

# PLACE-ACTIVATOR

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## Seven Architectural Interventions in the Port of Trieste

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Prof. Boštjan Vuga

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# Editorial

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Boštjan Vuga

PLACE-ACTIVATOR is the second in a series of four PLACE-STUDIOS conducted at ADIP – the Architecture Design Innovation Program at the TU Berlin.

The common denominator of all studios lays in the design and development of singular architectural objects that function as carriers and catalysts of change in their larger urban area. Architectural objects designed in this fashion do not only fulfill the contextual, programmatic and functional requirements of a project brief, but also add value to the development of the immediate surrounding. This can be observed in the usage and experience of their architectural space, both by the individual and society. The architectural objects' final stage is reached when they begin to impact and even change society in a narrow and broad context.

The PLACEHOLDER studio (winter 2011) dealt with temporal architectural objects – pavilions that stand on the sites of future building developments. The students designed 13 pavilions on 13 specific construction sites in Berlin. Each PLACEHOLDER, as an initiator and generator of new public space, programmatically related to the future development of its site. As relatively small architectural objects, the

PLACEHOLDERS were designed to add value to the architectural object by creating public space. Together, they established a dynamic new network of public spaces in Berlin – the city known for its constant state of becoming.

This semester's PLACE-ACTIVATOR studio has similar starting points. It also focuses on the catalytic and generative strength of individual architectural objects that impact the change and function of the broader urban tissue.

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## Trieste City Places

The Italian coastal city of Trieste was the chosen location for the PLACE-ACTIVATOR studio. Its urban center is diametrically opposed to the urbanity of Berlin. Demographically speaking, Trieste is an old city that has seen minimal change in its urban structure over decades. Simultaneously, Trieste is culturally rich due to its intricate location at the crossroads of Latin, Germanic and Slavic cultures. It is a city with atmospherically intriguing and unique micro ambiances. Located between the sea and the hilly backdrop, Trieste overwhelms you with its beauty and thrills you upon seeing its urban development potentials.

## Port

Paradoxically, the main factor that inhibits the city's current development is the same one that contributed to its development in the past: the seaport. It stretches along the city's coastline and almost entirely cuts the city off from the sea (with the exception of the area near Trieste's main square). The physical access to the sea is prohibited by the seaports' different property and management structures. The seaport is made up of a deserted old seaport (Porto Vecchio), a functioning new seaport (Porto Nuovo) and an industrial seaport (Porto Industriale).

### Singular Architectural Objects

The PLACE-ACTIVATOR studio proposes seven singular architectural objects on seven key locations within the old and new seaport. The locations vary according to accessibility and their implementation in the city's urban fabric. The proposed program for each object considers its specific location. Each location offers a diverse program that focuses on public space in order to attract visitors and citizens and contribute to the activation of object's location.

The seven objects cover: a research center, a regatta center, an info center, a spa and wellness center, a landscape bridge, a port authorities tower and a start-up center.



The singular architectural objects are planned and designed to open the seaport and reconnect the city with the sea. Each object has a surface area that opens to the city on the one side and to the sea on the other. The transition through an object is designed to be as smooth as possible. Each object's inner organization allows for multiple and atmospheric micro ambiances that create rich spatial experiences. The early stages of the design process focus on the activation of urban development within the objects' immediate surrounding. The future stages of development propose a transformation of the city's entire structure through the interaction of all seven singular architectural objects.

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## Border

**Boštjan Vuga**, born 1966 in Nova Gorica, Slovenia, studied at the Faculty of Architecture in Ljubljana and continued his post graduate studies at the Architectural Association

School of Architecture in London. In 1996 he and Jurij Sadar cofounded the architectural office SADAR+VUGA in Ljubljana. Currently he is the guest professor at ADIP at the TU Berlin.

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## City

The objects follow a series of design questions:

1. How must the singular architectural object be planned and designed in order for it to become a PLACE-ACTIVATOR?
2. How should the PLACE-ACTIVATOR be implemented in a location so that it becomes attractive and the transition between it and the surroundings as permeable as possible?
3. How can the facade be designed for it to allow multiple transitive spaces between the inside and outside area while projecting its inner activity to the outside?
4. How does the interior need to be organized for the corridor to serve as a continuation of the city's public promenade?

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### Porosity

The studio began with the introduction of 'porosity' as an architectural principle and common design technique. It included site porosity, external porosity and internal porosity. Case studies on porosity lead to a general understanding of how the abstraction of spatial models can be used as the basis for design. This spatial design concept leads to volumetrically, organizationally and operatively porous architectural objects. It

avoids the visual and formal replication of structures found in nature. Instead, it challenges the spatial effects of porous architectural objects and their ability to impact urban development.

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### Urban Speculation

The studio concluded with 'urban speculations' - scenarios that speculate the impact that porous PLACE-ACTIVATORS may have on a city's urban fabric. They project new spatial sequences and possible urban events in the future. They are a post festum urban analysis and an indicator of the catalytic strength of porosity. The studio emphasizes design-based research in form of urban speculation. The PLACE-ACTIVATORS not only become indicators of the Trieste's architectural fabric in the future, but activators of the city's development. Architectural design is a starting point for urban transformation!

















Nº2<sub>a</sub>

Nº2

# Trieste Needs Trieste!

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Roger Riewe

'New York needs New York.' This was Peter Eisenman's reply after he was asked by former New York Mayor Rudy Giuliani to create a special building for New York that would generate a 'Balboa effect'! Peter Eisenman was not quite sure if Rudy Giuliani really meant the 'Balboa effect' - hereby asking for double fist power - or if he mistakenly meant the 'Bilbao effect.' So in his polite and intelligent reply Peter Eisenman came up with a spontaneous reaction to try and convince Rudy Giuliani that 'New York needs New York' - no more, no less!

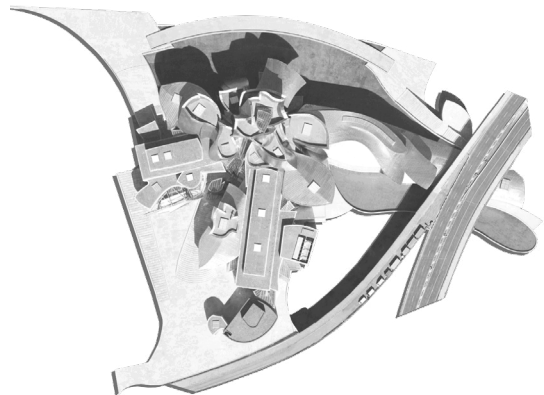
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## Bilbao Effect

Can architecture alone be strong enough to be a PLACE-ACTIVATOR or are there other assets necessary to make a project with this challenge successful? When contextualizing Frank O. Gehry's Guggenheim Museum in Bilbao and Richard Florida's The Rise of the Creative Class we are able to develop a number of important criteria for PLACE ACTIVATION. A positioning in city centers, a close proximity to seas, lakes or rivers, an innovative architecture and a provocative appearance are important aspects to begin with. Then there is the program, which questions if the to be designed project can re-attract its visitors and not just the one-stop-shop

tourists, who do not contribute to a sustainable city development. It is known that after three years its program has to be stronger than its appearance in order to make visitors come back! After this time period all potential visitors have visited the iconoclastic building of their desire. At this point other levels of attraction have to fall into place. The Bilbao effect only works for second row cities, but not for New York, London, Paris or Tokyo.

Generally, we may claim that the risk taken in Bilbao 1997 has paid off. Bilbao had 10.000 visitors per month before the Guggenheim Museum was built. After its opening, Bilbao was visited by approximately 80.000 tourists per month from 1997 to 2007.

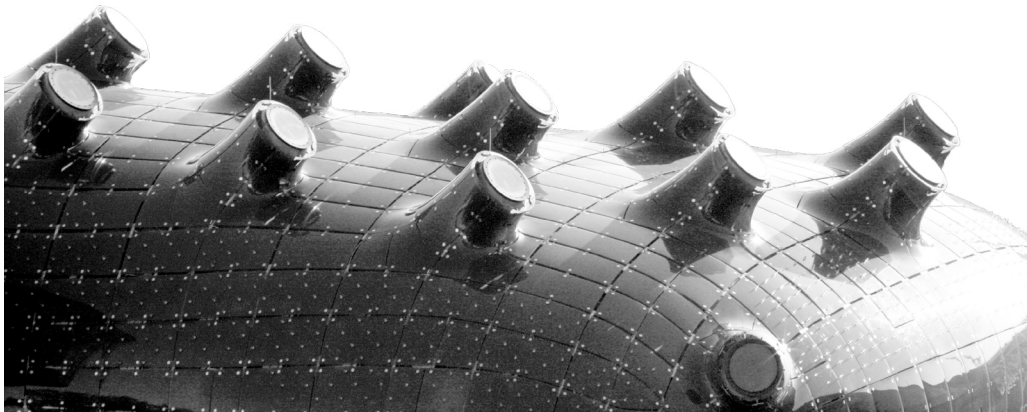




**Roger Riewe**, born 1959 in Bielefeld, Germany, graduated from the RWTH Aachen School of Architecture in 1995. In 1996, he and Florian Riegler cofounded

the architectural office Riegler Riewe. Since 2001, he is professor and head of the Institute of Architectural Technology at the Graz University of Technology.

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### **Kunsthhaus Graz**

Iconic museums, like Steven Holl's Museum of Contemporary Art KIASMA in Helsinki, were less successful. It belongs to a group of projects that had the Bilbao effect written in their briefs, but only managed to position themselves with moderate success. Another example of this sort is Peter Cook's Kunsthhaus in Graz. It was implemented when Graz was the European Capital of Culture in 2003. The number of visitors rose considerably that year. However, this was hardly due to the actual Kunsthhaus, which was only inaugurated by the end of 2003. The number of visitors dropped considerably the following year. Nevertheless, it can be claimed though that there are other side effects which paid off for the city of Graz. One example was the right decision to locate the new Kunsthhaus on the 'wrong' side of the city. It triggered a moderate gentrification in this run down area while re-connecting both parts of the city that are divided by the river Mur.

So the Graz Kunsthhaus' manages to open the door with its central location, placement next to the river, its apparently innovative architecture and its provocative appearance. Concerning the program, its budget may be too small. It takes blockbuster events to keep the number of visitors high. However, being European City of Design 2012 was a remarkable side effect!

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### **Place-Activator**

Searching for PLACE-ACTIVATORS means searching for innovative projects that provoke while providing a program, which has the potential to make visitors return more than once. The sites chosen in Trieste are all near the sea and in the center of the city. A good project doesn't need a signature architecture or be iconoclastic in terms of design strategy, but should have the quality to become an icon in the future.

The table is set: Trieste needs Trieste!

# No, we can't Trieste's Harbor: Identity and Vocation

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Gian Paolo Venier

In order to understand the city's harbor system, a few historical and legislative implications must be reflected upon. Trieste's advantageous geographical position massively contributed to the economical, and political identity of the harbor. The Habsburgian port was of strategic importance. It was the Austrian Empires only access to the sea.

The workshop at the TU-Berlin focused on Trieste's 'sistema porto' (harbor system) – a combination of the abandoned Porto Vecchio (the old Habsburgian port) and the Porto Nuovo (new port). Bureaucratically speaking, the harbor is a 'porto franco' – a duty free port divided into five different spatial units, where different taxes apply than in other Italian harbors. This advantage makes it more competitive and appealing to trading companies because goods are not taxable until they are sold. It's been the key factor to the harbor's success for decades and has lead to its decadence.

For this reason Trieste's Porto Vecchio has come under a lot of scrutiny. What is to become of the harbor now that it's almost entirely abandoned? How can the area be transformed and upgraded? How can the legislative problems that hinder a future be solved? These debates and struggles began more than a century ago and are very well summed up by a local

way of saying 'no se pol' (no, we can't). It's this mentality, which is the true obstacle to a prosperous future of the city.

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## From Warehouse City to Trade City

We have to thank Maria Theresia, the beloved and visionary Habsburgian empress, who began to rule in 1740. She was the first to recognize the importance of Trieste's harbor for the empire. We shouldn't forget that Trieste came into being due to the harbor. Not the other way around. It was the port's trade that allowed the city to grow and flourish. It became a second Wien – a modern melting pot. Its multi-ethnic society is still visible today in the city's synagogue as well as Greek and Serbian orthodox churches. They are urban symbols of an open, busy and tolerant city.

It's image of a warehouse city came from the Borgo Teresiano neighborhood. Planned and built along the regular axes of the ancient salt pans by Maria Theresia. Business prospered. Warehouses, workshops and depots flourished along residential buildings. The harbor created an entire urban grid in Maria Theresia's early years. Not until later did the thriving harbor push workshops and warehouses further back. It went from being a warehouse city to becoming

**Gian Paolo Venier**, born 1970 in Trieste, Italy, graduated from Università Degli Studi di Trieste. Since 2011 he has

been a teaching assistant at the Diritto Amministrativo e Urbanistico at the Università degli Studi di Trieste.

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a trading city. This was a big step forward that occurred in the transition from Maria Theresia's reign to that of the new emperor, Franz Joseph. Under a lot of protest, the emperor announced a competition for the new harbor, which we now call Porto Vecchio. The bourgeoisie strenuously opposed the change that came with the planning of the new harbor. They feared a loss of power and privileges. However, on January 27th 1863, Franz Joseph finally declared Südbahn, the powerful railway association, the competition winner. Südbahn's engineer, Paul Talabot, had previously planned the harbor in Marseille. The contract was signed in 1867 and was planned to be finished by 1873 for 26 million crown. But the construction lasted an additional ten years, costing an additional three million crown. It was more of a logistical problem than a the failure of the precise and efficient Habsburgian management. The bottom of the sea was muddy which made it difficult to install the pillars. The main obstacle however, was political. The city strongly resisted the new project.

United for the first time, Trieste's citizens, its press, the Chamber of Commerce and the Stock Exchange protested and rallied in November 1862 to save Trieste from the danger of becoming a mere trading city. But the construction continued and Trieste (with its new railway con-

nection to Wien) flourished rapidly. The 24,000 inhabitants of 1809 grew to 250,000 in 1914 and in terms of traffic, became the fifth most important harbor in Europe.

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### A Faraway Land

Silvio Benco, a local journalist and writer, wrote lyric pages about the harbor in 1910. To the incoming sailors he would describe Trieste as 'a panorama city, marvelously white, a happy parasite'. But to all the Triestini he would describe the harbor as a 'paese lontano' – a faraway land in 'chaos and fever' with its own rules, boats and cranes: 'The free port, the trading city is absolutely divided from the city of arts, of politics, of literary cafés and pubs...'

This should be kept in mind when thinking about Porto Vecchio's possible future. It has always functioned as a separate entity from the city. The architectonically beautiful warehouses were meant for goods and not people. Recently, one of the warehouses (Magazzino 26) was restored and reused for art exhibitions. The transformation of the warehouse shows how difficult it is to rethink a space that was initially built to fulfill very different technical and spacial requirements (e.g. light and air) than those needed for residential and office use.

Trieste is a city and seaport in northeastern Italy. Situated towards the end of a narrow strip of land it lays between the Adriatic Sea and Italy's border with Slovenia. Throughout its

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history Trieste is has been influenced by its location at the crossroads of Germanic, Latin and Slavic cultures. Currently it has a population of about 205,000 inhabitants.

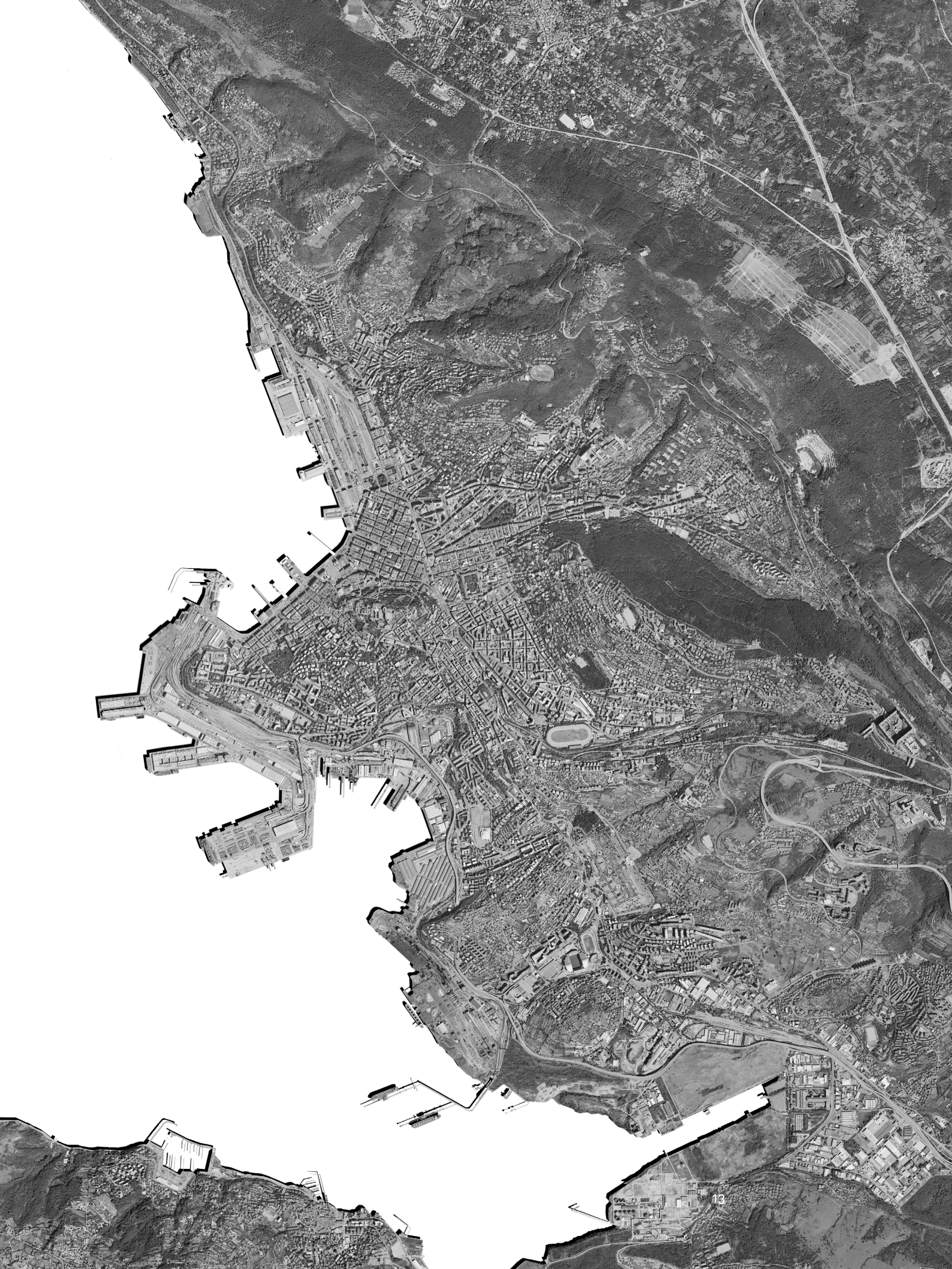
One possibility would be to reuse the warehouses for the sailing profession: the old warehouses could easily be converted into marinas with shops for boat-maintenance and other workshops. However, the problem is a legislative one and not merely an aesthetical or urban one. Porto Vecchio remains a duty free port that is virtually impossible to enter freely. The Guardia di Finanza (the local custom and border police) controls the area. The only option would be to strategically move the porto franco to another location. In 2007 the engineer Barduzzi developed a master plan for the Porto Vecchio. It was approved in 2010 but still requires political endorsement for it to be realized.

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### **Where To? - The Future**

In the mean time, Porto Città (a network of investors) has won the concession for the whole area. It was approved by the Harbor Authority and implies a sub-concession to other parties. These other parties could well be Trieste's world famous International Centre for Theoretical Physics or the University of Trieste with its science community. Could Porto Vecchio become a scientific hub and new platform for knowledge? Trieste has not yet positioned itself on this matter because it has been wrapped up in the same local quarrels since 1861!





# Site Mapping Seven Interventions

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## **PA.01**

Research Center  
Dora Ivanova  
Leópolð Kristjánsson

## **PA.02**

Terrazza Barcolana  
Ole Klingemann  
Caspar Kollmeyer

## **PA.03**

Entr(eg)ance  
Danil Chekushkin

## **PA.04**

Spa More Al Mare  
Linda de Geus

## **PA.05**

Sea Bridge  
Anna Mohn

## **PA.06**

Office Tower  
Martha Zarco Letzel

## **PA.07**

The Thindock  
Bastian Pfister  
Mirko Endler





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01

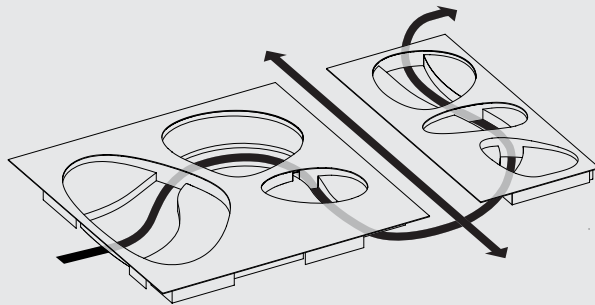




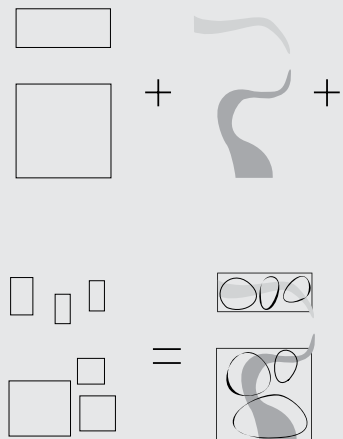


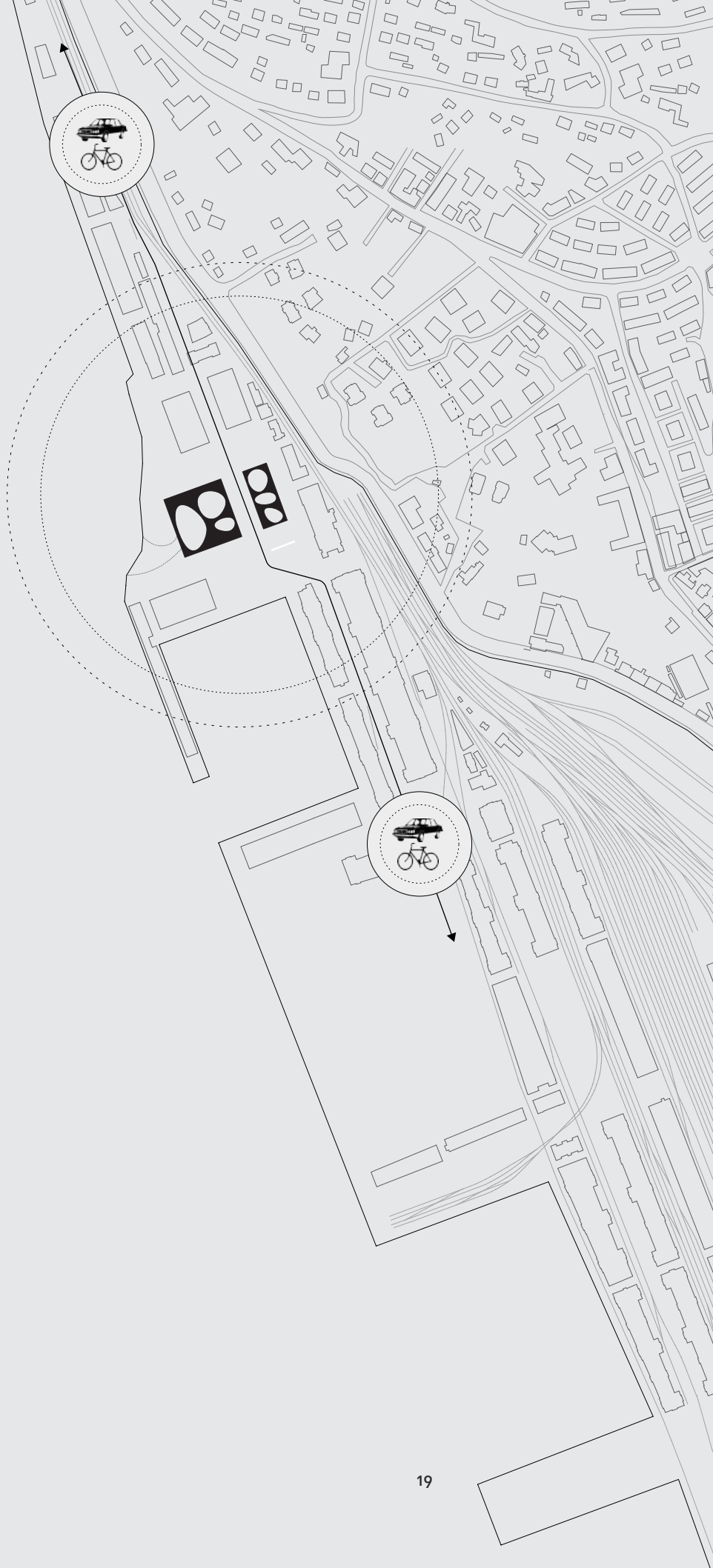
# Research Center

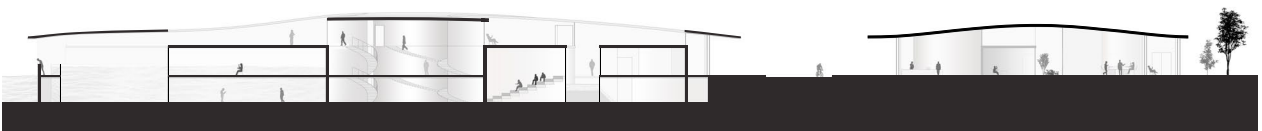
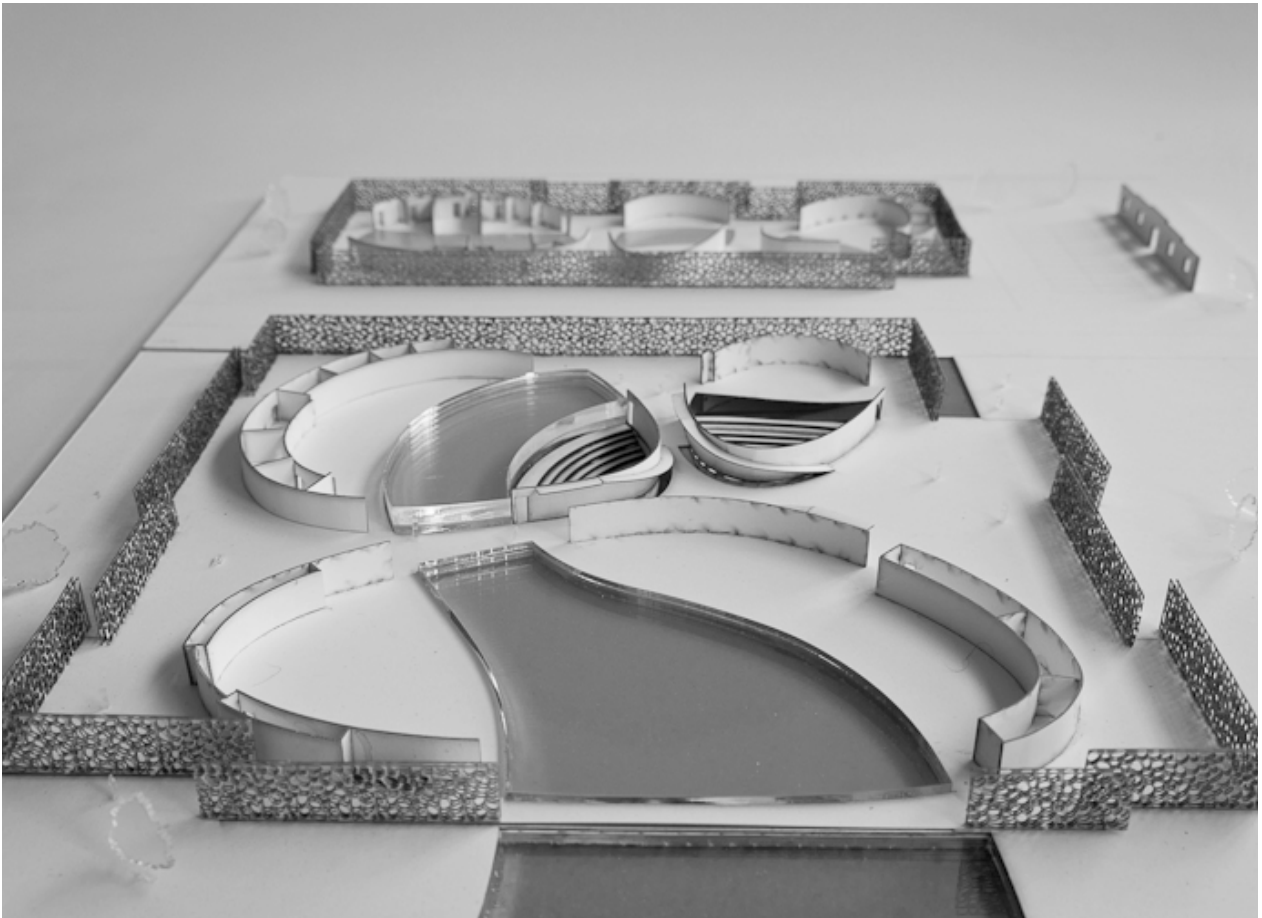
—  
Dora Ivanova  
Leópolð Kristjánsson



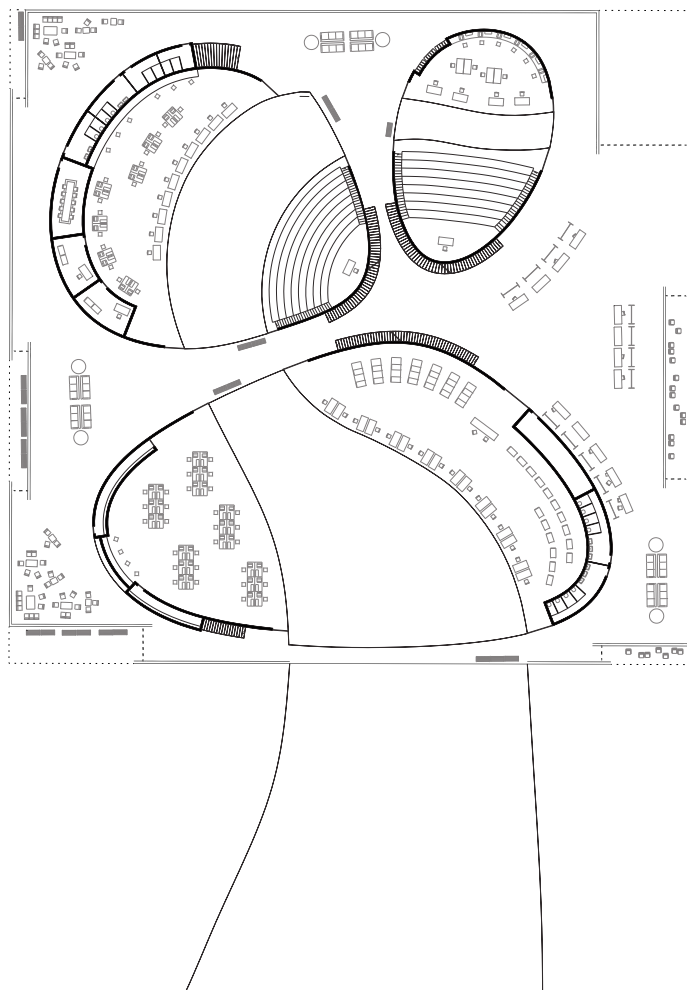
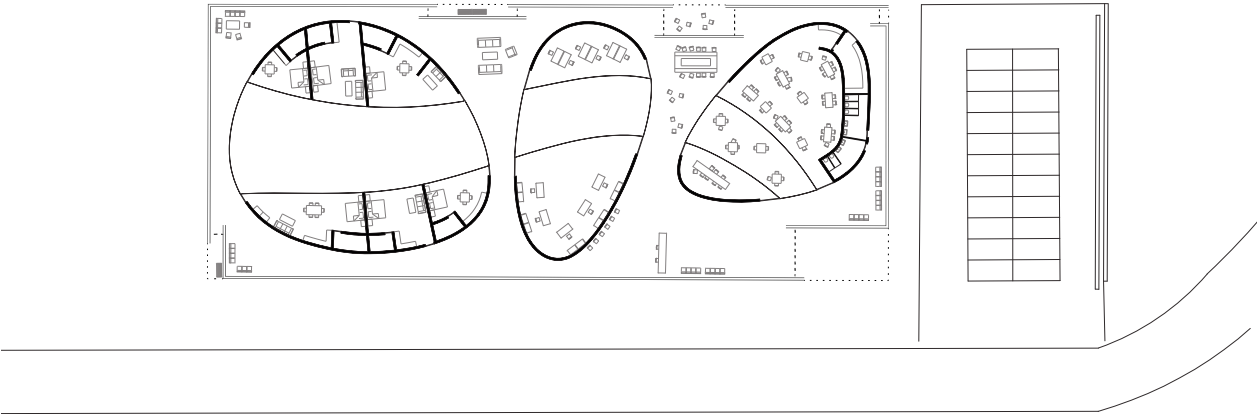
The PLACE-ACTIVATOR formally combines two parallel properties while activating the road that passes through. It connects to the sea on the west, allowing for water to flow into and through the Research Center. The meandering path of the water is designed to organize the program of the internal space. Large roof perforations allow for sun and air to enter the building at selected points. Where these perforations overlap with the water basin, terraces are formed on a raised plateau. These become leisure areas for researchers and visitors. Entrances result at selected points, where the double-layered perforated aluminum façade jumps inward. A reduction of closed-off rooms allows for a communal work atmosphere in large open-spaces that can be shared for occasional events like the annual regatta, temporal exhibitions and lectures.





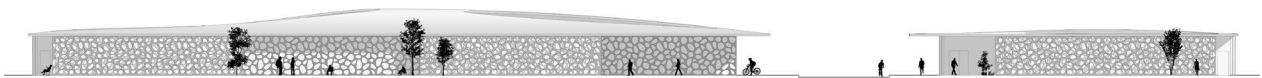


Longitudinal section  
1:750

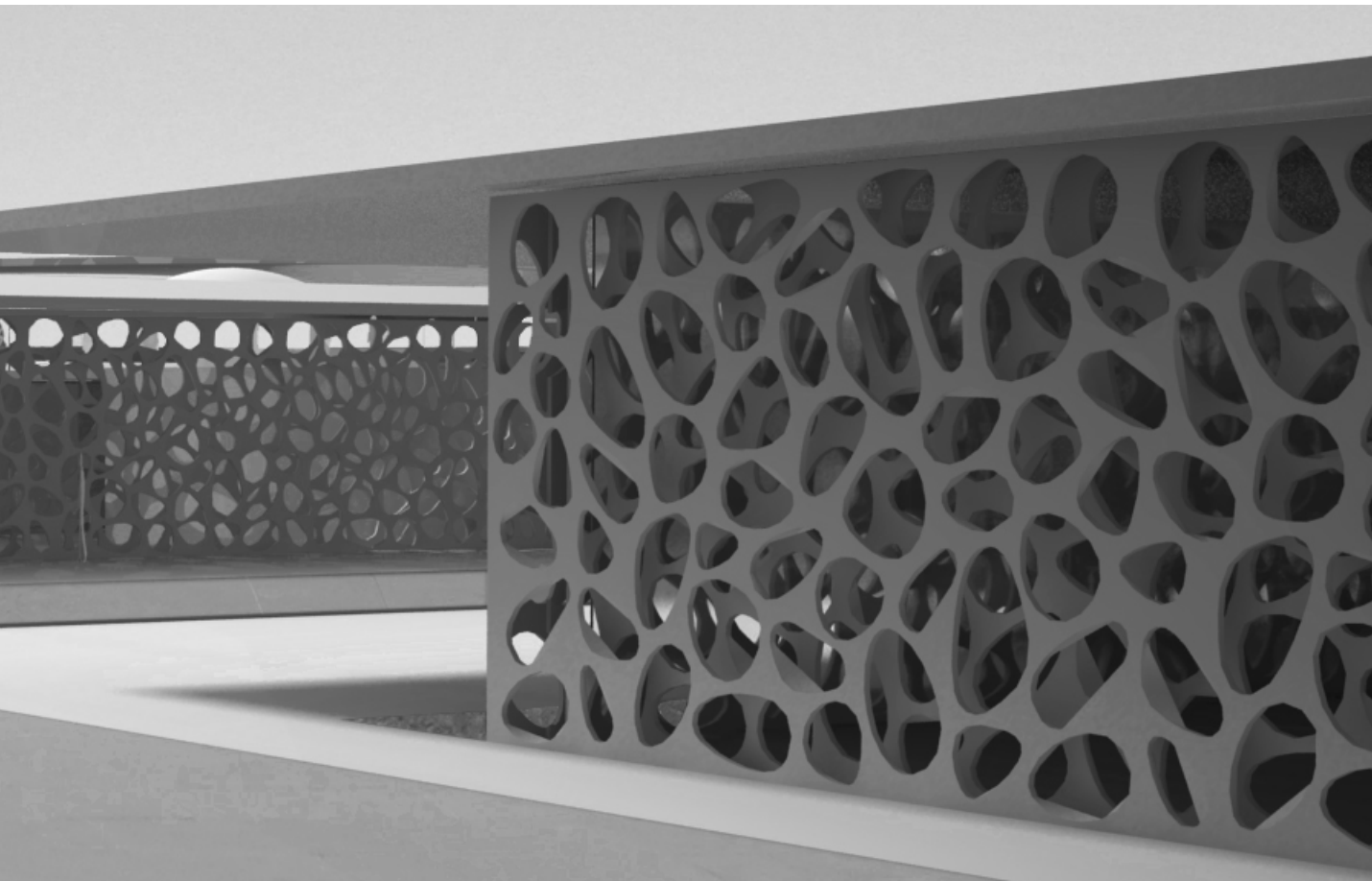


Level 0  
1:750





South elevation  
1:750



West elevation  
1:750

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02

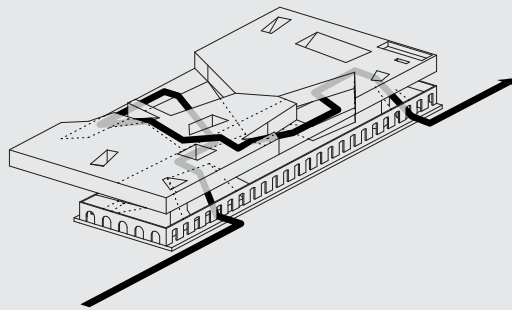




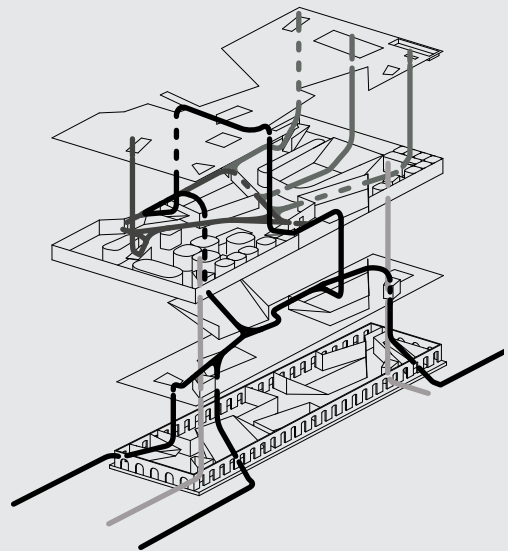


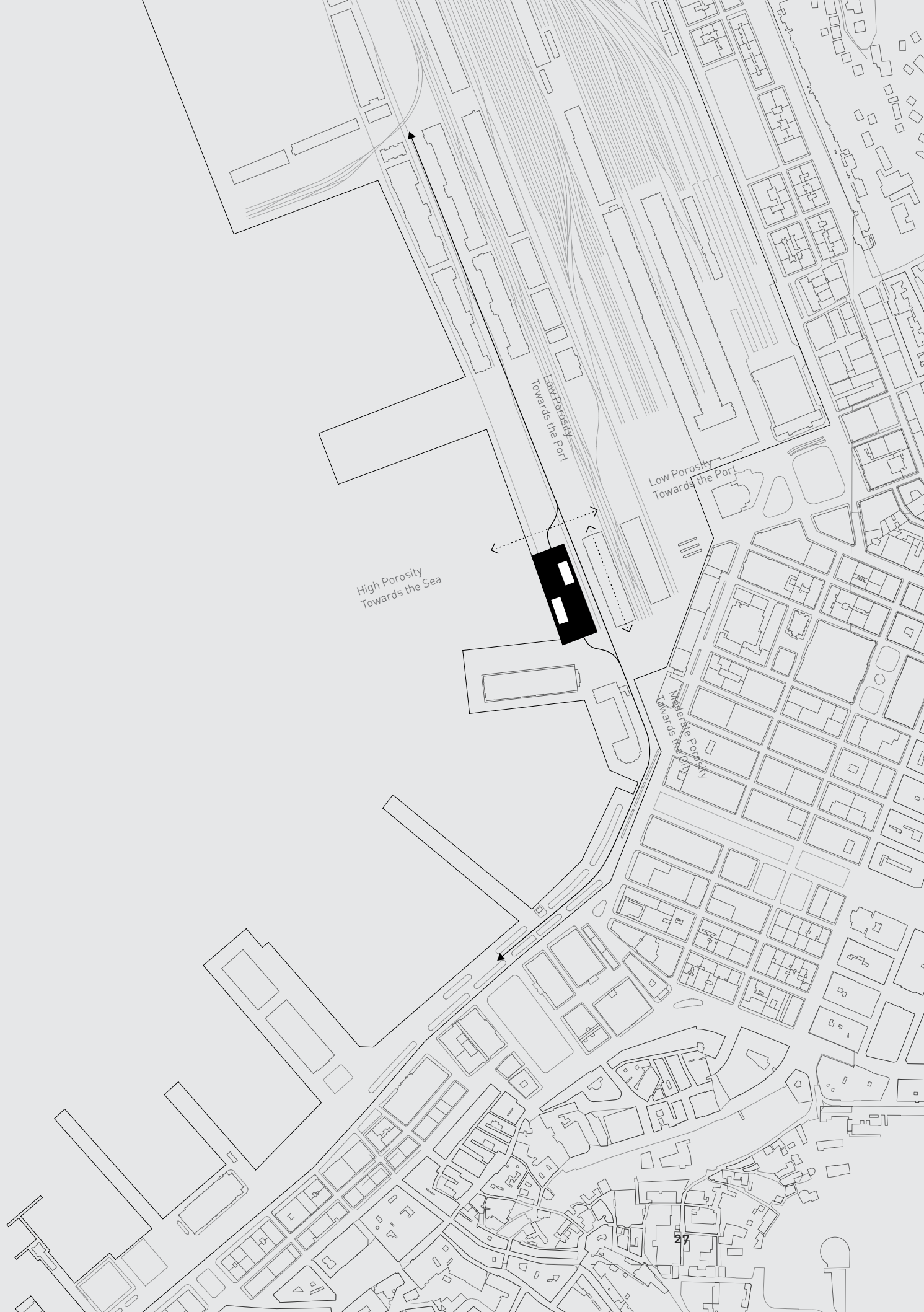
# Terrazza Barcolana

Ole Klingemann  
Caspar Kollmeyer



This PLACE-ACTIVATOR lays on a prominent location at the gate to the Porto-Vecchio. The new building has a high potential to become a center-point for the city's annual regatta competition and an all year-round stage for formal and informal events. The structure generates an urban terrace for the public with a unique view over the city, port and sea. Its size, program and design concentrate on turning the surrounding into the new cultural, maritime and sportive quarter of Trieste. The building is defined by two horizontal slabs. While the lower slab houses administration and other private functions, the upper slab contains public programs. In between they frame a shaded public terrace. The roof acts as a open viewing deck. All floors are accessed by a public promenade that defines the Regatta Center's porosity.





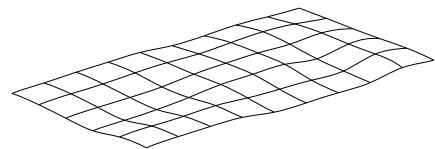
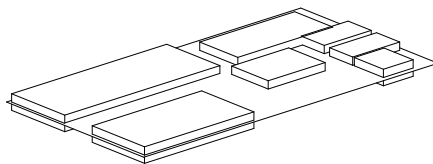
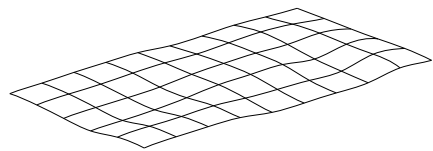
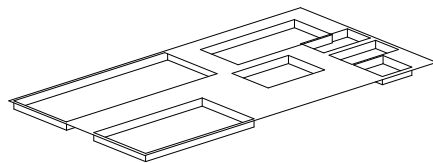
High Porosity  
Towards the Sea

Low Porosity  
Towards the Port

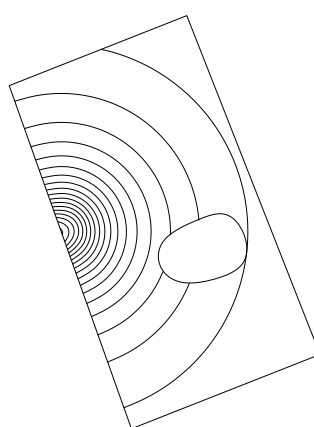
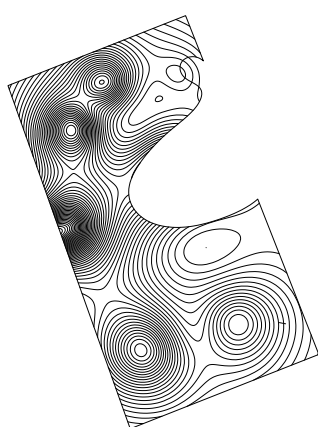
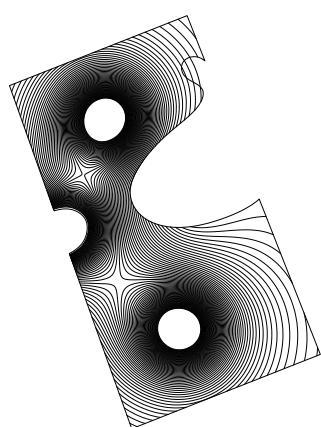
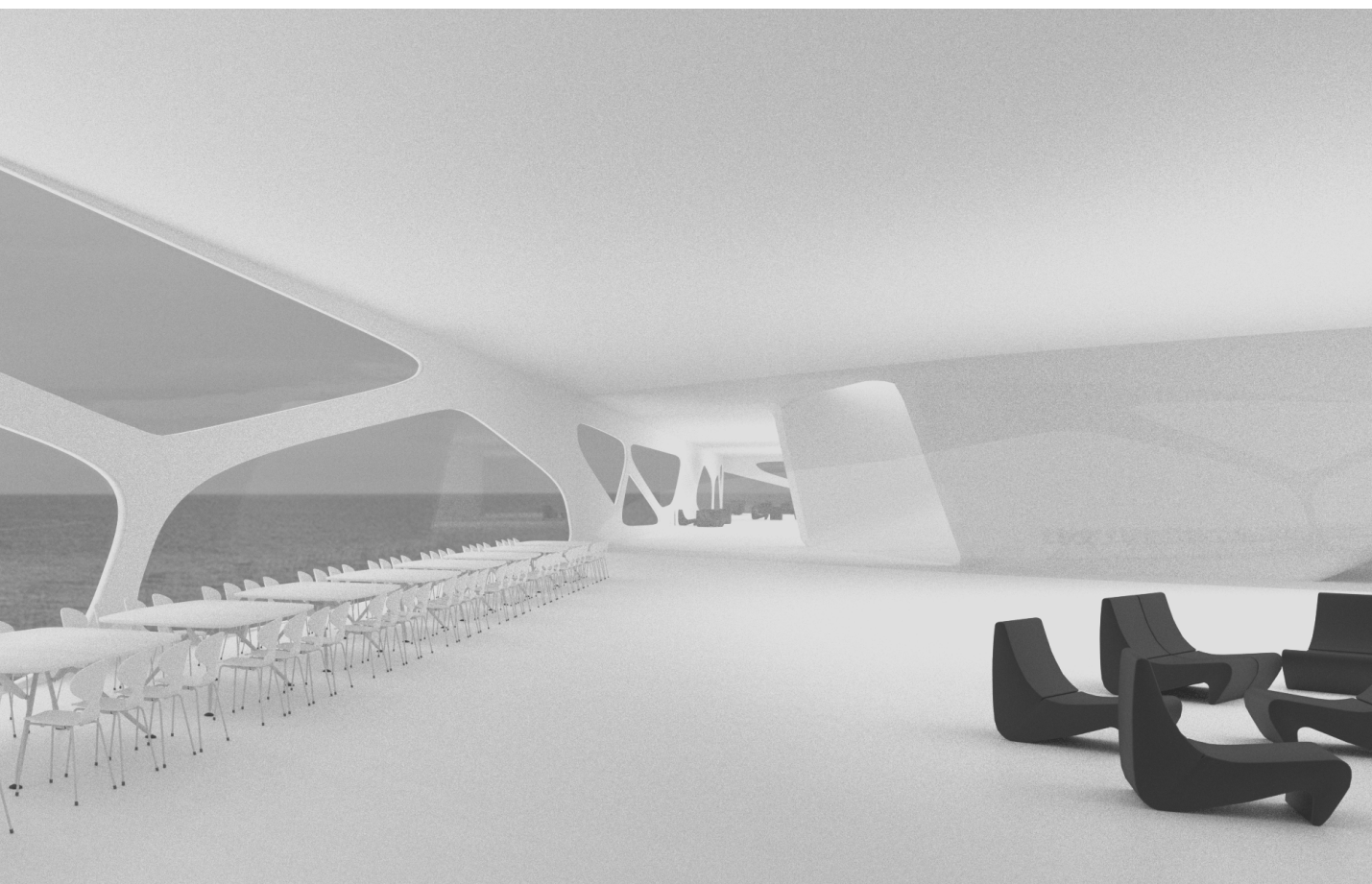
Low Porosity  
Towards the Port

Low Porosity  
Towards the City

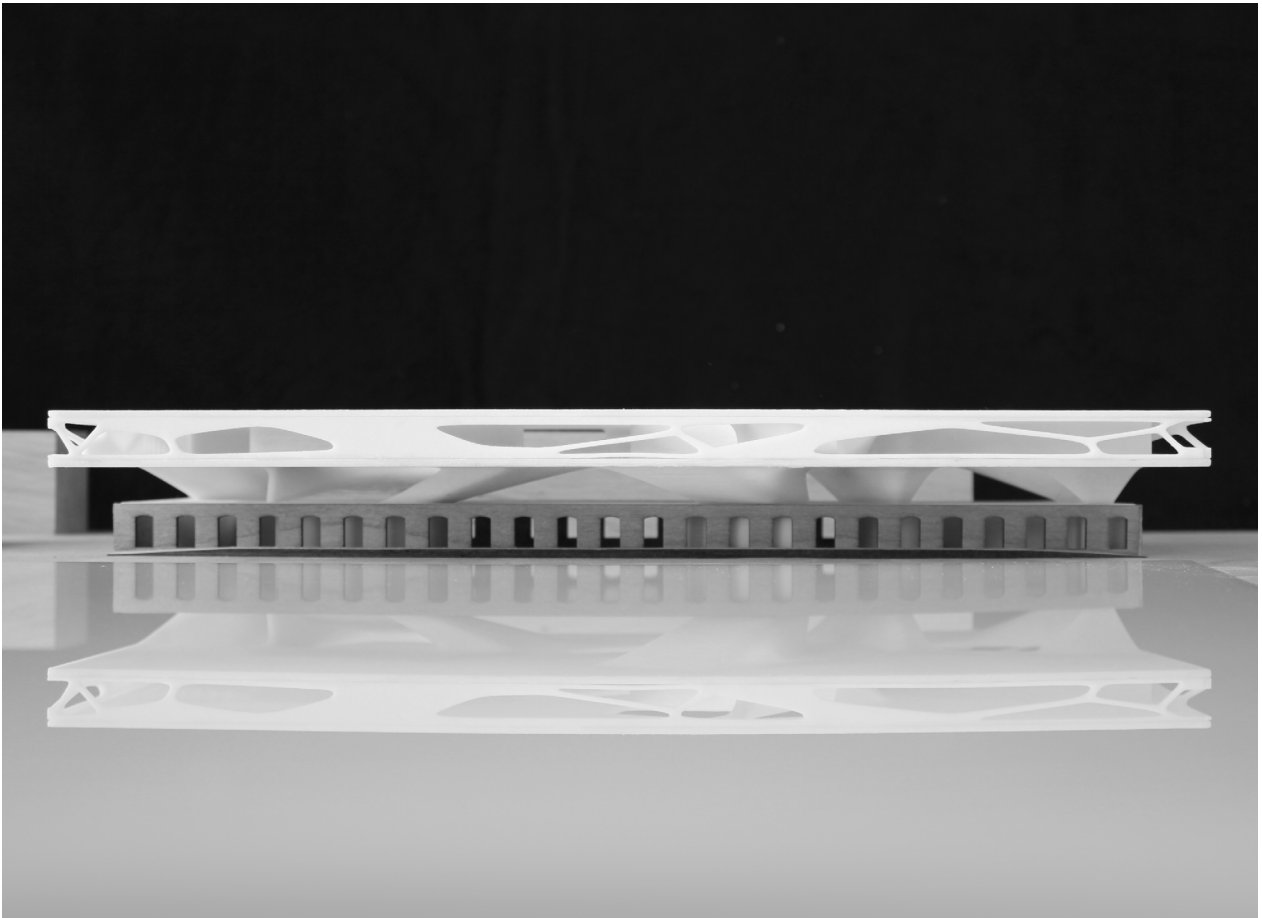




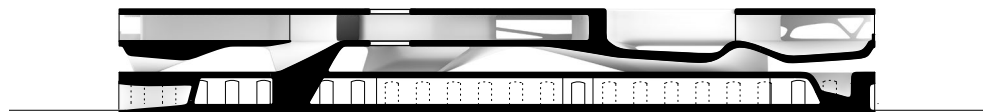
Surface concept

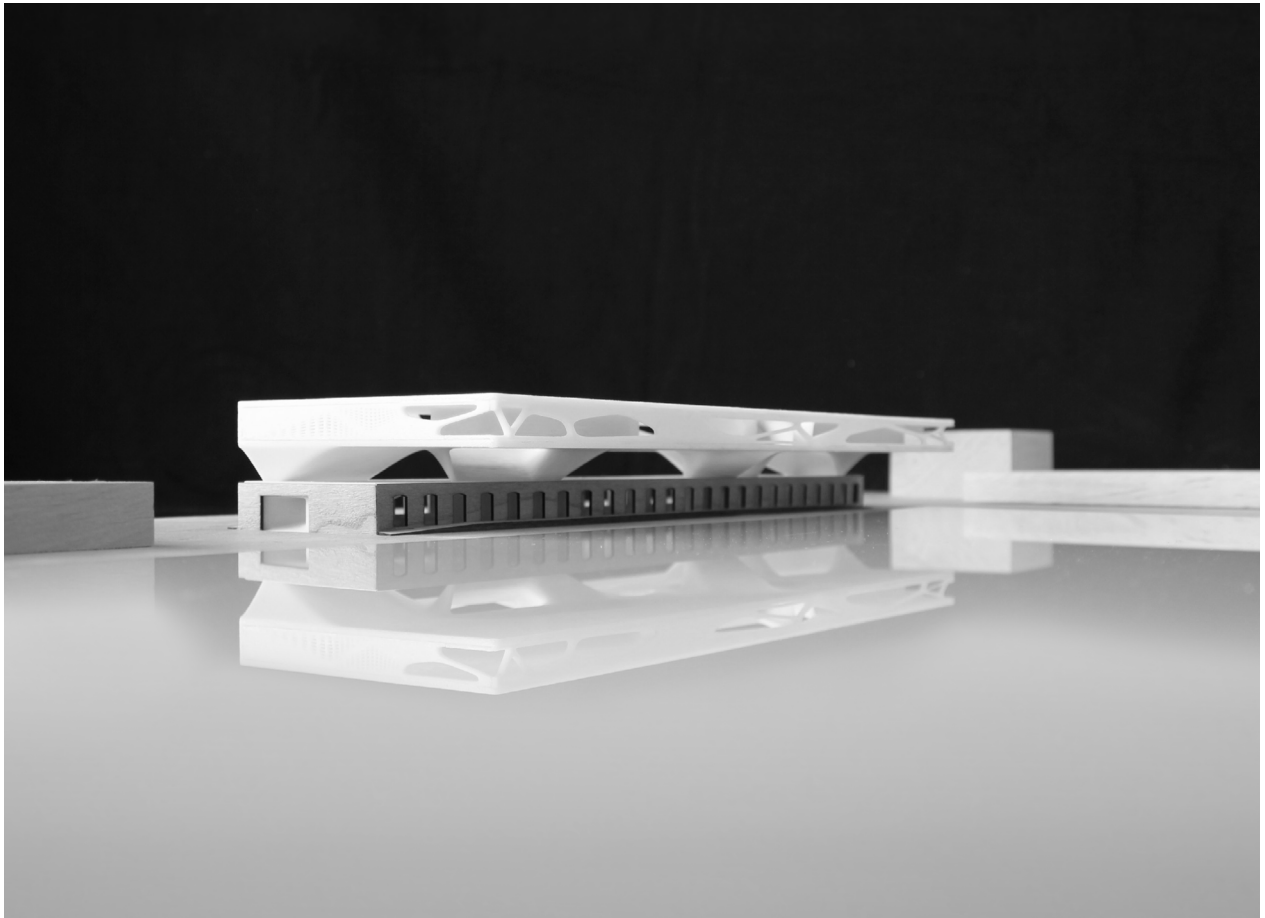


Spatial porosity



Longitudinal section  
1:1000



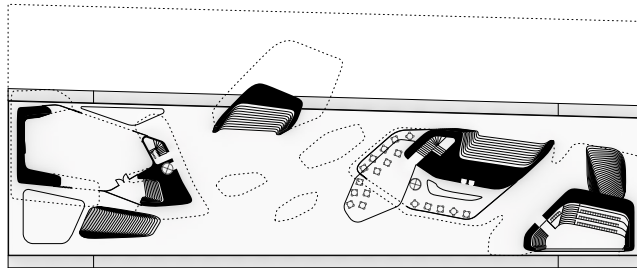


Cross section  
1:1000

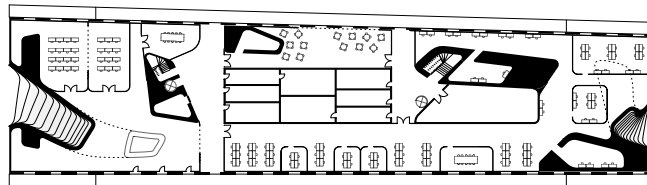




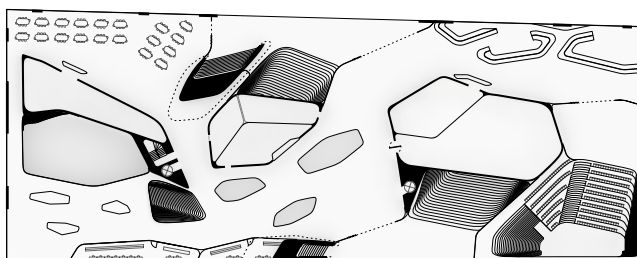
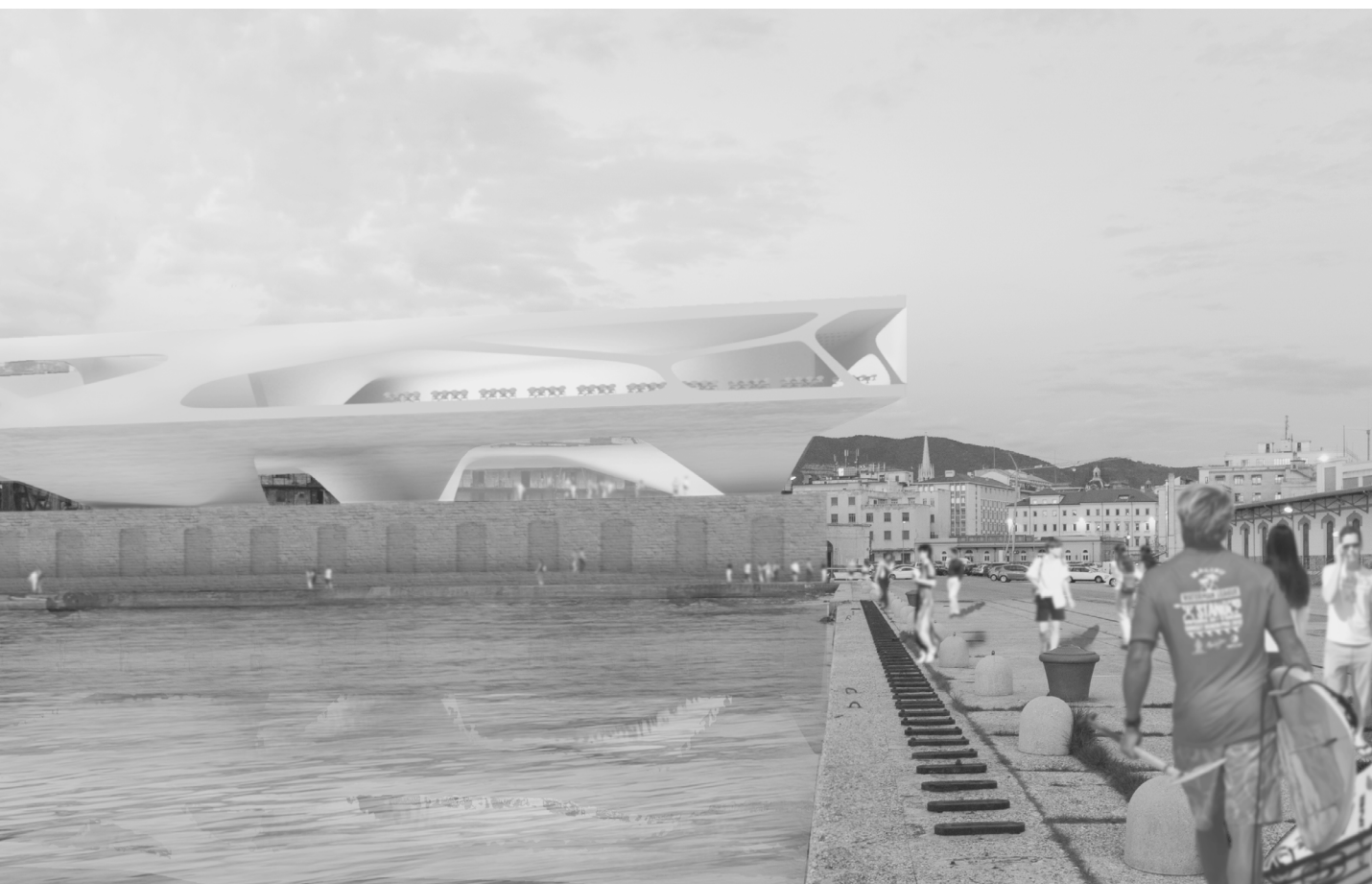
Level 1  
1:1000



Level 0  
1:1000







Level 2  
1:1000

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03



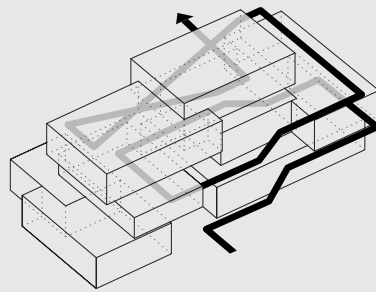




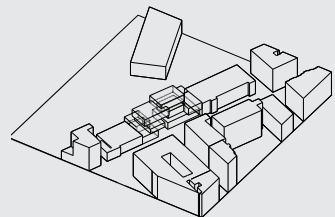
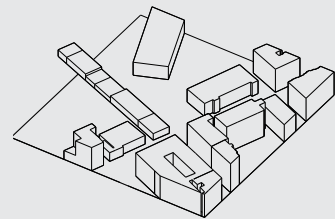
# Entr(eg)lance

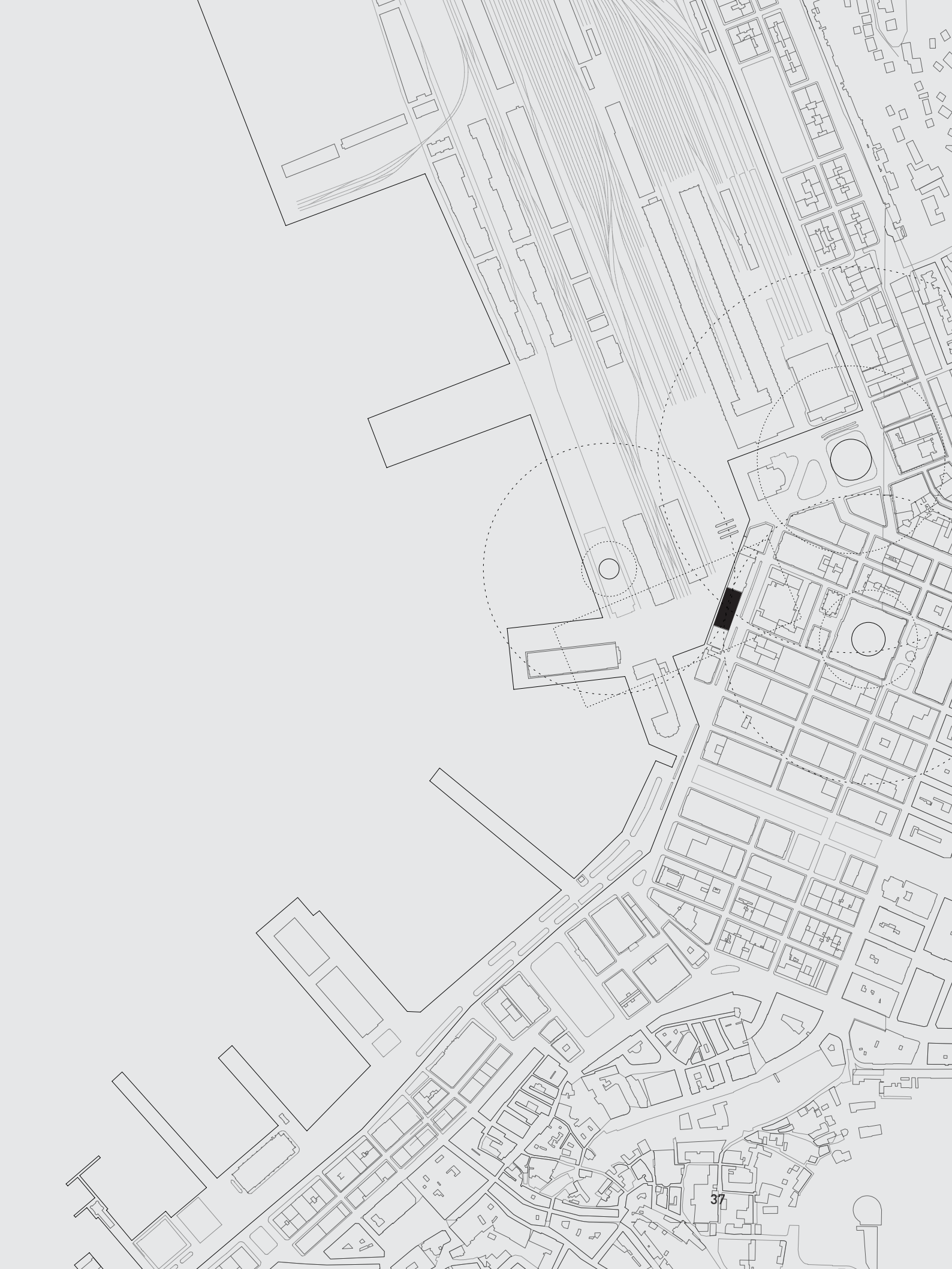


Danil Chekushkin

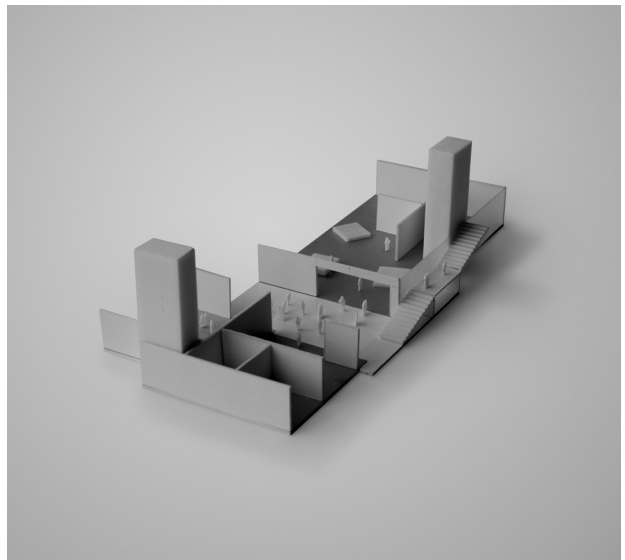
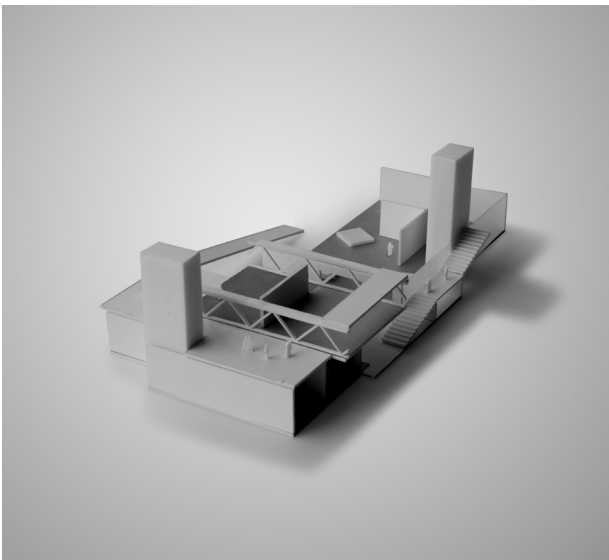
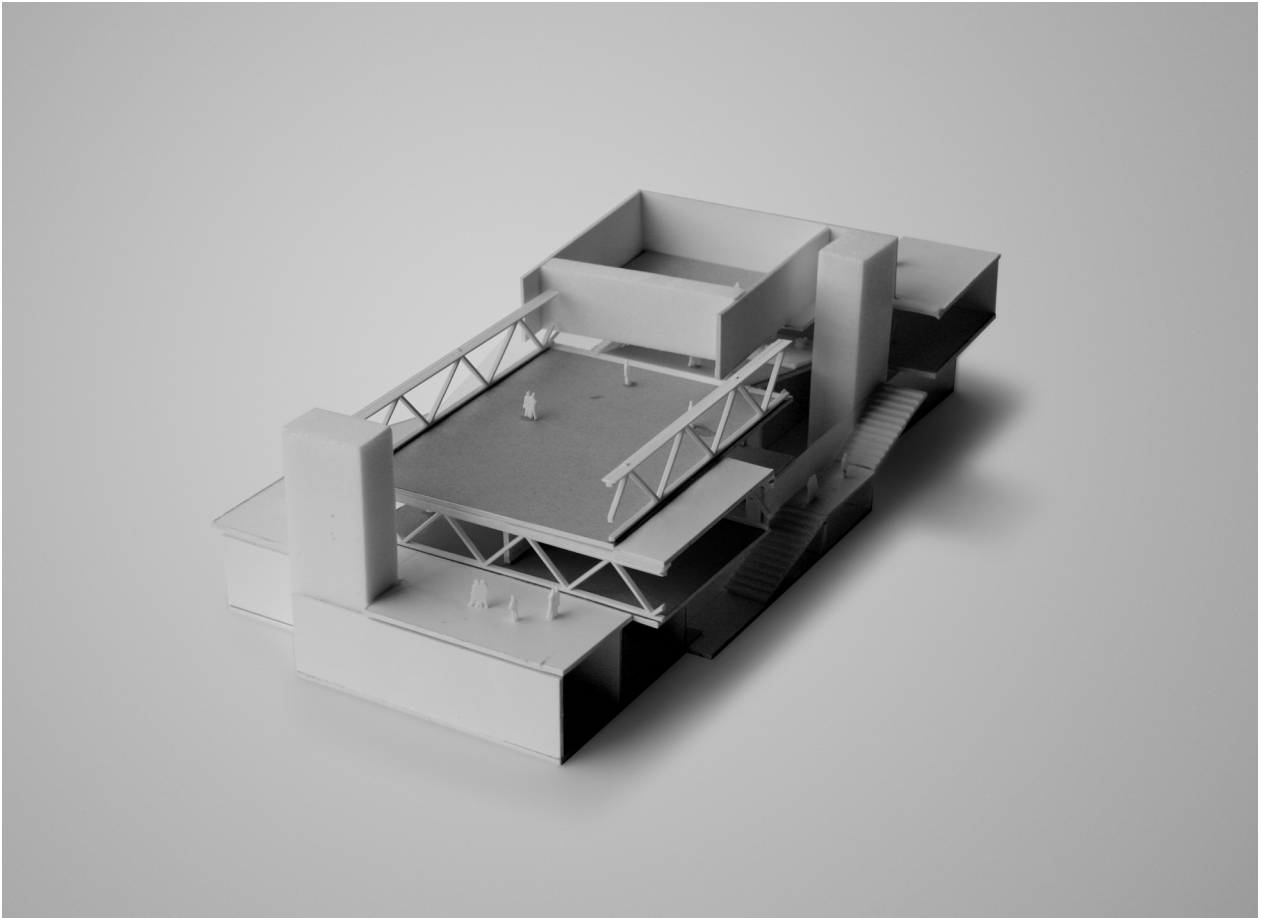


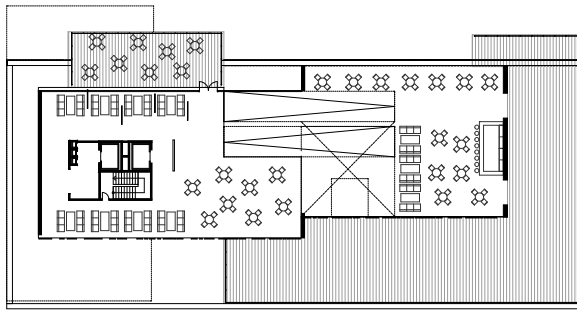
This PLACE-ACTIVATOR lays on the tangent of the Porto-Vecchio and the city of Trieste. Its proximity to Trieste's city center, its main road and local train station make it an ideal location for the main entrance to the harbor. The design attempts to consolidate the urban flows of traffic into one building. Programmatically, it functions as an info-center for both inhabitants and visitors to the city. The additional program, such as café, restaurant, exhibition, and gallery space, are organized in a spiral manner. Each program has a terrace, which is shielded off by a lamella façade. The terrace space between the double façade changes in depth according to the program. The building's porosity is defined by the multitude of layers one passes when walking through the building.



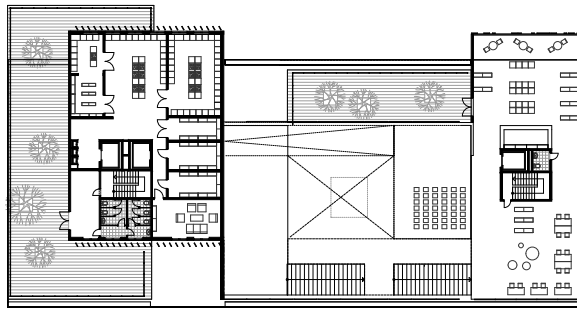




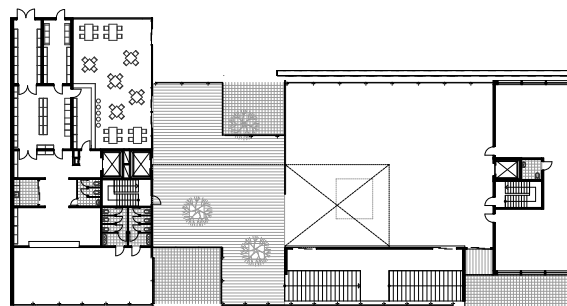




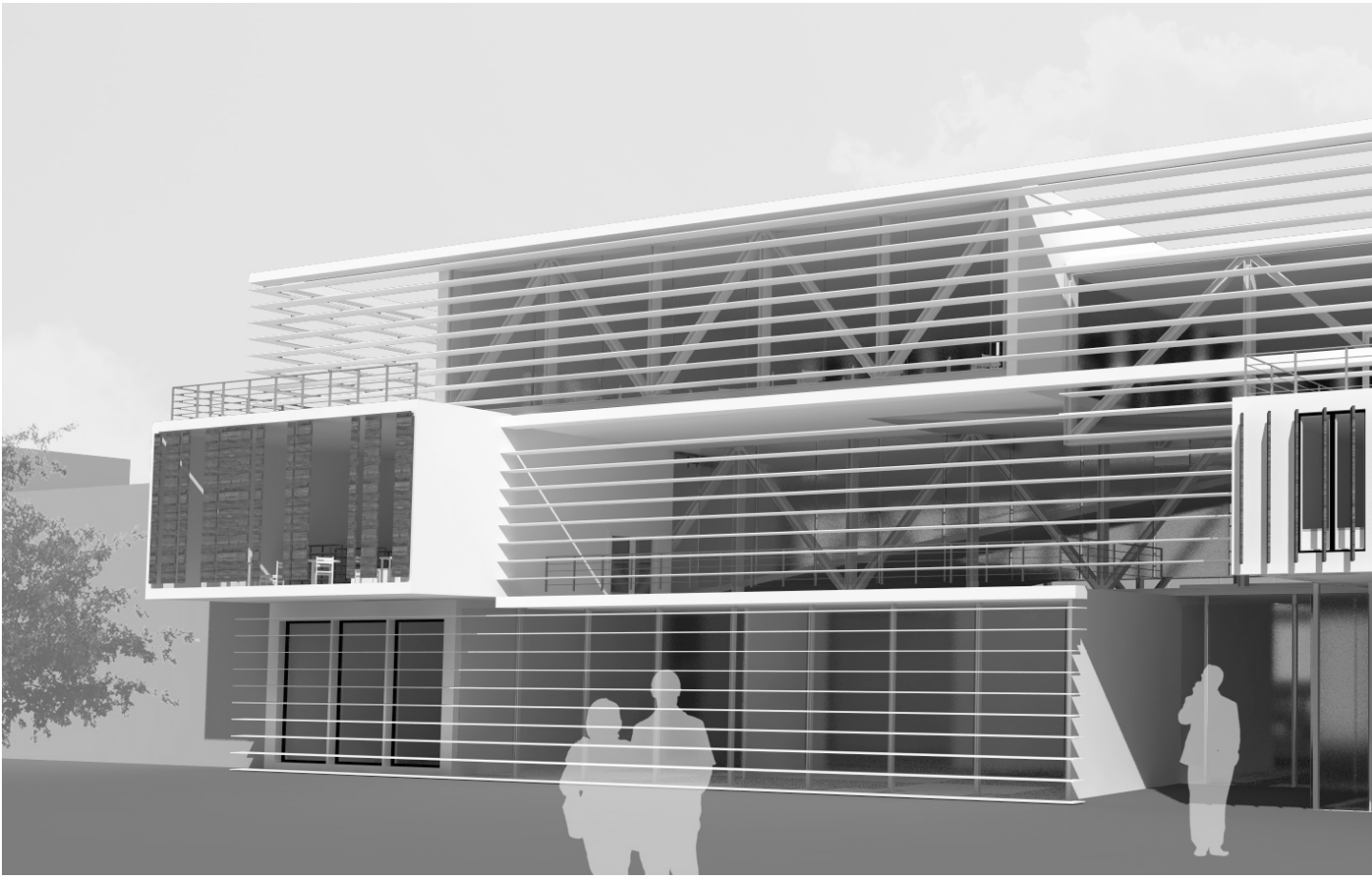
Level 2  
1:750



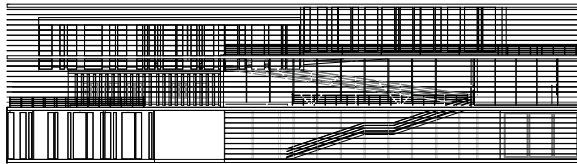
Level 1  
1:750

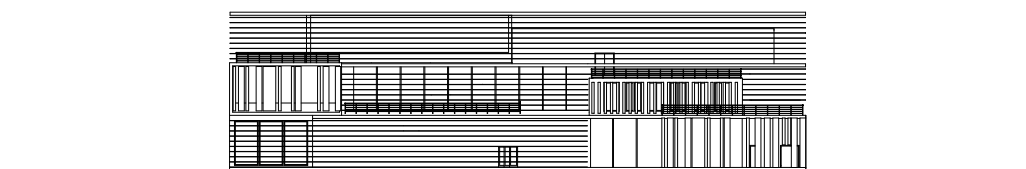


Level 0  
1:750



City elevation  
1:750





Port elevation  
1:750



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04

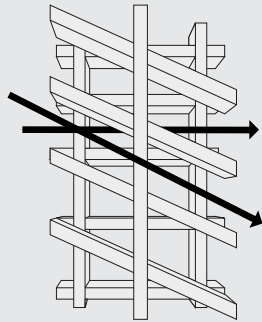




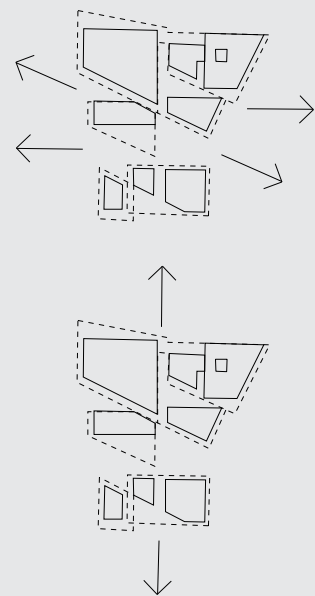


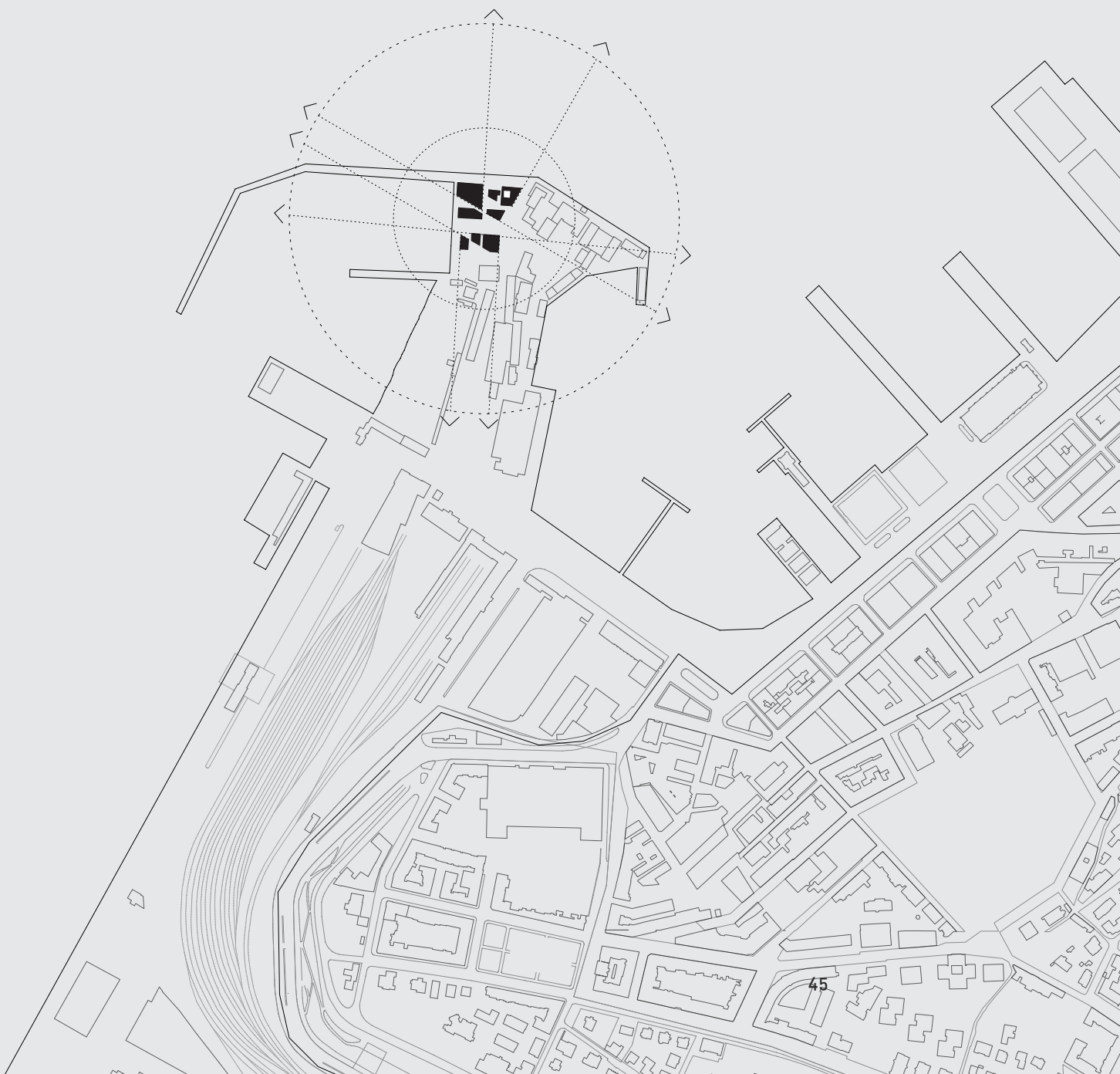
# Spa More Al Mare

Linda de Geus



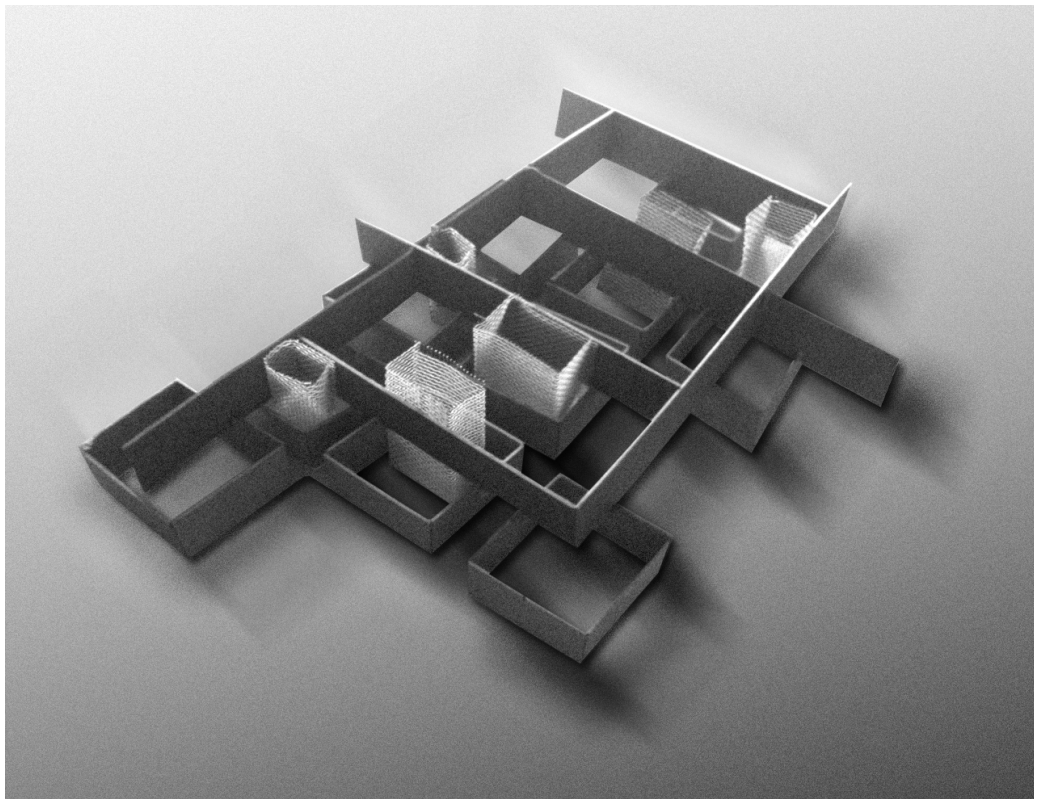
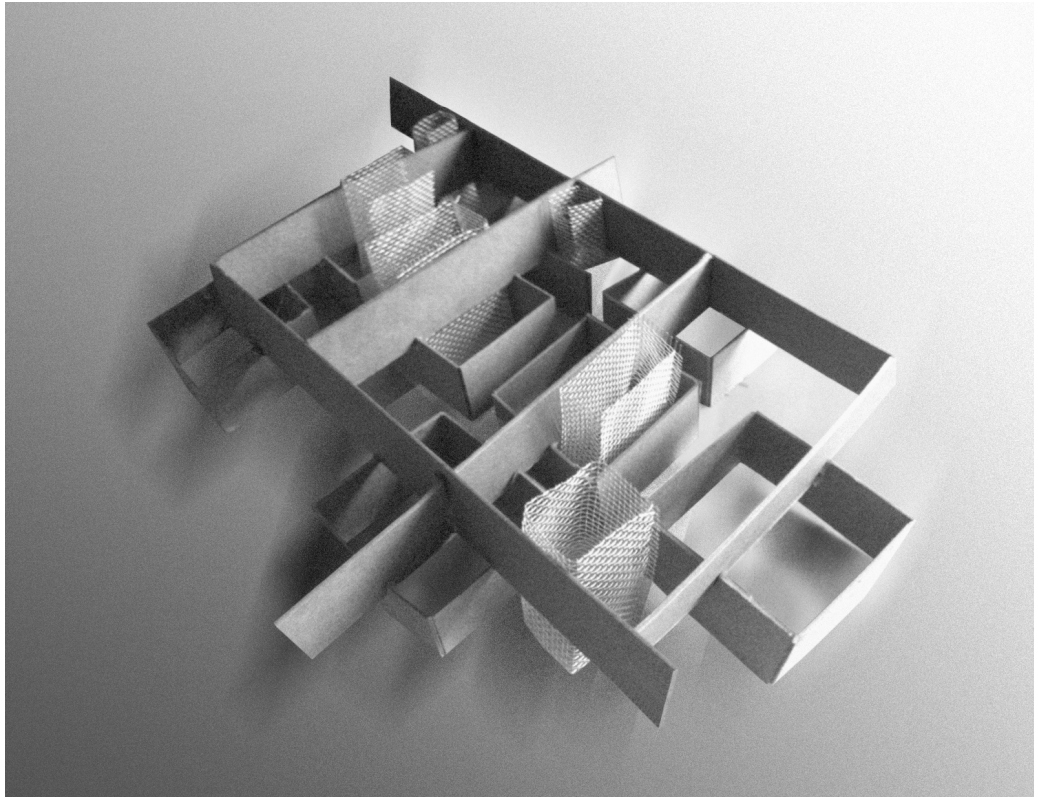
This PLACE-ACTIVATOR is situated at the end of the peninsula-like pier between the old port to the North and the new port to the South. Adjacent to the site lies the city's only official bathing area. In reaction to this, the building functions as an open structure on the ground floor. Several enclosed public pavilions are organized along a central axis, allowing guests of the bathing area to walk through and use the porous ground floor at any time. Additionally, these pavilions function as structural pillars that carry the more private top floor. The program was kept relatively diverse in order to ensure local and international visitors to regularly visit. A central axis ties the building together and draws the user in. Multiple side streets offer additional connections to the site.

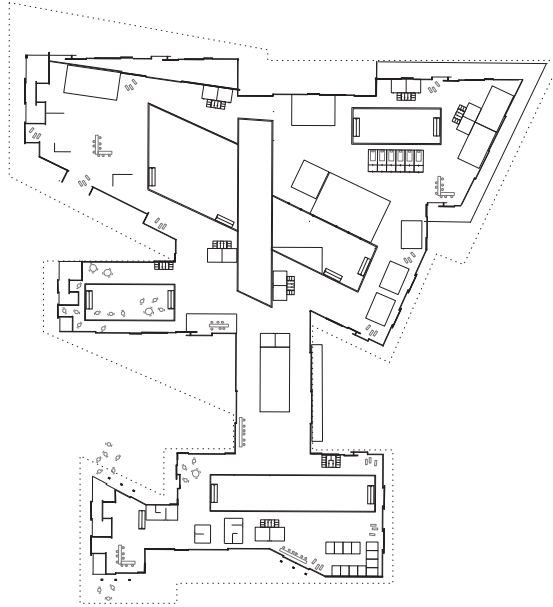




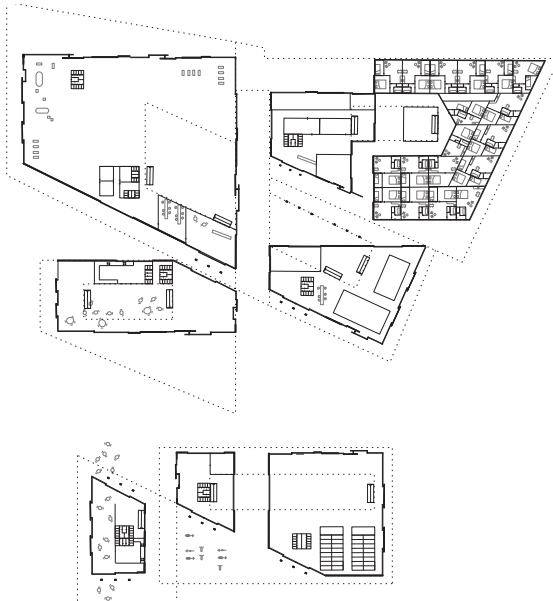


Porosity  
model





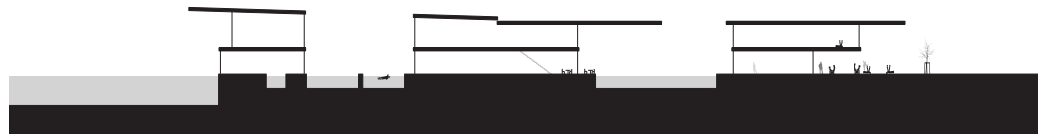
Level 1  
1:1000



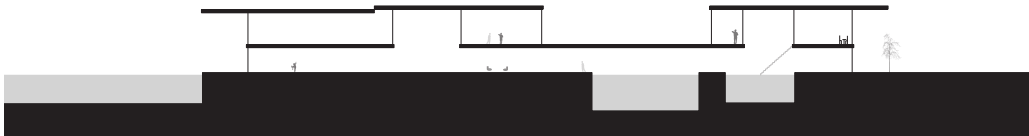
Level 0  
1:1000



Cross section  
1:1000







Cross section  
1:1000

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05





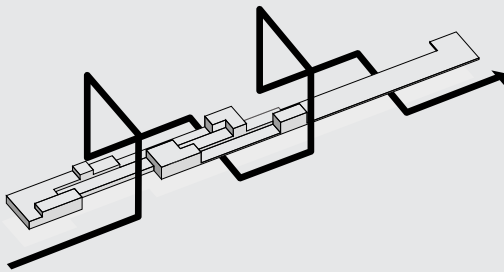




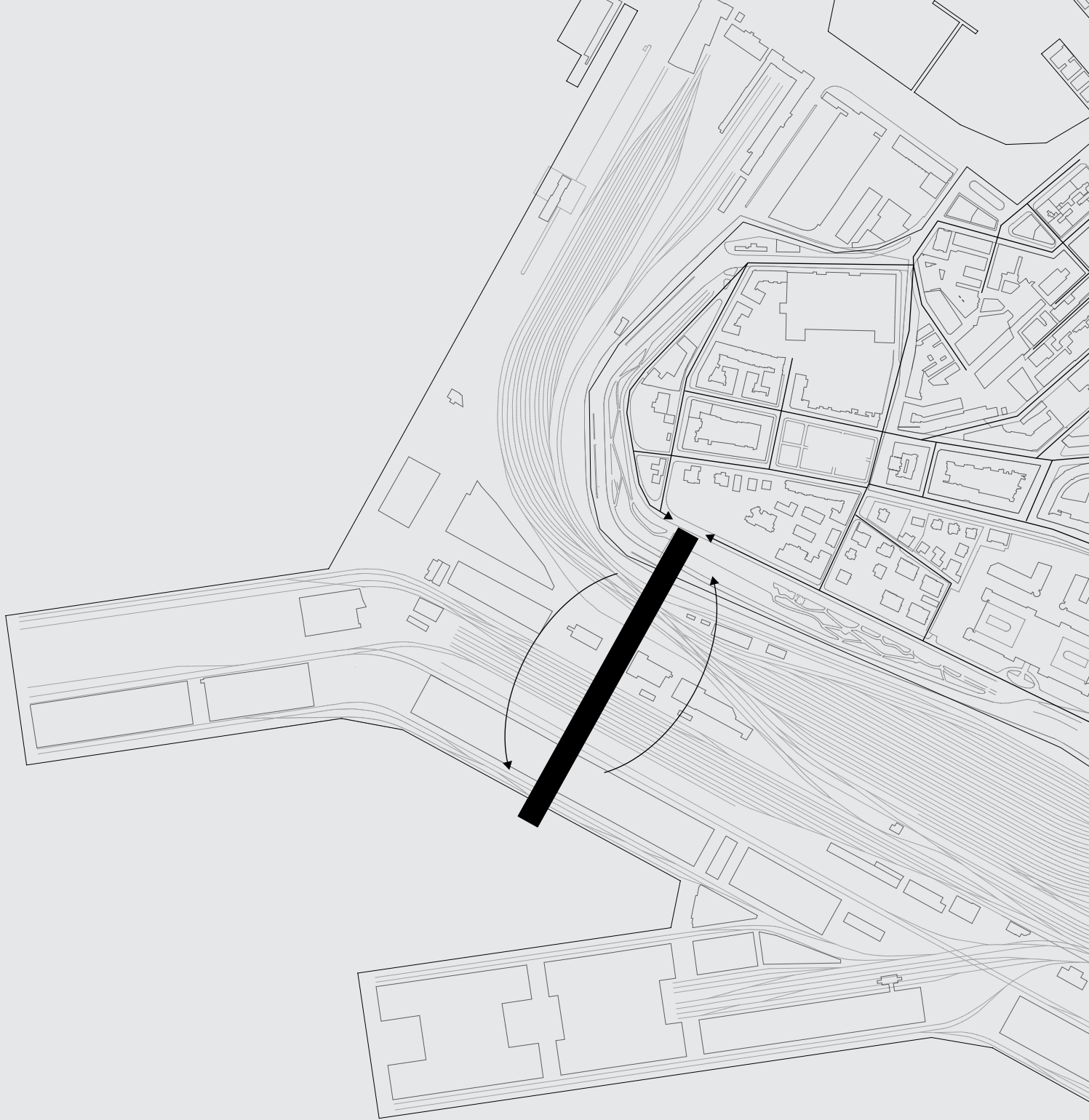
# Sea Bridge

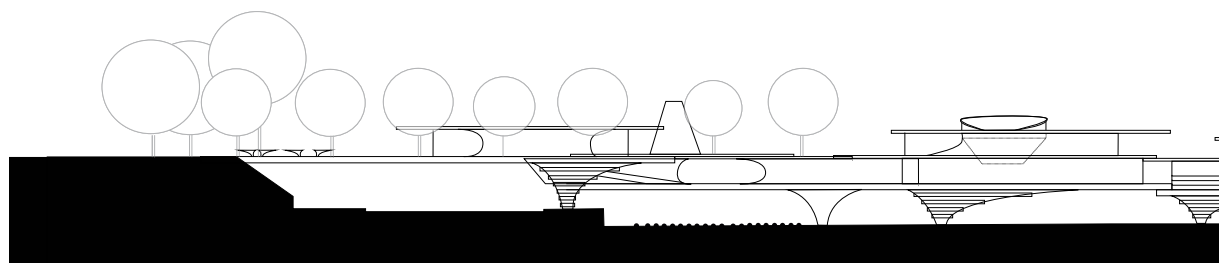
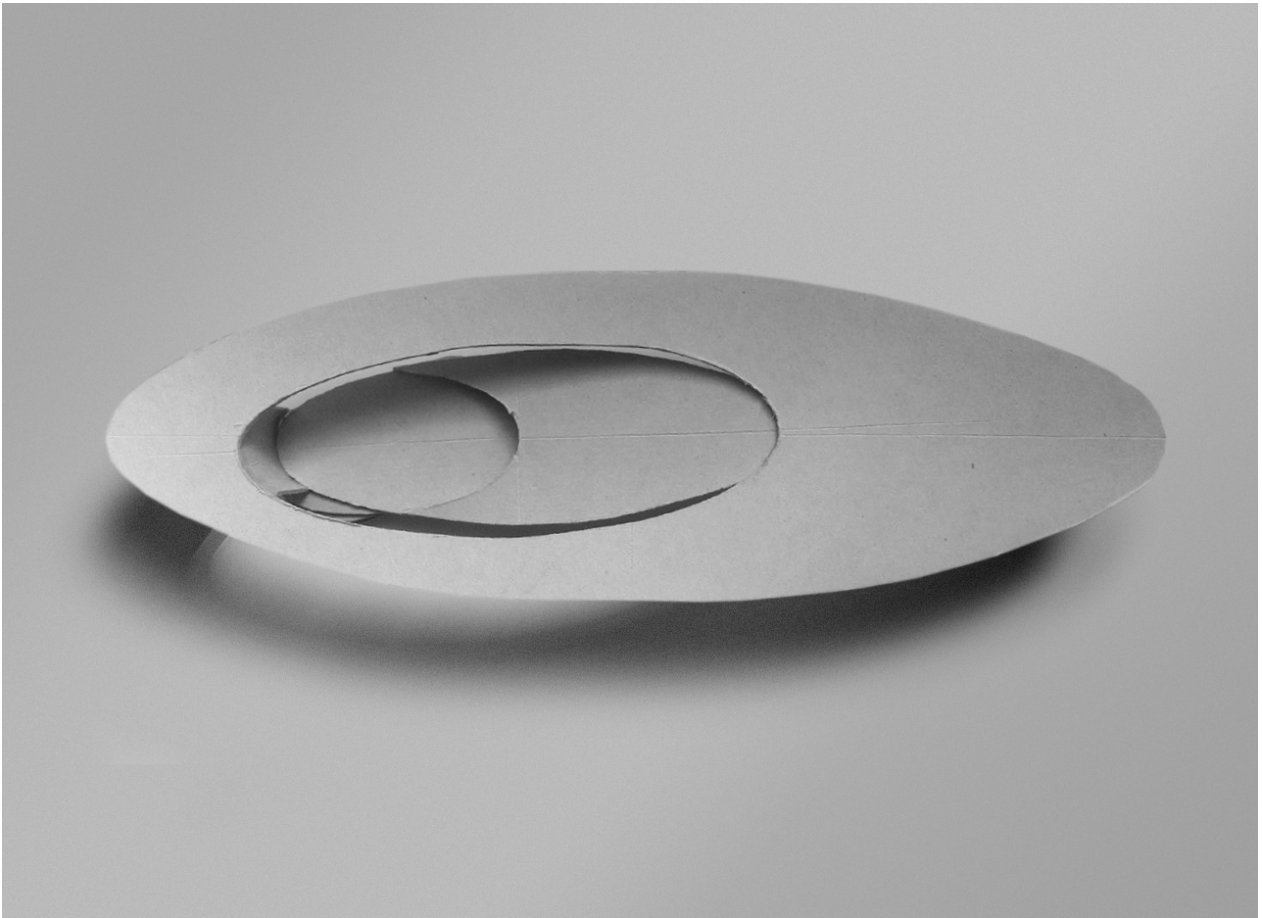
—

Anna Mohn



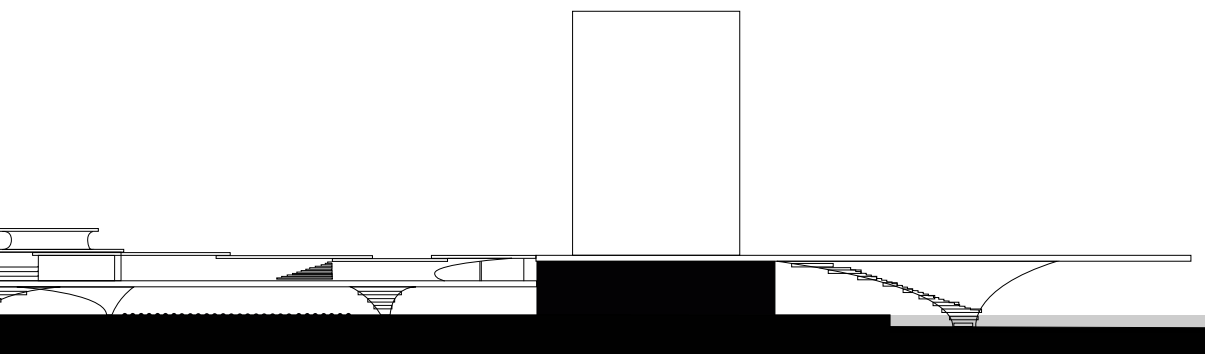
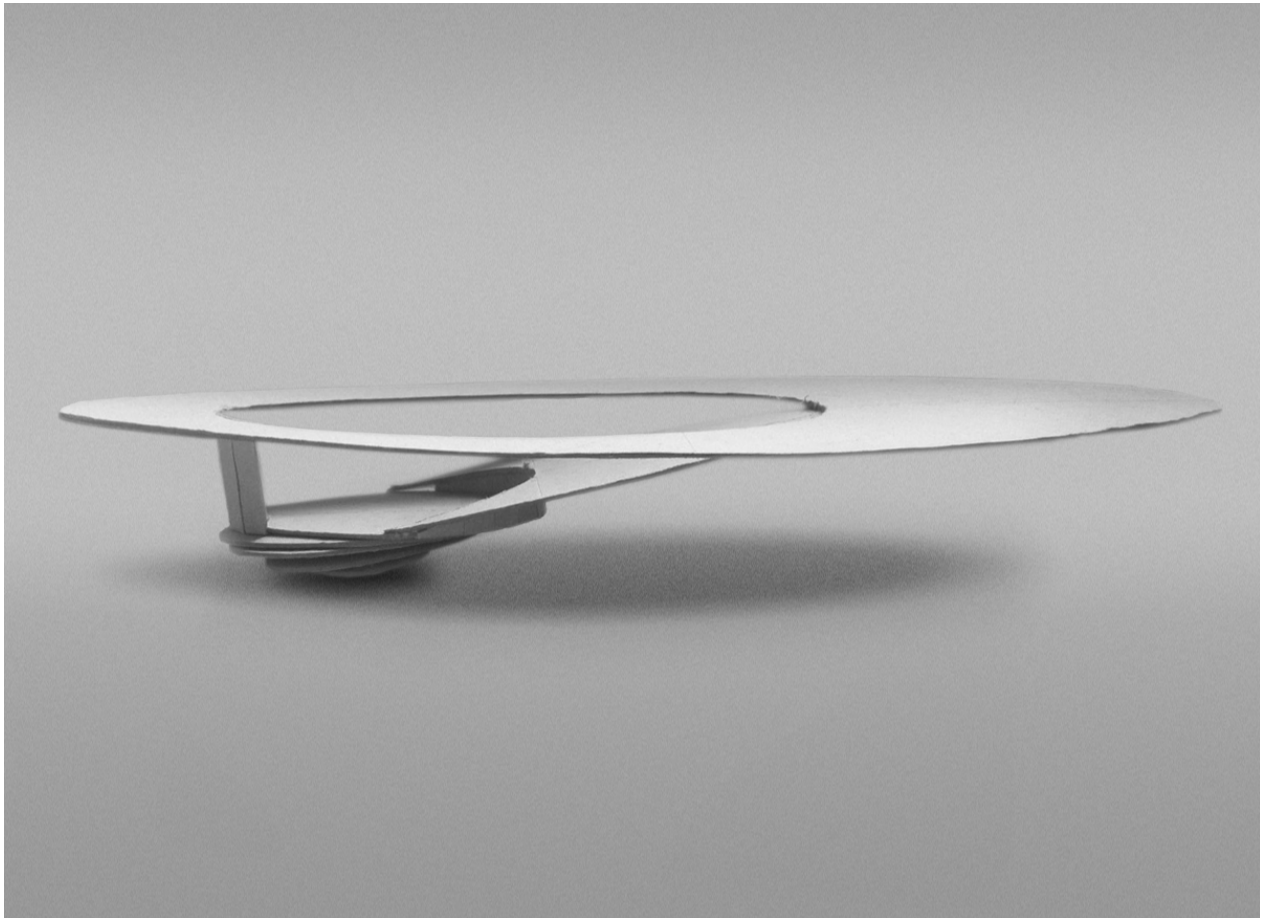
The Sea Bridge spans over the port's railway tracks to connect a popular Trieste park to the sea. The structure adds value to the city's urban tissue by integrating and extending the park. The frequent joggers and flâneurs are lead to a unique viewing point that hovers over the sea. Here, the bridge's funnel-like legs dip down to the water for the public to rest and bathe. A series of these legs are spread along the bridge and function as the primary structural support. A continuous meandering floor slab connects these structural legs and guides the user from one end to another. The hybrid building of the bridge gains in volume at strategic points to house programs like a café and exhibition space. The multitude in program ensures a use of the bridge throughout the day and night.

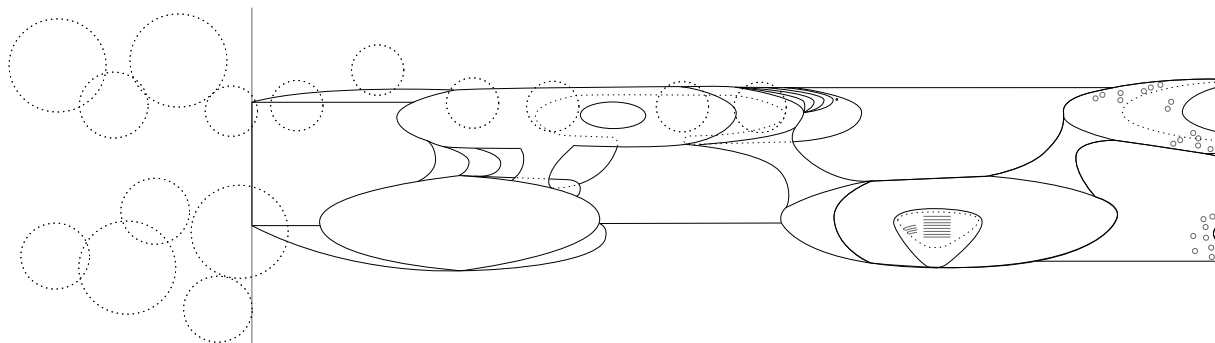
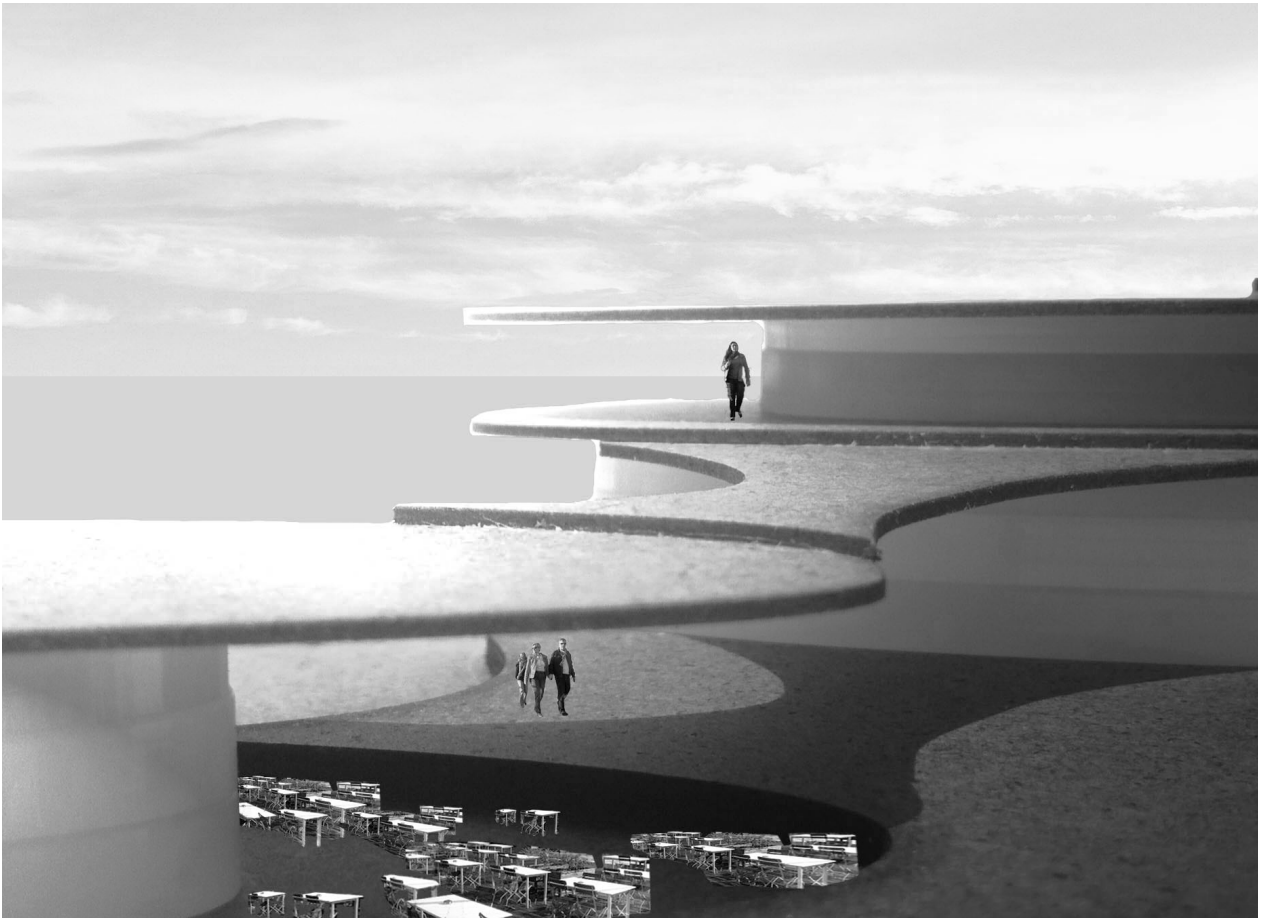




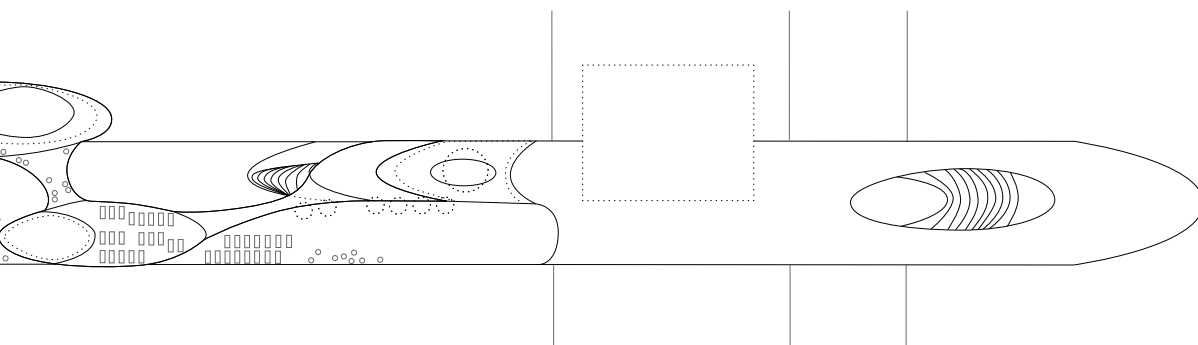
North elevation  
1:1000







Level 0  
1:1000





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06



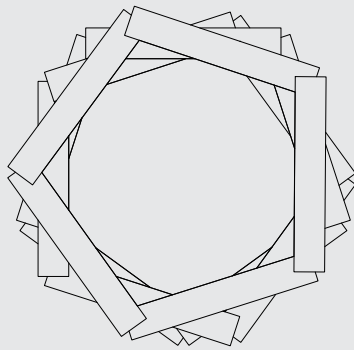




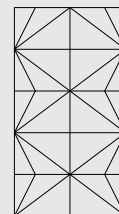
# Office Tower



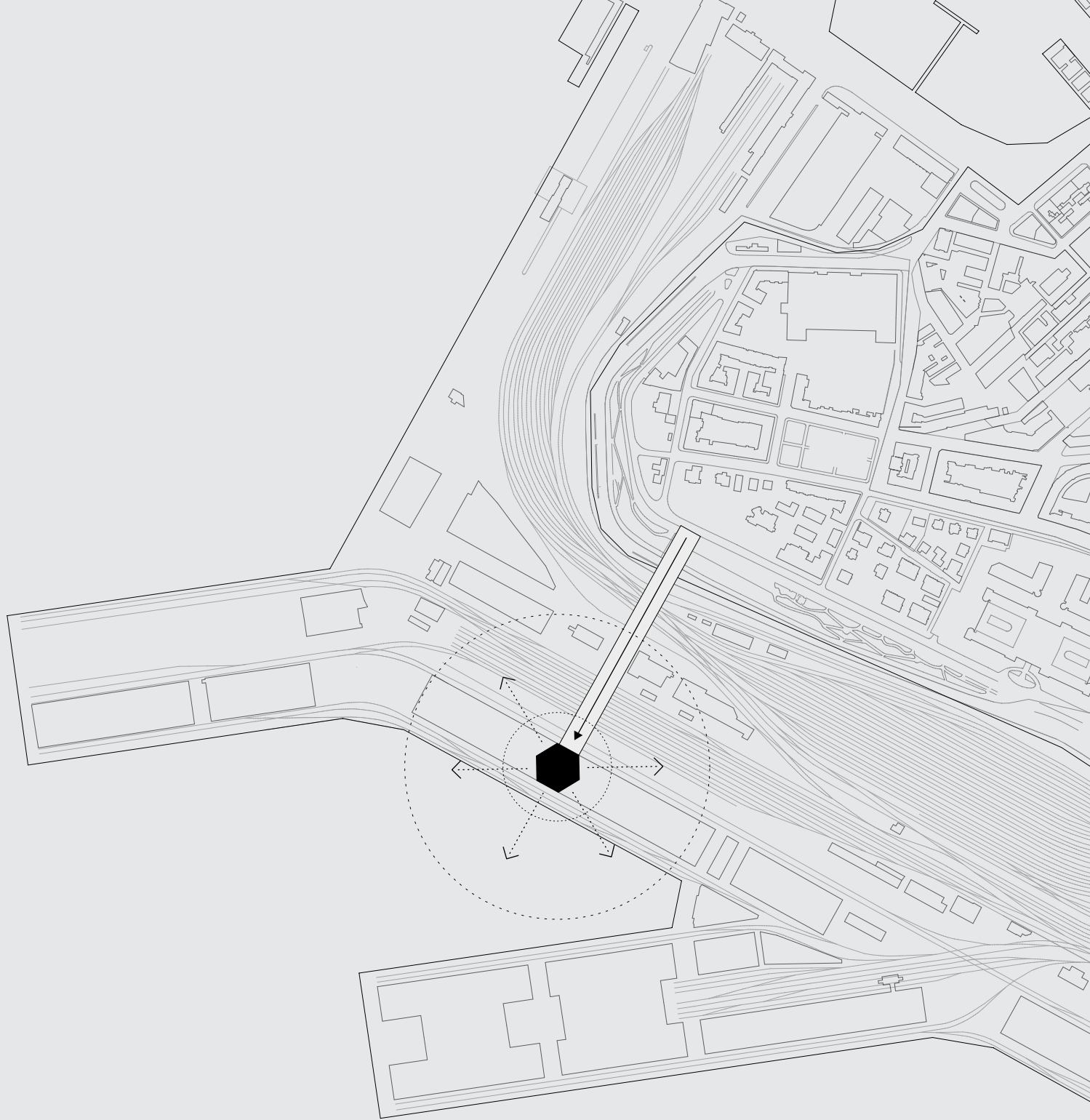
Martha Zarco Letzel



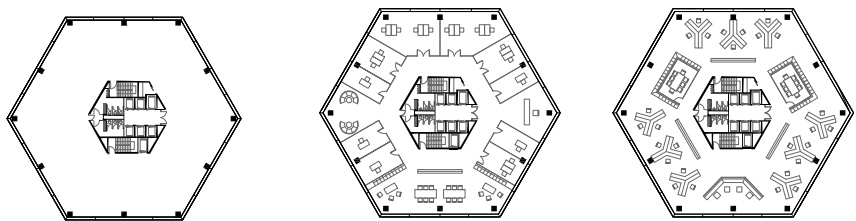
This PLACE-ACTIVATOR lays in the middle of Trieste's Porto Nuovo. Placed at the end of the Sea Bridge, it acts as the climax of movement over the bridge. It accomplishes this by drawing visitors upward. Its height offers guests and users of the office building to enjoy a multitude of views over the city and sea. Through the tower's hexagonal floor plan, possible viewing directions are multiplied and rotated moving upward. Formally, the object blends into its context by adapting the dominant zig-zag of harbor roofs nearby. From an urban perspective, the office tower acts as a symbol of progress for the decaying harbor area and has the potential to become a landmark for the city's inhabitants and international cargo ships that pass by from day to day.



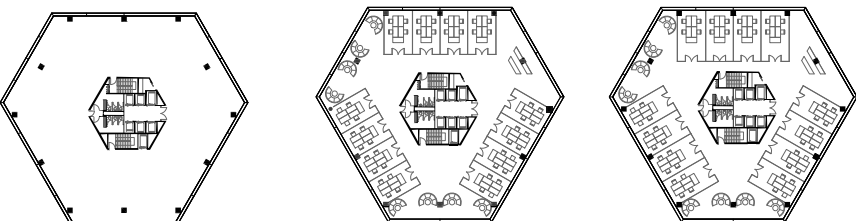




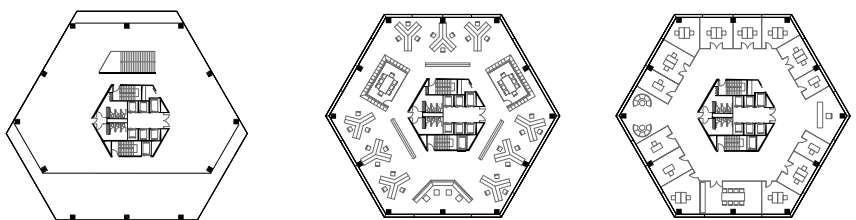
Level 4, 8, 12  
1:1250



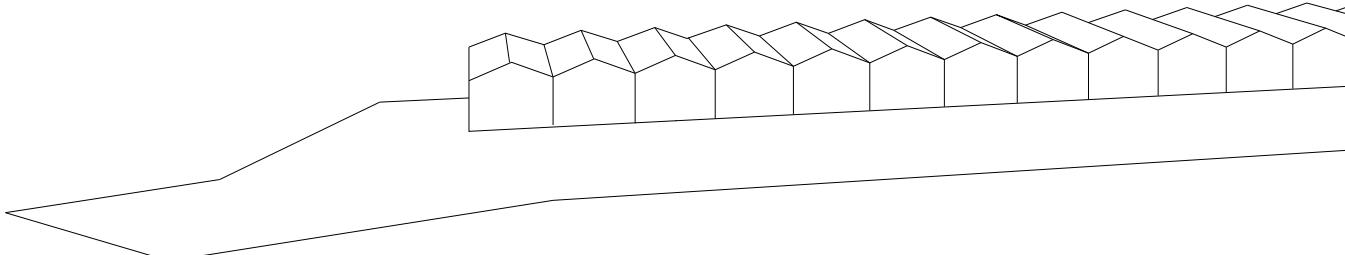
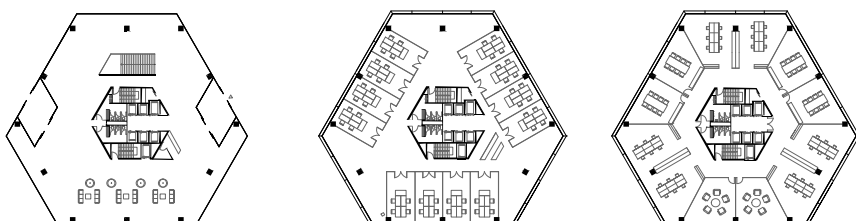
Level 3, 7, 11  
1:1250

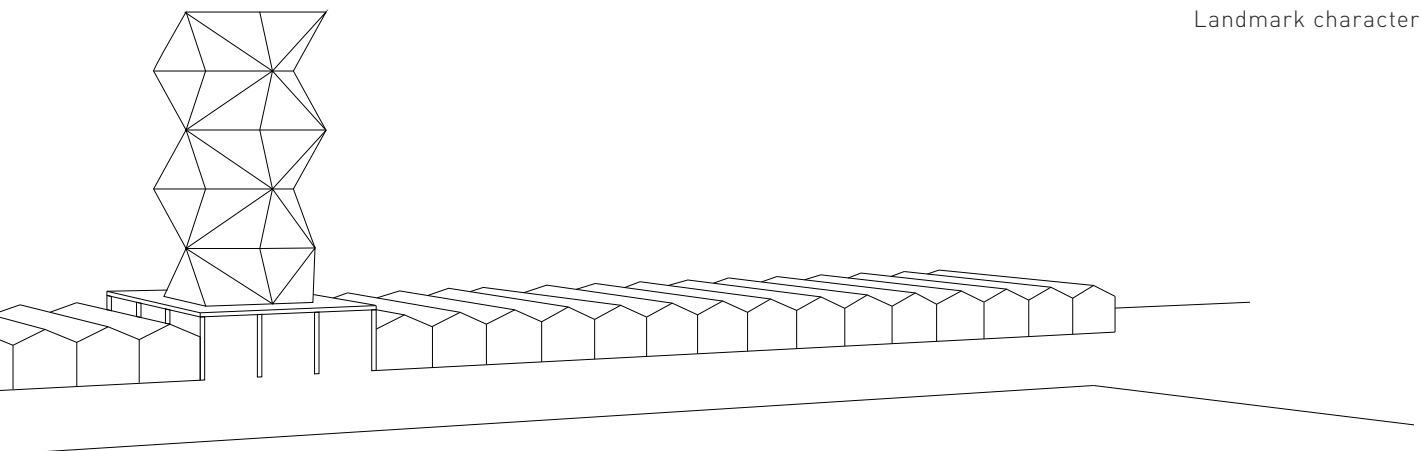
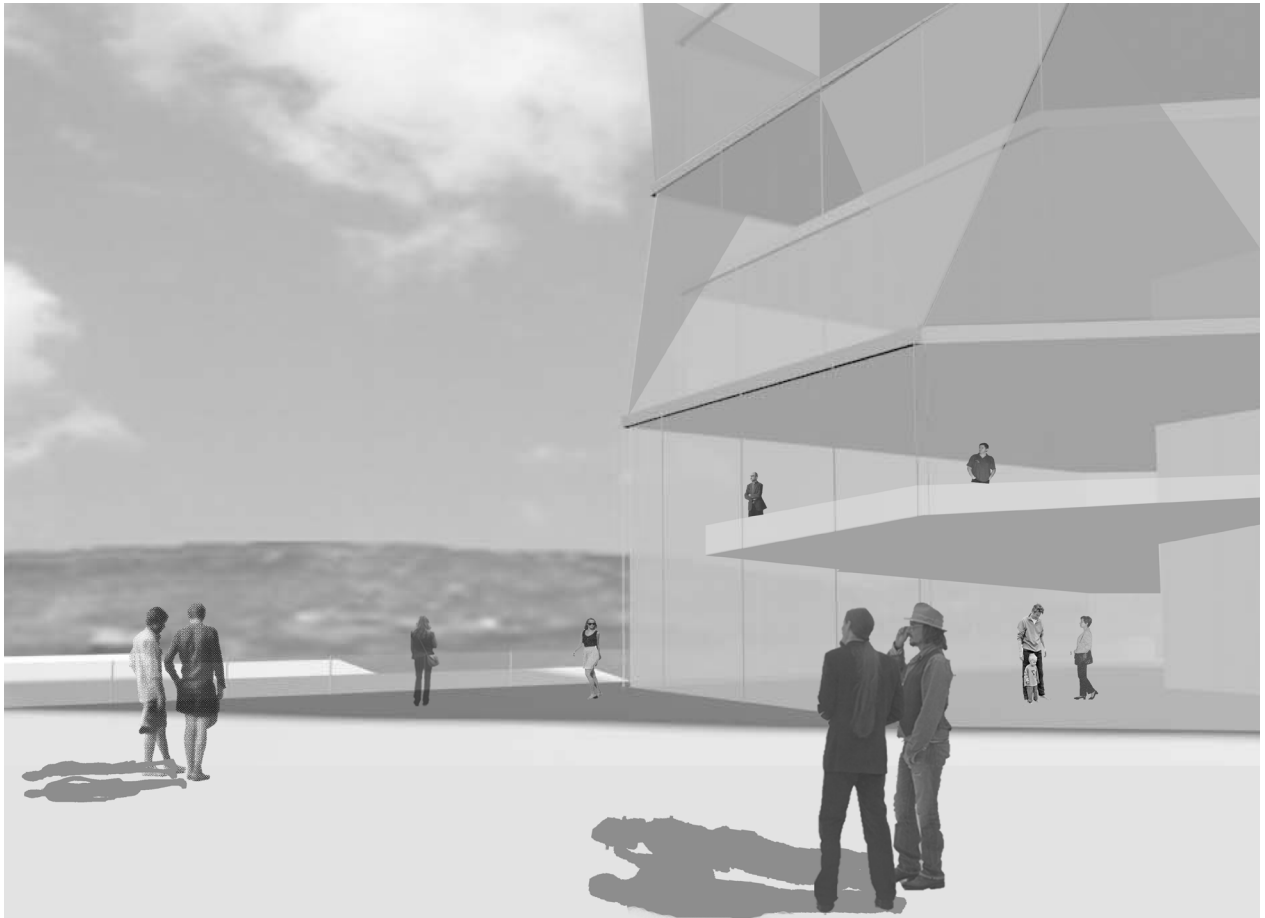


Level 2, 6, 10  
1:1250



Level 1, 5, 9  
1:1250





Landmark character



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07

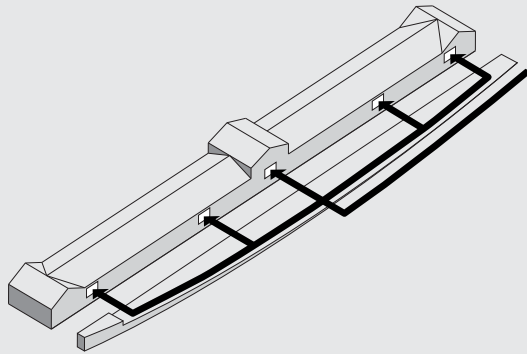






# The Thinkdock

—  
Bastian Pfister  
Mirko Endler



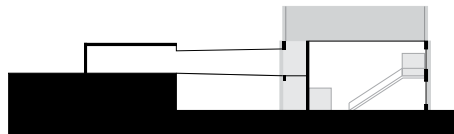
This PLACE-ACTIVATOR is situated on a site defined by a historic storage building on one side and garages on the opposite side of a private road that is used to access both buildings. The buildings are remarkably long with no connection to the city or one another. The new structure is a connection hub that works like an airport terminal. It distributes the users of the Thinkdock – a place for young entrepreneurs and start-up companies. A collection of bridges introduces porosity that breaks the length of the building and connects the co-working units with the central hub, where users can come together to exchange ideas. External porosity is introduced by piercing through the perimeter walls to create two connections to the city and make the building accessible to the public.



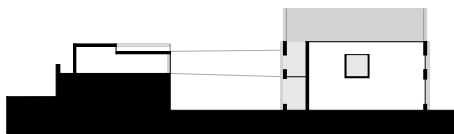


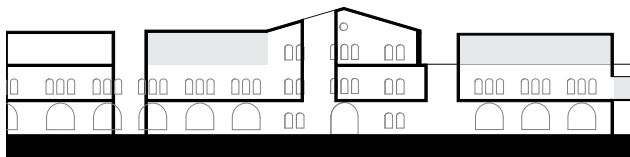
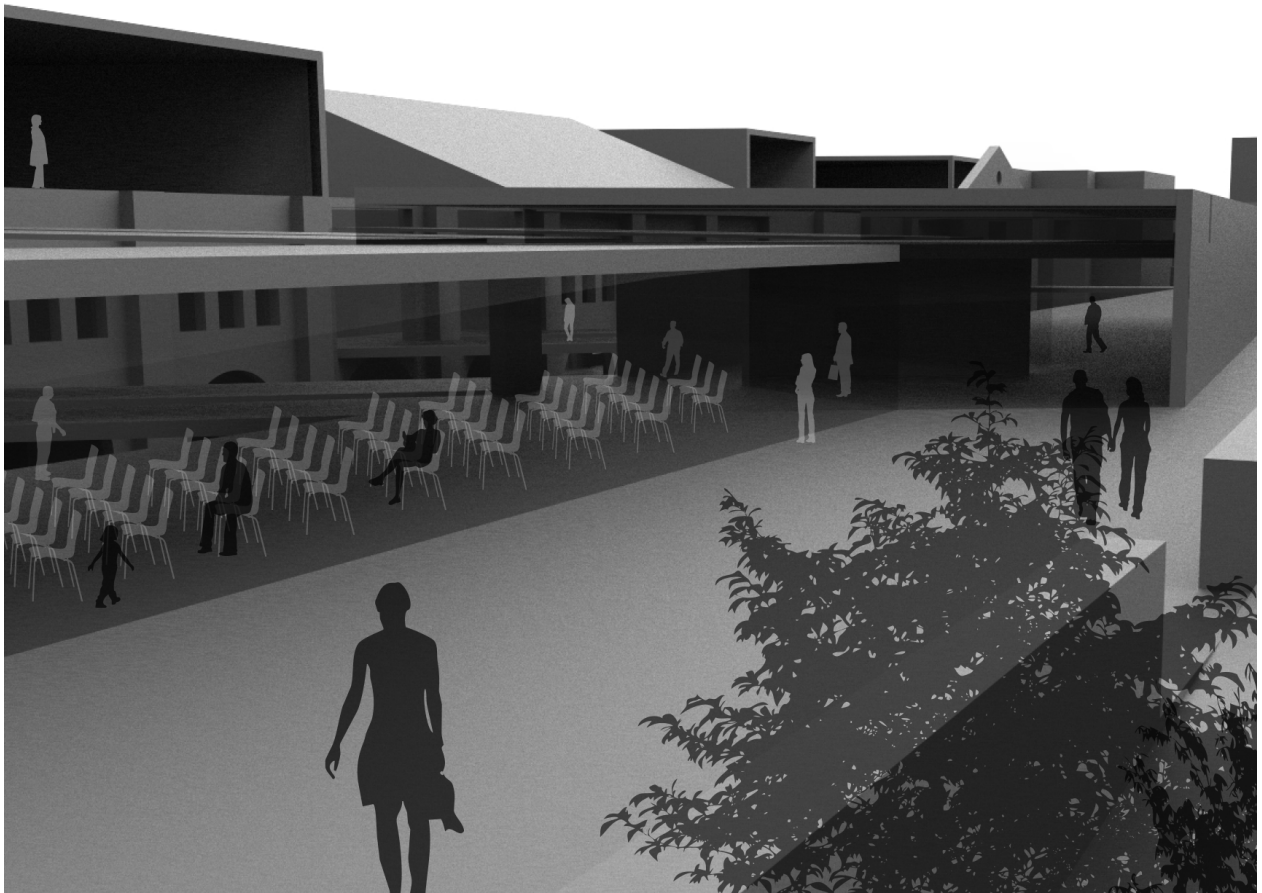


Cross section  
1:1000



Cross section  
1:1000





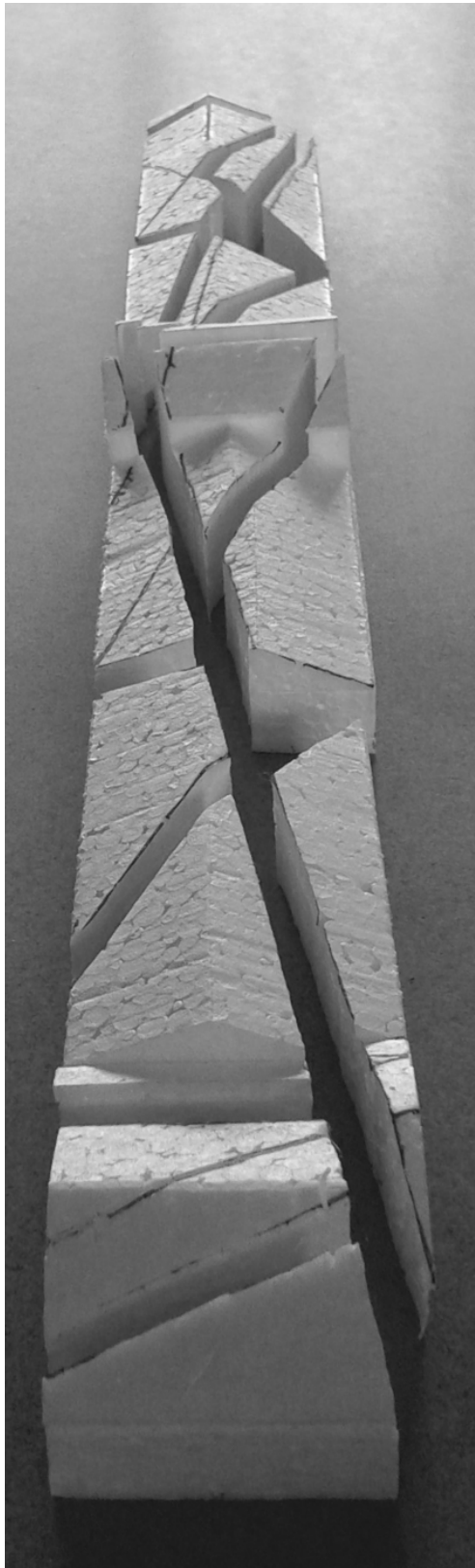
Longitudinal section  
1:1000

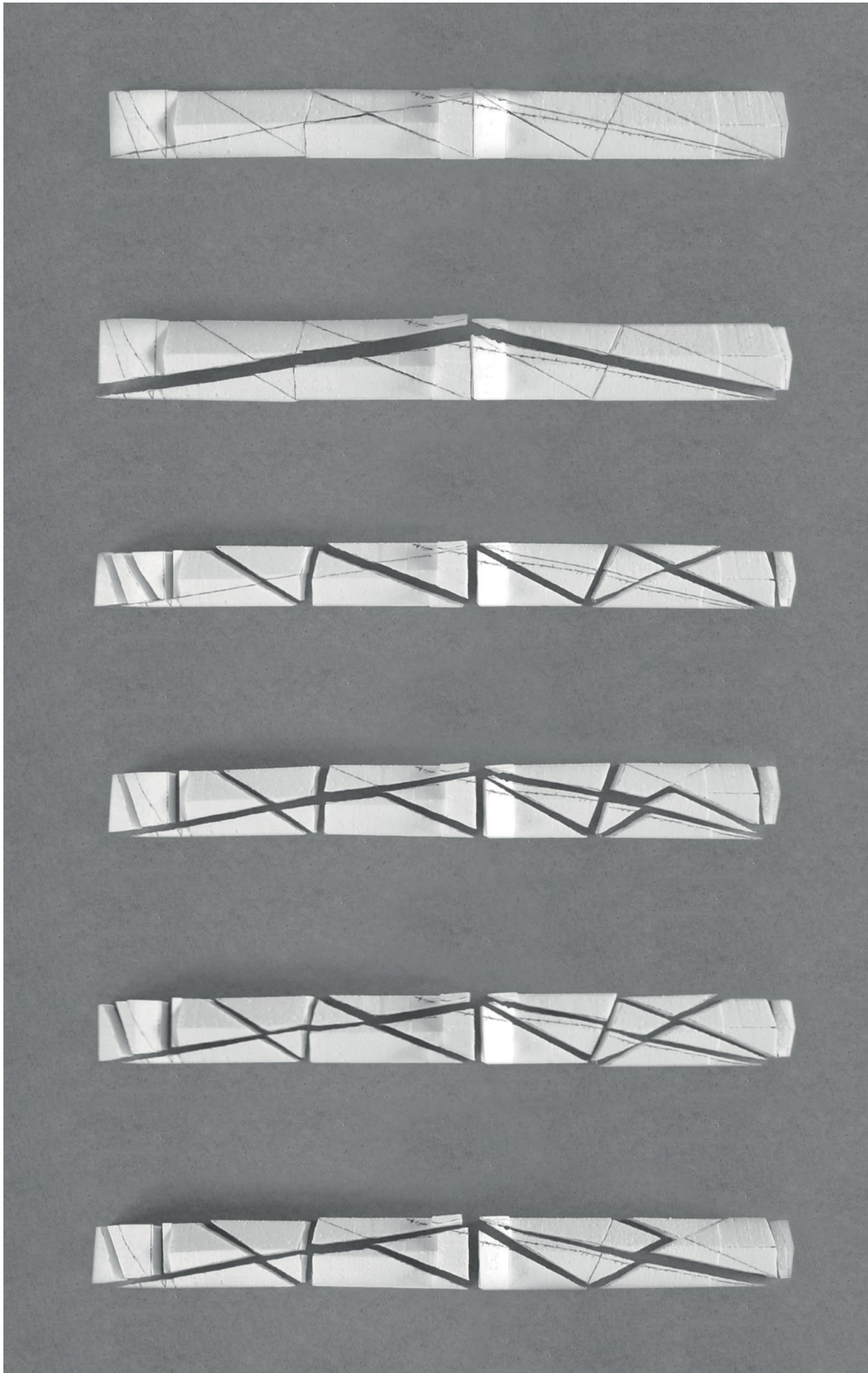


Longitudinal section  
1:2000



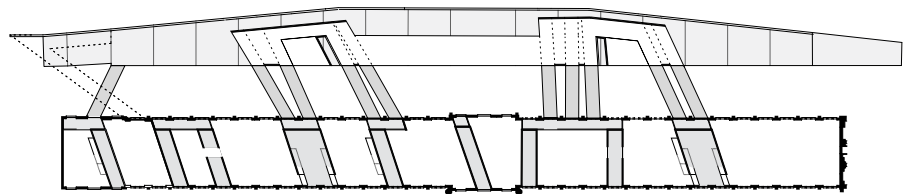
Porosity  
model



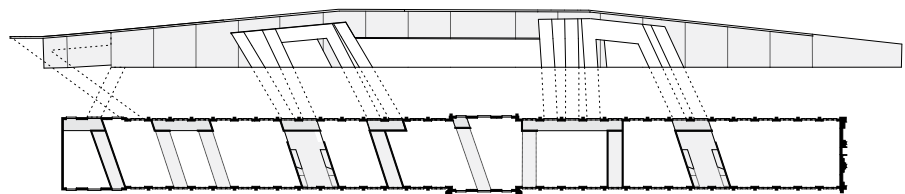




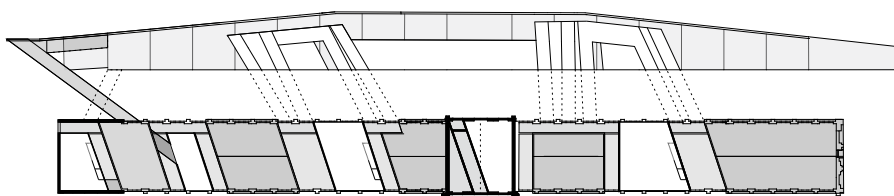
Level 1  
1:2000



Level 0  
1:2000







Level 2  
1:2000

# Porosity as Design

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David Ruic

POROSITY was introduced as a method to abstract spatial models and as a tool to design a PLACE-ACTIVATOR that maximizes its urban impact.

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## What is Porosity?

Scientifically speaking, POROSITY is the measure of void space divided by the total volume of material. Thus, the higher the amount of void space is in relation to the solid material, the higher is the amount of porosity.

In a different context, POROSITY means 'capable of being penetrated (porous national boundaries)'. In this sense, POROSITY describes the relation between a border and its penetrator.

In nature, porous structures often appear in form of a sponge or foam. But POROSITY is not associated to a specific geometry. Different techniques lead to different forms: stacking or piling, knitting or weaving, cutting or tearing, breaking or crumbling, creasing and roughening create a broad variety of shapes. What they have in common is a large surface in relation to their volume.

A material or structure can vary in the amount and type of POROSITY, depending on the scale it is examined on. As a consequence for the architectural analysis in the studio, three types of porosity were introduced:

SITE POROSITY reflects the relation of a building to its surrounding urban tissue. EXTERIOR POROSITY porosity describes the transparency and permeability of the layers that divide inside and outside. INTERIOR POROSITY deals with the subdivisions of interior space; especially the relation of transition space to main functions and side functions.

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## What are the effects of architectural Porosity?

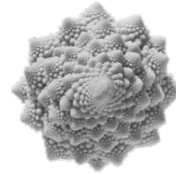
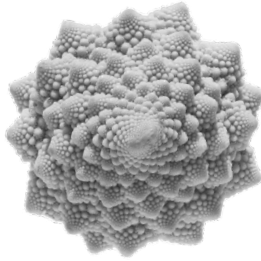
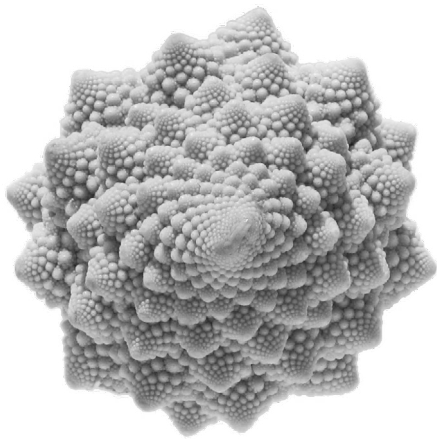
Smooth surfaces create a high flow velocity. Roughened surfaces decelerate and create turbulences. Considering the three types of POROSITY, this physical phenomenon can be transferred into architectural design.

SPATIAL POROSITY can be understood as a direct physical translation of the previously described flow image of people's movement. It can provoke or force deviation of movement. SPATIAL POROSITY creates micro ambiances that lead to an intense experience when passing through or passing by. SPATIAL POROSITY directs views onto itself generating a rich variety of complex sights. Instead of a pure efficiency of circulation, these effects lead to the identification with a place, quality of staying, and stimulation of participation. COGNITIVE POROSITY describes how architecture is perceived by the senses.

David Ruic, born 1976 in Cologne, graduated from the RWTH Aachen School of Architecture in 2002. After working as a free-lance architect in Ljubljana

and Berlin, he found his own practice in 2010. He has been a teaching assistant for ADIP at the TU Berlin since 2011.

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VISUAL POROSITY influences the transparency of bordering elements. How much of the inside can be seen from outside and provoke the viewer's curiosity? ACOUSTIC or OLFACTORY POROSITY will teach a passer-by about interior functions, when smelling a bakery in the morning or listening to a piano bar at night. UTILIZATION POROSITY is achieved through attractive programs and multifunctional spaces social borders are made porous through the attractiveness of public functions. Publicity attracts more publicity. The combination of uncertain spaces, micro ambiances or niches leads to their temporary occupation and user participation.

All types of POROSITY have in common that they create a smooth transition between public and private space, which triggers curiosity, invites and provokes social contact at functional borders and transitive spaces. POROSITY achieves extra value by activating in-between spaces and the surrounding area.

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#### How can Porosity be applied to design ?

The studio's strategy of designing porous structures is based on a visual approach that consists of four steps:

1. Create an image banks for all three POROSITY scales (site, exterior, interior). They should visually expresses a system that could incorporate a useful porous geometry.
2. From the most promising images, extract those parts that you relate to on an abstract level.
3. Develop the drawing into a diagram that explains the spatial concept. Consider the scale and orientation of the spatial situation. Support the diagram with a functional and organizational mapping.
4. Build a three-dimensional diagram of the spatial concept in form of a physical model. Test it on your site. Explore possibilities of adding and combining on different scales.

Once the spatial concept works on multiple scales, begin to build your final design.



# The Role of ADIP

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Birgit Klauck

The Architecture Design Innovation Program (ADIP) has existed at the TU Berlin for over 14 years. This chair has offered a field for experimentation in both practice and teaching guest architects and theorists. Our most recent guests shared a distinct focus on design – in particular, the advancement of design methodologies and development of specific building types. For the School of Architecture, ADIP has become a tool that provides fresh impetus to ongoing debates concerning the meaning of architectural design in cultural life and meaning of architectural research in the academic discourse.

Architecture is still often taught in non-research-driven institutions. This is remarkable since the link between research and teaching is fundamental for European universities and always has been since first advocated by the Prussian educational reformer Wilhelm von Humboldt<sup>1</sup> at the beginning of the 19th century. However, architectural education still heavily relies on an applied professional training, although located at universities.

Instead of academic research in the field of architecture, the focus often lies on increasing the knowledge base of the profession. The argument brought forth is that the application of accumulated knowledge in professional services<sup>2</sup> constitutes much of the scholarly

output of architecture. Accordingly, the past guest-professors were chosen based on of their outstanding buildings as well as their teaching concepts.

Architectural research must anticipate future global challenges and socio-cultural settings. Professional responses to questions on how to manage urbanization or on how technological advancements can contribute to sustainability should not be underestimated. It is vital that educators prepare young architects to create new solutions for the future and present while keeping the specific cultural contexts in mind. They are asked to systematically evaluate the current architectural practice and view the built environment critically. The aim is to formulate critical appraisal while building a positive strategy for the future. With this understanding schools of architecture can begin to responsibly develop and diversify the content of teaching.

The guest professors at ADIP contribute to this interrelation. As practitioners, they arrive with specific research questions and the intention to exchange information, ideas and experiences. While working within the framework of our institution, they confront students with issues from their current practice. In return, they benefit from the feedback of students and colleagues alike, which they take back to the

Birgit Klauck, graduated from the RWTH Aachen School of Architecture in 1993 and continued her post graduate studies at the AA School of Architecture in London and the Bartlett School

of Architecture. She has been teaching at the TU Berlin since 1995 and has been a member of ADIP since 2004. In 2007 she became Dean of Studies at the TU Berlin School of Architecture.

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'real world' of their practice. The two-year term of the guest professorship emphasizes the experimental character of ADIP and strengthens the interrelation between architectural practice and academia. The variation of guest professors has led to the ideological pluralism of ADIP. It is a desirable condition that all architectural education should pursue.

Our current guest professor, Bostjan Vuga, offers methods for acquiring knowledge in the architectural profession. The students learn which questions to ask in order to prepare their own project brief. They learn to take social factors into account and take responsibility for the future development of the built environment. They know that in a world characterized by change, today's answers may not suffice in the future. The students are given the responsibility to develop individual projects on a selection of sites – each responding to its urban and cultural context. Every semester follows a specific research topic that deals with PLACE. The studio works as a large team in which each student

works individually while contributing to an overall outcome. The idea of research teams may not follow the strict Humboldtian model.

But then again, one may have to begin questioning the effectivity of the Humboldtian model in comparison to today's collaborative research.

---

<sup>1</sup> The so called Humboldtian university model, which is based on the union of teaching and research in the work of the individual scholar or scientist, became a role model for the rest of Europe and originates in the establishment of the University of Berlin in 1810. The function of the university was to advance knowledge by original and critical investigation, not just to transmit the legacy of the past or to teach skills. Accordingly education is a student-centered activity of research, professors supervise and support these individual research projects. See: Anderson, Robert (March 2010). "The 'Idea of a University' today". History & Policy. United Kingdom: History & Policy. Retrieved 9 December 2010.

<sup>2</sup> Includes the whole spectrum of the architect's services.

# Credits

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## Students

Elisabeth Bork, Irina Burmova, Danil Chekushkin, Anne Drewitz, Mirko Endler, Sophia Engelberg, Linda de Geus, Simon Hacker, Dora Ivanova, Christina Kavourz, Philipp Kempfer, Ole Klingemann, Caspar Kollmeyer, Leopóld Kristjánsson, Matha Zarco Letzel, Anna Mohn, Binsar Nasoetion, Tomme Omer, Bastian Pfister, Manuel Rogalla, Kevin Rowedel, Christopher Sitzler, Liat Soriano, Alexej Tretyakov

## Articles

Boštjan Vuga, Roger Riewe, Gian Paolo Venier, David Ruic, Birgit Klauck

## Guest Critics

Donatella Fioretti, Wolfram Putz, Roger Riewe, Gian Paolo Venier, Wilfried Wang

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# Imprint

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