

Urban façade

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

Part I

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

Professor Jenni Reuter invited us to teach a master's level studio course at the Department of Architecture at Aalto University in 2017. Looking for a subject that would be both simultaneously pressing and elementary, we decided to focus on the external appearance of buildings: the façade. In contemporary discourse, façades are too often seen as mere envelopes for volume, without much original design intent or development. Nevertheless, they seem to pass the building process without much objection.

We argue that the outmost layer of buildings - materials, finishes, colors, joints, forms, proportions and depth - define the quality of urban space more than anything else. Streets and neighborhoods are, in the end, characterized by an ensemble of individual façades. It is this crucial and neglected intersection of urban planning and building design where we positioned ourselves and our students for a semester of inquiry.

We started the studio by assigning each student one existing building in Helsinki. The buildings represented different time periods and different programs. Each student produced a detailed elevation drawing of the main façade in the scale of 1:150, and described the façade objectively in written form.

Simon Mahringer and Esa Ruskeepää
Helsinki 2018



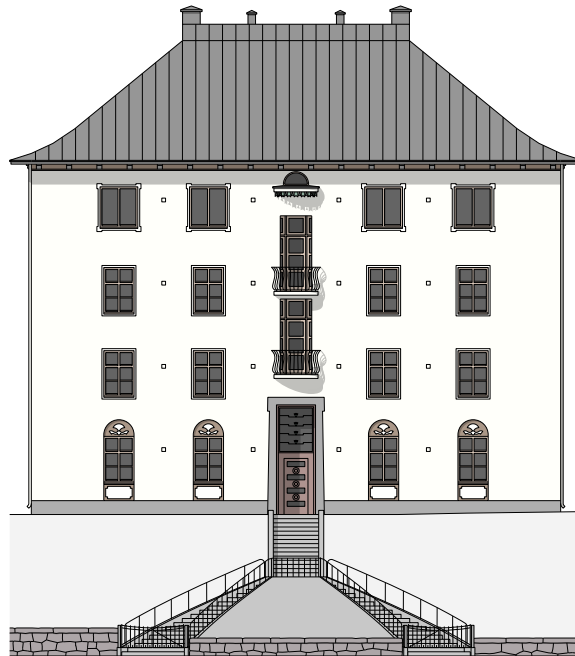
Luotsikatu 13 / Vyökatu 10 – Klinten
Karl Theodor Nyberg and Bruno Ferdinand Granholm 1904

The building is five stories high and sits on a slope. The described façade is facing east and takes up the entire block. The massing of the building is essential to describe its character. The castle-like appearance derives from shapes such as towers attached to the corners of the building and bay windows merged together with the main mass. This changes the two-dimensional surface into a three-dimensional object. Overall there is a playfulness in the use of basic geometric forms such as cuboids, cylinders and cones. However, many of the building parts were more complex in their original state and have been simplified over time. For example, the two towers used to have roofs that were more dome-like and had more variation in profile.

Besides shapes being added to the building, some parts appear to have been carved out. A prime example of this is the empty spaces beneath the towers. However, the building is massive and gives the viewer the impression of being a dense mass as well. Sparse glazing in proportion to wall surface is partially the cause as to why this is the impression mediated to the viewer.

The building sits on a plinth, has a roughcasting covering walls and a black tin roof. The colour scheme consists of various beige tones, as well as green and blue detailing. The building can be categorised as art nouveau.

Molly Ekholm



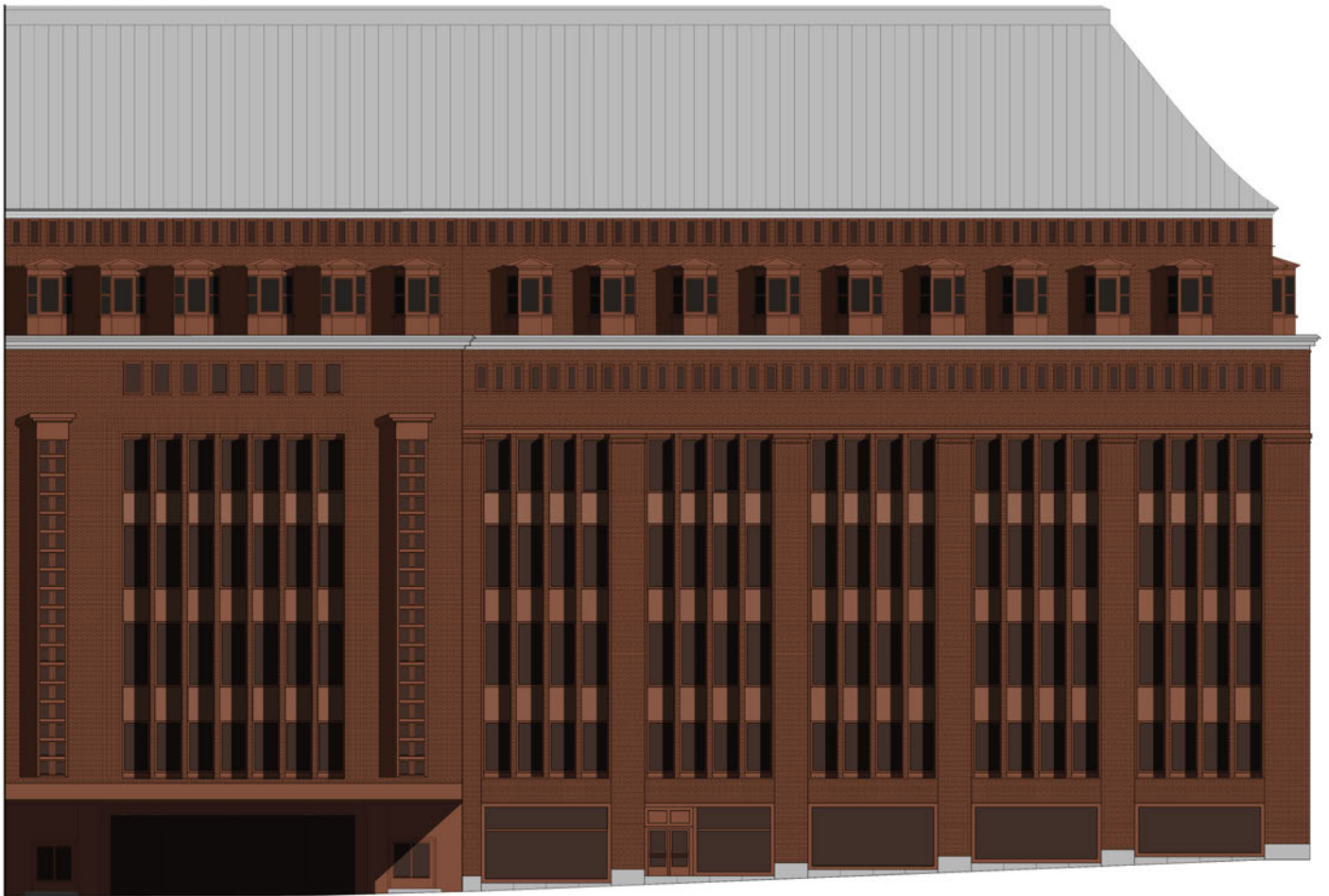
Franzéninkatu 20
T. A. Elo 1928

The building sits on top of a hill at the climax of an ascending street, resembling a Palladian villa. A double curving staircase, merging to a single straight one, leads from the street up to the main entrance. Two gates separate the stairways from the street. The building has withdrawn itself from the urban space.

The façade is symmetrical. It is three parts wide and two parts high. There are four floors. The roof is hipped, its angle decreasing towards the eaves. The façade is finished with white plaster. The roof is clad with black sheets of metal. The black roof seems to disappear to its surroundings. What is left is a white cube. In the evening sun, the colour of the white plaster appears as light ochre. On this canvas of plaster, different elements are arranged. The windows are arranged symmetrically in four columns, with four windows in each column. The windows are treated differently in the bottom, middle, and top parts of the column, echoing a classical order. The lowest windows are slightly recessed into the façade and framed with an ornamented semicircle above them and a rectangle below them. The two windows in the middle are framed with a simple white plaster border. The topmost windows are wider and lower than the others, almost square in shape, and framed with a white plaster border which is wider around the corners.

In the centre is the entrance. A door of lacquered wood, and above it, a large window with metal ornaments, are recessed deep into the façade and framed with a thick protruding border of grey stone. Above the entrance are two semi-circular balconies and a canopy, all on top of each other. The balconies have metal railings with S-shaped balustrades. Behind them in deep rectangular recesses are the wooden doors used to access them. The balconies and the canopy evoke an aura of royalty. Here you can be watched by the people on the street below, like a king appearing to his subjects.

Benjamin Schulman



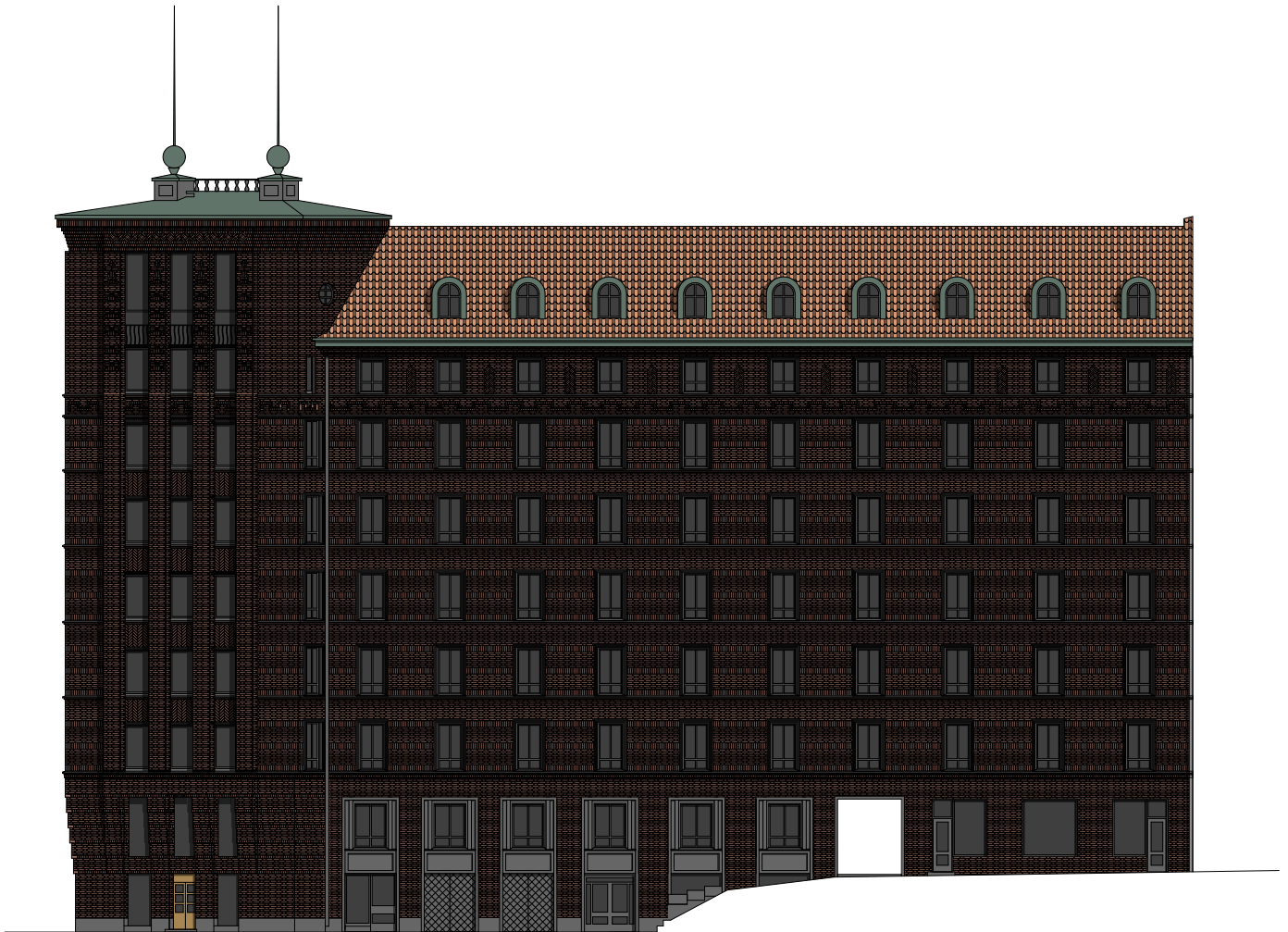
Aleksanterinkatu 52 / Mannerheimintie 1 – Stockmann
Sigurd Frosterus 1930

Stockmann department store in downtown Helsinki is a seven floors high building. It is designed with a pentagon plan in order to fit it into the site. The building is surrounded by streets of different scales, such as the busy Mannerheimintie and the pedestrian area of Keskuskatu. The unusual shape of the site, the irregular dimensions of the borders and the various speeds and movements of urban life are all conditions which require a response from the building. Stockmann department store communicates with the city by its posture and façade.

Horizontally, the massing consists of two different parts according to function. On the ground level are showcase windows and the main entrance at the corner, with commercial logos and advertisements and fascinating light shining from the interior in the evening. Above the ground level is the four floors high main body with narrow windows. In this part, the vertical line is the main element to emphasize the status of building. At the top, there is dark roof as a heavy horizontal line dominating all elements. Although all of the façades have different dimensions, they all make use of a regular pattern, which unifies the whole.

All of the façades are made of brick. The brick is used as the fundamental element of the pattern. Bricks are used horizontally on the columns, vertically on the beams, both vertically and horizontally to form radial square patterns in the walls under the windows. Darker bricks for these same walls increase the effect of the shadows. The façade is not only an experiment on a material but also a practice of an ideal. In all the different layers and scales of the façade, symmetry is the main rule, from the composition of patterns to the fabrication of bricks.

Wu Yao-Ting



Laivasillankatu 14 / Vuorimiehenkatu 2
Wäinö Gustaf Palmqvist 1930

The building is situated in the corner of the streets Laivasillankatu and Vuorimiehenkatu. The corner of the lot has an angle of less than 90 degrees. The building is a tall eight storey high building raising to around thirty-one meters from the street level. The ground floor has openings for entering the courtyard and large windows for the commercial spaces along the sides. On Vuorimiehenkatu the building loses one floor due to the sloping ground. The ground floor is approximately double the height of the basic living floors above it, which varies between 3,0 – 3,5 meters. The façade on the upper floors is characterized by a regular grid of windows of one by two meters, with a slightly varying central axis spacing of approximately 3,6 meters.

The building has a granite base and red brick cladding. The street corner is characterized by a tower with a rectangular plan, raising only slightly above the longer rooftop on Vuorimiehenkatu. The two masses along the streets collide into this massive tower partially intertwining with it. The tower has a dominant reduced pilaster motif with four pillars on the Vuorimiehenkatu side. The tower is topped by two tall peaks with decorative spheres at their base.

A line of lantern windows defines the visual appearance of the gabled roof. The building has a heat zinced roof and arch window cladding. The linings of the doors and windows and the lists are covered with dark grey rendering. Doors and windows are of lacquered oak. The red brick has a dark and varying appearance. The brick is laid with the monk order, the oldest order used in Finland. The façade has strong horizontal sections defined by the extruding eaves. Various decorative motifs are used, including a reduced meander above the sixth floor. The brick is used in a visually compelling and structurally sound way.

Oskari Parkkinen



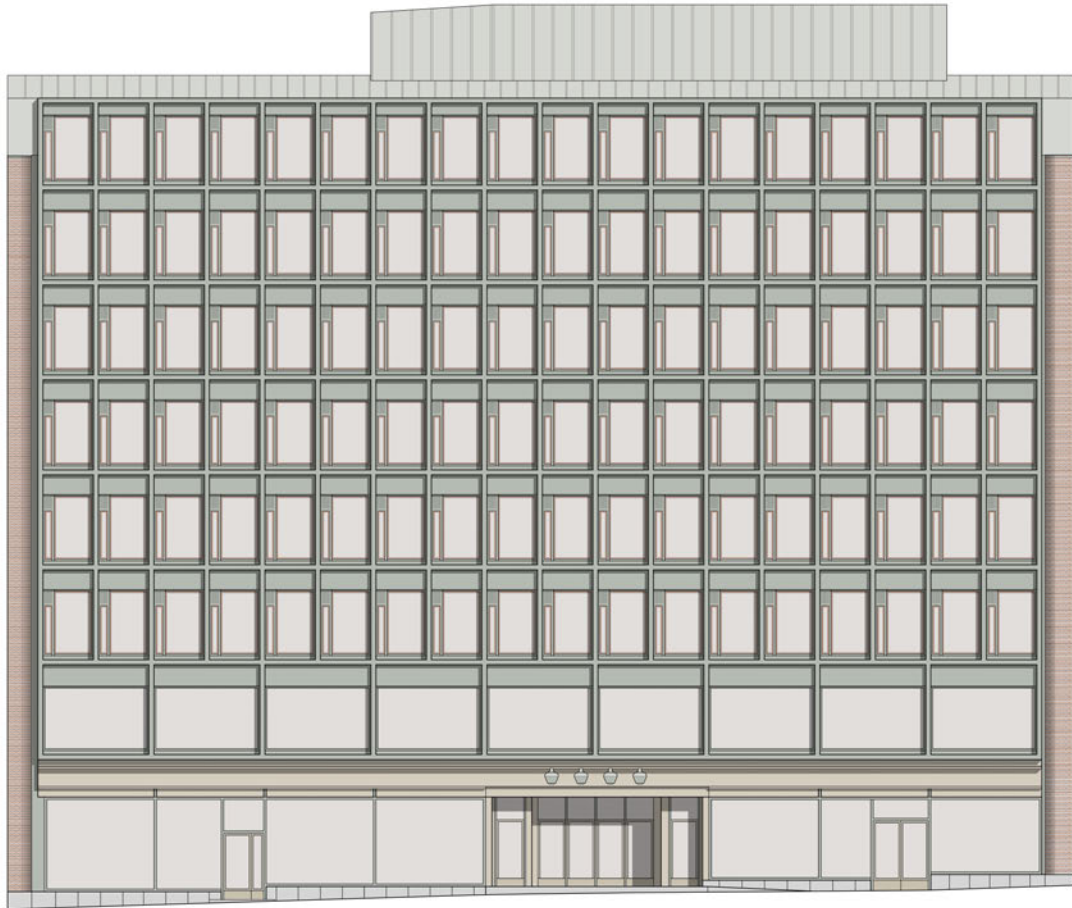
Vironkatu 5 / Mariankatu 20
 Carl Albert Edelfelt 1858, Theodor Höijer 1882, Matti Finell 1934

The building appears massive in the corner of Mariankatu and Vironkatu. It surprises its observers with its size, turquoise plastered façade, red eaves and reduced classical ornaments. Vertically the façade can be separated into three sections. There are two bays with round balconies at each end of the façade. The entrances are between the bays. Horizontally the façade can be divided into four segments.

The plinth is built of stone and the building is firmly connected to the ground. The ground floor has been plastered grey. The display windows are large and functional. The entrances are placed asymmetrically. A tall gate, located on the left side almost in the middle, leads to the courtyard. The entrance to the building is located on the right. Above the openings is a glass banner for advertisements. Above the ground floor is a frieze designated by white plaster borders. The frieze has white art deco ornaments on both bays. The first floor is the most important floor, the piano nobile. In the piano nobile, above each window is a white cornice. The windows are square and rest above the frieze. The rest of the floors are divided by horizontal white plaster borders. They follow the rules of the piano nobile. The top floor is the lowest and the most humble segment. The eaves are painted red, with another frieze situated below them.

Balconies with elaborate railings are situated at both ends of the façade. The bays have similar details as the piano nobile. However, all other ornaments have been erased. Above the left bay lies a roof terrace, which has a horizontal railing and a flagpole. The roof terrace and the flagpole appear like a bow and a foremast of a ship. Like a ship, the building is at the same time functional and decorative, regular and random.

Eilo Hatakka



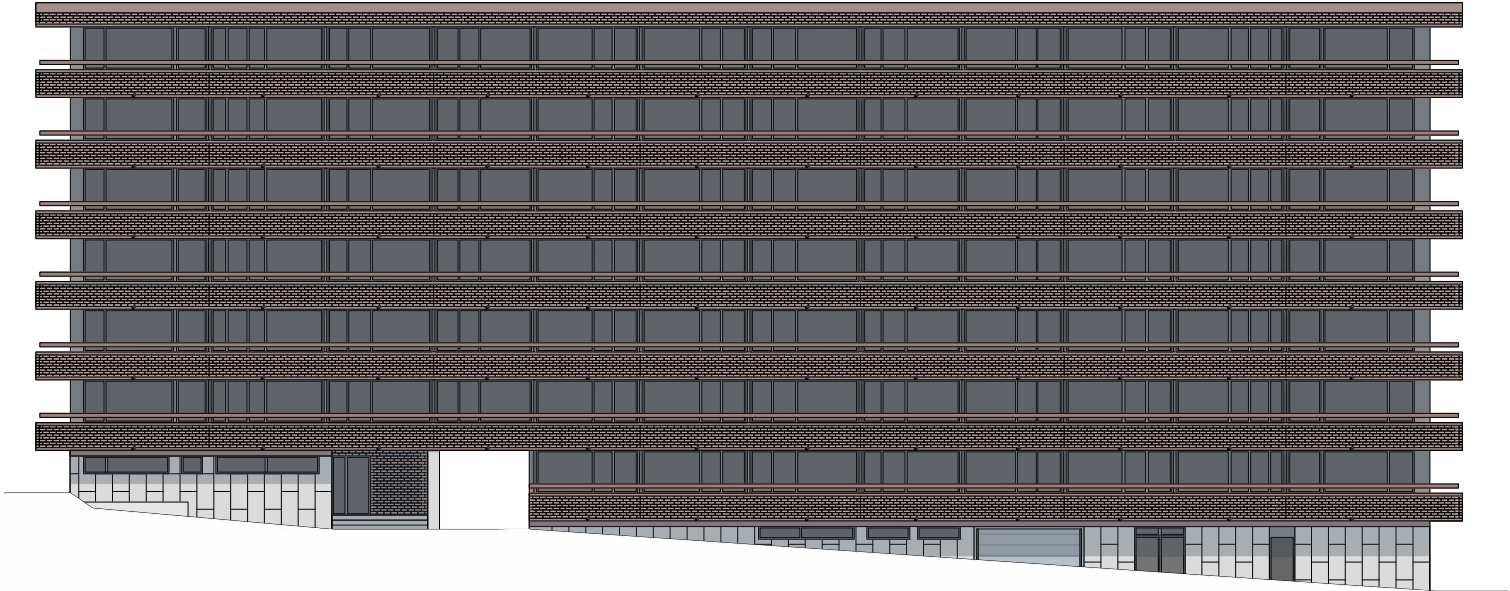
Keskuskatu 3 – Rautatalo
Alvar Aalto 1955

The main façade of Rautatalo is framed from both sides by the ends of brick walls. The profiles of these walls are slightly curved. The middle part of the façade can be divided into two parts: The ground floor, and the grid system from the first to the seventh floor.

The ground floor façade consists of a sign plate, large windows, two store entrances and a recessed main entrance, located slightly to the right from the middle. The grid system defines strictly the composition of the windows on the upper floors. One basic module in the grid consists of a window slightly higher than it is wide, a narrow ventilation window on the left, and a copper plate above. This module is pushed back from the surface of the uniform metal grid. The grid creates a frame for each window inside it. One row of the grid consists of eighteen modules creating a repetitive system from the second to the sixth floor. The window module of the seventh floor is slightly lower with a plate above the windows that is comparatively smaller than in the other floors. On the first floor the module is also different, with a larger window, two times the size of the smaller module, with a similarly wider metal plate placed above it.

Different parts of the façade are also defined by the use of materials. On the ground floor the main material used is a warm, golden bronze, which is most visible on the plate above the windows and entrances and on the walls of the recessed main entrance. The grid frame in the upper floors is defined by the use of dark green patinated copper. This is also the material of the plates above the windows and the roof surface. The small windows have thin wooden jambs. The plinth is made in grey granite, as well as the stepping stones leading to the main entrance.

Anja-Kaisa Ylimommo



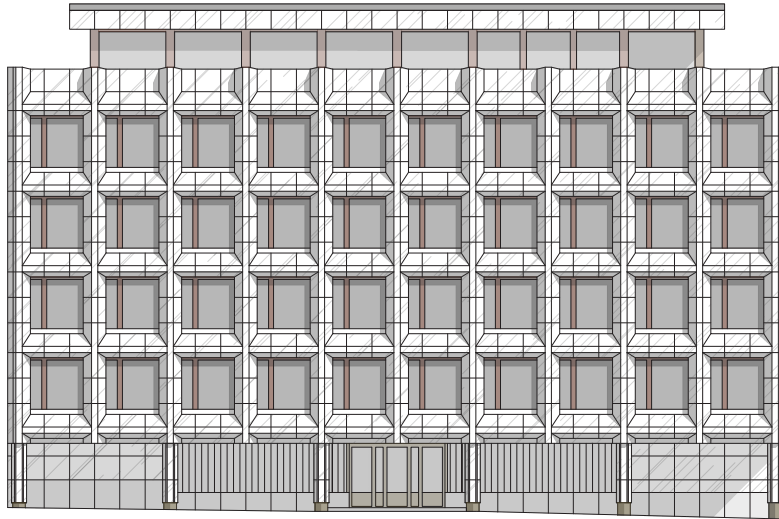
Kasarmikatu 1 / Vuorimiehenkatu 21
Kaj Salenius 1962

This residential building sits on a sloping lot at the corner of two streets. The façade introduces a composition that relies greatly on the aesthetics of repetition and horizontality. From the first to the sixth floor, a balcony runs as a ribbon through the width and around the corners of the façade. In the ground floor, caused by the slope of the lot, the ribbon is cut by the entrance to the courtyard. Partitions between apartments divide the long balconies into smaller bits. The division allows minor divergence in the sizes of individual balconies.

The material palette of the façade consists of four elements. These are: granite slabs on the ground level walls, oxidized copper in the window frames, wood in the balcony handrails and most notably burnt brickwork on the balconies. The brickwork, despite being partially burnt, is overall one of the lighter surfaces of the façade. Darker shades behind the balconies together with large, loosely divided windows create an impression where the walls behind the balconies appear to fade into distance. The dark background draws attention to the balconies and the brickwork.

The floating brick ribbons really are the key element of the entire façade. The use of brick is generally considered massive, but in this elevated context the brick gives the façade a sense of lightness. Perhaps there is a certain sympathy for the brick's emancipation. Having someone else bear the load for a change is a nice break from the usual way of things.

Kristian Penttinen



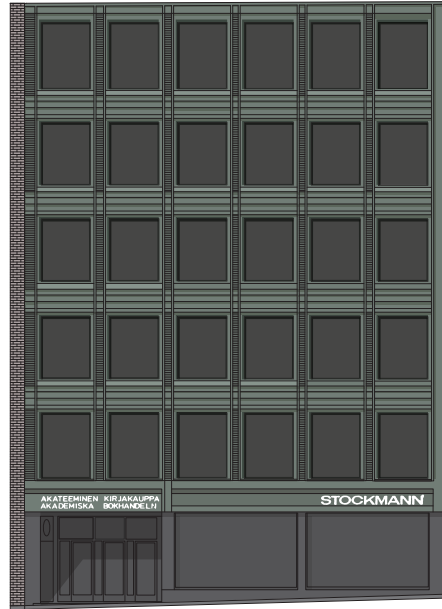
Kanavaranta 1 / Katajanokanlaituri 1 – Enso-Gutzeit
Alvar Aalto 1962

The main theme of the façade of the building is the waffle-like surface. The surface consists of repeated modules, each one of which comprises one window and the surfaces that frame it. The windows sink deeper into the façade than the rest of the outer surface. The surface of the façade does not end with a whole module, but instead, the modules are cut horizontally in the middle. This creates an impression that the surface is a piece that has been cut out of a continuous pattern. The impression is emphasized by the fact that the columns below have a less frequent rhythm, are narrower and of a different shape than the façade above them. Most importantly, the columns are pushed slightly behind the façade surface. At the same time, the columns and the way the surface is cut both highlight the vertical lines of the façade. The vertical parts that continue uninterrupted add to this effect.

The overall composition is very symmetrical. A frame divides each window into a narrow part and a wide part. Most of the tiling has butt seams. At the lower end of each module you can see the thickness of the stone material. The shadow on it creates a pronounced horizontal line. The ground level façade is indented and has been handled from a purely functional point of view. The top floor is also pushed further back than the dominant part of the façade.

The primary material of the façade is marble, originally Carrara marble. The window frames are teak, and the metal parts are either copper or brass. The plinth is clad with granite. The overall impression is twofold: looking from a distance only the strict grid of dark windows on a white surface can be seen. Looking closer the impression is three-dimensional and elegant with precious materials and sophisticated details.

Jaana Miettinen



Keskuskatu 1 / Pohjoisesplanadi 39 – Kirjatalo
Alvar Aalto 1969

In this six-floor-high façade the main interest is the cube of the five top floors. The cube is a grid of six times five upright, floor-high, rectangular windows in a uniform frame. The mildly indrawn ground floor only works as a pedestal for this main cube. The repetitive, continuous surface wrap of the cube consists of different bars, stripes and ventilation hatches vertically and horizontally crossing each other. There are two white advertisement signs in the bottom edge of the cube. The composition of the ground floor and the secondary detailing of the building are slightly asymmetrical.

The building is joined to its neighbour with a narrow brick strip. Nearly all other surfaces except the windows are of the same material: dark patinated copper. The ground floor has dimmed windows and all the other windows have mirroring glass. One can't see in through the windows, at least not in the daytime. Therefore, there is no communication between the street and the indoors. The building remains quite silent towards the street. It's not making a point of itself.

When the mirroring windows reflect the white sky, the dark building appears as a light, two-dimensional frame; one could think there's no building behind the façade at all. The exterior architecture of the building focuses strictly on the façade surface. The homogeneous and monochrome surface makes the two small ads stand out strikingly.

Stella Vahteristo



Part I – Analysis

- 1 Luotsikatu 13 / Vyökatu 10, Karl Theodor Nyberg and Bruno Ferdinand Granholm 1904
- 2 Franzéninkatu 20, T. A. Elo 1928
- 3 Aleksanterinkatu 52 / Mannerheimintie 1, Sigurd Frosterus 1930
- 4 Laivasillankatu 14 / Vuorimiehenkatu 2, Wäinö Gustaf Palmqvist 1930
- 5 Vironkatu 5 / Mariankatu 20, Carl Albert Edelfelt 1858, Theodor Höijer 1882, Matti Finell 1934
- 6 Keskuskatu 3, Alvar Aalto 1955
- 7 Kasarmikatu 1 / Vuorimiehenkatu 21, Kaj Salenius 1962
- 8 Kanavaranta 1 / Katajanokanlaituri 1, Alvar Aalto 1962
- 9 Keskuskatu 1 / Pohjoisesplanadi 39, Alvar Aalto 1969