MASTER

Super-/Subterranean
exploring context and interior autonomy in an extension to Zurich's Kunsthau

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Master's thesis project
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Introduction

For a first time visitor Zurich comes across as an idyllic city with a rich history. The old city appears to have survived the ages remarkably well, turning into a great tourist attraction. At the same time, Zurich has changed into a modern city which is very much part of the contemporary economy’s global network. Zurich’s position in this network, especially its leading role in the world’s monetary industry, has created an ever-increasing demand for space. With the historic center protected by strict zoning laws, an upwards expansion (i.e. high rise) simply was out of the question. Instead, the city has grown downward: At certain places there are as many - sometimes even more - floors to be found in subterranean expansions as there are visible to the exterior gaze. On top of this, modern structures have replaced many of the original interiors. Contemporary life takes place in this interior world.

In this thesis I will present my project “Super-/Subterranean.” Its subtitle “exploring context and interior autonomy in an extension to Zurich’s Kunsthau$$ indicates two entries for this project: one from an exterior perspective – context - and another from an interior perspective – the interior autonomy of a museum extension.

The idea of Zurich - its historic center to be more specific - as a modern city within a classic appearance has been the starting point for this project. Interior and exterior share their genesis but have developed virtually independent over the last decades.
The exterior is all about history, focus on a harmonious image of the city and could not be more contextual. Paradoxically, the contextual restrictions the exterior suffers from mean the ultimate liberation for the interior as neither expression, nor perimeter limits it in any way. Its forming principles have to come from within rather than from without.

To explore these perspectives with the design for a museum extension was prompted by an existing, ongoing competition for Zurich’s Kunsthau s. This museum is located in an area heavily influenced by the interior/exterior dichotomy. The suitability of this function can easily be substantiated: Historically, the museum has been characterized by a representative exterior and a neutral interior focused on displaying art. The museum creates a pedestal for the art because art wants to be seen, it craves publicity. At the same time, the museum functions as a shield, protecting art by giving it a scene. The museum therefore has to give shape to the ambiguity between inside and outside.

The punctuation mark “/” in this project’s title refers to Eisenman’s and Derrida’s use of the separatrix. In mathematics, it is used to describe the mark of division in fractions. Its analogy in architecture proves to be fruitful, as it simultaneously functions as a mark of connection: It joins numerator and denominator into the unity of the fraction. To question Zurich’s paradigm means developing a critical attitude towards the extreme interior/exterior dichotomy. Most importantly, destabilizing the boundary between inside and outside aims at raising awareness of its existence rather than accepting it as a given.

The two perspectives have had their impact on the physical form of this report as well. Flipping this booklet will unveil another front page. One side describes the contextual aspect more extensively,
INTRODUCTION

Top: Niederdorf’s exterior
Bottom: Niederdorf’s interior
while the other illustrates the museum as an archetype and its demanding program. I realize that this means a severe separation between the two views, but I feel that this is the right structure for presenting this project. Its binary, opposing logic corresponds to the radical contradiction between interior and exterior found in Zurich, but it offers the possibility of a more subtle relation as the description progresses. I will, however, not try to tie them together with rhetoric: The middle section is where I show how the design for an extension to Zurich’s Kunsthain combines and connects the storylines into an architecture that unifies the contradictions without diminishing either one.
On Interior Autonomy
1.1

Finding function

This project began with its location. Although this might sound like a peculiar process, it is in fact perfectly appropriated considering Zurich’s schism between external representation of buildings and their internal program: Interior and exterior can be developed independently or even with the existence of only one of them.

Virtually all buildings and functions (except the virtual) require some kind of definition of a boundary, some kind of statement about the façade. Giving space an inside automatically means creating an outside. This is where the realms of context and interior autonomy meet. But, most uses do not possess an internal autonomy strong enough to withstand the contextual pressure: They can easily be adapted to fit these external requirements. Several offices in Zurich support this statement: To function properly they need large scale storage space for valuables. The site’s perimeter, defined by the historical, superterranean context, simply does not offer sufficient room for these vaults, so the banks extend downwards into the earth. This, of course, follows from the decision to prefer the image of a continuous urban landscape over the modernist ideal of façades displaying the functioning of the buildings.
In its larger context, this project deals with Zurich’s separate treatment of exterior and interior. In order to continue the exploration of this theme architecturally, a function dealing with the relation between these entities is needed.

The museum as a function was not found after a selection by exclusion; it is not the only typology dealing with the topic, maybe it is even more apparent in other functions. An extension to the Kunsthau s is interesting because there is an actual intention for its construction preceded by a design competition. Of course, in Zurich the volume demanded is much larger than the envelope permitted by zoning laws. Up to 45,000 m³, half the volume, is to be located in subterranean parts of the new building to comply with the predetermined building lines. The competition’s time span coincidentally coincides with this thesis project. Its brief has enriched my project with a touch of realism with demands solvable only by such subterranean spaces.
1.2
The museum as typology

Dealing with the separation or unification of interior and exterior is not exclusive to the museum, but it is very much part of its qualities. Looking at the development of the museum as a typology shows an ever-changing attitude in the matter of representation. I do not intend to give a complete overview of the history of the museum building. Instead, a description of the expansion of the Kunsthaus will be used as an example of the general tendencies.

The Kunsthaus's collection was initiated by the 'Zürcher Kunstgesellschaft,' a local art association of artists and (wealthy) citizens, in 1787. In turns, the members contributed works of art and since 1801 this collection was exhibited annually. In 1910, the collection was formalized in a building, a true 'Musentempel' by architect Karl Moser. Its construction can be seen as part of the first museum boom in the late 1800s and early 1900s. This explosion in the number of museums went hand-in-hand with a shift in the meaning of art: Before, art had its scene in the private domain of the collector who also functioned as sponsor; in the museum art belonged to the public domain.

The Kunsthaus was a bourgeois museum, originating in a private collection, but most museums of that period were national museums. The latter were used - in both art and architecture - by monarchs and other rulers to create an image of the nation, while the former was a self-assured, proud statement of citizenship. The medium of both
messages can be found in the façade representing the importance of its content by deploying means as symmetry and pedestal to elevate the building. Their interiors have a rigid sequence of space with a revolving circulation. This arrangement enabled a linear exposition of art history and a categorization of successive artistic trends in different rooms. Cornelis van de Ven places the dichotomy between exterior and interior in the museum building's origin in the - at that time prevailing - (neo-)classical following of the palace model (originating in the works of Von Klenze, Schinkel and Semper) which had a similar disjunction of representational façade and content. ³

In the extension built in 1924 it became apparent that Moser had moved away from neoclassicism towards an early Modernist style. His contacts with architects such as Mart Stam and Dudok and his involvement in the CIAM had influenced Moser’s architecture to contain a functionalist’s vocabulary: The extension’s interior no longer rivaled with the art it contained, but has a more supporting role for it. ⁴ Its exterior, however, persevered in using ornamentation and classical proportions.

The, never executed, 1934 proposal showed that Moser had broken with historicism for good as he fully incorporated the International Style in this design. It no longer displayed the rigid organization of spaces of the palace-model, but used a free floor plan and a flexible wall-system typical for the minimalist and neutral exhibition hall. After Moser’s death an extension of this typology has been realized by the architect brothers Pfister in the 1950s. This extremely reserved space put all focus on the works of art; its architecture of technical perfection (concerning lighting, ventilation, etc) became almost invisible. Erwin Müller’s 1976 extension aimed at opening the museum to the outside. ⁵ New techniques in building materials made it possible to use natural light for this space. Again, this building functions mainly as a provider of space and lacks an own presence.
Top: Extension by the Pfister brothers
Bottom: Moser's monumental façade next to later extensions
2.1

Contemporizing the museum

In the expansion of the Kunsthaus we can see an architectural shift from a building equally expressive as the art displayed in it to a virtually disappearing architecture of mere functionality. After the 1970s the ideas about the museum building have continued to evolve even though this left no visible traces on the Kunsthaus. Wouter Davidts describes how in recent years the museum has functioned as an initiator of urban development. This is accompanied by a rise of museum "personalization." In order to generate attention, the world's famous architects are expected to house the museums in new urban icons. Every city wants its own Bilbao-effect. The objectives for these new museums are defined by exterior conditions: "The accent has changed from the appearance of internal program – the museum as a place for the storage of knowledge – to the design of the external program – the museum as an urban attraction." Similar to classicism’s museum as palace, these buildings are characterized by a showy exterior – the playground of its architects - and an exchangeable, neutral interior defined by a lack of architecture. This externally oriented appearance is supported by a program focused on “peripheral functions” like restaurants, shops, etc. These developments in museum architecture have made it difficult to 'derive' a new design from an existing typology, especially since so many new museums have proven to function perfectly fine in non-museum purposed buildings.
ON INTERIOR AUTONOMY

The abandonment of traditional archetypes in museum architecture since the 1970s has been explained as an updating of the museum. The museum needed to be more democratic and open so as to keep up with contemporary art. The museum was no longer considered to be merely a place of collecting and conserving; its exhibiting function became more important. At the same time, museums of contemporary art tried to be in closer contact with the artists by functioning as locations of art production as well. Wouter Davidts perceives how radical this break with the past is: Collecting art traditionally meant there was a stretch of time between the moment of art's origination and its admittance into the museum. Works of art in museums had already lived a life outside the museum before their entry in the museum.
The museum as place

The museum as a place, as a house, for art has always been a problematic one. Three texts have been quoted frequently in the discussion about the museum building: *Le problème des musées* by Paul Valéry (1923), a passage from Marcel Proust’s 1919 *A l’ombre des jeunes filles en fleurs* and *Valéry Proust Museum* by Theodor Adorno, recapitulating and continuing on the two former works.

What stands out in these texts is the fact that art is not unconditionally at home in the museum. Proust compares (not literally, but by textual proximity) the museum and the station as places of departure and arrival. He criticizes the “mania to display things in their natural environment,” which “covers up their essence, namely the mental process that isolated them.” Valéry places art in the area of lust: Every work of art craves exclusive attention, but this is simply impossible in a collection. To him, visiting the museum is like a drunk walk, haphazardly moving from one beautiful object to another without really paying attention to any one. The excessive, disconnected congregation of délices is tortuous to Valéry. And, the excess in museums will only increase as their collections grow because of continuous production and acquisition of art: “Everything has its terminus on a [exhibition] wall or in a show-case.” According to Valéry, this excessive collection of memory leads to an increasing superficiality: “Art becomes a matter of education and information.”
Adorno offers the most concrete suggestions on the nature of this transition: “Museums can be compared to the burial of works of art.”13 Art’s genesis in this is the creative conception by the artist. To place works of art in a museum means to take them out of the everyday life. And these environs, at least to Valéry, give meaning and memory to the art. Proust sees this differently: He considers the museum as a place where the art can be ‘discovered.’ Their difference in opinion can be interpreted as a different attitude towards art: With Valéry, the essence of art is to be found within its creation; he is aware of the influence of history on production and experience of art. Proust’s valuation of art is a secondary one: Every, and everyone’s, experience of art is an act of creation. It is in Proust’s paradoxical idea that death of works of art in the museum is also a resurrection. This shift towards subjectivism means resuscitation with every observation.
2.3

Publicity in the museum

To the public at large, the museum’s exhibiting role is the most important and the most visible. It outshines the part of archiving and education. The exhibition defines the museum building, because it publicizes art. "The museum is not the location of art's homecoming, but a place where its (reason of) existence is addressed. The museum does not offer a "natural" place to the artistic production, but a platform to publicize its results." Architecture’s task lies in the creation of a scene: The museum building has to offer the possibility of revelation while offering shelter to art at the same time. It defines the boundary between an inside and an outside.

Davidts demonstrates how the urge to create an easier access to the museum effectively means a denial of its character as an elsewhere to art. Instead, architecture can offer the works of art a dignified transition into their new life of being in a collection. This is where the museum is relevant and its architecture comes into play. The museum can once again function as society’s memory: “They are the proper location to observe the current situation of cultural inflation and, after a certain stretch of time, examine what is worthy of preservation.” Architecture should not be involved in the “conversation between art and public” but it should enable it with a statement about exterior and interior; how they are separated and where they are rejoined.
Most museums have gathered immense collections over the years. And, as Valéry stated, these collections will continue to grow as art production does not stop. A number of collections, the Kunsthhaus among them, have grown to incomprehensible proportions. Even though these collections are too large for a single visit, museums often persist in using a linear circulation. Visitors are expected to see the art in a predetermined way: A linear, chronological sequence of exhibiting is predominant, following the Hegelian, evolutionary concept of art history. Expositions show origin, development, counter movements and legacy of styles.

There are, however, a few exceptions; there are museums that allow their visitors to roam their spaces. One of them is the Metropolitan Museum in New York. Its collection would take days to see in its entirety, but as a visitor you never feel that you are missing out on something. No historical or education significance is imposed upon the visitor; he is left to find his own way by wondering from room to room. These rooms of varying size are arranged in sections, but they are not hierarchically divided; a room with medieval musical instruments is located virtually next to a gallery displaying Italian renaissance paintings and they can be seen after each other. There is no single dominant circulation. This concept interests me as it incites its visitors to choose their own way through the collection and accordingly through the building. The chronology of exposed works of art is not resolved in advance, but arises from subjective
considerations. Not visiting certain galleries will not feel like a deficiency, making even the largest museum comprehensible for its visitors.

The route taken by the museum visitor directly influences the way they experience other works. A museum open to wandering can set itself free from the constraints of chronology. The visitors will make connections themselves rather than obediently following predetermined ones. Therefore, a much lusher total of relations arises within the collection. This however, does not marginalize the curator’s position: It will be a challenging opportunity to allow for these multiple links. This idea for ‘alternative’ uniting themes is already employed in more flexible, temporary exhibitions. The range of topics is much wider than I, as a non-expert on exhibitions, can imagine.
For a number of reasons, the labyrinth has become an important concept in this project. I have to point out that the model I have used in fact is not a labyrinth but a maze. These are not similar, but their meanings have converged into a single notion. To the purist, the labyrinth refers to a linear, unicursal figure marking a path. It has been put forward that the labyrinth originates in choreography, describing a fixed dance. Hermann Kern writes: “As opposed to the maze, the labyrinth’s path is not intersected by other paths. There are no choices to be made, and the path inevitably leads to, and ends at, the center. Accordingly, the only dead end in a labyrinth is at its center. Once there, the walker must turn around and retrace the same path to return to the outside.”16

However, most modern dictionaries put these words at par and they are commonly used interchangeable. From here on I will rely on the Borgesian use of the labyrinthine. His story The Garden of the Forking Paths17 is based on the idea of multiplicity in the labyrinth: Each decision is possible and leads to other results. There is an infinite number of routes. The path traveled - i.e. which decisions are made - is defined by the person moving through it. Borges’s story, and the novel described in it, are exceptional in the fact that they do not fix or record one single storyline, but leave open multiple – or all! – options.

This is exactly the kind of subjectivism I described before when talking about the experiencing of a collection. The labyrinth is a
spatial concept provoking uncertainty; its space is not immediately readable. As an analogy we can look at the gardens involved in the Japanese tea ceremony and the irregularly shaped stepping stones they usually contain. These stones are supposed to direct the visitor’s view and movements by challenging the habitual practice of walking. This routine cannot be done thoughtlessly anymore as one has to pay attention on where to place one’s steps. The focus involved pushes away the ordinary thoughts. The clearing of the mind prepares the visitor to the ceremonial continuation.

A labyrinthine uncertainty leaves the visitor looking for clues on how to use the space or how to move through it. In the context of a museum these clues can be found in the works of art. They will function as waypoints, guiding one through the museum. So, this movement is not defined by predetermined linearity, but established, on site, during the visit. At the end, a visitor might say how he visited the museum: He went from Clifford Still’s work to the Rothko’s and finally saw Newman’s paintings. Maybe today he saw only bluish paintings or did he come to see the Van Ruysdaels in the old building and saw Gerhard Richter’s Wolken (Fenster) in the temporary exhibition after that?

“Space is real, for it seems to affect my senses long before my reason. The materiality of my body both coincides with and struggles with the materiality of space. My body carries in itself spatial properties and spatial determination: up, down, right, left, symmetry, dissymmetry.”18 Bernard Tschumi points at the labyrinth as a sensual experience. The sensory perception of space is “an immediate and concrete human activity”19 and thus subjective. The labyrinth excludes the exterior space and makes the interiority of art a subjective experience: Perceiving art becomes a conversation between the self (and its own context) and the work of art.
Irregularly shaped stepping stones make for a conscious entrance at Katsura Imperial Villa
4.1

The Kunsthaus extension competition brief

The extension should house approximately 13,000 m\(^2\) of program which, according to the official competition’s brief\(^2\), means a 90,000 m\(^3\) volume. This is a 60% increase to the existing Kunsthaus. The cornerstones of the extension are:

* Space for art: The Kunsthaus Collection (from 1960 on), the E.G. Bührle Collection (a collection of French (Post-)Impressionist works donated to the Kunsthaus) and relevant elements of the Kunsthaus Collection, medium-sized temporary exhibitions, and art warehousing.

* A central hall, including the main entrance and visitors services, such as a café/bar (served by a small kitchen), ticket office, service desk and cloak room. The extension should also provide for an extra museum shop.

* Art education (pedagogy): Rooms to serve as reception and introduction areas to groups, studios for art production by visitors, and offices and workstations for art educators.

* Event rooms: Multifunctional spaces to be used for concerts/lectures, events, and art. These are supported by a separate lobby and catering (which can function together with the café’s kitchen).

* Back office: Function-driven space to allow the museum to work properly, such as art transport services, deliveries/waste removal, storage areas, staff’s social rooms, workshops, and art restoration rooms.
4.2
Premises for designing the Kunsthaus extension

The urban restrictions lead to a museum divided into two parts, each on a side of the Heimplatz. To ensure their functioning as one museum, the extension brief mentions an underground tunnel connecting them. This tunnel is to be used by museum staff and visitors, but can also be used for art transport between both buildings. Most logistics of art, however, will be dealt with by way of the shipping facilities, because of the height restrictions in the existing building. It surprises me that there are no further requirements about the tunnel other than its minimal width: A staggering 2.2 meters, over a length of 60 meters, is supposed to be the lifeline keeping the future museum alive.

Rather than constructing two, loosely connected, entities I would like to propose a genuinely extending extension to the Kunsthaus. The existing building has been revised many times already and this extension will certainly not be the last one either: As museums will continue to collect, their functions as the memory of society will increase. A rhizomatic, underground expansion - stemming from the existing building only to break ground when absolutely necessary - deals with the current requirements and opens up possibilities for further growth. Indebted to Zurich's peculiar habit of building subterraneously when under contextual restraints, this museum will free itself from these limitations by creating a labyrinthine space without reference to an exterior.
Top: Both museum buildings and their lifeline
Bottom: The labyrinthine extension
NOTES

2. Ibid, p. 61.
(Translations from Dutch to English of Davidts's work are mine.)
10. Ibid.
The Design
Form defining system
Autonomous system

A subterranean extension is freed from contextual restraints. An independent set of rules governs behavior and structure of the interior. A grid, epitomizing an autonomous realm for it is purely self-referential, underlies the extension. To connect the old and the new, the orientation of the existing Kunsthaus dictates the new orientation. Therefore, the subterranean structure has a clear beginning and a clear direction. This drive from the Kunsthaus is slowed down by a field of walls parallel to the Kunsthaus’s Heimplatz façade. The combination of a Cartesian coordinate system with a longitudinal force and a transversal deceleration leads to a labyrinthine structure with diagonal views and movement.

From the existing basement visitors roam through the area under the Heimplatz with the shop, the art depot and rooms for temporary exhibitions and the tunnel that is the umbilical cord between the old and the new part. At the central hall these different routes join only to ‘explode’ in all directions again. Around this hall one finds a constellation of functions: Educational, conferential, logistical, gastronomical, and exhibitional. Every which way ricochets through the labyrinth of walls, driven by curiosity, deeper and deeper into the subterranean structure.

While two of the walls define a space between them, rooms are created by secondary walls in the original orientation of movement. These walls are fragmented to maintain diagonal views of adjacent rooms. The walls are made of opaque glass and lit from within to intensify the idea of a possibly endless labyrinth. This light and the shadow of people moving behind the walls help in this as well.

Even though this subterranean labyrinth is infinite in theory, some spaces in the extension’s brief need to be above ground for either daylight or logistical considerations. To accommodate this, some of the walls extend until they reach sufficient height. However, according to the form defining rules, these walls are impenetrable, so new element are needed to create continuous spaces in these towering structures: Steel walls slide in, perpendicular to the extended concrete walls transforming them into portals. These open up poches for spaces that are outside the labyrinth but within its set of rules.
Formal genealogy
Model of the subterranean structure
Model of the subterranean structure
Visualization of the lobby to the conference rooms
Visualization of a subterranean exhibition space
Visualization of a transitional space
Visualization of a superterranean exhibition space
Visualization of the educational poché
The extension projects out of the existing Kunsthaus's basement. Its current wardrobe will be transformed into the (internal) entrance to the new building. Moser's foyer offers plenty of space to insert a stair leading down to this area. Minimal alteration is necessary. A corridor of frames can be identified as main organizing element in the subterranean space, but it has an external presence as well.

Midway, under the "Heimplatz-Insel," the small island between roads, a glass box comes out allowing a view into the spaces of the temporary exhibitions (3) and the museum shop (2). This can be used for displaying messages about the museum (for example upcoming exhibitions) to the passing public. The art depot (1) is located under the Heimplatz as this is a function that can do without natural light.
At this level, most of the spaces are directed at the exhibiting function of the museum. At the new entrance is the multi-level hall (6). At -5 meters, it is the node joining all kinds of different spaces: Corridors, exhibiting spaces, and the event rooms (5). These rooms have their own foyer offering entrance to the other rooms. The largest is capable of housing events visited by up to 500 people (4).

Service areas, such as a speaker’s room, a director room, storage spaces are located close to the main event room. A catering (connected to the kitchen by way of a dumbwaiter) can also be found here.

Under the last superterranean volume (left in the image) the numerous installations are located.
As the exhibition spaces follow the slopes of the landscape, they reach a floor level of -1 meter. The transition in height happens by areas without art. They offer a brief moment of relaxation in the museum.

The main entrance volume has its first floor here. The act of entering resembles a spiral motion, from Heimplatz to entrance (8), along the restaurant (7), to reception, and the lower level which was visible before through the atrium.

The corridor has a second floor here so the last volume (which houses the Bührle collection of Impressionist art) can be reached without passing through the subterranean collection of modern art. The first level of the corridor is not used by visitors in this part; they serve the logistics of the museum by connecting all the volumes and their elevators.
Horizontal section at +6.5 meters

On this level trucks enter the building for art transportation, deliveries and waste removal. Security demands the possibility to park nineteen meter long trucks inside the building. This explains the long, but narrow shape of the middle volume. (10)

The top floors of the main volume house the educational areas of the museum. On this floor, a large group room (spacious enough for two school classes) can be found. (9)
Horizontal section at +15,5 meters

Exhibitions space (16)
Staff's social room (15)
Horizontal section at +18,5 meters

Offices for educators (17)
Diagrammatic connection

The concept for connecting the outside and the inside has been achieved by a simple diagrammatic model:

- Structure/orientation defines location of wall
- Height of walls defines shape of roof/square

So, interior lay-out and scenic square are connected by a conceptual rubber band as the two are tied together but follow each other’s movements or consideration in their own pace.

“"The architectural avant-garde has fought often enough over alternatives that appeared as opposites – structure and chaos, ornament and purity, permanence and change, reason and intuition. And often enough it has been shown that such alternatives were in fact complementary."


This project owes many thanks to Marc van Bemmel, Ralph Bertram, Jouri Kanters, Gert Kwekkeboom, Jan Lebbink, Arno Mulderij, Mark van der Net, Niels Ponjee, Pieter de Ruijter, Luuk Schreiber.
View from the restaurant
Visualization of the lobby’s subterranean level
Visualization of the multi-level entrance lobby
Visualization of the multi-level entrance lobby
Visualization of the former gymnasium
Separatrix

The roof/square:
The roof covering the subterranean spaces is a square in its urban context as well; the urban square also happens to be the roof of an underground museum. The understanding of this depends on the beholder’s perspective. For the outsider’s view it appears as if something is lurking behind the square’s surface: A presence has altered the landscape, rupturing its face to reveal an interior. From the inside, an abundance of light falls in through these openings. The roof is (structurally) thin to enable this. A combination of pre-stressed laminated wooden beams and concrete slabs has been used for this purpose.

For both views, the roof/square has a continuous character: As a sloping landscape, it can be seen as a continuation of the existing landscape. Easy access is provided at certain point. In other places the crests isolate the square from the street, creating spaces within the larger urban space. Here, the relief makes it possible to use the roof/square to sit on or lean against.

Façadism:
The former gymnasium on the Heimplatz will be saved and incorporated in the new museum. When walking through the exhibition spaces five meters below this building, it will give an immensely spacious feeling and provide high quality, natural lighting for the art underneath. It becomes a remarkable and memorable element within the museum.

However, the gymnasium will be completely stripped of its authentic interior and function. Its reference to history is only skin-deep. Externally, this means a conversion from an expressional functioning of the gymnasium’s façade into a purely ornamental one.
Section 1/500
The roof / square
Flächen und Bekrönungen
View along Rämistrasse
View along Kantonsschulstrasse
Model of the superterranean structure
Model of the superterranean structure
Model at city scale
Superterranean structures

The location of the superterranean structures is adapted to the direct surroundings. The side of the Rämistrasse has been kept open apt to the street’s character. Most buildings along it are located on their own islands of green, open space.

The Kantonsschulstrasse on the other hand is defined by buildings close to it. As an effect, this street almost functions like a funnel, directing the eye towards its end at the Kantonsschule (seen from the Heimplatz).

The (steel) walls of the new structures play a part in this as well: Their structural UNP-beams are a reminiscence of the ornamental lines between the stories. The windows and their proportion refer to the adjacent buildings too. The metal used (treated with a wax coating) will soon get a patina giving an almost instant touch of history to the building. The walls’s mirroring windows reflect the clear skies thanks to their slightly canted placement. They become specks of light in a dark façade, turning around the usual composition.

Responding to the interior/exterior dichotomy, my project looks for an architecture capable of simultaneously handling exterior and interior considerations. One of the strategies in this has been to extend or ‘deepen’ the façade. This has created an image of layer upon layer, finally forming a unity. A ‘deep’ façade offers more possibilities for combination and transition without intruding on the demands of either one.

The slightly reflective façade is one of the layers in this, commenting on the practice of mimicking or referring to a context. This acrylic glass façade has a CNC-milled texture on the inside. In this case I propose the image of an abstracted ice cube, to allow for an affected conception by its beholders.

The two different processes of making ice cubes are interesting: Internally freezing with needle injection leads to clear ice. ‘Misty’ ice tells you that the cold was applied externally.
Functioning of the square

The plains are connected by conveniently accessible routes. Inclined and inaccessible parts divide the square in spaces to move, spaces to stay and spaces to see.

To accommodate access the square is flush with the surrounding pavement at points where (pedestrian) traffic meets an edge. The subterranean ensemble directs visitors over the square to form connections.
Functioning of the square

Adjacent buildings on both sides of the square dictate the rhythm of the new structures creating both narrow and wide vedute.

Flat areas within the field of slopes organize spaces where people are likely to gather: In front of the entrance, terraces at the existing and new restaurants, the Heimplatzinsel next to tram and bus stops and the plateau at the foot of the Rämibollwerk.
Functioning of the square

The site is characterized by a set of lines between the existing Kunsthaus and Kantonsschule. The square slopes up and down parallel to these lines as if they are fault lines of a tension underneath the square.

The lines along Rämistrasse and Kantonsschulstrasse also represent isobars of an increasing density from the former to the latter. The superterranean structures maintain the alley-like appearance on one side while continuing the line of freestanding objects on the other.
The Design
8. Loos, Adolf, "Ornament and Crime", (Lecture 1908). Quoted in:
In: Schmidt, Petra; Tietenberg, Annette; Wollheim, Ralf (eds);
9. Ibid.
10. Colomina, Beatriz, "Privacy and Publicity: Modern Architecture as Mass
Actar, Barcelona, p. 11.
13. Ibid.
15. Gómez-Moriana, Rafael, "Everyday Camouflage in the City".
17. I have used the German terminology concerning the fortifications:
Bollwerk = bulwark; the pentagonal extension to strengthen the
fortification.
Schanze = sconce; rampart constructed of earth.
Graben = trenches or ditches, surrounding the fortification.
18. This chapter uses two documents accompanying the Kunsthaus
"Gutachten Archäologie und Denkmalpflege", (2006); Stadt Zürich,
Hochbaubeinortment, Ambt für Städtebau, Archäologie und
Denkmalpflege; Zurich.
G. Hager, K. Bachmeier, A. Lanz; "Gartendenkmalpflegerisches
Gutachten", (2006); Grün Stadt Zürich, Fachstelle Gartendenkmalpflege;
Zurich.
19. It should come as no surprise that "boulevard" is linked etymologically
to "Bollwerk".
Wirklichkeit". October 10th 2008 at
On top of this a structure is sought after reminiscent of the mansions and of the suburban housing continuing, as it were, the slope outside the former city gate. This new building becomes subtly imbedded within its urban context and pays respect to it without losing a character of its own.

NOTES
4. My description of "the façade problem" is based on an earlier essay on three Japanese tower houses. This essay was written in co-operation with Renze Evenhuis, Stijn van Gorp, Jasper Ponjee, Thorsten Schneider, Marieke Sijm and Dorien Treep.
6. Ibid. p. 42.
7. Ibid. p. 73.
4.4

Premises for designing the Kunsthaus extension

Concluding from the previous section, we can say that the master plan has a number of effects I deem undesirable. These mainly arise from the emphasis on the green belt. According to the preceding analysis it will rather divide than connect the city and the universities. It can also be argued that it overlooks the historic, 'cellular' lay-out of the slope by turning it into an alm-like meadow. Connecting this slope to the Turnplatz area means treating the former line of the fortification and the area characterized by its location between the medieval and baroque fortifications as equals. Although these fortifications have been leveled long ago they have formed the current situation and their heritage still defines it.

By disregarding Girot's master plan, my design is based on a different premise than the competition held for the extension. I have used the orientation resulting from the fortifications as a point of departure. Nowadays, this orientation is still clearly present in the perimeter defined by the existing Kunsthaus and the cantonal school. The Turnplatz former use as an athletics field has resulted in an open area in between the buildings, next to the Heimplatz. I have endeavored to continue some of this appeal of an essentially rural area within the urban context.
Kunsthau extension envelope as proposed in Girol's Plan City Campus
4.3

The Kunsthaus extension

Girot’s master plan extends along the Rämistrasse all the way to the Kunsthaus. The museum’s extension is incorporated in this plan, placing it at the former athletics field. The gymnasia would be removed from Zurich’s list of monumental buildings, and so are the grounds and gardens surrounding them. The northern part of the perimeter, the direct vicinity of the old cantonal school, is to be preserved and could function as an art garden in the future. Here, the characteristic terrace (the former Rämibollwerk) contributes to the schools monumentality; it provides the building with a dominant position as it can be seen even from the Heimplatz. This long line-of-sight, combined with the stair leading to the entrance, intensifies the axial orientation of the site (between the existing Kunsthaus and the Kantonsschule) and the frontal focus on the building. In Girot’s proposal, the condensed remains of the Turnplatz (i.e. the tree lined place below the stairs) would become part of the green belt discussed before. The immense size of the museum’s extension – a volume of around 90,000 m³ with an area of almost 13,000 m² – is primarily focused on the Heimplatz, which would profit from a more defined square space. A negative aspect inevitably connected to this is the damage done to the visual relation with the school building as the new building would block the view from the Heimplatz. Its presence would change from frontal to oblique, because it will be visible only from the adjacent streets. The new building would also isolate the open, green space from the square even though half of its volume is to be located below ground level.
This process resulted in the slope dotted with mansions surrounded by lush gardens. Girot's unification of the slope might be too strong a gesture as it would seriously alter the relation between city and 'campus'. Now, the slope functions as a filter, as it offers an almost ritual transition between the two. At the same time, this route brings them closer together, since they are clearly linked by it. Girot's plan would clear the area in a single sweep creating a void much harder to cross. Obviously, this would give the Hochschulgebiet a distinguishable identity, but at what price? The universities and their buildings would be further isolated rather than merging into the city. The façades of Semper and Moser towering above the city would turn into giant billboards: Mere visual representation of functions no longer present at the 'city campus.'
Top: Plan City Campus by Christophe Girot
Below: The Haus zum Rechberg between medieval Graben and fortifications
4.2
Plan City Campus

A 2002 competition for the Hochschulgebiet, the area containing the main campuses of both Zurich’s universities and the university’s hospital, was won by Christophe Girot and his Atelier for landscape architecture. The objective of this competition was to find a new identity for the area and its connection to the Altstadt by way of the Culture Mile, i.e. the Rämistrasse. Most of the educational facilities have been moved to other locations in the city, leaving the buildings devoid of their original identity. The Culture Mile is a concept to link the (now mostly cultural, i.e. museums, auditoriums) functions along the Rämistrasse in a gesture of the grand boulevard. Girot introduces another spatial change as well: To strengthen the idea of a campus, he proposes a continuous, green ‘belt’ along the southern side of the Hochschulgebiet. This garnish is projected on the slope between Altstadt and universities. Although it refers to the classic, enclave-like campus it seems out of place here: As stated in the project description, this area should serve pedestrian movement between city and the higher plateau.

Currently, the slope has a fragmented nature. This can be explained historically: Before the construction of the baroque fortifications, the area just outside the medieval wall was used as farmland. When it became enclosed between the two lines of defense its character changed from agricultural to more refined as Zurich’s well-offs (who largely financed the fortification) started settling here. The Haus zum Rechberg with its terraced gardens is a good example of this.
The Heimplatz and adjacent structures have been adapted considerably over the years. The Turnplatz, however, has been preserved from such alterations: It has always served as a counterbalance to the Heimplatz with its more laid-back atmosphere. The gymnasium, built in 1880 and 1901, and the barracks have replaced the sports field but the area has maintained a calm, open, park-like character within the city.
Top: Nineteenth-century turnplatz as athletics field
Below: Rämibollwerk, Schanzen and Graben in 1834, E. Schulthess
Location between medieval and baroque fortifications shown on the 1824 Kellerplan
This project is located just outside the medieval city wall, but within the baroque fortifications built in the seventeenth century. Their demolition, after 1830, cleared the area for large-scale construction along the Rämistrasse. The orientation of this road - and the nineteenth-century buildings along it - is determined by the terraces and slopes compiled with soil from the former ramparts. These developments can easily be recognized in the university buildings of both the University of Zurich (UZ) and the Eidgenössische Technische Hochschule (ETH).

The Rämistrasse was built on the lower side of the fortification, where the Graben used to be. The Kantonsschulstrasse defined the inner boundary of the ramparts. So, the Kantonsschule and the Turnplatz, the location of the school’s gymnasium, have been built exactly on top of the former fortifications. The school owes much of its monumentality to its base, the leveled Rämibollwerk.

The Heimplatz is one of the squares replacing the medieval city gates: Central, Bellevue, Paradeplatz and Heimplatz all became bustling nodes in the extending city and the connection between Altstadt and the expansion. The importance of the Heimplatz has been emphasized by the buildings surrounding it, such as the Pfauen theater complex and, since the 1910s, the Kunsthau. Due to its position, the square has also become a central point in the city’s tram network. The small waiting-room/kiosk is an effect of this.
This technique relies on an extreme separation of both sides of the façade: Conceptually, the inside is based merely on interior considerations, the outside is entirely contextual and without even the slightest reference to the existence of an interior. The reflecting façade mimics its context in an extremely exact manner. Without the need for an architect's hand it is not an interpretation but a pure, undiluted image of context.

In a way it uses the building's surrounding to cause an affect as discussed by Farshid Moussavi: It deploys history as to arouse emotions (of nostalgia perhaps) with its beholders. Can this also be made operative as a means of ornamentation?
3.2
The urban conversation

A healthy, living city is defined by the conversations taking place there: Conversations between people but also between buildings and between epochs. In Zurich, this conversation has effectively been silenced. Recent additions either borrow heavily from adjacent buildings or use an extremely reserved architecture. Both withdraw themselves from the urban conversation for they do not add to it. It is as if Zurich's historical context paralyzes and has a vocabulary of reticence as an architectural effect.

When put to the extremes, façades stemming from internal consideration (such as structure, function, etc) can result in self-centered buildings. Such celebration of engineering can be found in the curtain wall, which diminishes the façade to a mere sheet of glass. Its transparency results in a overly talkative façade by making the interior immediately readable from the outside. If we consider the city as a conversation between buildings, the curtain wall is an element which never listens but merely speaks. Interestingly, glass is not as transparent (anymore) as originally envisioned. Recently, the unintended side-effect of reflection has been utilized to create buildings reflecting their surroundings. These buildings merge into their context by deriving imagery like a chameleon.
This process has been halted in Zurich’s city center. Instead, Zurich has successfully conserved a city center with an appearance based on an obsolete logic, i.e. the logic of an archaic city life of habitation and production powered by man- and horsepower. Maintaining the premodern image has been an immense effort and an immensely costly and technically challenging one as well. Its solution for the question of dealing with historic appearance and modern functioning can be seen as a postmodern one. It is even possible to regard the center as a collection of decorated sheds, consisting of existing buildings. The ‘decoration’ in this has been formed by history and is already present; the ‘shed’, the interior, is vacant like an empty shell for a hermit crab.

Let us look into this analogy a little further: The shell offers protection to the hermit, like the urban shell houses modern function. The hermit, in return, gives new life to a deserted shell. Similarly, the modern interior guarantees a dynamism to the old city as it attracts visitors. Effectively, the center would die without this. And this is where the analogy is flawed: The shell is inanimate; a city should be full of life.

As a theoretical introduction to this project, the concept of parasitic architecture has been investigated. Karel Steller and I asserted the inappropriateness of this concept considering the absolute negativity and egocentricity of the parasite in biology. Parasitic architecture simply is an impossibility as architecture is positive and creative by nature! Looking at Zurich’s center from the point of view of biological analogies - in the form of symbioses, close associations of organisms - does raise some fascinating questions: Does Zurich keep its historic center alive by a subcutaneous injection of modernity? Or is it the other way around and are the contemporary functions abusing the nostalgia caused by image of authenticity?
3.1
Possession of the façade

Rafael Gómez-Moriana claims that the postmodern practice of "disjunction [...] between what a building contains and what it 'looks like' it contains" can have the characteristics of camouflage when applied to make buildings look like their surrounding and thus vanish into it. It has been a postmodern ideal to establish or recreate the harmonious cities as existed in pre-modern times. He makes an important point in asking to whom the façade belongs: "...to a building, or to the public space that it faces? For many citizens, the face of a building is an immutable aspect of the collective memory of the city."

The idea of a collective memory of a city, culminating in the ideal of the harmonious city, stems from another postmodernist, Aldo Rossi. His "The Architecture of the City" is an appeal to a more considerate attitude towards the existing urban context. His quest for a continuous practice of urbanism (responding to the modernist 'tabula rasa') led to the introduction of the notion of 'permanency'. Lasting elements, the monuments, connect the city's past, current and future. Rossi's theory was never intended to be conservative though: Permanent elements ensured the continuative nature of the city; dynamism was taken care of by the more ephemeral areas of dwelling.
The postmodern contradictory attitude did once again open the ornament as a means of expression in architecture. In a compelling essay Farshid Moussavi makes a plea for the ornament as a necessity in architectural communication. This communication through "mechanisms by which culture can constantly produce new images and concepts" links architecture to culture. Postmodernism's failure in creating a language of symbols forces Moussavi to bypass this codifications by returning to the Sullivanian ornament; an ornament consistent with the interior because it grows from its "material organization and is inseparable from it." Its communicative abilities can be found in the affects and sensations it creates. These ornaments, however, make no attempt at signifying anything for they shift communication towards their beholder: Affects and sensations are defined by a subjective nature and can vary per person or even per observation. This aspect is essential in the current ornamental revival as it makes their interpretation fluid compared to the inflexible message of symbolism. It is my conviction that this contemporary ornamentation with its subjective appeal is a serious challenger of Zurich's practice of prevailing historicism in architecture.
Modernism's notorious inability of monumentality may be related to absence of a Loosian screen to project meaning onto while simultaneously containing an interior. One of Postmodernism's reactions towards modernist austerity has to do with these limited possibilities for representation. Venturi and Scott Brown's idea of the 'decorated shed' is exemplary for the postmodern break and "contradiction between space, structure and program on the one hand, and representation on the other." Their architecture of 'signs and symbols' proved to be short-lived as the difficulties of a common language became apparent. The postmodern relation between signs and signified has not always been as clear to the wider public as envisioned by the architects. Besides, the emphasis of reuse or reinterpretation of existing symbols meant a serious limitation of the postmodern vocabulary.
Beatriz Colomina has described this difference between exterior and interior by using the idea of the wall as a mask: On the public side the wall speaks “the masking language of information,” “the language of civilization”\textsuperscript{10}; the other side speaks “the language of experience of things,” “the language of culture.”\textsuperscript{11} In public buildings these two are interchangeable, but for houses the outside has to practice reticence to allow for the intimacy of the inside. Somewhere in between the two faces we can find the screen, the “mechanism of difference”. Both languages are projected on their side of the screen without influencing or depending on each other. The screen functions as an independent medium.

For long, architects have continued to refrain from using ornaments. The modernist ideal of transparency, however, goes against Loos’s separation of interior and exterior by the masking wall. Transparency means getting rid of two disjointed sides and merging them into a single image. Opposite to Sullivan’s ornaments, indirectly symbolizing and expressing an interior ‘truth’, transparency is an attempt to express structure and program in the most direct way possible: The visual. With function readable on the outside, a representing language was no longer required.
Adolf Loos, familiar with Sullivan's work and theory after living in the United States, rejected ornamentation for most architecture. His argumentation is based on the distinction between the crafts and the arts, between “the objects of everyday life and imaginative works of art.” According to Loos, mass-produced ornaments did an appeal to the idea of ‘art’ (the creation of the new and the unique) where, in most cases, architecture should not refer to such an expression of individuality by any artist. Art in architecture could exist only in works concerning the collective memory: The monument and the tomb. In his own work, this division of monumental and habitual is most apparent in the Viennese ‘Looshaus’: This building combines a commercial function – a cloth store – and apartments in a single shell in an urban context. Loos decorated the lower floors apt to their commercial nature, but disposed all ornamentation in the private floors following Sullivan’s memorable motto. His treatment of exteriors of private space displayed a clear message in the discussion about the façade: Representation in the public realm was to be reserved for those buildings with a collective function; expression of identity of the individual should be concealed within the interiors. In “Ornament and Crime” Loos's despise of décor becomes apparent: “Evolution of culture is synonymous with the removal of ornamentation.” Therefore, ornamentation as decoration signifies the inability to display a civilized control and is thus a “sure sign of degeneration of society.”
Top: The Auditorium Building, Chicago, Adler and Sullivan, 1886-90
Bottom: Looshaus, Vienna, Adolf Loos, 1909
interiors this closely before: Traditional, representative façades are a very indirect way of bringing interior into the exterior, public space since they only represent or symbolize this interior.

More specifically, the "problem" Colquhoun pointed at can be found in the difficulties architects had in dealing with the dominance of the structural skeleton. Should this highly functional feature be left in plain sight and be expressed in the appearance of their buildings? The first experiments in high-rise architecture of the Chicago School were still influenced by more traditional ideas about composition, like the ones found in the Italian palazzi. A classic, tripartite organization of the façade "had the merit of presenting to the street a complex, contrapuntal texture capable of being read as part of a continuous urban fabric." This citation refers to Louis Sullivan’s Auditorium Building and shows his awareness of the "danger to urban unity" posed by an excess of structural expression and subsequent neglect of context. To Sullivan, originally an ornamentalist and designer of façades, the ornament played an essential role in the appearance of his buildings and the way they related to their surroundings: As an extension of structure, he did not consider ornamentation as merely embellishment but as expression of this structure. They were, however, used to emphasize the individuality of the buildings too.
This chapter briefly discusses the development in architectural attitude towards the separation of public, exterior space and interior space. The way they relate to each other has changed substantially with the different paradigms. The subject of “the façade problem” has been mentioned by Alan Colquhoun in his essay ‘Rules, realism and history’.

According to Colquhoun this “problem” is to be found in the discrepancy between the modernist dogma ‘form follows function’ – the exterior as an expression of internal organization – and the traditional façade as an element of representational nature.

Colquhoun connects the rise of this question to the situation in Chicago in the 1880s. Traditionally, composition relied on an external set of rules (symmetry, hierarchy, ornamentation, etc) based on conventions passed on through the École des Beaux-Arts. Buildings that needed the involvement of architects were also the ones in need of representation of authority or of community, such as churches, palaces, theaters, and museums. This representation was intended for the direct vicinity and was supposed to be seen and understood by its citizens.

The introduction of steel as a structural material, taking away the load-bearing function of the façade, led to a paradigm shift: The engineering of the entire structure would now dictate the composition of its façade. So, mechanisms of the interior rather than external forces create the appearance of a building. Internal logic seeps into the public space which has not been confronted with
Top: Entrance to ShopVille
Bottom: ShopVille interior
Zurich is such an extreme example because the old and the new never seem to meet each other. The rationality that united interior and exterior in the historic city has been replaced by two distinctively different realms. This means that Zurich's center can be experienced from two perspectives: The exterior gaze meets centuries-old stone, while on the interior a parallel reality of entertainment and fun has been created without any reference to an outside world. This interior is epitomized in ShopVille, the multi-level, subterranean shopping center connected to the main rail station. These parallel experiences of interior and exterior make Zurich unique: No other city has separated history and current more thoroughly.

Exterior and interior exist simultaneously but they can never be experienced in a single moment. Moving from one to the other involves a clearly defined transition. The realms of exterior and interior have only one boundary in common, one adjacent surface: The façade. This façade functions both as bearer of history and as container of modernity, but it never shows this ambiguity. ‘Functioning as a container’ also implies that the façade is used to hide modern additions from the view. Without proper research into this topic I will not venture upon an explanation for this urban conservatism, but it is safe to say that it has been a very conscious, political decision to prefer the Sittean image of the city over a modern one: A laissez-faire attitude towards modernization would inevitably have led to a more significant visible presence of newer structures within the center.
Rem Koolhaas stresses the importance, and the paradoxicality, of this centrality in 'The Generic City':

"The insistence on the center as the core of value and meaning, font of all significance, is doubly destructive – not only is the ever-increasing volume of dependencies an ultimately intolerable strain, it also means that the center has to be constantly maintained, i.e., modernized. As "the most important place," it paradoxically has to be, at the same time, the most old and the most new, the most fixed and the most dynamic; it undergoes the most intense and constant adaptation, which is then compromised and complicated by the fact that it has to be an unacknowledged transformation, invisible to the naked eye."²

It comes as no surprise that Koolhaas mentions Zurich as the most radical example of this paradox. As a prime example of a once-fortified city, its dense center originates from the limited availability of space within the city. The city's size has historically been restricted by its defensive walls, moats and ramparts built to maintain its status as an independent city-state. Demolition of these fortifications has not led to any significant changes within the existing urban fabric. Rather, expansion happened outside the former city edges leaving the center as "the most old and [...] the most fixed."

As in many cities, the center has become a place of leisure: This is where one goes for cultural experiences (theaters, cinemas, museums), (fun)shopping, joining friends for a drink in a bar or dining out in a restaurant. These functions are generally defined by their ephemerality; they constantly need to change and reinvent themselves in order to continue to be entertaining. Therefore, the center is "the most new and [...] the most dynamic."
1.2

The interior/ exterior dichotomy

The discrepancy between (visual) image and functioning of the city is not unique to Zurich: Most historic cities have been challenged to find a way of dealing with the combination of a pre-modern image and modern, functional demands. Their centers are characterized by “high density and tight mix of building functions” typical for civilizations depending on pre-industrial sources of energy, transportation and communication. Modernization and industrialization of the society did not affect the appearance of the center, but it did change the functioning of the city as a whole. Rapid growth has created peripheral areas depending, and focused, on a center. In fact, the creation of periphery has made it possible to define the center as an entity. Production and dwelling have moved away from their former location into the peripheral expansion leaving the center open to new developments. Much larger urban areas now depend on these centers as locations of gatherings of people, products, businesses, etc.

As places of gathering the centers have gained immensely in importance. The deprivation of places of living and production, however, has radically altered them from ‘places to be’ into ‘places to visit.’ Historically, the center has been the city (in its entirety), now it serves as an image of the city. It provides identity to the more generic urban area surrounding it.
Top: Urban stage sets
Bottom: Section from Müllerplan, 1793
Top: Urban layers as a décor
Bottom: Live Maps Aerial, 2007
1.1

Picture postcard urbanism

As a prelude to this project, my fellow students Jouri Kanters and Mark van der Net and I have analyzed the situation at Eidgenössische Technische Hochschule’s (ETH) and the University of Zurich’s (UZH) oldest areas, their breeding ground, called “city campus”. In this analysis we came across an urban phenomenon we decided to call picture postcard urbanism. This term first emerged in our minds while standing on the renowned Lindenhof and looking toward the main buildings of ETH and UZ. To us, with a tourist gaze at that time, the city we saw consisted of clearly defined stages. Starting from the river Limmat, we could see the historic center, then a steep sloop on top of which the universities are located finally followed by the hills as a background. All of these layers have their boundaries separating them from each other.

It struck us that this view must have been the same for ages since none of the buildings appeared particularly modern. What had happened to this part of the city to make it look like a nineteenth-century freeze-frame? While walking through the area we could only see from afar before, we did however discover newer structures, but they had been hidden from the tourist view by their location either behind or under the historical buildings. The monumental mise-en-scene, with voids or gap space between its theatrical layers, ensured its future existence by strictly quarantining the modern props within these invisible gaps. Exactly like the props create the stage set, they are an absolute necessity to make the spectacle happen.
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while the other illustrates the museum as an archetype and its demanding program. I realize that this means a severe separation between the two views, but I feel that this is the right structure for presenting this project. Its binary, opposing logic corresponds to the radical contradiction between interior and exterior found in Zurich, but it offers the possibility of a more subtle relation as the description progresses. I will, however, not try to tie them together with rhetoric: The middle section is where I show how the design for an extension to Zurich’s Kunsthauz combines and connects the storylines into an architecture that unifies the contradictions without diminishing either one.
INTRODUCTION

Top: Niederdorf’s exterior
Bottom: Niederdorf’s interior
INTRODUCTION

The exterior is all about history, focus on a harmonious image of the city and could not be more contextual. Paradoxically, the contextual restrictions the exterior suffers from mean the ultimate liberation for the interior as neither expression, nor perimeter limits it in any way. Its forming principles have to come from within rather than from without.

To explore these perspectives with the design for a museum extension was prompted by an existing, ongoing competition for Zurich’s Kunsthau. This museum is located in an area heavily influenced by the interior/exterior dichotomy. The suitability of this function can easily be substantiated: Historically, the museum has been characterized by a representative exterior and a neutral interior focused on displaying art. The museum creates a pedestal for the art because art wants to be seen, it craves publicity. At the same time, the museum functions as a shield, protecting art by giving it a scene. The museum therefore has to give shape to the ambiguity between inside and outside.

The punctuation mark "/" in this project’s title refers to Eisenman’s and Derrida’s use of the separatrix. In mathematics, it is used to describe the mark of division in fractions. Its analogy in architecture proves to be fruitful, as it simultaneously functions as a mark of connection: it joins numerator and denominator into the unity of the fraction. To question Zurich’s paradigm means developing a critical attitude towards the extreme interior/exterior dichotomy. Most importantly, destabilizing the boundary between inside and outside aims at raising awareness of its existence rather than accepting it as a given.

The two perspectives have had their impact on the physical form of this report as well. Flipping this booklet will unveil another front page. One side describes the contextual aspect more extensively,
Introduction

For a first time visitor Zurich comes across as an idyllic city with a rich history. The old city appears to have survived the ages remarkably well, turning into a great tourist attraction. At the same time, Zurich has changed into a modern city which is very much part of the contemporary economy's global network. Zurich's position in this network, especially its leading role in the world's monetary industry, has created an ever-increasing demand for space. With the historic center protected by strict zoning laws, an upwards expansion (i.e. high rise) simply was out of the question. Instead, the city has grown downward: At certain places there are as many - sometimes even more - floors to be found in subterranean expansions as there are visible to the exterior gaze. On top of this, modern structures have replaced many of the original interiors. Contemporary life takes place in this interior world.

In this thesis I will present my project "Super-/Subterranean." Its subtitle "exploring context and interior autonomy in an extension to Zurich's Kunsthaus" indicates two entries for this project: one from an exterior perspective - context - and another from an interior perspective - the interior autonomy of a museum extension.

The idea of Zurich - its historic center to be more specific - as a modern city within a classic appearance has been the starting point for this project. Interior and exterior share their genesis but have developed virtually independent over the last decades.
View along Rämistrasse
Flächen und Bekrönungen
The roof/square
Perspectives and sections 1/500
Separatrix
Visualization of the former gymnasium
Visualizations of the multi-level entrance lobby
Visualization of the lobby's subterranean level
View from the restaurant
Diagrammatic connection
Horizontal sections
Top view without roofs
Visualization of the educational poché
Visualization of a superterranean exhibition space
Visualization of a transitional space
Visualization of a subterranean exhibition space
Visualization of the lobby to the conference rooms
Model of the subterranean structure
Formal genealogy
Autonomous system
Form defining system

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31 4.2 Plan City Campus
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36 4.4 Premises for designing the Kunsthaus extension

The Design

Functioning of the square
Superterranean structures
Formal genealogy
Model at city scale
Model of the superterranean structure
View along Kantonsschulstrasse
Super-/Subterranean
exploring context and interior autonomy
in an extension to Zurich's Kunsthau

Master's thesis project
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