diagonal ramp spontaneously leads upward, while halfway along a smaller reception space appears leading toward the entrance of the auditorium. Within this space, a view opens up onto two rooms stacked above one another, interrupted by the floor of the auditorium. As a result, different levels and activities become visible simultaneously. This moment creates an awareness of the layered nature of the building and of the different "lives" taking place there at the same time.

The freedom of routing reinforces the sense of continuity. Visitors can adapt their route to their interests or to the specific exhibition, allowing the building to be experienced differently each time.

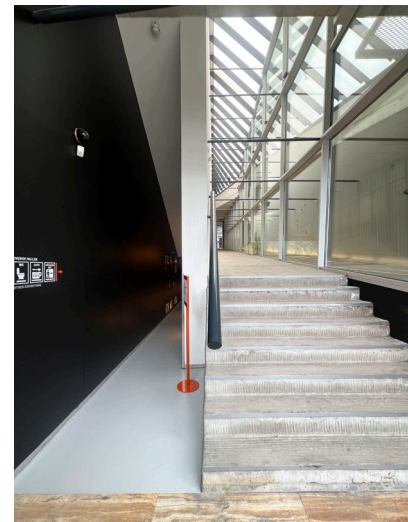
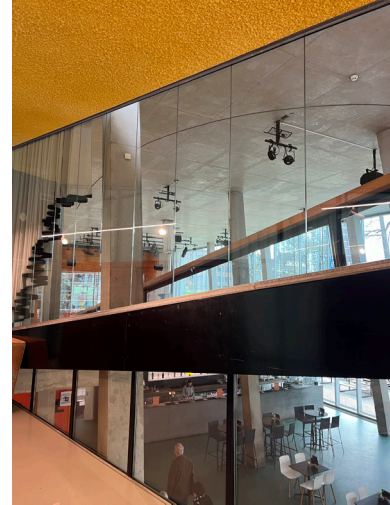
Open and Closed Spaces

The exhibition halls also play an important role in the spatial experience of the visitor. The flexible, movable walls make it possible to arrange the spaces differently each time, depending on the program. As a result, every exhibition can create its own spatial atmosphere.

At the same time, the sightlines - often combined with openings between spaces - reinforce the feeling of spatial continuity. The combination of open and closed spaces, flexible layouts, and multiple entrances means that the Kunsthal has no fixed route.

Each visitor therefore experiences the building differently, depending on the chosen sequence of spaces, the exhibitions, or even the weather conditions. Circulation thus forms a dynamic system in which fragmentation, continuity, and freedom of choice are balanced.

Koolhaas's cinematic approach can also be seen in the circulation. As in a film, where the viewer moves from scene to scene and continuously receives a new perspective. The continuous dialogue between user and building, is comparable to the montage of film fragments that create meaning through sequence and juxtaposition.



³³ Pataky, T. (2023), pp. 83-86.

F. 31



F. 32



F. 33



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Renovation and Future Challenges

The Groninger Museum: maintenance and the 2010 renovation

After its opening in 1994, the Groninger Museum was used intensively, and after approximately fifteen years the building required considerable maintenance and several adjustments. The number of visitors was higher than originally expected, causing various parts of the building to show wear more quickly. In addition, the characteristic colorful façade panels and other finishes had become discolored or deteriorated over the years, causing the visual quality of the expressive design to be partially lost. Several public facilities, such as catering, cloakrooms, and information services, also no longer met contemporary museum standards.

Between May and December 2010, the museum underwent a large-scale revitalization in which both the exterior and interior were addressed. The aim of the renovation was twofold: to restore the original design and to modernize the public spaces. Façade panels were replaced or refinished so that the original colors of the building became visible again. At the same time, new public spaces were designed by contemporary designers, including Studio Job, Maarten Baas, and Jaime Hayon. They designed the Job Lounge, the Mendini restaurant, and a new information center respectively.

The renovation thus combined the restoration of the architecture of Alessandro Mendini with new design interventions by contemporary designers, allowing the building to be aligned once again with contemporary museum practice.

The revitalization aimed to make the museum building suitable for long-term future use while preserving its original architectural identity. By restoring the façade colors and adding renewed public spaces, the building

gained new vitality. This renovation therefore repositioned the Groninger Museum in line with its original design principles, allowing it to retain its iconic character within contemporary museum practice.

Although the principles of the original design have largely been respected, continued attention to these principles remains necessary in future renovations. For example, the current information desk deviates from the original design principles, partially disturbing the symmetry at the level of the floor plan. In addition, the color use on the exterior is not everywhere identical to the original palette, which also represents a deviation.

According to Gortzak, these are interventions that were carried out without sufficient consideration of the original artistic intention. Although further research is still being conducted, it is important that future renovations carefully align with the original design principles in order to preserve the architectural identity of the building.

The Kunsthal: Art theft and the 2014 renovation

A key reason for later interventions in the Kunsthal was the 2012 art theft, during which several paintings were stolen from the building. This event revealed that the museum's security did not meet the standards expected of institutions exhibiting valuable artworks. An important reason for later interventions in the Kunsthal Rotterdam was the Kunsthal art theft of 2012, during which several paintings

F.31 Building process Pavilion CHB - From: Harry Cock

F.32 Entrance hall Groninger museum - From: Groninger Museum

F.33 Cafe-restaurant Groninger Museum - From: Groninger Museum

F.34 Renovation process Restaurant Kusnthal - From: Archive Kunsthal OMA

F.35 Entrance A, Kunsthal - From: HC 2026

F.36 Rolluiken kunsthal - From: HC 2026

were stolen from the building. This event made clear that the building's security did not meet the requirements expected of museum institutions exhibiting valuable artworks. Because the Kunsthal is not a museum with a permanent collection but an exhibition building with temporary shows, the original security level was relatively limited. After the theft, however, stricter requirements were imposed by insurers and other involved parties, leading to significant adaptations of the building.

In a sense, the Kunsthal was reorganized and internally divided into different security zones. These interventions are largely invisible but have had significant consequences for the way the building functions internally, including the addition of roller shutters, sliding doors, and other security systems. Despite these adjustments, the architectural identity of the building has been preserved.

The renovation of 2014 introduced both technical and programmatic changes. In addition to security improvements, adjustments were made to the organization of functions within the building. An important change was the mixing of several public functions. The entrance was combined with a bar, restaurant, and museum shop, creating a hybrid space where multiple activities converge.

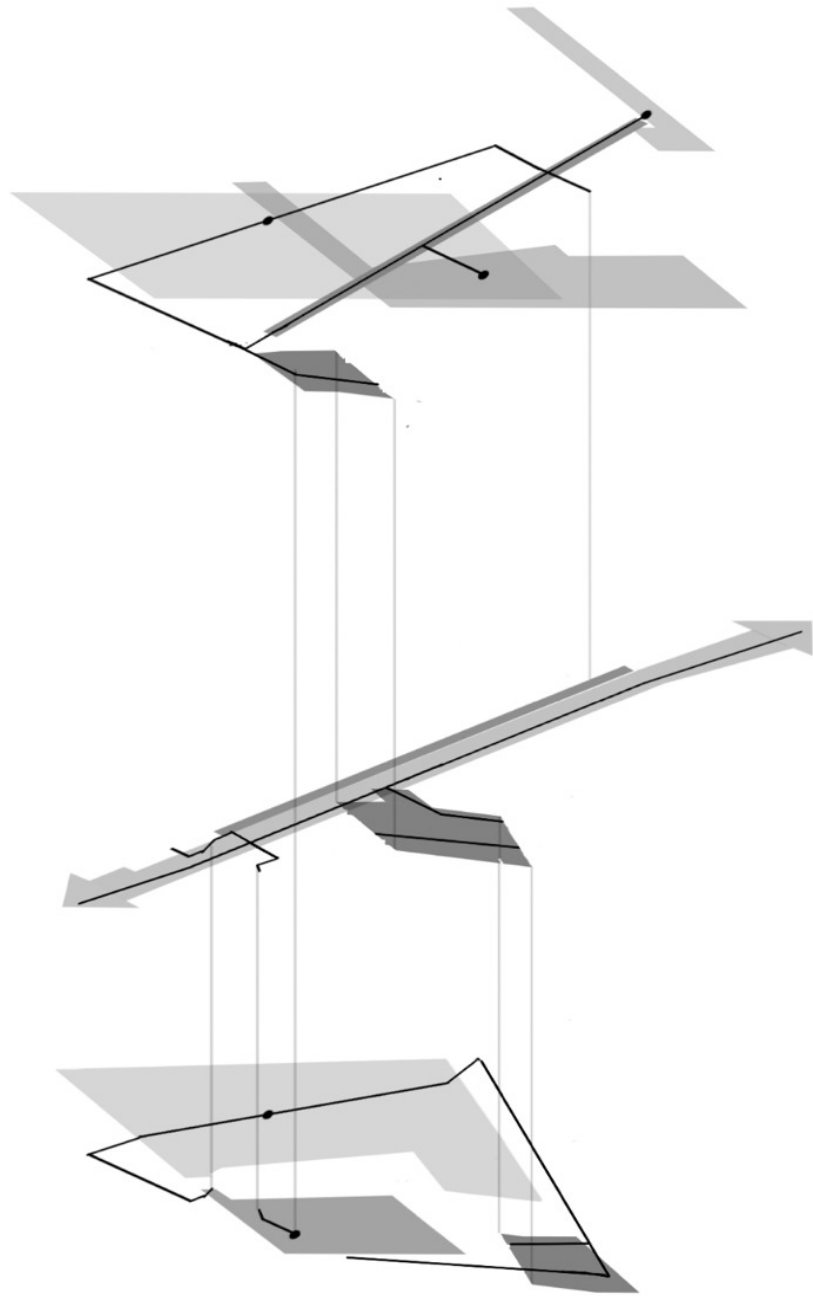
This intervention stemmed from the desire of the management to make the building more active and economically viable. The entrance on the park side was designated as the central entrance to the museum, which was originally the door located halfway up the slope leading to the Auditorium. In addition, several technical improvements were implemented. Installations were renewed and the glazing in the building was replaced, partly to improve energy performance and to achieve better control over sunlight and

temperature. Although these interventions were important for the functioning of the building, they remain largely invisible to visitors. Despite the renovation in 2014, the Kunsthal faces new challenges in the future. The building was originally designed for approximately 150.000 visitors per year, whereas the current number of visitors is significantly higher, with expectations that it may reach around 400.000 visitors annually. During popular exhibitions, this can still lead to large crowds and logistical problems.

According to Van de Kar, the main bottlenecks are not located in the exhibition spaces themselves, but in supporting facilities such as cloakrooms, toilets, and reception areas. If the Kunsthal continues to organize larger exhibitions in the future, a more substantial reorganization of the building may become necessary. This could mean, for example, that functions such as the entrance, catering facilities, and visitor amenities might need to be separated or expanded.

Van de Kar emphasizes, however, that such changes are not simple, because the Kunsthal is a complex architectural system in which circulation, program, and space are closely intertwined. In addition to the construction, the programmatic interpretation by the users also plays an important role. By continuing to follow the original logic of the building and aligning the program accordingly, the Kunsthal could in principle remain capable of accommodating larger numbers of visitors without causing confusion around the entrances or disrupting the spatial organization.

Both projects demonstrate how iconic museum architecture must continuously adapt to changing technical, functional, and institutional demands, while at the same time preserving the architectural principles that define their identity.



Positioning within the Architectural Discourse of the 1990s

In the 1990s, museum architecture played an important role within the broader architectural discourse. Museums were increasingly used as architectural and urban showcases through which cities could strengthen their cultural identity and international image.³⁴

Within this context, the Groninger Museum can be understood as an example of postmodern museum architecture in which plurality and stylistic diversity are central. Instead of employing a single uniform architectural language, the museum consists of an ensemble of pavilions designed by different designers. This strategy aligns with the broader critique of the modernist pursuit of a universal and coherent architectural language. Within postmodernism, architecture was often characterized by the combination of different styles, symbols, and references within a single architectural whole.³⁵

Alessandro Mendini applies this approach by allowing several architects and designers to contribute to individual parts of the building. As a result, an architecture emerges that is consciously multiple and layered in both authorship and formal language. The museum can therefore be seen as a pronounced example of expressive museum architecture from the end of the twentieth century, in which architecture itself plays a cultural and symbolic role.³⁶

Within broader developments in architectural discourse, architects during this period increasingly began to embrace complexity, ambiguity, and layering as a response to

the rationalist approach of modernism. This attitude aligns with the ideas of Robert Venturi, in which contrast and contradiction are not seen as problems but rather as enrichments of architectural design.³⁷

In contrast, the Kunsthal Rotterdam occupies a different position within the architectural discourse of the 1990s. Whereas the Groninger Museum makes fragmentation visible in its architectural form, the Kunsthal approaches architecture primarily as a spatial and programmatic system.³⁸

Within this discourse, the Kunsthal represents a shift from stylistic expression toward programmatic and spatial complexity. The building responds to the dynamics of the contemporary city by intertwining infrastructure, program, and movement. Architecture is therefore not conceived as an autonomous object, but as a system that organizes various activities and urban movements.

This approach is expressed in the spatial organization of the building. The design integrates the height difference between the lower-lying Museumpark and the higher Westzeedijk and makes use of asymmetrical connections, ramps, and continuous circulation routes. As a result, a continuous system of movement emerges that breaks with the modernist expectation of hierarchical and linear spatial organization. Rem Koolhaas emphasizes architectural complexity, fluid spatial relationships, and a

³⁴ Suzanne MacLeod, *Reshaping Museum Space: Architecture, Design, Exhibitions* (London: Routledge, 2005), 12-15.

³⁵ Charles Jencks, *The Language of Post-Modern Architecture*, 6e ed. (London: Academy Editions, 1991), 9-11.

³⁶ Deyan Sudjic, (2005), pp. 246-248.

³⁷ Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1966), 16-23.

³⁸ Rem Koolhaas en Bruce Mau, *S,M,L,XL* (New York: Monacelli Press, 1995), 920-930.

strong relationship with the urban context. From the perspective of spatial configuration, the building can be understood as an architectural network of routes and spaces. The configuration of these spaces determines how visitors move through the building and how they experience spatial relationships. Circulation therefore functions not merely as a functional element but as a fundamental organizing principle within the design.

Both buildings therefore respond to the modernist pursuit of a universal and coherent architectural language, but they do so in different ways. Both the Groninger Museum and the Kunsthall challenge the idea of the singular architectural object by emphasizing complexity, layering, and programmatic diversity.

The difference lies in the way this complexity is articulated. Whereas the Groninger Museum employs plurality and stylistic fragmentation as an architectural strategy, the Kunsthall approaches architecture as a dynamic system in which program, movement, and urban infrastructure converge.

While the Groninger Museum manifests itself as a collage of expressive pavilions, the Kunsthall develops a spatial network in which circulation and infrastructure form the organizing principle. Together, these projects illustrate two distinct yet complementary positions within the architectural discourse of the 1990s.

Contemporary Positioning: A Form of Architectural Timelessness

Flexibility has today become an important principle within sustainable and future-oriented architectural design. But why is a flexible building often considered more sustainable? Flexibility is a broad concept that can be defined in various ways. In contemporary architecture, it is often associated with future-proofing, adaptability, and multifunctionality.

In practice, however, this often still results in modular or neutral architecture, in which the architectural identity of a building fades into the background. In such cases, the programmatic use has a greater influence on the identity of the building than the architectural design itself. As a result, a building may be functionally flexible, but often lacks a clear architectural character or spatial expression.

In this respect, the Groninger Museum can be considered an architectural icon: an expressive building that, in a certain sense, functions as a work of art in itself. Apart from the theoretical positioning of the building within postmodern discourse, it can therefore also be understood as a timeless design. It possesses a strong identity and character, which must be carefully safeguarded in future renovations and adaptations. This identity also strengthens the visitor experience, as the fragmented architectural composition is translated into the spatial sequence and circulation of the museum.

A form of timelessness can also be recognized in the Kunsthall Rotterdam, although in a different way. The non-museum layout of the building, combined with an open hall structure and a continuum of spaces, makes the building multifunctional and relatively flexible in use. The program-oriented entrances and open circulation connect smaller spaces into a coherent spatial system, while the non-linear routing deviates from conventional geometric building structures. As a result, an architecture emerges in which spatial experience and programmatic flexibility are closely intertwined.

The four different façade elevations can moreover be experienced as a continuous perceptual experience, resulting from the unique circulation and urban positioning of the building.

The infrastructural and urban integration of both buildings therefore still forms a relevant reference point within contemporary architecture. The same applies to their function-specific expressiveness, which strengthens the user experience and contributes to the formation of the building's identity. What in the 1990s was considered an innovative development and was often associated with postmodern architecture can today be interpreted as a form of architectural timelessness, in which strong design principles form the basis for long-term relevance.



Conclusion

The study of the Groninger Museum demonstrates how fragmentation and cohesion can function simultaneously within a single architectural object. The museum is often described as an iconic example of postmodern architecture. However, a closer analysis of floorplan and circulation shows that fragmentary composition is not only a visual strategy, but also a spatial organizing principle.

From the exterior, the museum presents itself in expressive terms as a collage of separate volumes with different materials, colors, and stylistic references. At first glance, this fragmentation suggests a loose collection of architectural objects. At the same time, this diversity is spatially connected through an underlying structure of circulation and plan organization. The semi-sunken connecting layer and the central tower function as links between the different pavilions. Fragmentation and cohesion thus coexist: the architectural components retain their own identity, while the spatial organization forms a coherent whole.

The comparison with the Kunsthal Rotterdam makes this strategy more clearly visible. Whereas the Groninger Museum primarily organizes fragmentation at the level of individual volumes and authorship, the Kunsthal develops an architecture in which cohesion emerges from a continuous system of circulation and infrastructure. Rather than a collage of objects, a dynamic network of spaces, ramps, and routes is created, in which movement becomes the primary organizing factor. Despite their different circulation flows, both designs employ a similar form of intersecting transition, embedding the building within its context while simultaneously allowing it to move infrastructurally with its environment.

This comparison shows that both museum buildings formulate different responses to the modernist ideal of a rational and uniform architecture. While the Groninger Museum expresses plurality and stylistic diversity through an expressive architectural composition, the Kunsthal translates fragmentation into a spatial system of movement and infrastructure.

By analyzing these two projects in parallel, it becomes clear that fragmentation in the architecture of the 1990s does not necessarily lead to spatial chaos, but can instead function as a means of organizing new forms of spatial coherence, and can even achieve a form of timelessness. In the Groninger Museum, this coherence emerges from the relationship between individual architectural fragments and their connecting circulation structure.

The enduring relevance and primary quality of the building therefore lie not only in its iconic appearance, but especially in the way it develops a complex balance between architectural autonomy and spatial organization. It is precisely this tension between fragmentation and cohesion that forms the core of the spatial experience of the Groninger Museum and explains why the building continues to serve as an important reference point within late twentieth-century museum architecture.

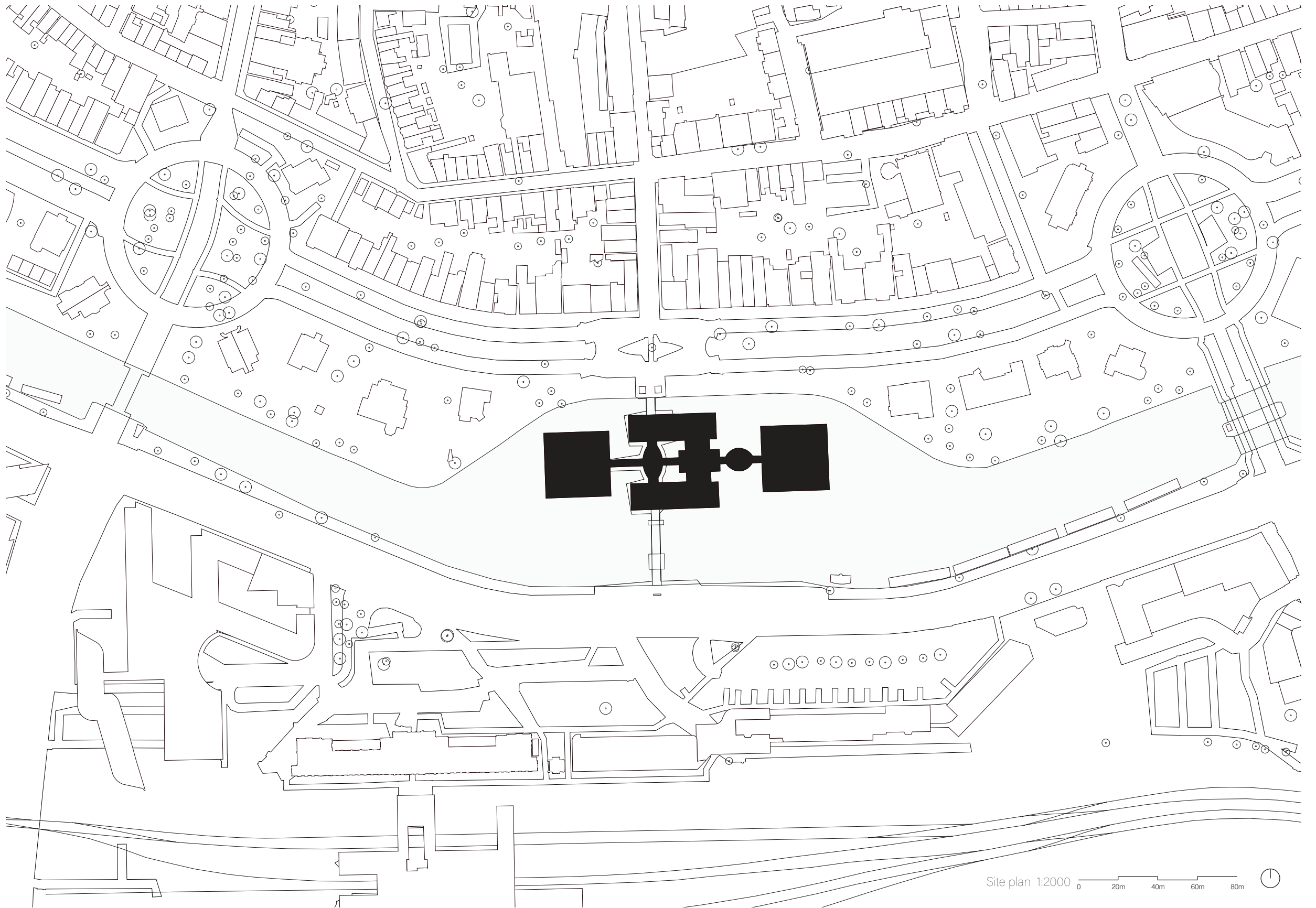
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Figures

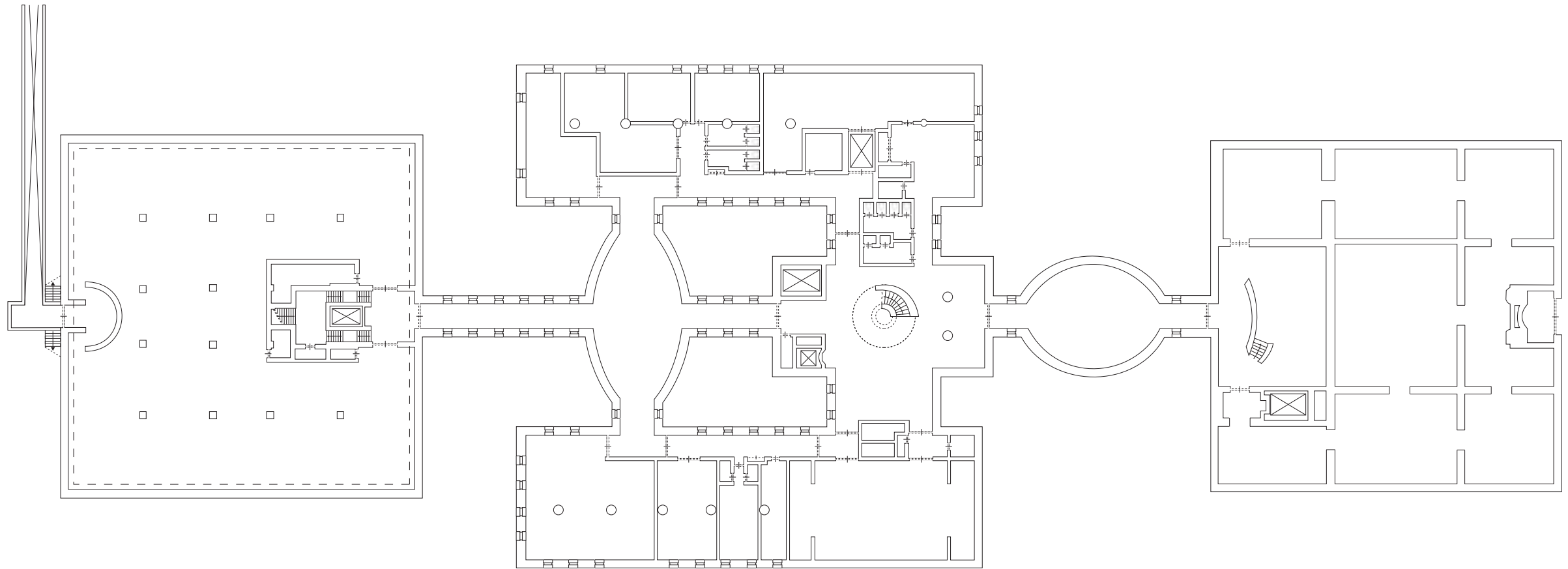
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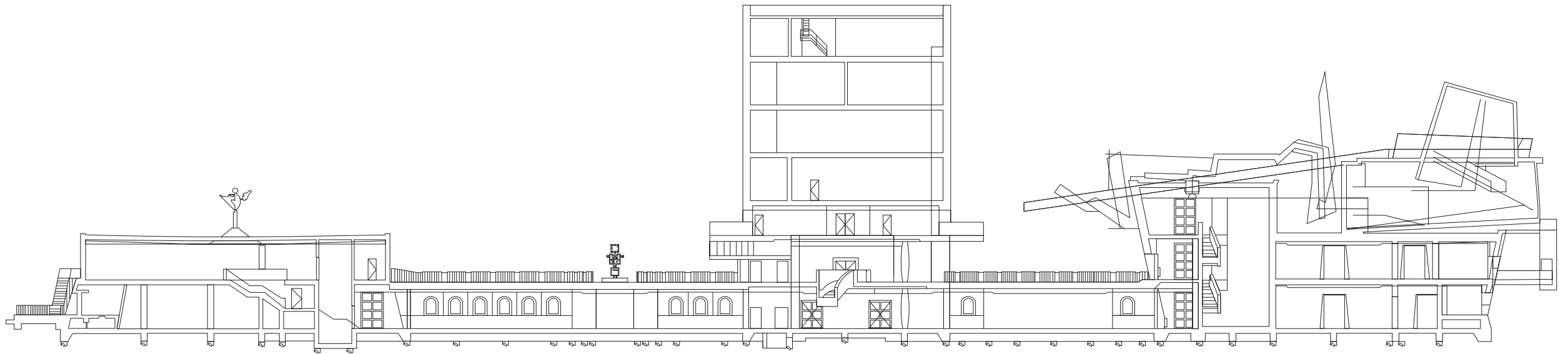
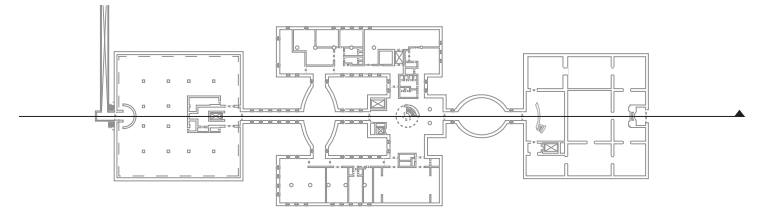
Site plan 1:2000 0 20m 40m 60m 80m



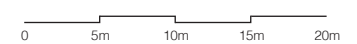


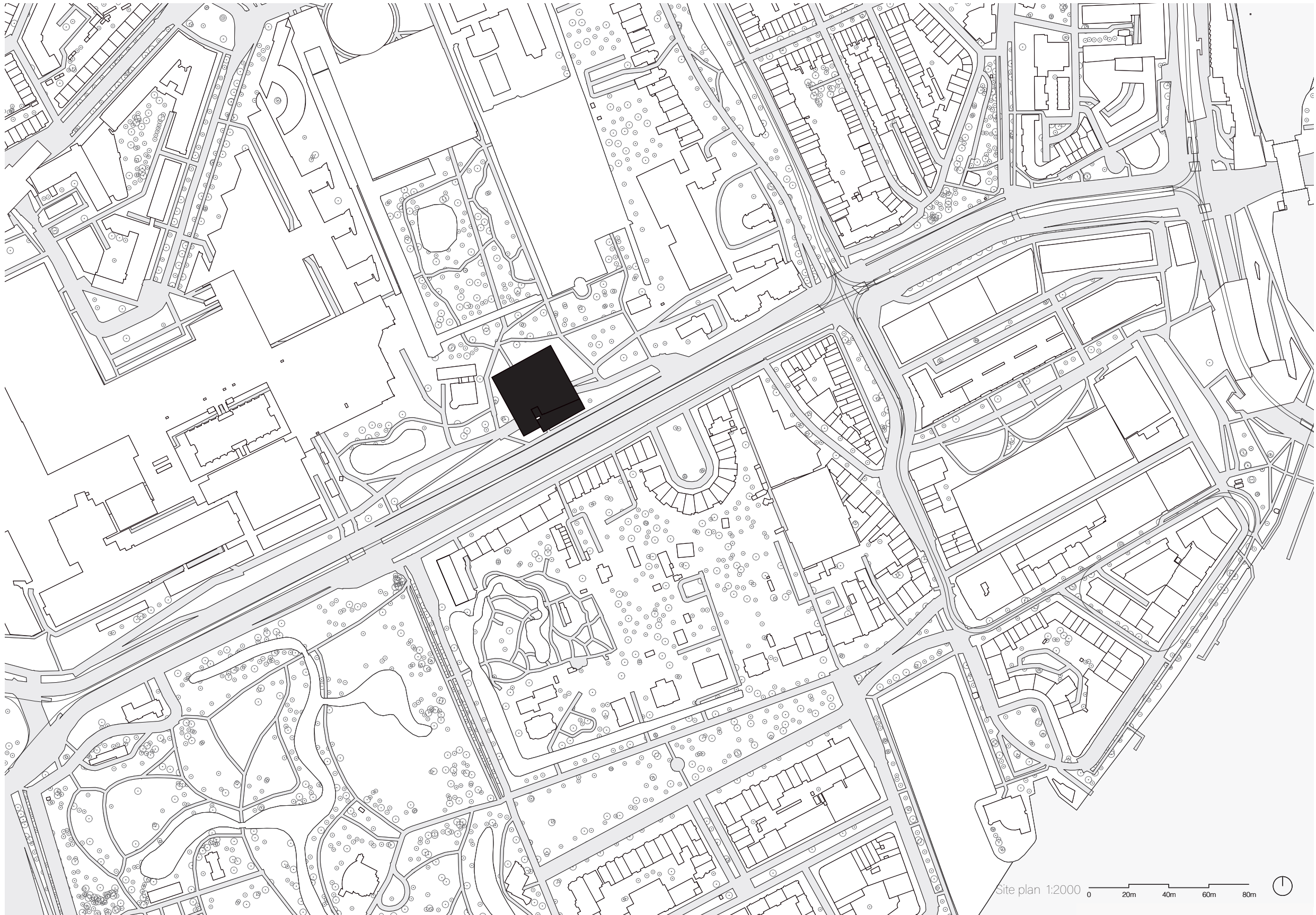
Floorplan -1 Groninger Museum 1:500 (scaled to 95%)





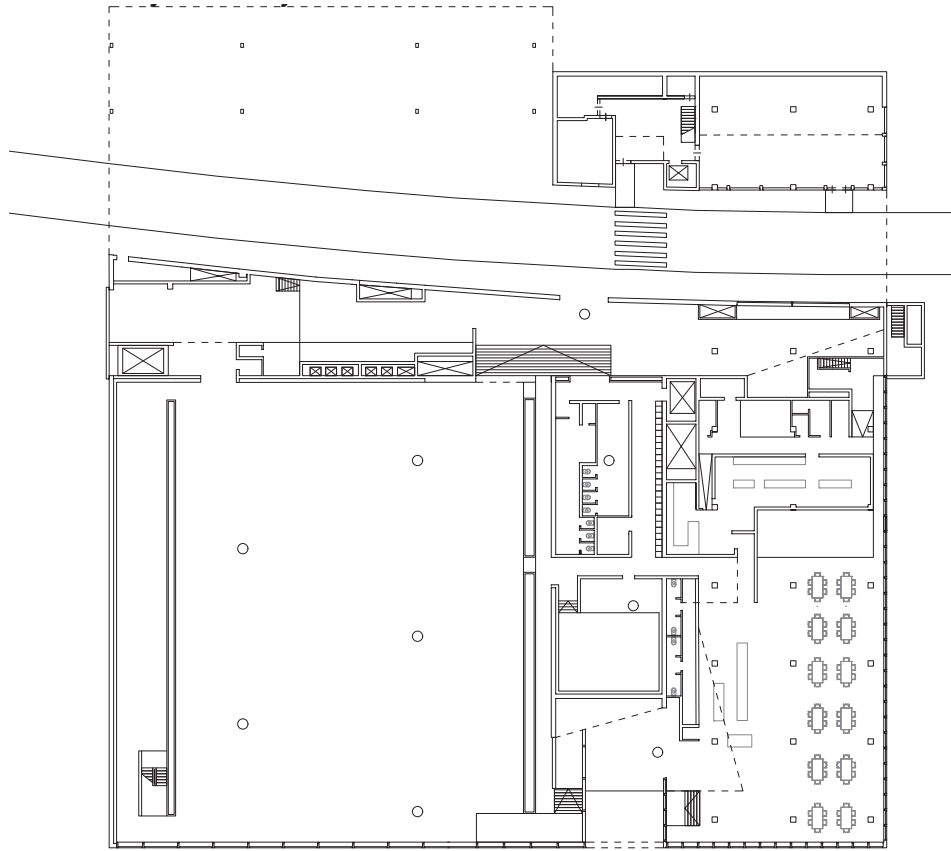
Section Groninger Museum 1:500 (scaled to 95%)



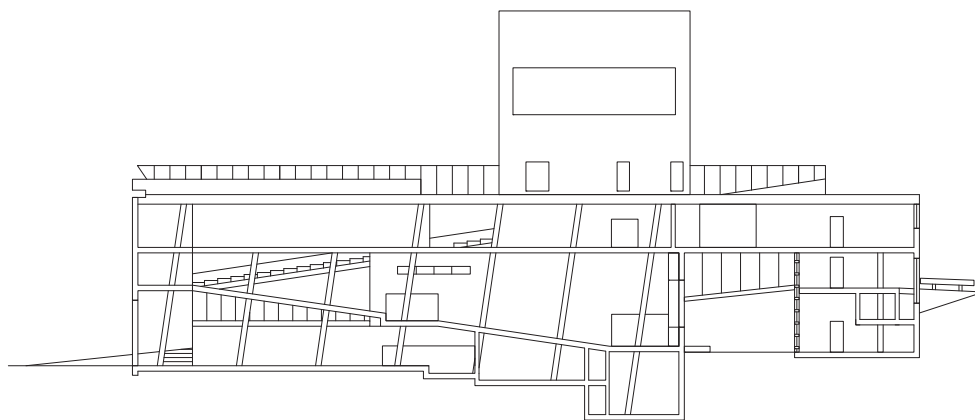
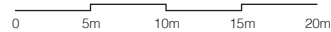


Site plan 1:2000





Floor plan Kunsthall 1:500



Section Kunsthall 1:500

