

Urban façade

Aalto University School of Arts, Design and Architecture
Architectural Principles and Theory 2017

Part II

Catalogue of student work

Architectural Principles and Theory master's level studio course ARK-E1502 'Urban façade'

Aalto University School of Arts, Design and Architecture

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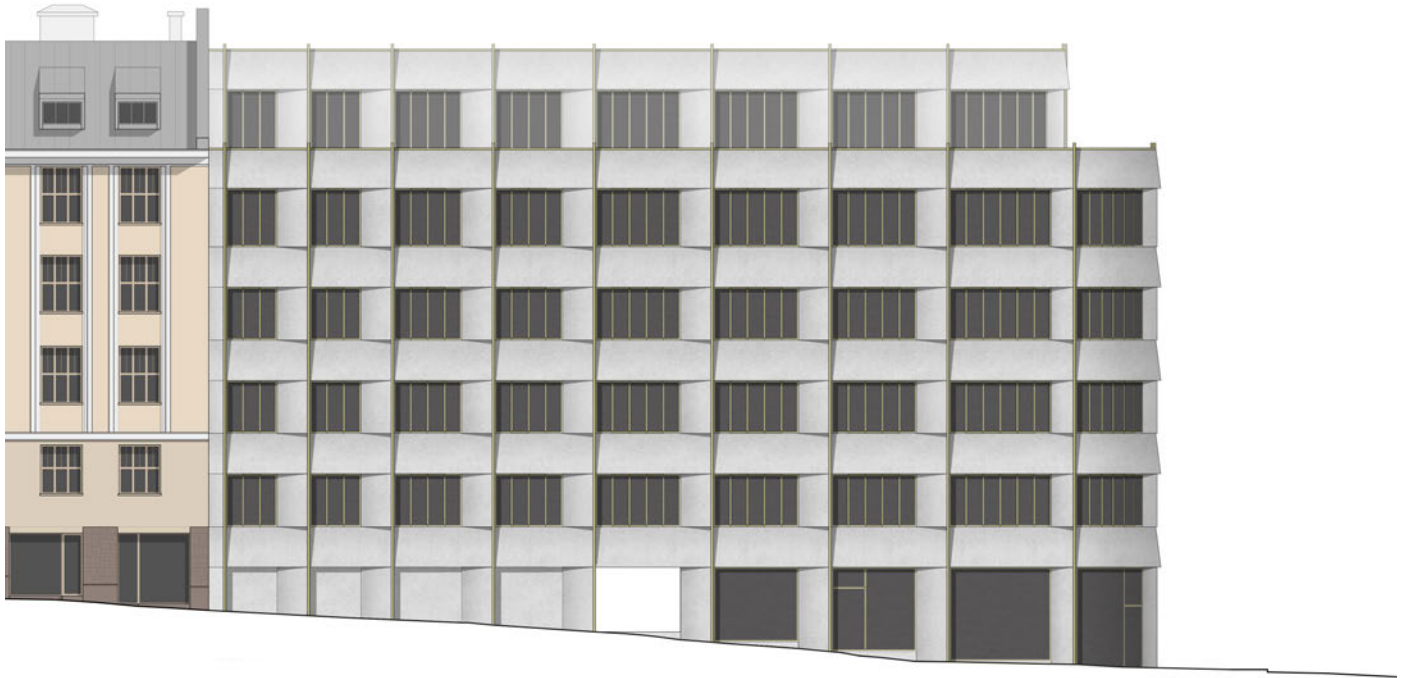
Course Introduction

The site for the design assignment was located in Helsinki next to the Finnish Architecture Museum, at the corner of Kasarmikatu and Punanotkonkatu. The plot is currently under redevelopment. We gave the students a general description of a hypothetical program: a residential building with commercial space on the street level. The volume was up to the students to define. No floor plans were drawn; interestingly this would be difficult to tell from the submitted work.

We started by defining the volume using study models in the scale of 1:200. Emphasis was put on the systematic development of volume and proportions. In the next step we developed the structure, depth, materials and colour scheme of the façades using models and drawings in the scales of 1:200 and 1:50. Finally, we worked on a specific construction detail at 1:20 of each façade in plan, section, and elevation.

In each phase we set common rules for representation and limited the number of design documents to be submitted. This was part of an effort to keep the discussion focused, as well as to put emphasis on the quality, rather than quantity, of the models and drawings produced.

Simon Mahringer and Esa Ruskeepää
Helsinki 2018

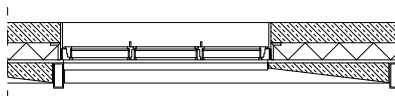
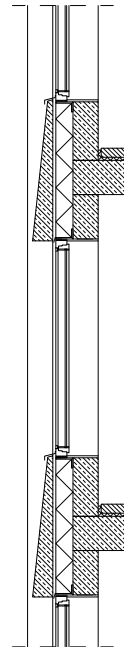
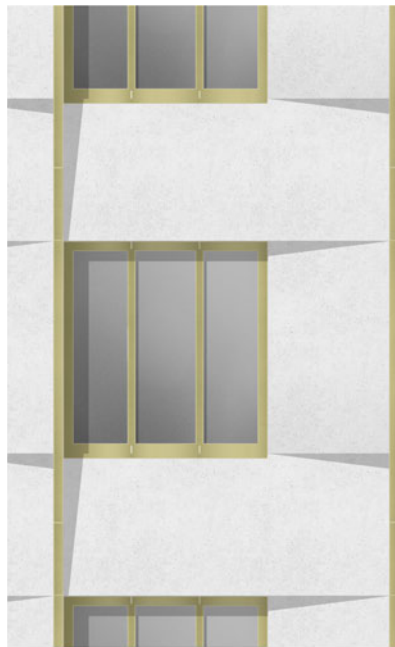
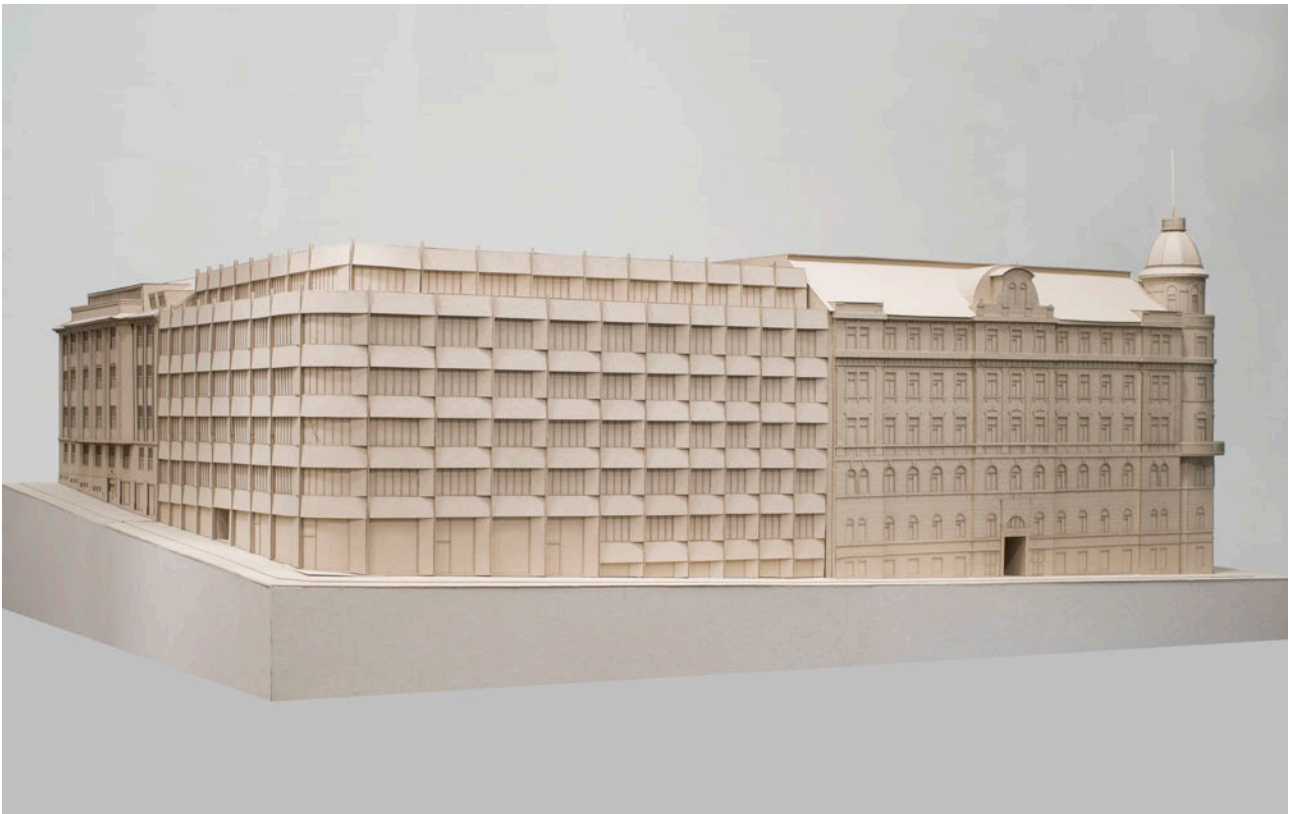


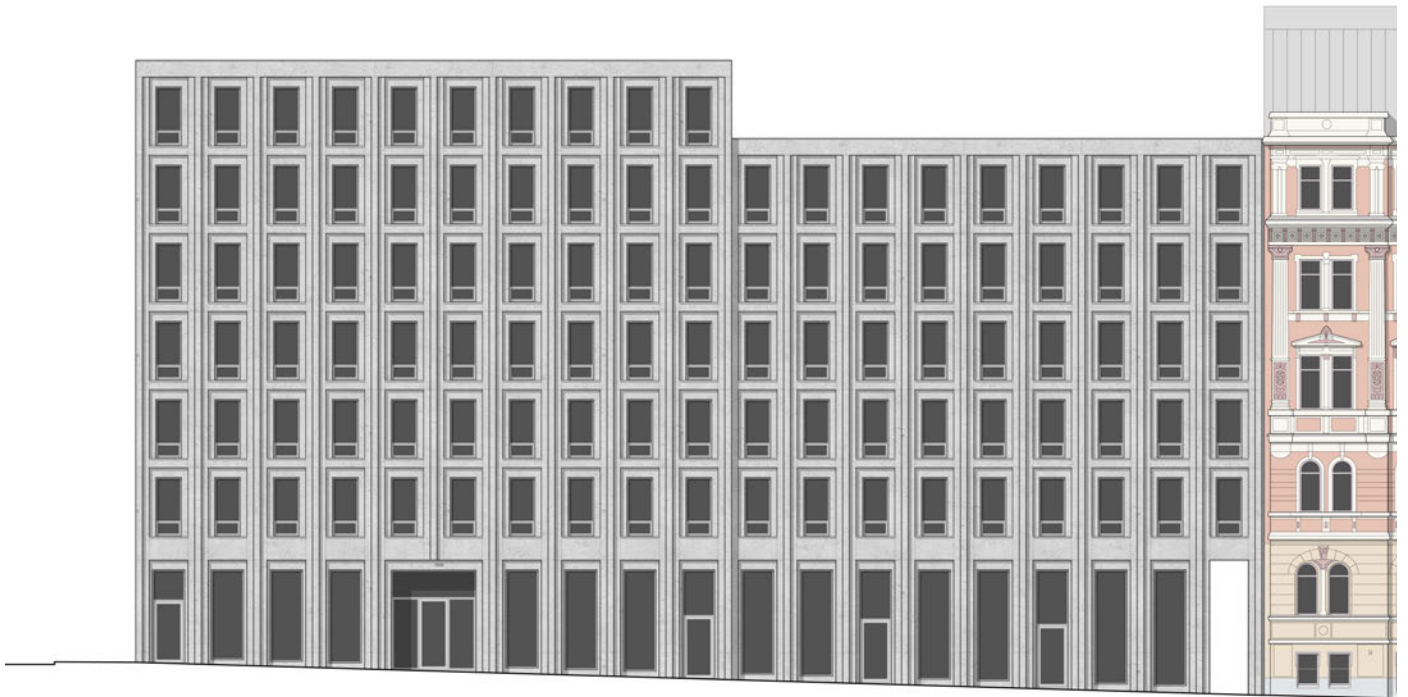
Anja-Kaisa Ylimommo

The mass of the building is divided into two parts. The main mass is four to five floors high with a one-storey setback on top. The most prominent feature of the building volume is the curved corner.

The strict window grid is varied by increasing the size of the windows towards the rounded corner. The windows are divided in tall, narrow panes of three, four, five or six. On the top floor of the main volume and on the top volume the windows are slightly taller. On the ground floor the windows have large glass surfaces and their heights adjust to the slope of the site. Towards the neighbouring buildings, indentations are placed in the grid instead of windows.

The grid framing the windows consists of three elements. Two of them are concrete elements, varying in thickness and tilted direction, one placed on the right side of the window, the other on top of it. The concrete elements are smoothly finished and light grey in colour. The third element is a thin pilaster, the outermost layer of the façade, extending as a continuous element through the whole height of the façade. The pilasters and window frames are brushed brass with a golden colour. The grid continues throughout the façade creating a fabric-like skin.



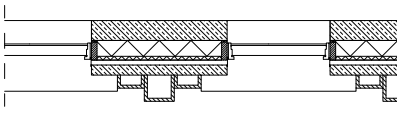
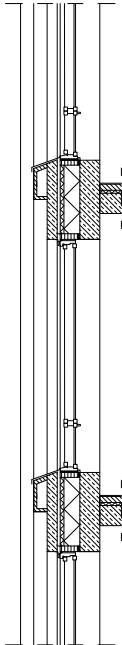
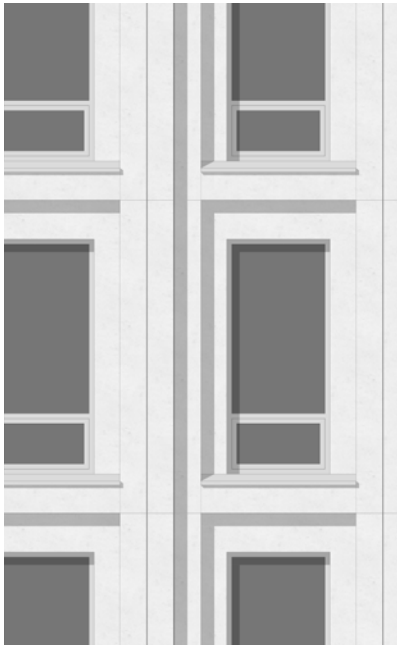
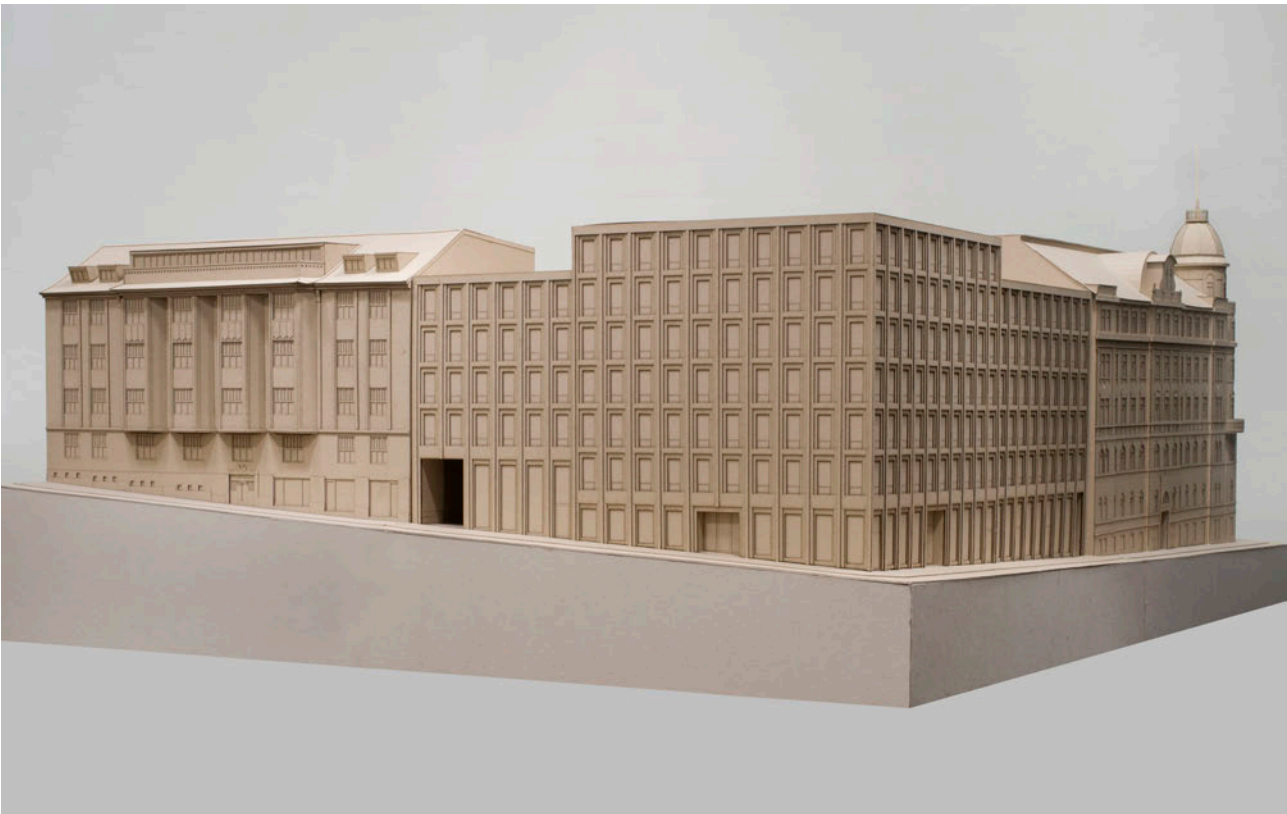


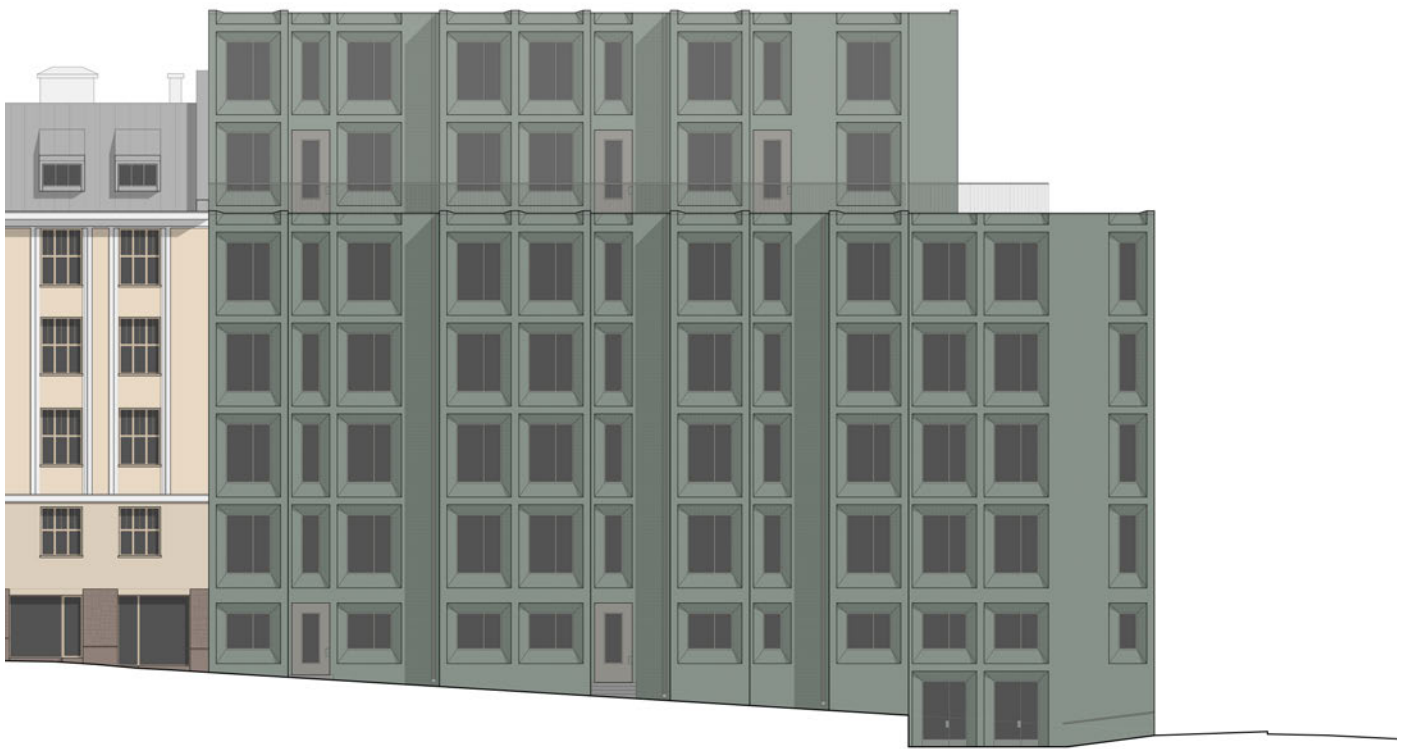
Jaana Miettinen

The building is divided into three parts of two different heights. The highest mass is situated in the corner of the lot. The façade has a continuous pattern which consists of the repetition of a window module. The pattern continues uninterrupted over the corner of the block which creates a skin-like impression. The façade has a three-dimensional form where the windows sit deep. The pilaster-like vertical forms constitute the outermost layer of the façade, running along the entire height of the façade. The side masses are slightly pushed in, which is accentuated by the narrow side wall, creating the impression that the façade is cut.

The exceptions to the dominant pattern indicate different functions; the ground floor is dedicated to commercial use. The openings have a hierarchy that is indicated through height and width. The measurements of the pattern remain as a rule within which these deviations are made.

The rich form of the façade's surface is a nod to the neighbouring buildings. The higher corner mass creates a balanced appearance with the tower of the neighbouring building. The symmetry and the slight shift in the façade line are features that can also be found in the neighbouring buildings. The robustness, abstractness and the unrefined materials, concrete and aluminium, give the building a modern edge and emphasize the impression of heaviness. The highlighted vertical lines give an impression of dignity to the building.



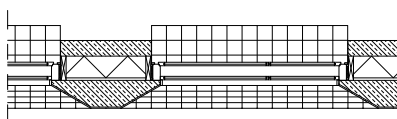
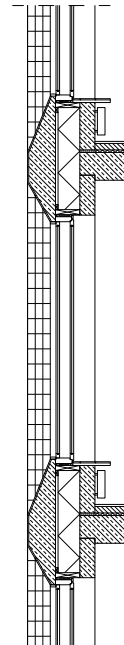
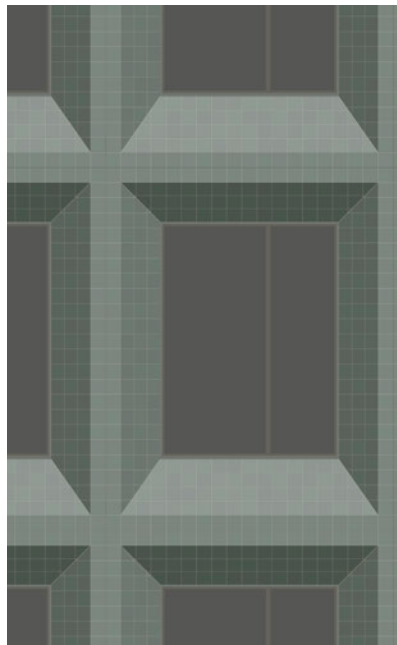


Molly Ekholm

The volume of the building is the most dominant feature it has. The building can be described as growing from the ground upwards. The pillar-like elements, deriving from the surrounding buildings, create pockets on the street level that partially serve as entrances. As these shapes continue in the vertical direction, they create views for the inhabitants above. The corner of the building can be deemed as an exception to the system of the façade. Here, a part of the building is cut out, emphasizing the small plaza where the main entrances are situated.

The grid of windows gives the building a waffle-like texture. However, an equally important part of the façade are the surfaces that are systematically chosen to be covered by tile. The most dominant material used is this semi-glazed green tile with some variation in tone. For details, wood and copper are used.

The building strives to fit into the existing environment while maintaining its own position. Integration comes from following pre-existing horizontal lines. To provide more residential space in the city centre, two floors rise above the neighbouring buildings, implemented as a setback which is unnoticeable by the pedestrians.



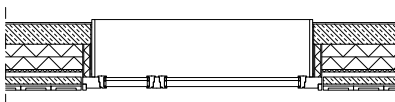
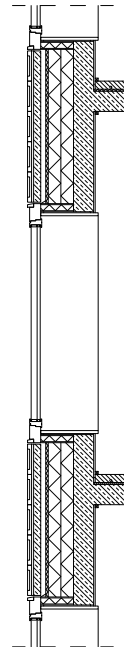
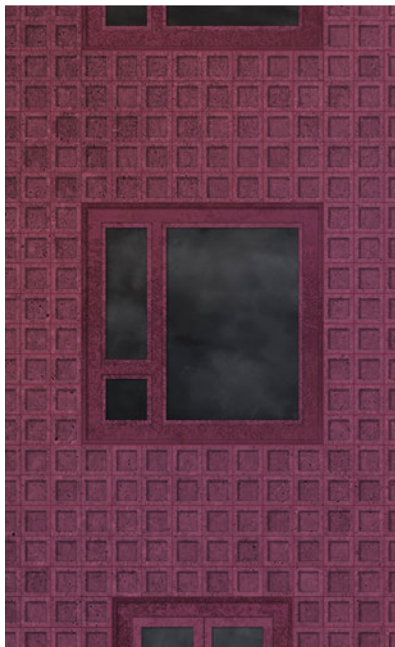


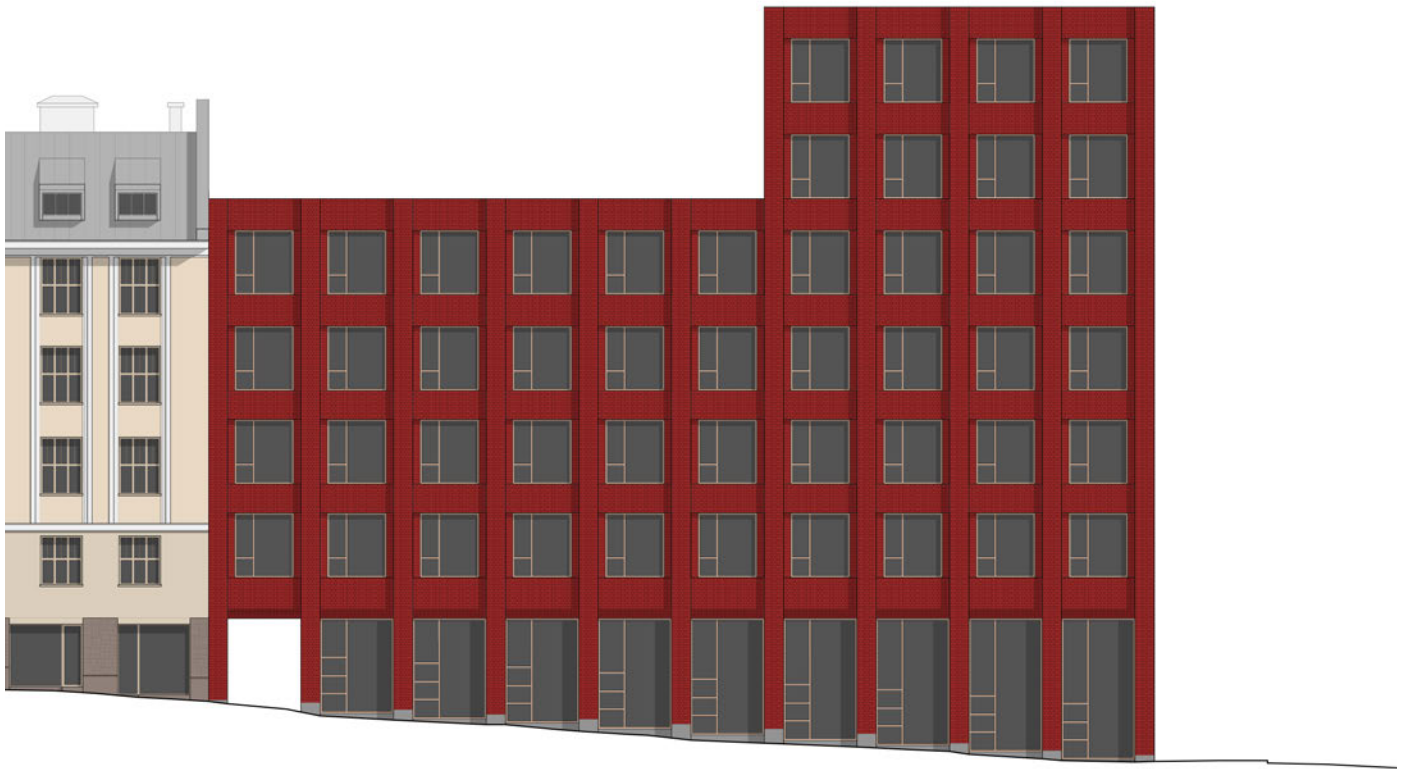
Benjamin Schulman

The building appears as a single volume divided into parts. Horizontally the volume is divided into two. In the lower part, the volume continues the existing street façade except for a setback at the corner. In the upper part, the volume has setbacks next to its neighbours, disconnecting the building from them, concentrating the volume at the corner.

The building is clad with large square ceramic tiles 300 mm by 300 mm in size. A special tile is used to go around the corners of the volume. The centre of every tile is recessed. With the special corner treatment and variation in depth, the tiling creates a blurry line at the edges of the volume. The façade begins to appear as a huge lattice extending all the way through the mass of the building. The shape of the recess and the colour of the tile varies slightly to subtly emphasize the different parts of the volume.

The aluminium framed large square windows are arranged in a peaceful grid. Every now and then a window is replaced by a french balcony. The glazing of the windows is brought close to the surface of the façade. The windows behave as large tiles in the tilework. The corner windows provide the apartments with views along the streets. With the detailed tiling, the large windows, and the strong colours, a joyful luxury is brought to life, similar to that of the neighbouring buildings, but spoken with a contemporary language.



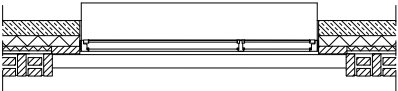
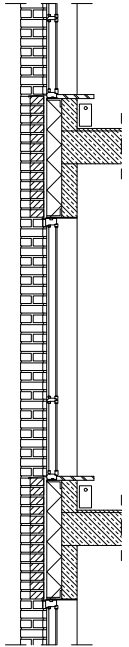
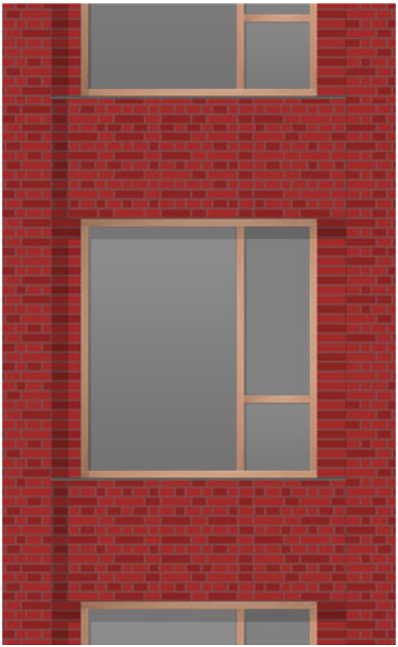
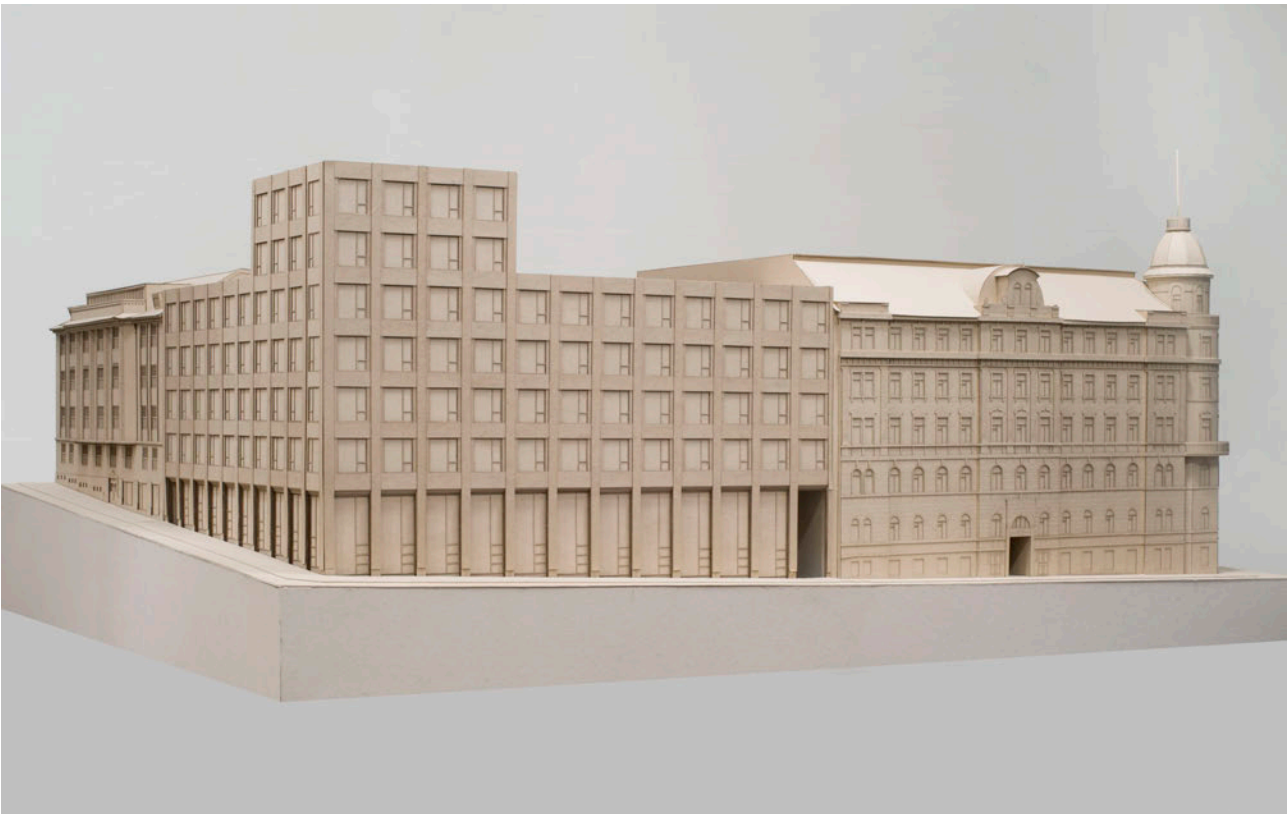


Saara Sillanmikko

The building does not participate in the ornamental game of its immediate neighbours but appears quite silent and rigid, finding its fellows from the old military buildings across the street. The mass is quite simple. The most remarkable feature is the tower located in the north-east corner of the lot. A tower in this corner is a logical gesture as there are many towers in similar places nearby.

The façades are made of bright red brick. The colour and surface of the bricks are uneven to give the building a lively appearance. The masonry plays with depth and highlights the vertical lines. Above the windows on the ground floor there is more detailing than elsewhere to accentuate the public feeling of the street level.

There are two types of windows in this building: the square ones of the apartments and the bigger and more narrow ones of the public spaces on the ground floor. The apartment windows are all identical but mirrored between the façades. The windows on the ground floor are otherwise similar but the height and the proportions vary to adapt to the slope. All window frames and doors are made of oak. Their proportions emphasize the verticality of the whole building and especially of the tower.



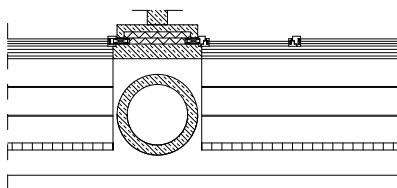
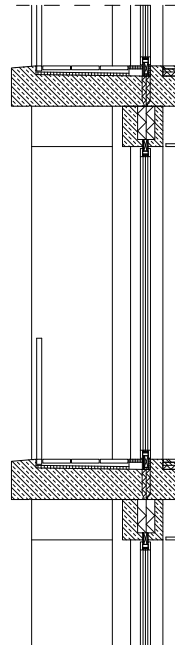
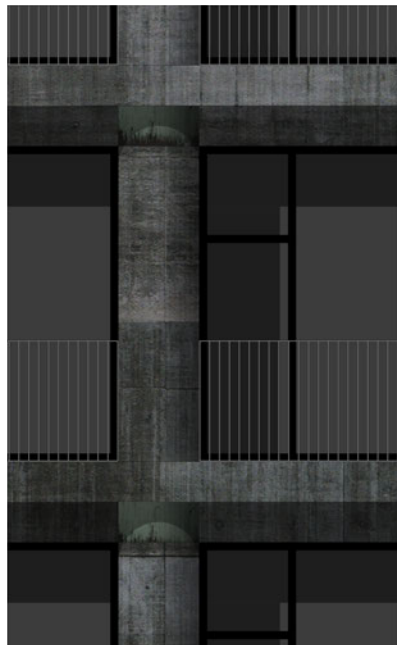
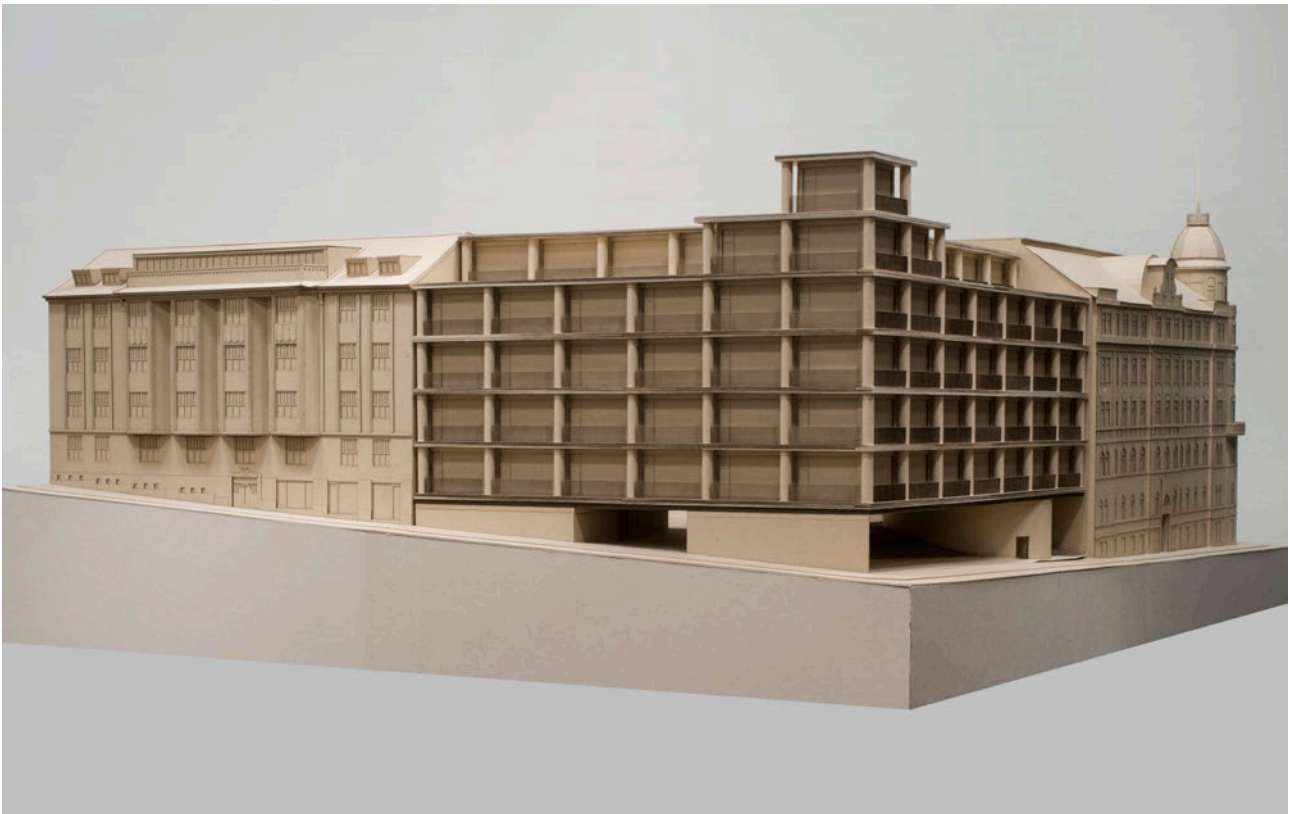


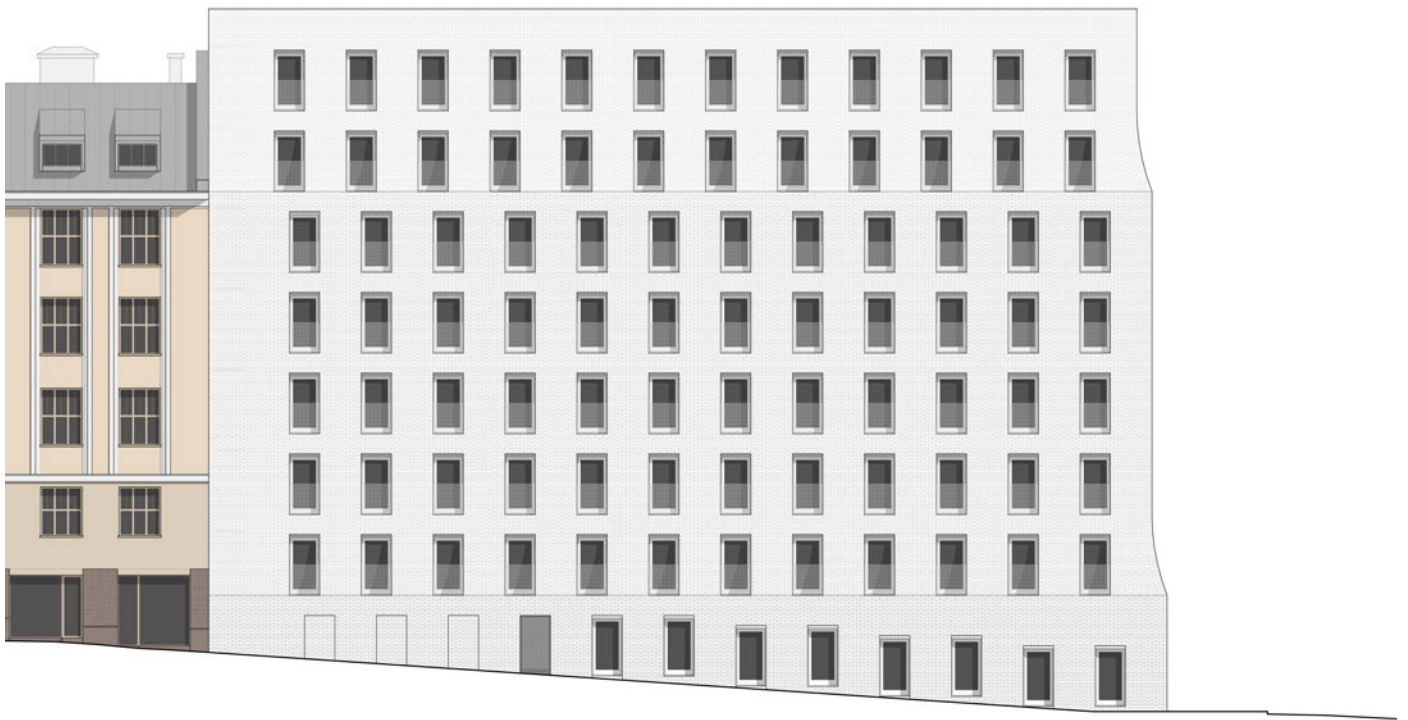
Oskari Parkkinen

The building consists of a five to six storey cast on site black concrete structure of columns and slabs resting on three massive black concrete columns with huge diameters aligning the streets. These columns, rising from the bedrock, are deep, tall and profound. The shapes of the columns are pure abstractions in plan: a square, a triangle and a circle. Each of the columns have a small, deep hole on their side, rectangular in shape, which lead into a dark vast void.

The building is an extension of the existing urban condition of the two museums situated as separate buildings in the park across the street. The building provides exhibition spaces in its three massive columns and in the white stone stereobate. The unevenly dark, rough surface of the slabs, columns and the colonnade above is contrasted by the white stone steps rising under and through the building from the street on the northern side. They allow for passage as well as lingering, and they create a sheltered and unexpected urban situation which pulls in the visitors of the museum. Upon arrival to the top of the stairs the subject enters a vast, white and light stone yard.

The eave height of the building matches that of the adjacent buildings. A one storey high setback on each side provides the topmost apartments with private terraces and pergolas. Vegetation growing on the balconies would provide natural colour and contrast. The tower in the corner accommodates public spaces.



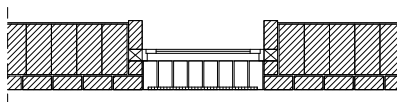
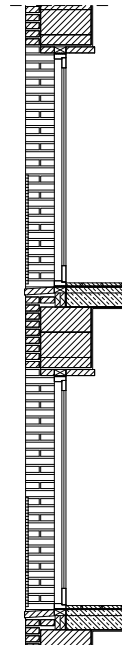
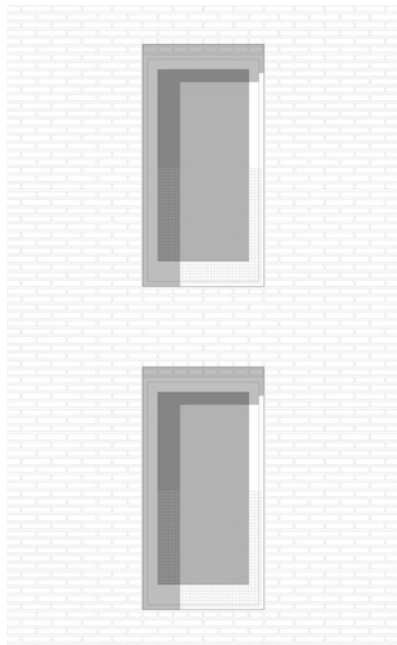
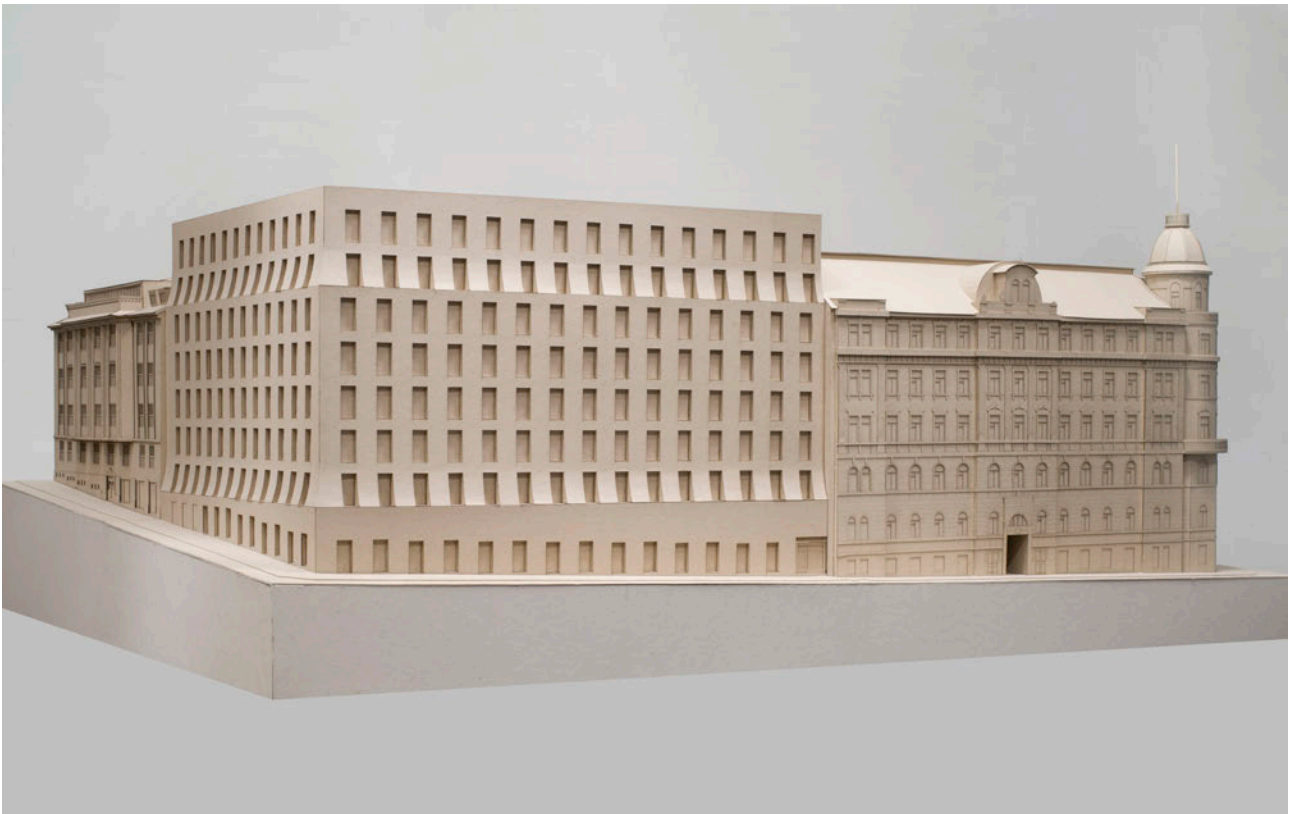


Eilo Hatakka

The building completes the block. The rules of the facade are designated by the neighbouring buildings. The building follows clear horizontal segments: plinth, piano nobile, residential floors and eaves.

The plinth is the first and most humble segment. The first floor is the most important residential floor, the piano nobile. The arc-shaped brick walls create small private balconies. The rest of the residential floors follow the rules of the piano nobile. The second setback is at the height of the neighbouring eaves. This setback allows additional floors.

The arc-shaped setbacks delicately fade out the massive size of the building while simultaneously giving the building its distinctive character. The form creates an ornamental order. The size and distribution of the windows emphasize the shape. Arc-shaped brick walls can be found in the buildings of the surrounding area. Still, the approach in question is unique and new.





Part II – Design

Molly Ekholm

Eilo Hatakka

Jaana Miettinen

Oskari Parkkinen

Benjamin Schulman

Saara Sillanmikko

Anja-Kaisa Ylimommo