



PRAGUE LECTURES

JULIETTE BEKKERING & MICHIEL RIEDIJK – FA CTU 2011

Faculty of Architecture of the Czech Technical University in Prague
cordially invites you to a lectures by Dutch Architects

thursday

12/1/2012

at 6.00 pm. in Betlémská kaple
Betlémské sq. 4/256, Prague 1

Faculty of Architecture in Prague



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Introduction

This publication, presented to Czech as well as (probably) Dutch readers, serves as an indirect evidence of the fact that an international cooperation of universities is not, and can not be, only linking of two institutions based on well-intentioned exchange agreements. Primarily, it is a result of very specific personal relationships and small common work with often unpredictable outcomes. Unfortunately, too often we are embracing the abstract goals of international agreements and neglecting the important role of interpersonal contacts and quite ordinary friendly relations.

At the beginning of summer 2011 I visited my Rotterdam friends Juliette Bekkering and Michiel Riedijk after a long time. When at dinner our conversation turned to the possibility of direct cooperation, none of us knew that it would become real and where we were going to end up eventually... We all began to elaborate on this idea seriously and thus it gradually received a concrete form. We believed that our cooperation should not be limited to a single visit, but rather that it would be interesting to find a reasonable degree of intervention in actual teaching – ideally, to find a form of cooperation in teaching in the studios, which is an essential part of education of future architects in both countries. Finally, before the beginning of the winter semester, we agreed on a form of cooperation the role of Juliette Bekkering being formalized by naming her a "visiting professor at the CTU", while the role of Michiel Riedijk remained very informal due to his rather unpredictable engagements as well as his position at the TU Delft.

In this publication, significantly supported by the Netherlands Architecture Fund, you will find the end of the story and learn more about specific results of the project, which eventually grew to an unforeseen width as well as depth. However, it is not the projects themselves but rather the direct confrontation of two – after all – different ways of thinking and education, which was more important. In the end this was the most interesting lesson for both students and teachers on both sides. A short but very intensive participation of B&R marked the approach to teaching in the studios. I would characterize it as

"compression" as well as "liberation" – a compression of all analytical data and fast collection of information with a clear conclusion on one side, and a liberation of possibilities for student imagination on the other. The task of graphic expression of the "ambition" was unusual news for the students, they were unable to cope with it in the beginning. However, as it turned out later, an emphasis on the essential idea of the projects, rather than on their complete documentation, coiled as a red thread within the projects, and helped some students achieve extraordinary perfection. To others, on the other hand, it was a clear evidence that they were not yet able to work on such an abstract level and must further improve their basic knowledge and skills.

The pedagogical part of the cooperation culminated in a double-lecture in Betlémská kaple (Bethlehem Chapel). It was the climax of the cooperation and finally confirmed to all the participating students what they had begun to reveal already during their work: an uncompromising approach to the position of the architect, supported by a clear story and, above all, by hard work both on the spatial concept and the engineering of a building – leads to excellent results.

In the introduction to the publication I would like to thank all the "leading actors": Juliette Bekkering for taking the main responsibility and for fulfilling the plan, Michiel Riedijk for his generous participation and excellent quick responses within all contacts, Hana Seho and Martin Čeněk for the invisible and often unpopular role of the "Czech partners", and all the participating students for bravery in direct confrontations and intensive work on individual projects. My thanks, of course, go also to all who participated in the realization of this publication, and no less importantly, to the Netherlands Architecture Fund in Rotterdam, without whose financial support it could not be accomplished.

April 2012

prof. Ing. arch. ir. Zdeněk Zavřel,
Dean of the Faculty of Architecture of CTU



Lectures, Betlémská kaple, 12th January 2012



The Identity of the Public Building

JULIETTE BEKKERING

***1963**

Bekkering Adams Architecten

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1989 Graduation with honors the architectural department of the Technical University in Delft, Netherlands.

1993 Post-graduate education in Urban design at the Polytechnic University of Barcelona.

1989–1997 Work with several renowned architectural offices, including OMA

1995 Collaboration with Neutelings Riedijk architecten

1997 Juliette Bekkering Architecten in Rotterdam established.

2005– present Collaboration with Monica Adams under the name Bekkering Adams Architecten.

Teaching and lectures at several (inter) national architectural institutes, member of different Quality and Advisory teams and participation in juries, master classes and workshops.

2011 Visiting Professor at the Faculty of Architecture of the Technical University in Prague.

Building a memory palace

Sculpture – Scenography - Skin

Each design is a search for the essence of the task at hand. Analogous to the sculpture "The Secret" by Auguste Rodin (1), where two hands emerge from the rough stone and the sculptor symbolically liberates the hands from rough matter to assume their own identity, the architect has to forge the public character and identity of the assignment in order to form the yet unformed built substance.

This recurring quest for the identity of the design and the way the rough stone will start to take shape in the near future, representing the importance of the public sphere, enabling new typologies, or generating new encounters, reflects the design intentions of the architect, since the design is always based on the position you assume as an architect.

Although buildings represent inertia, solidity, and slow matter, the thought of a distant future and a timeless quality is of utmost importance, since buildings have to respond to constantly changing uses and meanings due to developments in society.

Here the key question of the ambition of the architect comes into play. The ambition of the architect is reflected in the building through the interpretation of the assignment. Precisely formulating an ambition is essential to giving a building its own sturdy identity. The quest for identity is difficult and often leads to ambiguity: there is no clearly defined itinerary to be followed with a clearly known destination. The design process is not a "ClubMed" trip to a well known resort but a journey of discovery whose end point, the result, and the trail are not known in advance.

Aspects and polarities such as public versus private, the changing role of the public in our society, "permanent" education in our daily lives, the notion of urbanity and the scale, the role of the interior and themes such as sustainability determine the scope of ambition while designing our future buildings. Furthermore, because of changes in methods and processes, the manufacturability of a

building, and the relationships with the contractors, the client or the future tenants have become design components that highly influence the final result.

In our work, there are three recurring themes that enable us to give direction to the above mentioned themes and constraints.

Sculpture: the physical form that the building assumes and its representation in the urban landscape,

Scenography: the way the building is used, the story that the building tells its users, and the experiences that the building generates.

Materiality: the capacity of the building to evoke tactile and sensory experiences. This theme addresses the way the building is built: how it is materialized, its supporting structure, and how the patterns of the skin are conceived. Materiality directly relates to the so-called "flesh and blood" of the building.

Sculpture and iconography: Although there are many examples of buildings that look like powerful sculptures, with a recognizable appearance and clear identity, while designing you use series of different images and associations from the built environment that you like as if a catalog is stored in your memory: a giant "memory palace". This is analogous to what Aldo Rossi has described in his book: "A Scientific Autobiography".

The gigantic concrete pylon of the Delta Project (2) on the former work island Neeltje Jans is for me almost symbolic of what a building can achieve and express. The Oosterschelde dam, a vast civil engineering project to protect the Netherlands from storms at sea, is composed of 65 pylons. It took 1.5 years to build one single pylon, hence this project demanded a tight organization where simultaneously different pillars were made. To be sure, two spare pillars were made. One of them remains on the artificial island Neeltje Jans, rising as a huge sculpture from the water. Meanwhile, this one pillar symbolizes the whole endeavor of the Oosterschelde dam. Isolated, alone, rising from the sea water, this single pylon shows the ingenuity, the daring enterprise of building such a dam





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and its strength. By contrast the dam does not convey this monumental power. The dam itself turned into an anonymous civil engineering work topped with a road that runs from nowhere to nowhere.

Just before my departure to Prague, Karel Hubáček, a leading Czech architect, passed away. He designed, among others, the Ještěd Tower (3), a tower with hotel and restaurant facilities combined with a television mast. The building is located on top of the mountain Ještěd in Liberec. Three years earlier I had been there: the building can be seen from miles away; like a magnet, it attracts all attention to itself: a rocket on the top of the mountain that can leave any time. The interior is like a home for Barbarella, a backdrop for a spectacular scene in a 007 movie.

The racecourse

Scenography: the way the building is used and the story that it tells to its users. The scenography addresses the experiences the future building will generate.

In the early twenties of the 20th century the Lingotto Fiat factory in Turin (4) opened its gates. The car plant was designed by Giacomo Matte-Trucco. The huge building, more than half a kilometer long, is conceived in such a way that its form represents the different steps in the car production process. Each floor is the stage for another step in the manufacturing process. One floor comprises the assembly line, the next the body workshop, the engines, the gearboxes, the differentials, and eventually the painting of the car. The more complete the car was, the higher it rose in the building. Through elegantly designed concrete ramps with a delicate rib structure, the finished product was directed to the roof of the Lingotto building. On the roof the car was tested on a racecourse with a magnificent view over Turin and the Alps.

The curly curves on the roof-edge enabled the cars to race while looking under an angle into the abyss of the inner courtyards of the factory. After test racing, the cars were transported into the wide world via the ramps. The combination of an absolutely

convincing, efficient organization and the spectacular scenography for production of cars turned the building in one of the most powerful designs of that era.

The building of flesh and blood

The materiality of a building highly determines its capacity to evoke a tactile and sensory experience. The way it is built, how it is materialized, its supporting structure, and the patterns of the skin come into play. The building is conceived as analogous to a body of flesh and blood.

In the same period Matte Trucco designed the Lingotto factory, Frank Lloyd Wright built the Ennis House in Los Angeles (5). The house is the fourth of his so-called Maya Period. Frank Lloyd Wright developed a low-cost building system, during his time in Los Angeles. The system consisted of simple, modular, concrete blocks with a pattern. His idea was that on the weekends people could cast these concrete blocks on site, and by doing so eventually build their own houses. The pattern had several variations with closed or open parts to let daylight filter through. Houses built using this system were called textile block houses. Ultimately there were 4 houses built with this "Lego" system. They have incredible poetic power. The refined concrete pattern combined with the solid cubic block-structure give the houses an exotic look, like forgotten temples in the jungle.

Vandal-proof

Booster Pumping Station, Amsterdam (6):

The design for the Booster Pumping Station East was a major challenge. The assignment comprised a building program that did not yet exist. The brief demanded accommodation of three giant sewer pumps in order to route Amsterdam sewage to new water treatment facilities on the western side of the city. The second challenge was to conceive of a context that did not yet exist, since the location of the building would radically change after the construction of the station. The new station would liberate the site from its current water cleaning facilities, and would enable new development. Within a few years on the site an entirely new

residential area would arise. The urban plans ranged from a green park-like residential area with green living areas to new Manhattan-like developments on the shores of the river IJ.

With this information, ranging from a non-existing program in a not yet existing place, we started working. The main ideas of the design were summarized in a series of steps: the building as a beacon along the highway ring, a standalone sculpture along the newly planned boulevard. The building had to mitigate the noise of the pumps, the building needed to be "vandal proof" to protect the installations from vandal attacks. The building had to accommodate the equipment in an optimal way and communicate and convey its function and value to future urban development.

Sculpture

Since we had to make hardly any windows and doors, we had the opportunity to conceive the volume as a gigantic sculpture. The building's skin folds around the heavy pumps and machinery in the heart of the volume. The base of the building follows the form of the heavy sewer pipes, and air inlet grills. The overall shape of the station is determined by the functional demands of the building's equipment and the form of the parcel. The volume juts out, protrudes, and contracts, and has cantilevers and recesses; all related to inner service platforms, the positions of air inlets or discharge grills, doors, or other functional necessities. To keep the building as pure as possible, all installations and other openings are concealed. The roof is designed as a fifth facade to achieve a building as a universal object from all sides, transmitting its function to the neighborhood.

The skin:

Concrete was the ideal material for the skin of this building (7). Each form and each pattern is achievable. Several studies showed the effect of different patterns: coarse versus fine, sober versus exuberant. Since in precast concrete slabs you have to work with a pattern of seams that will dominate the appearance of the building, we designed a web of seams like a coat wrapped over the building. The seams of the individual panels are immersed in



the bas-relief pattern. Besides the pattern of seams, characters are added to the concrete panels as a second decorative layer. The word "Booster" is visible in various thicknesses. The panels are shot blasted and allow different reflections and shadows to play at various moments of the day. The building is made of a cobalt blue and green marble surcharge pigmented concrete.

The individual panels are masterpieces in themselves, skillfully executed as ice floes on the site. The base of the building is illuminated with a diffuse blue light through narrow light fixtures integrated in the cantilever. At night, the booster gently glows in the dark. The infrastructure, material and structure, provides, analogously to the pylons of the Delta work, a self-evident powerful symbolism. The building is visible from afar, and reveals the hidden heavy tasks that are performed inside.

The Secret:

Each assignment requires its own interpretation in order to provide new use possibilities, generating new programmatic relationships, and starts telling a new story. To achieve this in each new assignment we first define what identity the building should evoke and addressing the question "why", we are in search for a specific architecture, before the question "how" can be addressed. "Why" defines the ambition of the building; whether it is a hard or a soft building, striking or modest, screened, or open and inviting.

The new accommodation of the Schuurman Group (8) is located at the Boekelermeer Alkmaar business area. This prime location is visible from the highway and borders a nature reserve. In general, industrial buildings are hermetically closed boxes to maximize storage space and fight burglary. In order to express the open-minded and forward-looking image of the company, we imagined an open spatial workspace, flooded with daylight. Daylight became a theme in the building

The volume has uplifted corners to give room for the large glass surfaces indicating the special features of the building, like the main entrance, showroom, and service counter. Due to the glassed



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corners, daylight filters deep into the building. The lifted corners contribute significantly to the overall appearance of the building and highlight its special features. The strong diagonal lines of the exterior give the building a distinct expression, allowing the landscape to flow visually into the building. In the closed parts of the facades oblique incisions provide space for rays of light: sometimes glazed, sometimes of polycarbonate with LED lighting. The building consists of two zones: an industrial zone and an office area. The main organizing elements in the building are the large staircase, and on the top floor, a large inner patio. The stairs lead to the natural daylight of the patio and serve as the main artery in the heart of the building, connecting the entrance area and the offices to the adjacent canteen and workshops.

The patio (9) spans a substantial part of the building, providing daylight deep in the building and vistas from the inner garden to the offices, the canteen, and the workshop and storage area. The patio is the heart of the building, hidden from outside: only on the top floor you can access this secluded, intimate patio forming

the secret of the building's design. The patio is an incision nearly 10 meters above the warehouse. Through its windows you can see the stored boxes below, while enjoying a panoramic view over the surrounding landscape, illuminated by tulips in all the colors of the rainbow.

Scenography:

In the second half of the 20th century, the American architect John Lautner designed an overwhelming number of marvelous villas in the Los Angeles area. Years ago I visited a few of his villas, hidden in the hills of Los Angeles. The buildings merge with the environment: rock pieces are integrated into the floor, tree trunks shoot through the roof or carry the cantilevered roofs as a canopy giving shade and shelter. Water splashes in small streams through the houses and curls into soft folding wooden recesses on the floor. Each house culminates in a breathtaking view, where a sudden dizzying vastness overwhelms the visitor. Here you can imagine being a cave man or just a successful 007 spy.

The hat

Recently we completed the headquarters for the fashion brand Esprit (10). Esprit is one of the largest brands of this moment, with a young and dynamic image. The building needed a powerful, striking image to broadcast the Esprit brand. On the other hand, a neutral, timeless structure was required, since Esprit's image may change over time. The design provides a hybrid building that includes office functions, showrooms, and corporate functions. First of all, the building is a tailored suit, tailor-made for Esprit. Secondly, the building is a sustainable neutral, able to accommodate any organization.

The building has a "Janus" face: a recognizable face to the highway, and the other one overlooking the greenery and closely linked to the landscape. The landscape is lifted like a blanket and pulled into the building to create a raised, transparent entrance area. In the plinth the parking area is invisibly integrated. The plinth is a welcoming gesture to the environment. On the plinth the entrance lobby, restaurant, and cafe are situated, with terraces to





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enjoy the afternoon sun. Because the building's height was limited by urban planning regulations, the building is designed as a giant roof. Since the facades of the tapered building are set at an angle of 9 degrees, the volume is considered a roof according to local legislation.

Falling Curtains

Analogously to Lucio Fontana, who made knife cuts in stretched canvasses, the facade is treated as a canvas where, the windows form wedge shaped cuts. Light, bronze-colored aluminum cladding, embossed with a filigreed pattern of waves and curves, covers the building.

The pattern conveys information on the tenant of the building. Waving curtains of large pieces of delicate cloth composed of small dots of various dimensions and undulations are represented in the steel facade paneling. The bas-relief of dots and perforations repeats itself in three plates, wrapping in a continuous pattern around the building. The pattern in the silver, bronze-colored plates

reflects the light and creates all weather conditions' different reflections, thus giving way to a dynamic facade that is never the same. The tapered volume is supported by large boulders and columns on a plinth of stone blocks, anchoring the building to the landscape.

The interior of the building is dominated by a large, monumental staircase lined with wood (11). The staircase connects the three floors, offering views on the activities on the different levels. Due to the width of the stairs it can be a stage display for clothes or serve as a catwalk in product presentations and fashion shows. On the top floor there is a patio where you can relax. Sunlight falls deep into the building through the large patio windows. Two large cantilevered panoramic windows on the upper floor mark the meeting rooms in the building. The wedge-shaped windows are all different: high or low, ascending or descending, providing dynamic, natural light in the interior. The windows and the overall shape form a distinctive silhouette in the urban landscape, visible from afar along the motorway around Amsterdam.

Public space:

The role of the public domain is constantly changing. The public sphere retreats into the interiors of buildings and hardly provides added quality to the public domain. This development, so-called internalization of society, threatens the cohesion of the urban landscape. Public space tends to fall apart in isolated pockets within the urban landscape. Through clear programming and staging of the public sphere the urban domain gets meaning, and relevance. By creating spaces that are used frequently, fantasizing about endless possibilities, clearly delineating pedestrian routes, usage, type of vegetation, and high or low spaces, we are able to enforce to the public domain.

Series of gardens

Landscaping Bloemershof (12):

The design for the Bloemershof urban ensemble comprised a special task since it was possible to design both buildings and the surrounding environment, squares, roads, parks, and gardens. The assignment consists of three public buildings, apartments,

and houses on a prominent site between the main road and the edge of the "Veluwe" National Park. The public functions consist of a vocational school, a sports hall, and a fire station. Together they form a new focal point in the neighborhood. The location is a link between the city center of Dieren and the foothills of the leafy, natural park of the Veluwe. The site balances cityscape and countryside. Analogously to the manors and estates in the direct vicinity, Bloemershof is conceived as an urban ensemble with a formal garden opening to the street and an informal park-like garden towards the Veluwe. The ensemble is bisected by a major footpath, connecting the village to the forest by means of a monumental gate.

Inside

The urban design strategy was to invert the usual relation between the public and private domains: all the private rooms in the buildings are on the perimeter of the site, while public functions are located in the heart of the area. Areas like schoolyards, gardens, maneuvering space for fire brigade vehicles, and parking remain on the outside, while public functions are located in the heart of the complex: the formal garden at the side of the road and the scenic park on the side of the Veluwe, separated by the pergola. All the public buildings form a U-shape, and the houses fan out to the Veluwe.

The ensemble is conceptually conceived as a "petrified" forest, with different heights meandering through the gardens. The load-bearing structure consists of concrete "trunks" filled with glass, accompanied by closed sections of slightly sweetened stone strips and thin wooden planks, floating as a "canopy" above the concrete trees. The choice of materials enhances the natural unity of the complex.

School as an engine for the neighborhood (13) (14).

The role of schools in society is changing rapidly. Increasingly, school buildings are used for various activities in the neighborhood, not only as a location for education during the day but also in the evening for courses and meetings. The school should function as an engine for the neighborhood: new public spaces where people



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can meet and get together. The interiors of the school are bright and transparent, to provide optimal functionality for pupils and staff. By minimizing circulation areas in the school the brief allowed us to design a hall as large as possible: a joyous common interior providing space for a variety of activities. For meetings or performances the students can cook in the adjacent kitchen classroom, transforming the space into a restaurant for the neighborhood.

The large south doors of the common hall can open to the garden to allow the quality of the park to filter into the school. The gym has diffuse daylight from the top and is used by the school during the day, while at night, clubs from Dieren come in. In the evening the children play in the park, and joggers run in the woods.

Campus

The project for a Campus in Peer (15), Belgium, with a total size of approximately 18,000 m², comprises the construction of a secondary school, an elementary school, a sports complex, and a boarding school. The campus is located on a site of approximately 3.5 hectares in the immediate vicinity of the center of Peer. The plan provides a large green campus open to the public: a park with meadows, bushes and sports facilities for both schools and for the residents of Peer. The project is a landscaped ensemble, with all buildings and entrances to the outer perimeter of the area and connected to the park by a continuous pergola, which serves as a partition between the schoolyards and as indoor playgrounds. It creates a variety of buildings, indoor playgrounds, and outdoor spaces around a central park: a diverse play and learning landscape with terraces, patios, and secluded gardens, where a range of activities is possible. The school buildings are organized around a large central hall, with open learning centers at different levels. The multipurpose room is on the first floor, at the top of a monumental staircase, and can be used as a tribune and performance area during parties and school festivities.

The memory palace

Each draft unfolds a story. The story could be about the shape, the presence in the landscape, the story of the visitor wandering through the building or his footsteps echoing on the hard stone surface. The stories reveal children, bored in their classrooms, or a party in a vast and monumental hall composed of natural stone, wood, and masonry. We design gigantic memory palaces, accumulations of imagined spaces that can function again as carriers for other memories and dreams to come true in future designs.

Juliette Bekkering,
Prague 12 January 2012





The Tale of Two Buildings

MICHIEL RIEDIJK

***1964**

Neutelings Riedijk Architects

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1983–1989 Technical University Delft

1989–1991 Partnership with Juliette Bekkering

1992– present Partnership with Willem Jan Neutelings

1990– present Teaching at the Technical University in Delft and Eindhoven, the Academies of Architecture in Amsterdam, Rotterdam and Maastricht and the Berlage Institute in Rotterdam.

1990– present Lectures at numerous international architectural institutions and participation in several symposiums worldwide.

2002 Guest Professor at the Lehrstuhl für Wohnbau und Grundlagen des Entwerfens, RWTH Aachen.

2007– present Professor of Architecture at Technical University Delft

Prologue

In 1859, Charles Dickens wrote *A Tale of Two Cities*, a novel about love that plays out in Paris and London during the French Revolution. It begins with a statement of opposites: love versus hatred, fortune versus misfortune, light versus darkness, and so on. The protagonists, the two cities, and their cultural contexts are presented as antitheses: London is from Dickens's perspective the city of reason and rationality, while Paris is the city of hot-blooded passion and murderous brutality. Ultimately, the two different story lines converge and turn out to be inextricably linked. The only thing that counts in the end, according to Dickens, is not the contradistinction between reason and passion, but the true love of the main characters.

The "tale of two cities" is a rhetorical device whose antitheses give definition and character to the different dramatis personae, such as the cool, detached Englishman versus the passionate French-woman, and offer the reader the highly satisfactory outcome of the synthesis of two extremes.

A Tale of Two Buildings

"A Tale of Two Buildings" draws on Dickens's rhetorical device to weave an analogous tale around two recently constructed buildings designed by our firm, namely the Netherlands Institute for Sound and Vision in Hilversum (16), and the MAS | Museum aan de Stroom in Antwerp (17). These two buildings appear to be polar opposites in every respect. The architectural composition and the materialization of the two buildings will be discussed in terms of contrast: Centre versus Periphery, Edge versus Core, Material versus Virtual, Glossy versus Matte.

Architectural design spans three different poles: Position, Composition, and Materialization. Position describes the standpoint designers adopt vis-à-vis the task and the way the cultural or physical context resonates in the design. The composition is the drawn encapsulation of that interpretation of the task, while the materialization gives expression to the way the initial position is translated into Wood, Steel, or Concrete. Position, Composition, and Materialization are inextricably linked to one another. Despite that, each of

these aspects is also independently evident in every facet of the architectural design.

Centre

The Institute for Sound and Vision is conceived as a pure Euclidian cube of approximately 55 by 55 by 55 metres. Half the cube is sunk below the ground, the other half rises above it. The different components of the Institute are housed in every corner of the cube: the archives and related spaces in the basement, the museum and offices above ground. The various parts of the building are purpose-designed, which is to say that the form, size, and nature of the space in each part of the building are precisely tailored to the technical demands of that particular section. The below-ground location of the archives and the heavy concrete walls and floors make any other form of use highly unlikely.

The programme components do not fill the entire cube because they have been pushed to the edges of the volume thereby generating a large cavity in the centre of the cube. The cavity devoid of programmatic responsibilities or significance forms the heart, the empty inner court, of the building. Because half of the built mass is dug into the earth, you enter the heart of the building at ground level. The entrance opens onto the court from where the different parts of the building are visible and accessible. From the large court a circulation route runs downwards to a big ravine, a canyon lined with all the Institute's archives, or upwards to the offices and the museum. All access and routing through the building begins in the middle, the centre of the composition.

Periphery

In the Museum aan de Stroom, by contrast, movement through the building is routed in the periphery of the volume. An escalator edged by undulating glass winds slowly upwards from ground level, finally finishing sixty metres higher in a huge panoramic terrace overlooking the urban landscape of Antwerp and its harbours. The MAS is a city museum with a very diverse collection, ranging from eighteenth-century children's toys to masterpieces by Rogier van der Weijden and Jan van Eijck. This heterogeneous collection called

for ten exhibition spaces, which we placed one on top of another, rotating each one ninety degrees with respect to its predecessor. The result was a huge spiralling stairway that organized the route along the periphery of the volume. MAS's ten boxes are not tied to particular uses. The office space could become a museum gallery; the open storeroom has the same spatial configuration as the other rooms and could also become an exhibition space in the future. The building is programmatically neutral: the shape, site, and character of the spaces are such that they could one day be used in completely different ways.

Addition

The materiality of Sound and Vision is made up of different images and references. The canyon, five underground levels deep, was conceived as a stone necropolis, a burial ground where the physical remains of our audiovisual past lie in store until the end of time. The strongly repetitive openings in the canyon walls are clad with natural stone. The openings glow with an orange-reddish light, reinforced by the epoxy resin coating on walls, floor, and ceiling. The archives form a stone block at ground level, above which a silvery volume appears to float. This volume, which contains the museum section of the building, looks like a spaceship dressed in a glamour gown worthy of Oscar night. The volume has three successive cantilevers all clad with small, silver-coloured panels fixed in place with springs. The panels can move, quiver, and reflect the artificial light. The building's manifestation can be described as heterogeneous: in the materiality and spatial form there is no continuity between inside and outside. The different volumes in the interior of the building are not explicitly visible on the exterior and the materiality of the internal form does not coincide with the organization of the overall shape on the outside (18) (23).

Monolith

For its part, the MAS stands beside the River Schelde like a monolith of red stone. Everything is clad with this material. The walls, floors, ceilings, and the outdoor area around the building are finished with the same type of stone (20). The pedestrian route, the ascending escalator behind the undulating glass, seems to have been freely







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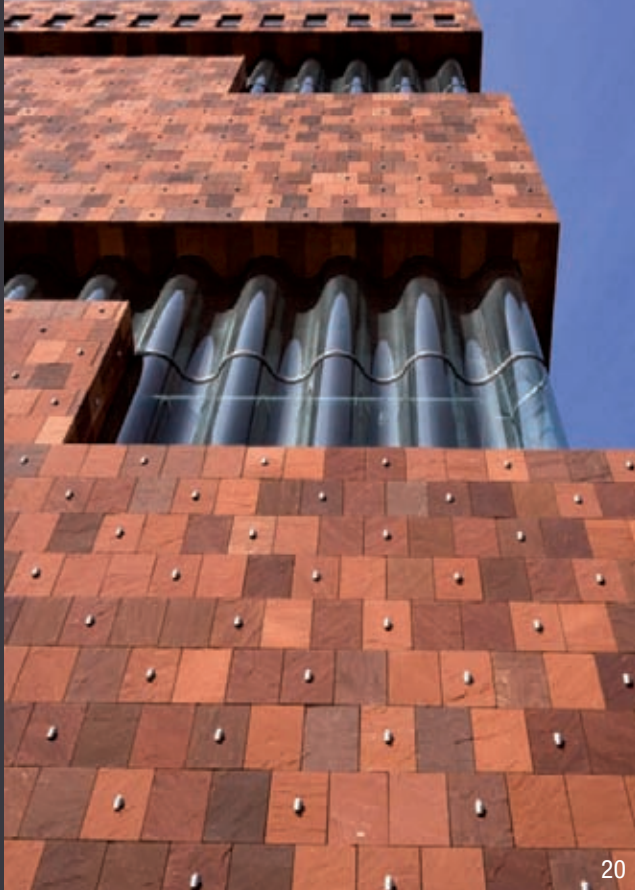
carved out of the stone, a cavity in a solid lump of stone. The different colour tones in the stone play a part in the composition of the cladding. By mixing the light, mellow, and darker shades of red, based on the axiom of the geographical map, a richly variegated image was created in which the juxtaposition of large areas of the same colour was avoided. The exterior and the interior of the vertical promenade are defined by the red stone. The building's appearance is homogeneous, which is to say that there is considerable continuity between inside and outside. The large cantilevered volumes of the exhibition spaces are clad inside and out with the same reddish-brown stone. The wavy glass is merely a climatic separation, not a transition between different worlds, each with their own materiality or appearance.

Edge

Given that the large, unprogrammed cavity lies in the heart of the Institute for Sound and Vision, the load-bearing structure of the building is so designed that no supporting elements stand on or in any way directly encroach on this central cavity. To achieve this, all the load-bearing structure is contained in the exterior wall areas and edges of the volume. The office section bears on small,



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fourteen-centimetre-wide columns integrated into the wall unit. The "letter" columns in the north and south elevations support the museum, freeing the internal space from structural elements. The deep cantilever of the museum block above the central square is balanced by a large concrete external wall on the east elevation of the building.

Core

The glazed escalator route inside the facade of the MAS (21) constitutes a monumental urban boulevard celebrating the view over Antwerp. To make the most of this panorama, the building forms a "milkmaid's balance" whereby storey-high steel girders, cantilevering out from the central core, keep one another in balance. By putting the main load-bearing structure in the core of the

building, no columns are required in the undulating glass elevations. The glass is self-supporting and because of its wavy surface is able to absorb the wind pressure.

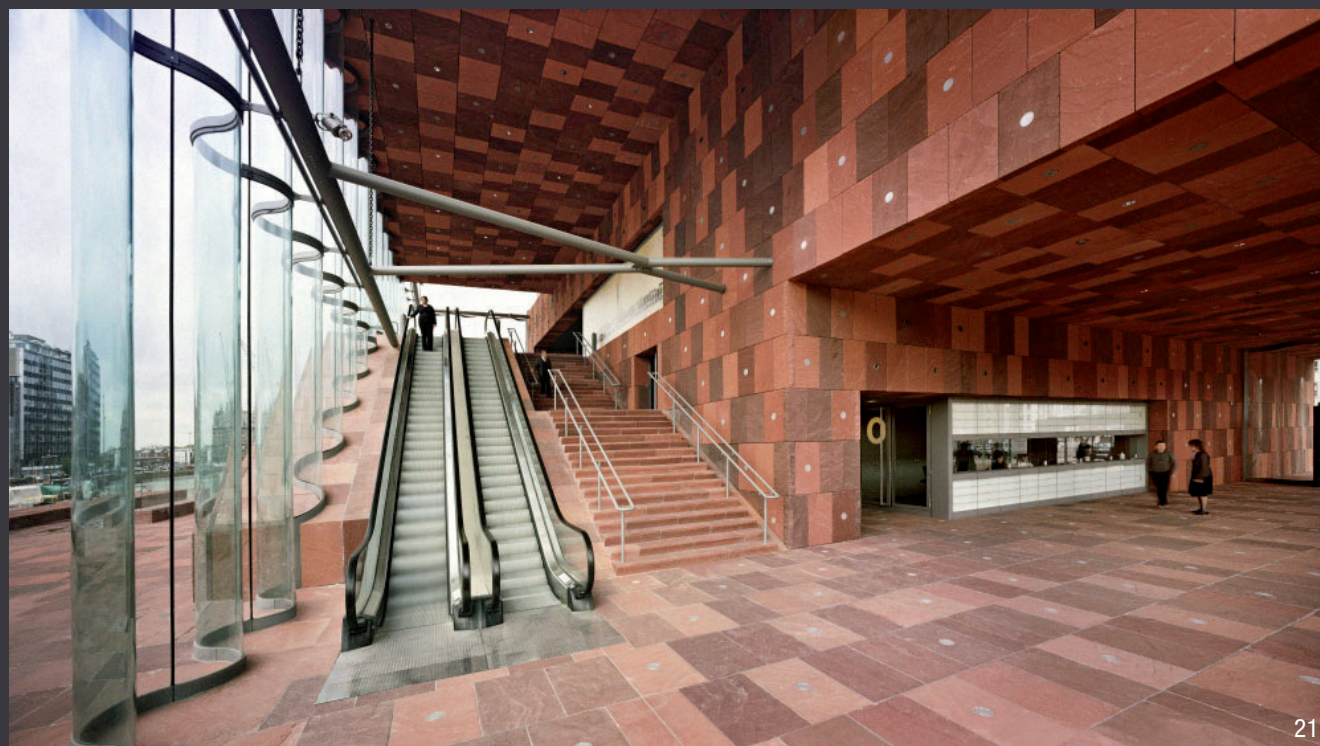
Pavilion

The building in Hilversum can be understood as a pavilion in a park-like setting. The building stands on the transition between a residential area and the more industrial set-up of the media park with its nondescript, boxy studio buildings and broadcasting company offices. On the other side, the building borders a major arterial road with roundabout, and the railway line to Amsterdam. On the building's south side is a large pond which acts as a rainwater collector and a sprinkler-water reservoir. Projecting into the pond is a large terrace, an extension of the stepped restaurant inside the building. Although the building's facade forms the vertical elevation of the

pond area, it does not define a significant urban domain. There is no spatial element that delimits a square or an urban space, for example. The buildings in the media park stand freely in the space. The building is surrounded by various types of urban space, but adds nothing to it except for the terrace in the pond and the garden around the building.

Square

The MAS stands between two large docks excavated on the orders of Napoleon's brother, the northern harbour extension, and the edge of the historical town centre. The site is suffused with an atmosphere of urban vitality. The building forms a sixty-metre-tall landmark between the two docks. The verticality of the building made it possible to construct a sunken square that adds a new public domain to the city.

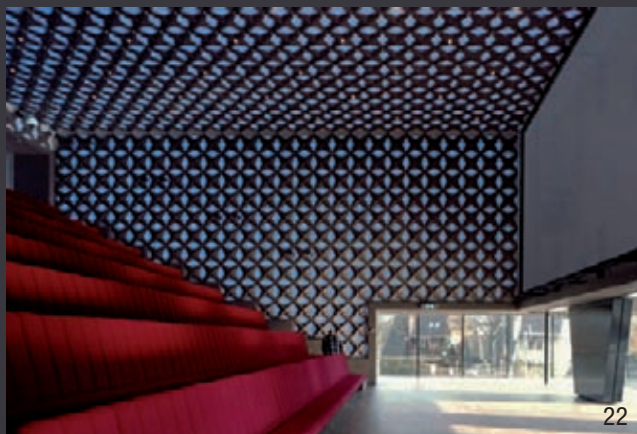


21

Next to the main entrance of the MAS is a series of pavilions containing, among other things, the museum shop. Together with the main building these pavilions constitute a spatial frame for the square. As such, the space between the docks forms the transition between the historical town centre and the neighbouring harbours. At the same time, the tower inscribes itself on the skyline of the city and becomes a new beacon in the urban landscape of the region.

Virtual

The collection of the Institute for Sound and Vision consists of sound and film recordings, historical sounds, unique images from Dutch radio, film, and television history. This collection exists only in time; by playing the film or recording, the original image can live once more or the recorded sound can be heard. Without playback equipment the collection consists of worthless celluloid and useless plastic tape. The collection is virtual, not tangible, and after the sound or image fades, it disappears again. To enable Sound and Vision exhibitions to be mounted, a large hall was designed containing themed pavilions. Inside the pavilions forgotten sounds can be heard again or vanished images made visible once more. The large hall is entirely painted in Chroma-key blue so that the exhibition space itself could disappear behind the projection of an Arcadian Dutch river landscape, a heaving North Sea, or jubilant football fans.



22

The material as a medium for expression has become virtual here: a layer of paint only a few microns thick determines the quality of the interior of the museum (22).

Material

The MAS has a tangible, material collection of widely differing quality: from battered children's toys, historical miniature boats, and pre-Columbian art to Flemish paintings from the early Renaissance. It is a collection with a strong, wide-ranging material expression ranging from gold brocade to tarred rope. In the elaboration of the material structure of the building, this formed the guiding principle: all the architectural elements were designed so that the material finds the most eloquent expression. The parquet is composed of extra large planks, in the concrete the grain of the formwork has been emphasized as much as possible, and the formwork spacers are accentuated with gleaming rosettes and cast-in threaded sleeves. The big steel trusses of the load-bearing structure are prominent and tangible in the hall rather than being wrapped in fire-resistant covering (26).

Transparent

The Gallery of Cornelis van der Geest by the Flemish painter Willem van Haecht shows a room whose walls are completely lined with paintings. The paintings represent pictures owned by van der Geest,



23

but also pictures that were later made up by Haecht. The image of the room is determined by the composition of all the individual images: together they form a new image. Van Haecht's painting was used as an analogy for the elaboration of the facade of the Institute for Sound and Image (24). Canonical images from the Institute's archives were assembled and used to compose a new image, the facade of the building. The images from the collection were cast in glass (19). The colours of the original images blend with the colours of the adjoining images. The black-and-white contrast in the original images is rendered in a relief on the sheets of glass. The coloured areas in the facades are transparent. They are overlaid with the images in relief. The building is polychromatic and changes colour under the influence of the sun. The relief flashes, reflects, and sends huge bars of coloured light streaming into the central area of the Institute. As the sun moves across the sky, the images in the relief are sometimes rendered clearly visible by reflection and shadow, only to disappear again. In the same way, the Institute's collection can be understood as only projections of light and sound in time that disappear again once the show is over.

Opaque

Unpolished natural stone is dull. It has no shine and is opaque. The colour is visible on the fracture surfaces of the split stone. The building is monochromatic; a red glow defines the exterior. Against



24

the background of the rough stone, small silver hands attached to the centre of the stone slabs provide a reflective counterpoint in the facade surface. In the interior of the promenade, in the same rhythm as the silver hands, circular medallions are embedded in the stone. The cast medallions bear an image of Scamozzi's ideal city. The museum rooms radiate no light. They present as solid, opaque boxes that appear to rest on the undulating glass. The lighting of the promenade reinforces this effect. Large light boxes with exhibition information illuminate the stone ceilings from below, casting a warm red glow around the building in the evenings (25).

Epilogue

In Dickens's *A Tale of Two Cities*, the difference between Paris and London is irrelevant. So too is the difference between Hilversum and Antwerp. The twin concepts Centre versus Periphery, Edge versus Core, or Transparent versus Opaque say something about the compositional and material structure of the designs but only by implication do they say anything about the position of the designers.

The interpretation of the task, the attitude of the designers, is ultimately the essence of every architectural composition. The Institute for Sound and Vision and the MAS are at first sight very different, yet they share the same starting points. Central to both buildings is the search for a public domain that is not determined by programmatic or spatial preoccupations. The creation of a cavity, a sanctuary in the public domain, free from functional restrictions, which can still be taken over by life. The celebration of public life, an essential hallmark of the modern open society, forms the heart of both buildings. The inner court of Sound and Vision and the promenade of the MAS are places you can enter without a ticket and relax in without obligations. The size, form, and nature of these urban spaces is such that there is freedom to do something that has not yet been imagined. Architecture serves the public cause and gives form to public life.

Michiel Riedijk

Prague, 12 January 2012







Design Studio

Design Studio River and City
Faculty of Architecture CTU in Prague
Department of Architectural Design II
Juliette Bekkering and Michiel Riedijk
With Hana Seho, Martin Čeněk and Zdeněk Zavřel



PROJECT STRUCTURE

Juliette Bekkering

The studio's position: in search of ideals

Our position vis-à-vis architectural design education is based on the presumption that any design should eventually embody an Ideal projected into the Future. The notion of idealization comprises two important aspects: firstly, since architecture comes into being only in the future, it should always be based on a situation that is not a mere extrapolation of the known situation but should comprise a paradigm shift, an invention that repositions the demanded task. Secondly, any building should be an improvement of the situation at hand, otherwise it does not make sense to build in the first place. The precise formulation of ideals should always contain a vision on socio-political aspects, cultural phenomena, and society at large. The students are obliged to take a position. The position will be conveyed in a composition or in other words translated in a drawn statement presented as an architectural object. The position has to clarify proposed urban and architectural interventions while the composition embodies sought ideals. Eventually the materialization of the design will illuminate the initial position. A cardboard facade or facade composed of granite express two completely different positions on architecture and for instance its relevance in a debate on sustainability. The changing position of the architect in society demands a new definition of the specific tasks of architects. The architect should not be a mere "problem" solver providing a service but instead deliver an integral vision of urban society, socio-political conditions, and contemporary culture.

Delineation of the study object

Prague is a beautiful city situated on the banks of the Vltava River. Although the river and the shallow waters to cross it, from the mere reason of the existence of Prague nowadays the river hardly relates to the city. The river adds little quality to the urban domain and its fabric. Only in well known places like the Charles Bridge does the River clearly contribute to the quality of the city's public domain. The overall assignment comprised the whole trajectory of the Vltava River through the urbanized area of Prague. There were no sites selected; the students had to define relevant and interesting places to intervene architecturally. Besides that, the students had to identify means and (programmatic) instruments to enforce the relation between City and River.

Description of the studio structure

To ensure that students define their own position in respect to cultural, economic, and spatial phenomena in the larger Prague river estuary, the studio started with a comprehensive analysis. The analysis resulted in an in-depth understanding of the region. Furthermore, the analysis contained a first delineation of socio-cultural and spatial questions to be addressed in the forthcoming design task. Based on this, the students had to formulate both their urban planning interventions and their architecture assignments. The assignment had to be a public building. The delineation of the public realm forms the core of civic society. In the design, the public building as a vision of contemporary civic society materializes.

The studio works from the general, hence larger, scale to the specific conditions of sites selected by the students. This forces the students to think about the object as a composition based on general architectural rules without specific constraints induced by peculiarities of a site. This didactic strategy avoids architectural solutions based on singularities and exceptions of a particular site.



CITY AND THE RIVER

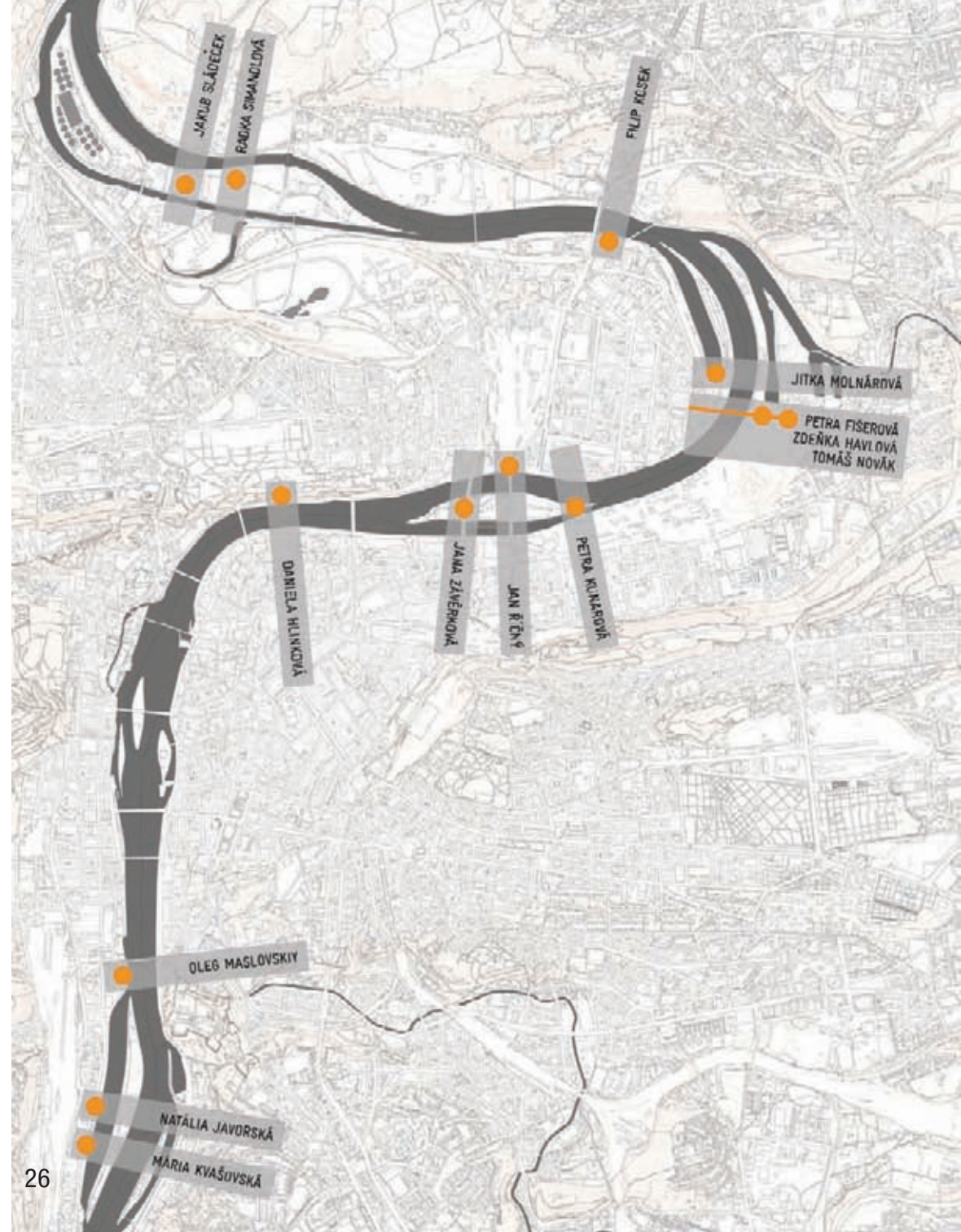
Hana Seho

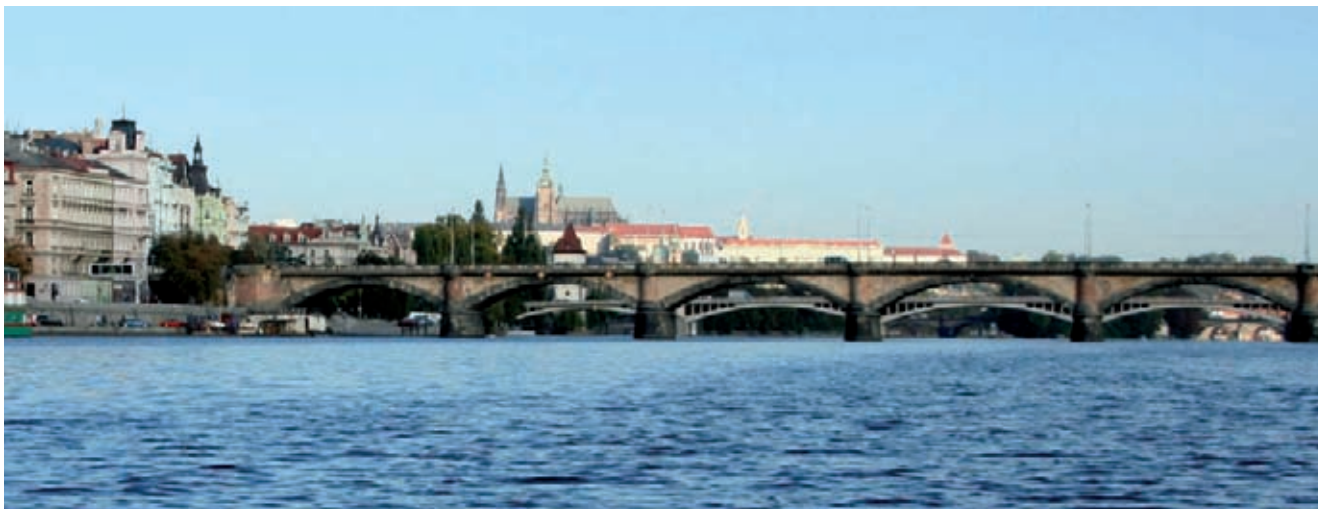
The river is life-giving for the city in the same way as there is no life without water. This is undoubtedly valid in the case of Prague as well. The river influences the city's growth, its activities, its attractiveness and photogenic qualities as it used to be in the past, when it influenced morphology, transport, crafts and urban construction. The city was emerging on both river banks concurrently and the river became the city backbone. It was and has been always necessary to articulate the relation of the city to the river. This relation is influenced by the shape and character of the transition between water and dry land, i.e. character of the bank.

However, sometimes the river becomes an element which we must not object to and can do nothing else than accept the element and respond to it. A consequence of this was the regulation of the river bed and thus the establishment of its character in a given place. The building of an embankment on a level ensuring the protection of the city against floods has significant consequences and is a significant urban measure. This courageous intervention of our great-grandfathers in the profile of the river substantially changed also the perception of the river in Prague. It finalized the era of banks gently sloping towards the river, where it was in any place possible to enter into immediate contact with water. This brought an end to washing clothes in the river, to the era of fords, tanneries, blacksmiths' workshops, dog catchers' houses and other facilities for whose existence water was essential. A stone embankment elevated above the water surface for a long time established the character of the place and the city and remains almost untouchable until nowadays.

The formation of the embankment character or border between water and dry land also becomes a basis for the context of a newly arising structure of any type – from a house in the sense of architecture to a bridge or a technical structure related to the usage of the river for urban life. The bank, or embankment of the Vltava river has completely changed its character, it is no more a space for economic activities of the urban life, but a territory with the magic of water in movement being so attractive, that the embankments are becoming a place for building representative structures and public areas and spaces. The value of these territories is very high because of their attractiveness and uniqueness.

The areas along the river attract the attention of both residents and visitors to the city and therefore the architects' responsibility while creating these places and structures along the river is enormous. During the design of a structure it is essential to think intensively about all challenges and limitations, offered by the phenomenon of the river. For both architectural and urban design the contact with the river or the river's proximity are principal and the design concept should derive from this fact. The river is a phenomenon and all our interventions should respect and promote this given fact, i.e. gift, instead of devastating or ignoring it. From this neighbourhood we can draw endless inspiration and utilize its potential for our creation.





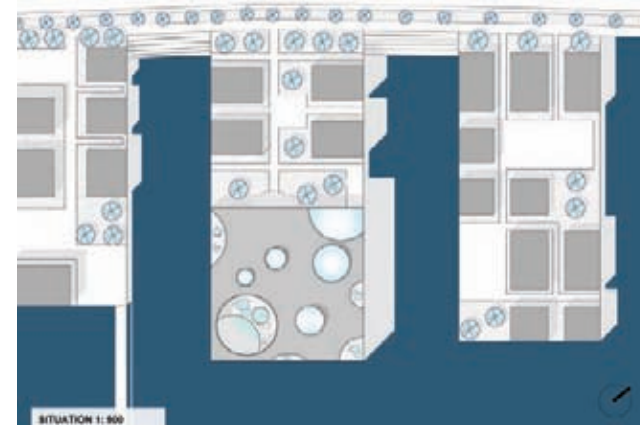
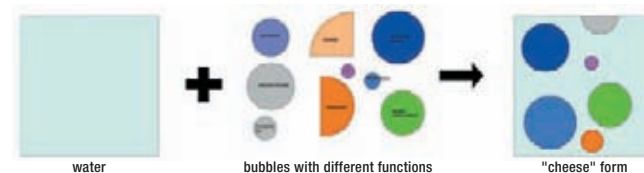
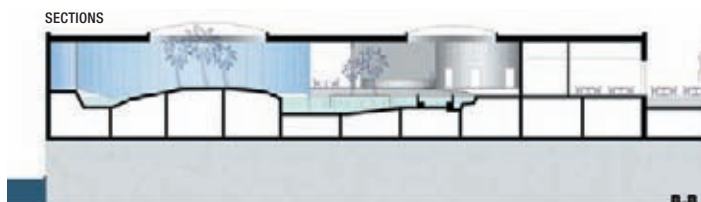


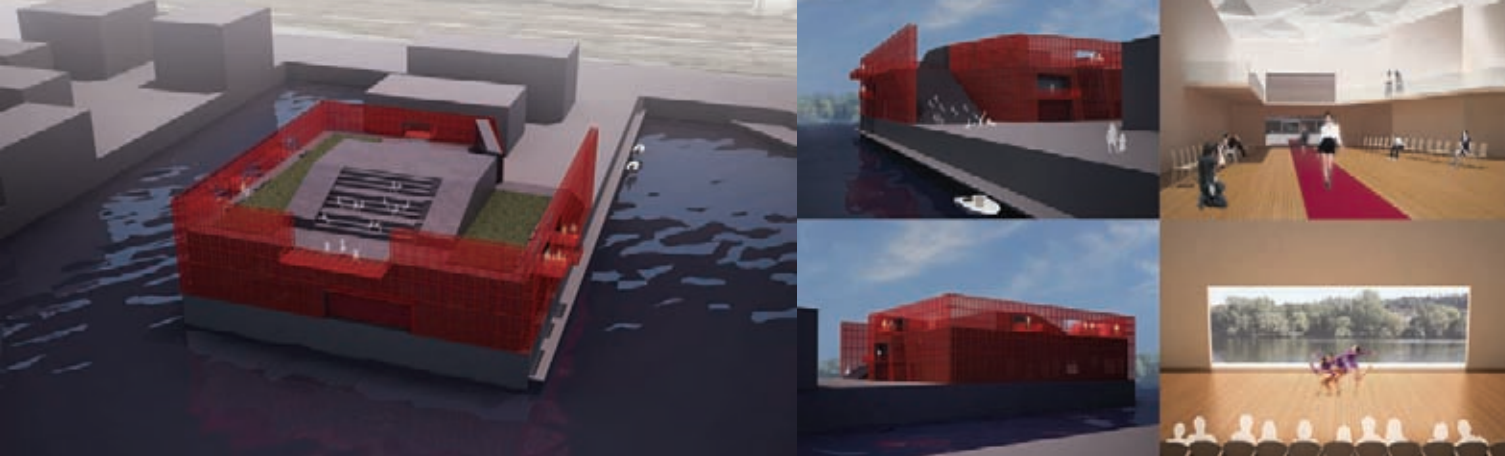
MÁRIA KVAŠOVSKÁ Spa Centre

Place: Smíchov embankment between the railway bridge and Zličov – restructured into an urban waterfront with "five fingers" of different urban functions of recreational and cultural character, including a river „marina“.

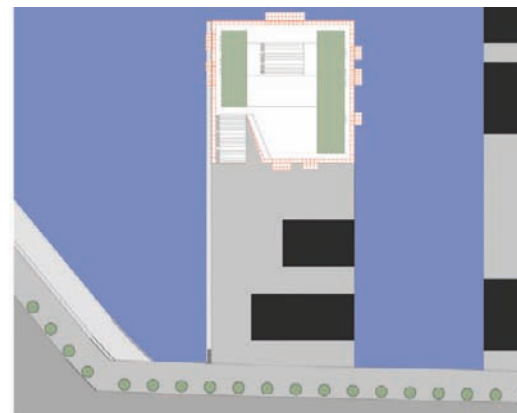
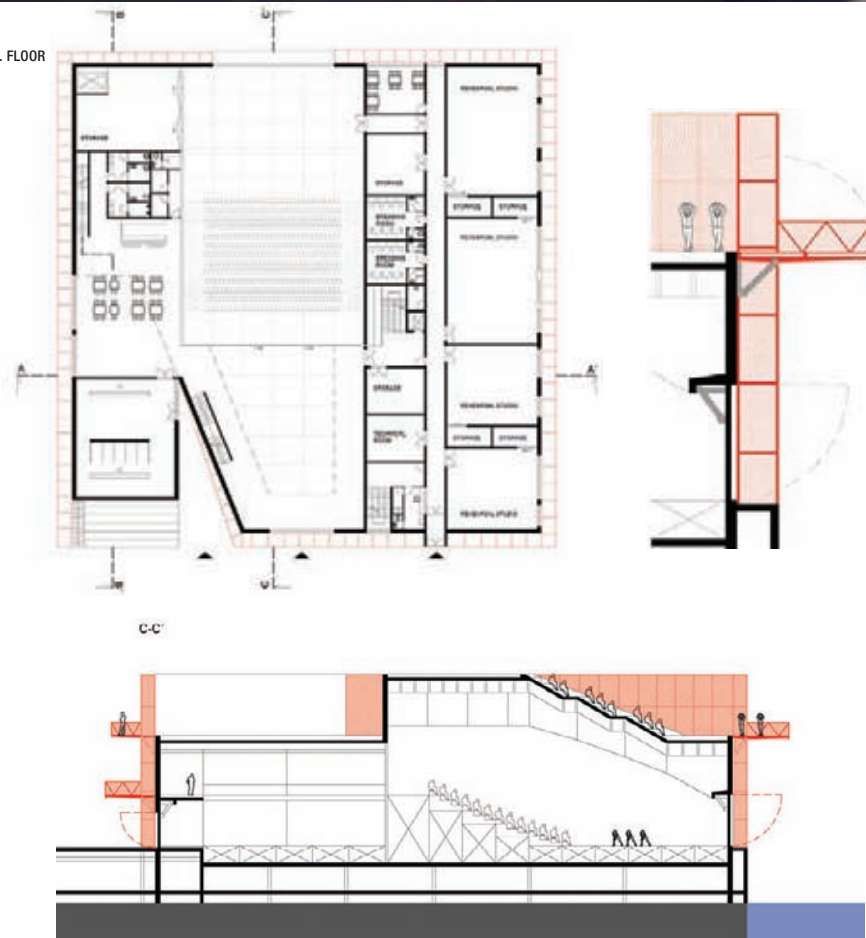
Theme: baths and a relaxation center

Concept: A piece of nature in a building surrounded by the river on three sides. An exact box full of "bubbles" creates a contrast between the exterior and interior. A fixed external form is a wrapper for the free-floating opened or closed spaces inviting visitors to full relaxation. Dark corners overlap here with places full of light, rooms with different temperature and humidity.





1. FLOOR



variability: dance shows and competitions, experimental theatre, concerts, fashion shows



NATÁLIE JAVORSKÁ Centre of Performance Art

Place: Smíchov embankment near Císařská louka, one of five "fingers" of the new structure of the urban waterfront.

Place: Performance house

Concept: A space for experimental theater of maximum flexibility – it can be played indoors, in front of the house, on the water, watched from the house, the roof, from the slant wall-amphitheater. An ever-changing house bounded in the form of an "advent calendar".



Sketch Juliette Bekkering

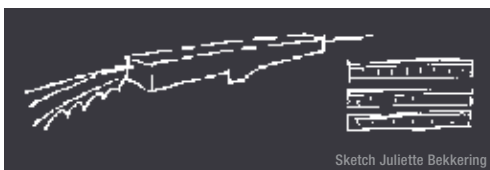


JANA ZÁVĚRKOVÁ Spa Štvanice

Place: Ostrov Štvanice (Štvanice Island) – a house on a bridge as a basis of an urban boulevard

Theme: urban baths

Concept: A compact mass of the house as a single frontage of an urban boulevard, raised above the island. The natural scenery of the island flows freely below the house. The house is closed to the street, it opens to the views of the river, the Prague Castle. Loosely arranged pools of diverse character organized into a solid block at the edge of the bridge benefit from a unique position in the city.



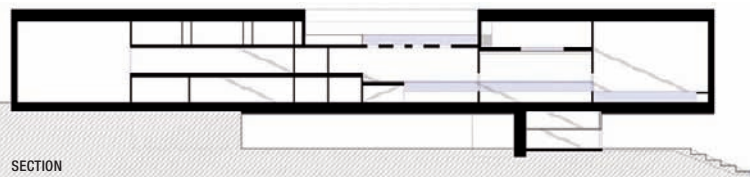
THIRD FLOOR



SECOND FLOOR



FIRST FLOOR



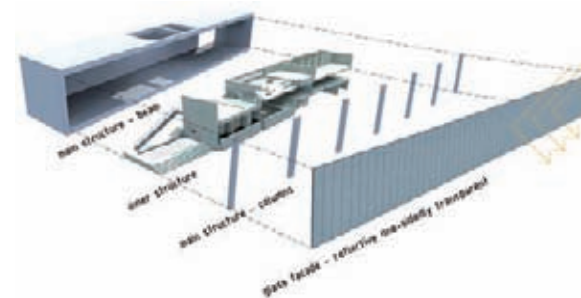
SECTION



SITE PLAN



SITE PLAN



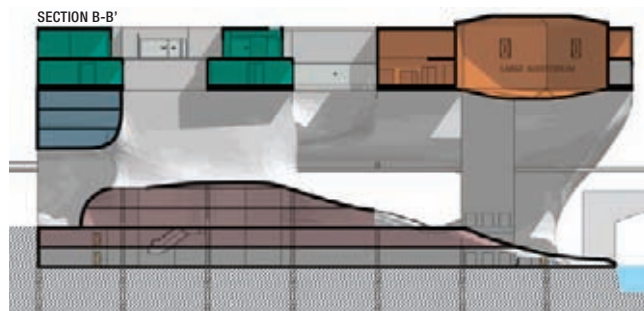
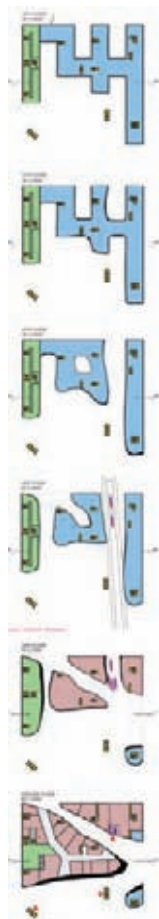


JAN ŘÍČNÝ Dance & Music Conservatory

Place: Vltavská – a communication node
v. a scar on the face of the city

Theme: conservatory

Concept: The proposal seeks an attractive and inspiring position for a music and dance conservatory. A conservatory structured as a "grid" is elevated to the clouds above the vibrant city, overlooking the river. An area with a ruined urban structure, destroyed by the Vltavská traffic node, thus receives a new impulse.



7TH FLOOR: THE CONSERVATORY



8TH FLOOR: THE CONSERVATORY - ENTRANCE FLOOR



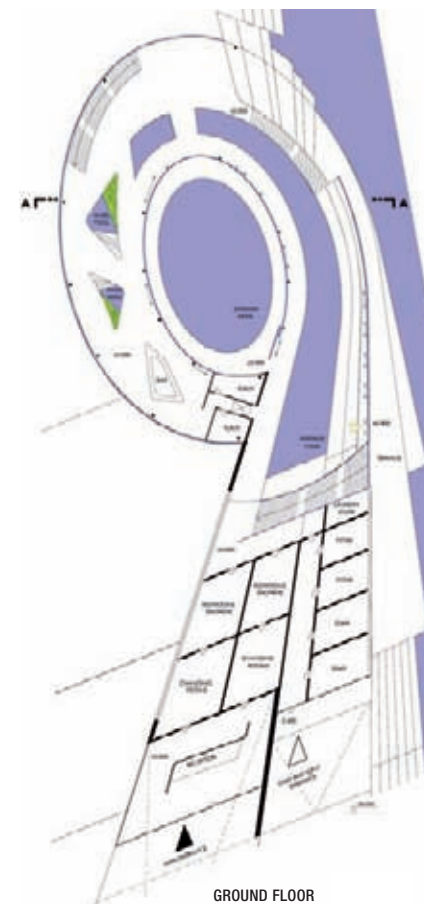
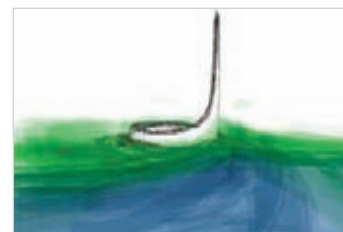
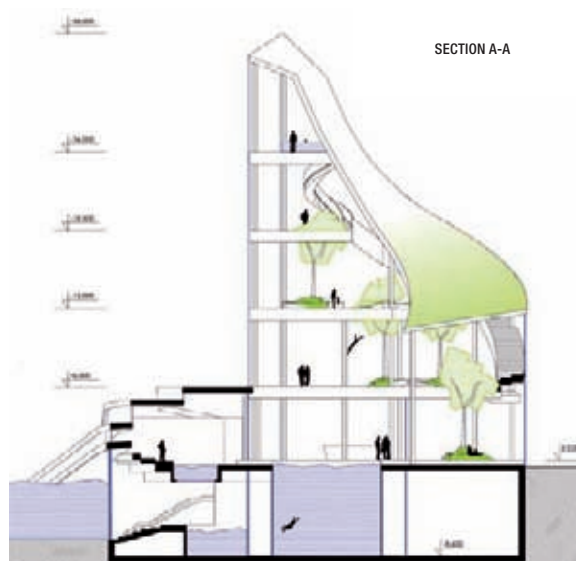


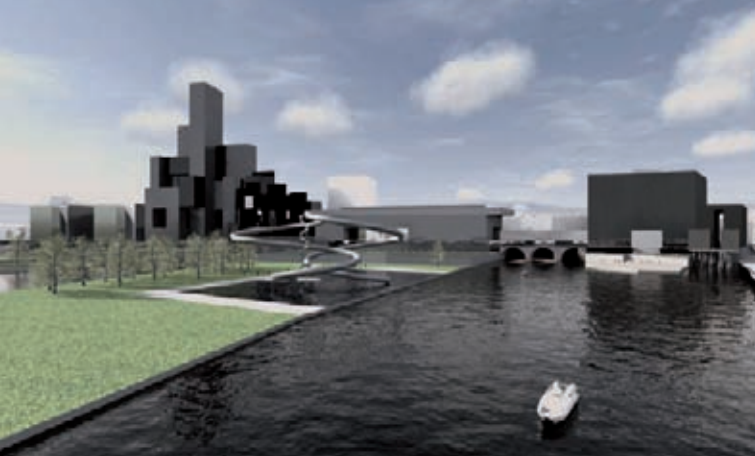
PETRA KUNAROVÁ Riverbath

Place: Ostrov Štvanice (Štvanice Island)

Theme: river baths

Concept: A water vortex is embodied in the river baths. Visitors are first led "deep" below the river level to be afterwards taken up by virtual energy to the sunlit water and further up to the "clouds".



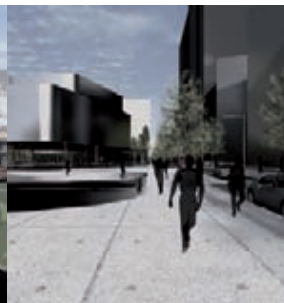
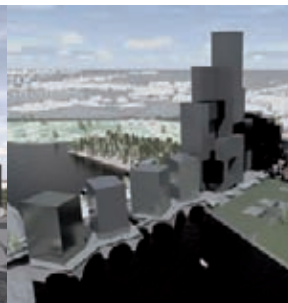
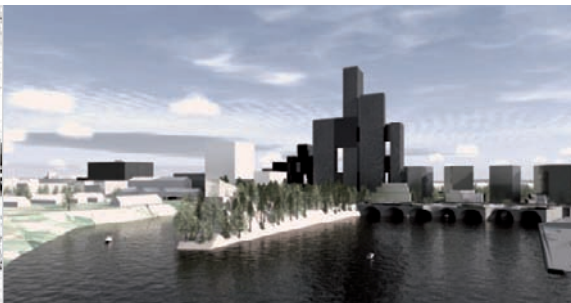


TOMÁŠ NOVÁK Mostrov

Place: Libeňský most (Libeň Bridge)

Theme: an urban structure of the area between the boroughs of Libeň and Holešovice

Concept: Seven virtues as well as seven vices will materialize in the urban structure of the built-up area at the bridge and the islands below the bridge between Libeň and Holešovice. The ambition is to create a permanently lively part of the city. The bridge becomes a peculiar urban unit creating a link between the two boroughs.



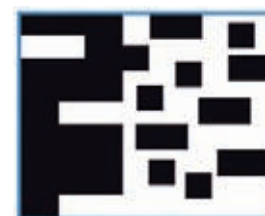


PETRA FIŠEROVÁ Movieum

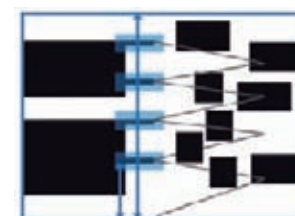
Place: Mostrov – another object
at the new boulevard at the Libeňský most
(Libeň Bridge)

Theme: a cinema complex
and film museum – Movieum

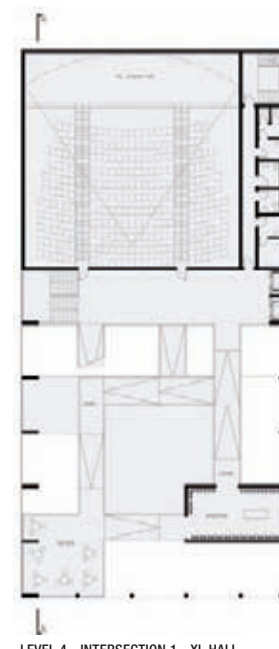
Concept: A house in motion – motion in the house.
A house with two faces – a fixed organized structure
of viewing rooms faces the street, while the volumes
of exhibition spaces of the film museum are freely
floating in the air above the water, connected by
a system of mobile as well as static staircases thus
creating a glass block.



SPATIAL ORGANIZATION



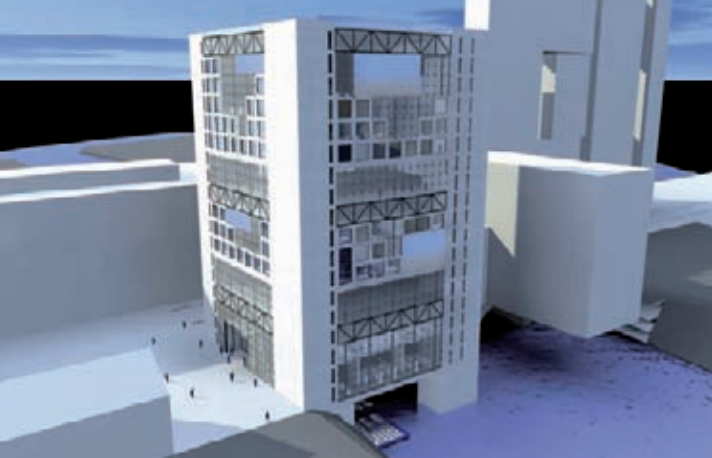
CIRCULATION



LEVEL 4 - INTERSECTION 1 - XL HALL



LEVEL 6 - INTERSECTION 2 - EXHIBITION



SITUATION



ZDEŇKA HAVLOVÁ Artel

Place: Mostrov – the Libeňský most (Libeň Bridge) and islands below the bridge in a new urban structure built at the edge of the bridge

Theme: a unique house compiled from a hotel, housing for artists, their studios and galleries or theatre stages

Concept: a "melting pot" for creating as well as "consuming" art. The house is placed partly on the bridge, partly on the island. Its structure comes out from the different requirements of each function, determined by the relationship to water. Fundamental to the seventy-meter high solid block are four service cores at its corners. The rest of the space is filled with various functional units and interstitial meeting points.



RIVER LEVEL - 3rd BASEMENT



RESTAURANT LEVEL - 3rd FLOOR



SPECIALIZED WORKSHOPS - 7th FLOOR



Sketch Juliette Bekkering

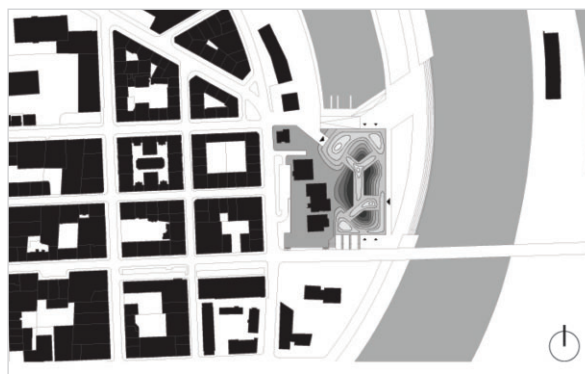


JITKA MOLNÁŘOVÁ Market hall + Library

Place: the head of the Libeňský most
(Libeň Bridge) in Holešovice

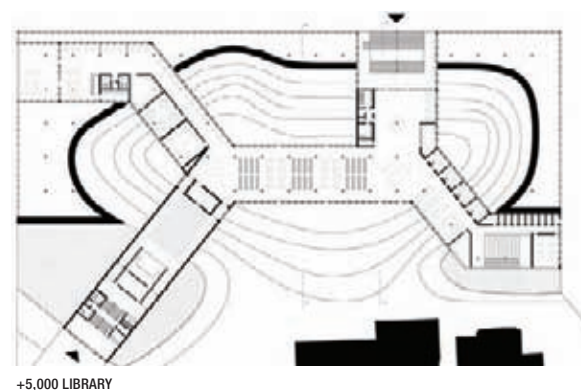
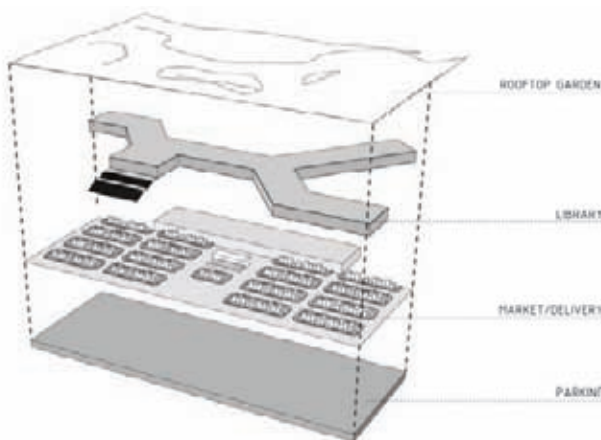
Theme: a marketplace – library – park

Concept: A house where layers of the city meet. The level of the embankment is run over by the level of the city. The border between the city and the river forms a "furrowed floe" of a park on the roof of the marketplace. The memory of the Holešovice docks is inserted under the layer of the city in the covered market hall. Between these two layers (the park and the marketplace) sails the world of ideas embodied in the volume of the library.



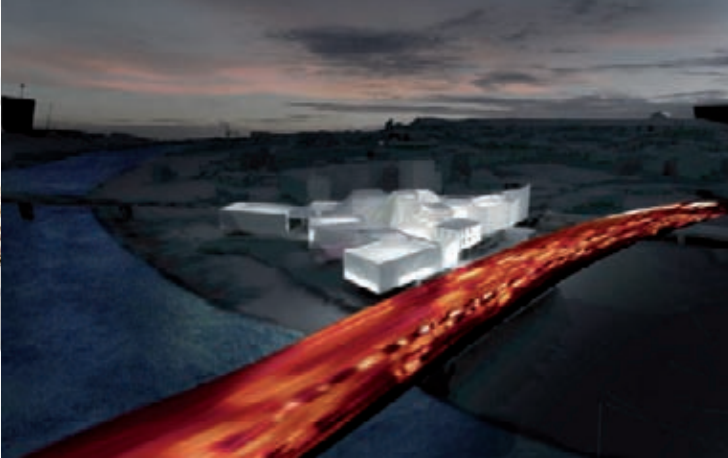
URBAN PLAN

PROGRAM DISTRIBUTION SCHEMA



CONCEPT





FILIP KOSEK Bodybuilding

Place: the northern bank of the Vltava river in Holešovice, a place forgotten by the city west of the Most Barikádníků (Barikádníků Bridge)

Theme: „Bodybuilding“

Concept: An object for sports and exercise as an activity – not a performance – at a place where the neurotic and dynamic city meets the neglected territory of the homeless and dog walkers. An almost invisible membrane separates a space filled with boxes of different shapes, sizes, programs and expression. These boxes create a space for open communication and meetings, where stress is replaced by relaxation.



Sketch Juliette Bekkering

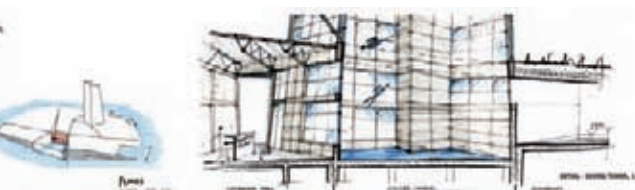
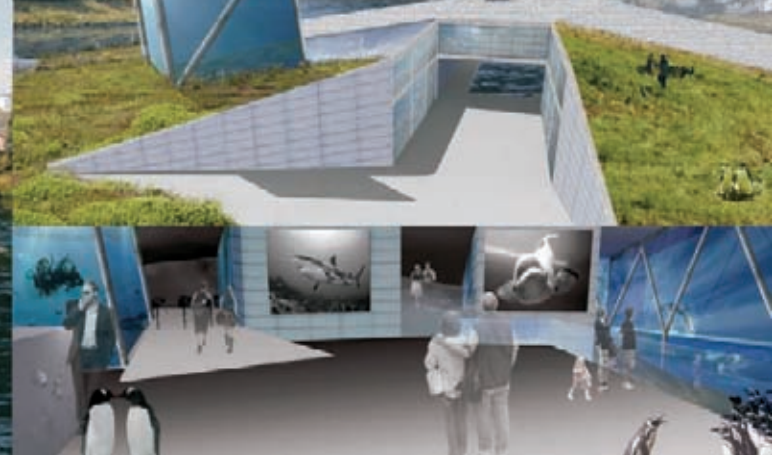


RADKA SIMANDLOVÁ Aquarium

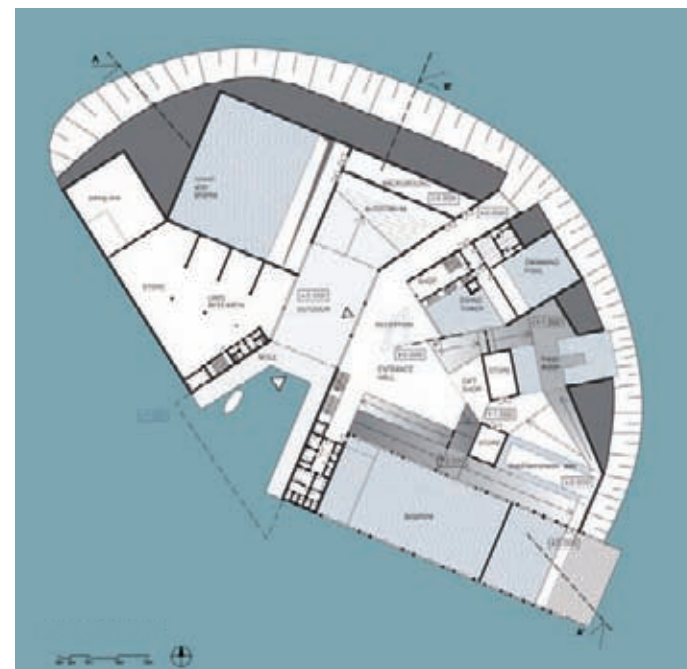
Place: Císařský ostrov (Císařský Island) – "Galapagos" are created by breaking up the central part of the island – each island is assigned a specific function

Theme: aquarium

Concept: The artificial island is largely made of the body of the building. The island-aquarium is accessible only by water. The object is divided into two parts by the niche of the bay for landing ships and the embarkation ramp. These parts are connected by an "infinite loop" of the sight-seeing path loosely coiling through the object. A tower, which is designed for diving in the inside and as an observation tower from the outside, serves as a vertical dominant attracting looks from far away.

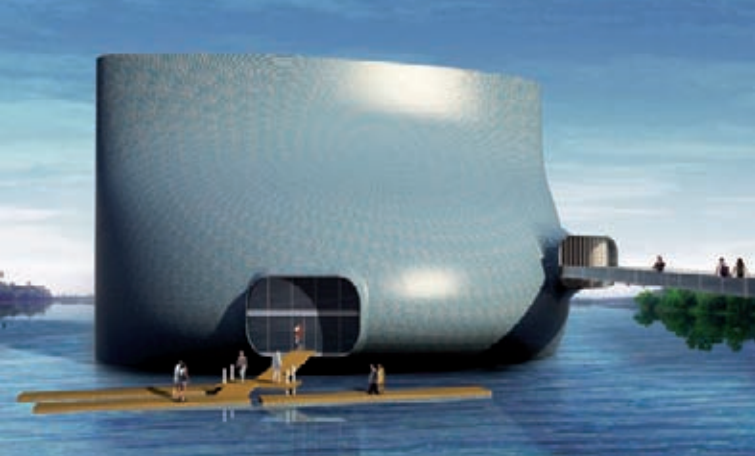


GROUND FLOOR



SECTION LONGITUDINAL A-A'





JAKUB SLÁDEČEK Aquarium

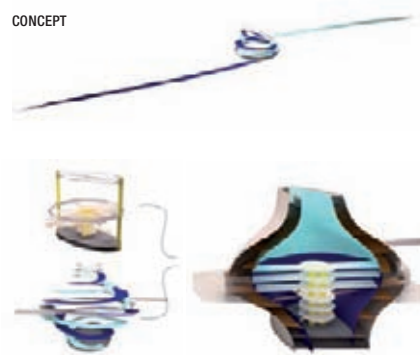
Place: Císařský ostrov (Císařský Island) – the urban concept is based on a division of the island in its central part into a few smaller islands, the larger of which are accessible by pedestrian walkways and the smaller ones by boats only

Theme: aquarium

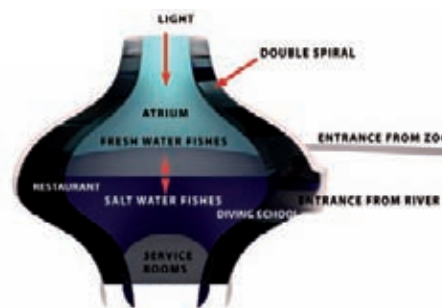
Concept: The link between two banks of the Vltava River on a sight-seeing route from the Stromovka park to the Prague Zoo culminates in the object of aquarium in a double spiral of paths. These paths allow visitors to pass freely through this specific object and choose different ways of viewing life in the water. The attractiveness of the place is enhanced by a wide range of options and ways to get acquainted with the world below the water level.



CONCEPT

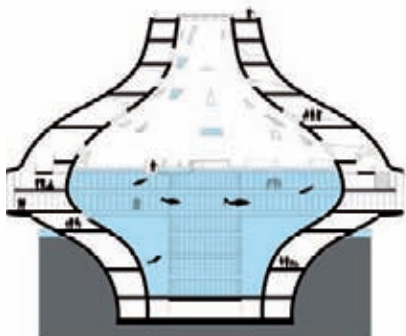


CENTRAL SCHEMA

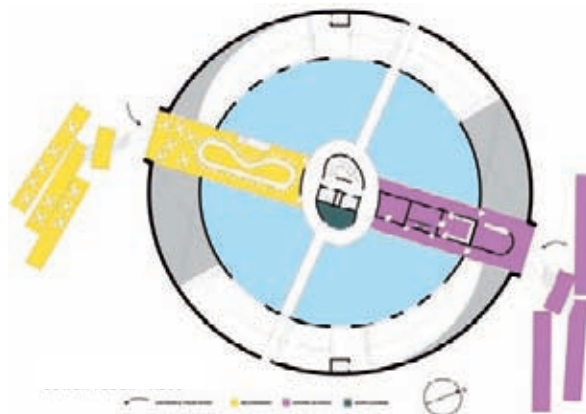


LOWER FLOOR

UPPER FLOOR



CROSS SECTION



Sketch Juliette Bekkering





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