Book 1. Learning From Others

Heritage & Architecture Studio Msc 2 2018 Delft University of Technology

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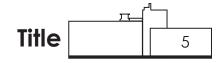
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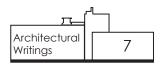
Van Nelle Factory, 1931 Adambräu brewery, 1926-1930 Jobsveem, 1912



Architectural Writings

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Kenneth Frampton The New Objectivity: Germany, Holland and Switzerland 1923-33



In the article the "Neue Sachlichkeit" is discussed. It talks about what it is and what the imported events and architects were. The article starts with that the word "Sachlichkeit" first was used in architectural context by Hermann Muthesius, who wrote for the journal Dekorative Kunst. Sachlichkeit for Muthesius seems to have meant an "objective" functionalist and eminently yeoman attitude to the design of objects, tending towards the reform of industrial society itself. In reality it was something more universal underlying this objectivity and of which it was the expression, a revolution in the general mental attitude of the times, a general new Sachlichkeit of thought and feeling. In 1926 the phrase was first used to designate a "new objective" and explicitly socialist attitude to architecture. The Neue Sachlichkeit architecture is a set of specific socio-political connotations. It was a new unsentimental approach to the nature of society and architecture. In the rest of the article a brief history of the Neue Sachlichkeit is given. It talks about how it spread over Germany, Switzerland and the Netherlands. Different people at different time had different options about what the Neue Sachlichkeit had to be, but one thing all those people had in common was that architecture had to adapt to the new society and make use of the new technology that was to emerge at that time.

The Neue Sachlichkeit is called in the Netherlands "Nieuwe Zakelijkheid" or "Nieuwe Bouwen". The HAKA Building is also design in this functionalist way. In the article the Van Nelle Factory is discussed, this factory is only a couple kilometers away from the HAKA Building, and was built around the same time. Although the buildings don't look the same, they are designed by the same attitude of design objectives. The HAKA Building has a lot of big windows that let sun light though. The structure of the building is made out of concrete, what was quite a new material for that time. They used also for the first time, in the Netherland, a pump to cast the concrete into the formwork. There was time and though spent to the design of the structure. The materials used in the HAKA Building is for the most part concrete, glass and steel. There are also tiles used at curtain places, but that is for the most part functional, not decorative. The Neue Sachlichkeit finds "form" nonobjective and that is also the reason the outside of the HAKA Building is not ornamented. The inside is at some places ornamented, but that has a function of being formal. That is also the reason way the factory parts isn't ornamented and the office part is. Also characteristic of the Neue Sachlichkeit is the separation of function. The HAKA Building has multiple functions, but they are separated within the building.

By reading the article you see that the HAKA Building can be placed in a historical context. It is part of the history of architecture in the Netherlands. It is therefore import to value every part of the building, keeping in mind what the meaning of that part is. This is important when transform and re-designing the building.



The facede is ordened in a rational way, by the principles of the Neue Sachlichkeit.

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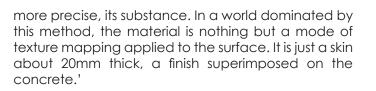
Kengo Kuma A return to Materials

In 'A return to Materials', Kengo Kuma shares his view of architecture in terms modernity and Japanese culture, with the focus of architectural materiality. In his writing the theme of architecture and one's personal feeling within a space is strongly evoked. He recounts his first personal reaction with concrete, perceiving the finish as 'fairly attractive', but as he was to experience the concrete as an enclosure he felt suffocated and angst.

Due to the tragedies of earthquake and turmoil from World War II, the adopted use of concrete emulated the United states. It was used due to the early 'common notion that only concrete could withstand big earthquakes'. Which ultimately 'modified the appearance of cities', while it also 'destroyed the culture of japan and undermined the spirit of its people' referring to a loss of identity as a country and also in the view of its people.

In response to this new age modernity and as the architectural tradition and ideals are fading in Japan he implies 'If we want to get back the spirit of respect for nature, we are going to have to discover new materials that can replace concrete and use them to construct buildings, create cities and improve people's sensibility.'

In comparison with the traditional methods and use of wood in architecture that is slowly being stripped. 'The 'concrete method' is in essence a style that completely ignores the material or to be



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In reference to his approach and design methods in projects - 'I prefer an ambiguous, unreliable condition, in which the substance is scattered all over the place. I don't want to make 'particulate' architecture but create a 'particulate' condition.'..... 'More than and prior to defining a style, what I desire is to create a certain type of place and a certain type of condition that can be experienced by the human body.'

Learning from this article, when analyzing the Haka building from its past historical context, meticulous use of materials and specific building method, we can view the essence of Haka in a new light and not just the face value for what it is. When designing the repurposing of the HAKA building we should all try to embrace all parts of architecture from the: human sensation to the crafting from traditional techniques to most advanced technologies to create a 'particulate' condition.



Stairwell in Haka Building, March 2018



Factory interior in the Haka Building, March 2018

Steven Holl Duration (The not yet meets the already gone)

Architectural Writings

Joseph Brodsky, Watermark

"I simply think that water is the image of time, and every New Year's Even, in some pagan fashion, I try to find myself near water... Preferably an ocean... To watch the emergence of a new helping, a new cupful of time from it."

We cannot speak of time, we can only speak of duration.

Duration, a fluid, flowing time, is intertwined with an experience of being where past, present, and future merge. If one extreme of time is the experiential time of individual being, the other extreme is the abstract, anonymous, measure time of science.

Based on, Henri Bergson "Matter and Memory 1911"

Memory

Architectural Heritage projects such as The redevelopment and reuse of the Haka Building in Rotterdam give you the opportunity to merge past, present and future with architecture being the physical embodiment of time. Different traces of different time layers can be discovered in the frames of the windows, the layers of paint in the wall, specific architectural features, decorations, machinery etc. Each element a physical manifestation of a past life, a past use, a memory. Consequently the architect in charge must find the proper tools and elements to enhance the historical narrative of the building and avoid overshadowing it with his personal ambitions.

Time is only understood in relation to a process or a phenomenon.

Transformation

In order for the redevelopment plan, the transformation of an existing building into a building that addresses contemporary needs a merge must be achieve between the cultural significance of the building and the phenomenon that takes place in it. The use of the building and its programme is the element that is going to generate memories and feelings and will actual achieve the continuation and inheritances of its qualities both tangible and intangible.

Time in its various abstractions links architecture and cinema.

1...It is analogous to cinema's ability to compress time (twenty years into one minute) or extend it (four seconds into twenty minutes).

3... Absolute time is measure in a projected beam of sunlight that moves across the "cubic pantheon in

the lobby.

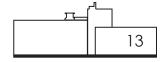
Filmic space is often created in linking a series of interiors in sequence without an overall objectified exterior. Likewise an architecture can be created from the inside out.

"De-construct"

Heritage architecture can be compared to Steven Holl's reference to cinematic time. First of all, it terms of the different time layers and the different components of the building you can tell different stories therefore you have to deconstruct the picture and then montage the pieces so as to facilitate the user to understand the message. Moreover, by de-constructing and studying all the elements that compose the building, inside and out, as long as you have a suitable functional programme that fits the character of the place then you start to redesign the space from inside, from a sequence of interior images to the exterior connection to the city. Priority in heritage architecture have the interior quality and atmospehere of the place, the quality of materials and structure as well as their potential to create new experiences that address the future.

This kind of approach is the one that we should use to approach the Haka Building. Understand its industrial qualities, its functional characteristics and memories, its true identity and future potential.





Precedents Studies



by Johannes Brinkman and Lennert van der Vlugt, Rotterdam

A good reference for the HAKA Building is the Van Nelle Factory also located in Rotterdam. It was designed by Johannes Brinkman and Lennert van der Vlugt and build in 1931. The HAKA Building as build in 1933, so it round the same time as the Van Nelle Factory. In the factory thee, coffee and tobacco were processed. It is kind of the same as the HAKA Building were where in addition to morning food also thee and coffee were processed. Also a comparison between the HAKA Building and Van Nelle Factory is that they both have access to the railway and water.

Next to the factory part the Van Nelle Factory has also a office part. Different to the HAKA Building the offices are located in a separate building what is connected with a bridge to the factory part. The Van Nelle Factory is more a complex of building then like the HAKA Building where all functions are located in one volume. The two buildings are both very narrow and long, but the Van Nelle Factory is much larger than the HAKA Building. The construction of the Van Nelle Factory is made out of concrete, the same as the HAKA Building. But the façade is made out of brick breastwork containing a row of windows. The façade of the HAKA Building is made of concrete. The columns of the Van Nelle Factory are mushroom shaped and the floors have no beams so more light can come into the building. The windows of the Van Nelle Factory are larger the of the HAKA Building, so the building has a different expression as the HAKA Building.

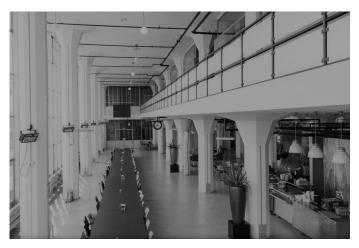
Renovation/redesign

In 1995, sixty years after the opening of the factory, the factory lost its function. But this didn't meant that the building was at the end of its life. In 2000 till 2004 the building was renovated by the office of Wessel de Jonge. It became a "design factory", a multicompany building with offices for the creative sector.

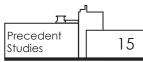
For the redevelopment 60,000 m2 of gross floor area had to be redesigned so that approximately 100 companies can work there. To accomplish this a structure plan was made. In the structure plan the intended destinations and criteria with regard to the establishment of offices, businesses and facilities, as well as parking, public transport, green areas and recreation are laid down. In addition to functional and planning conditions, guidelines are given for monumental aspects and architectural elaboration. The structure plan has served as a basis for the design team for the various parts of the complex, which are next to each other and for different users and are still being (re)developed.







Van Nelle Factory



In the former factory buildings, at the proposal of project architect Claessens Erdmann, studio and office spaces were realized with a double façade construction. Thanks to this climate-regulating façade, the workspaces can be conditioned without drastically changing the historic façade. The box-inbox construction in combination with the climateregulating facade also increased the sustainability of the building. This ensures the preservation of the fragile gossamer façade, while creating a comfortable indoor climate. In addition, the reuse of the existing heating, the lower lighting level, the maintenance and expansion of the greywater circuit, the minimal interventions and the user information also increase sustainability.

On the dark side of the building, the second façade has been placed further back to create a corridor. Traffic and train noise is also caught between the old and the new façade construction. The originally undivided space, transparency and daylight have been kept tangible in as many places as possible. Partitions have been closed to door height for privacy reasons, but are transparent above and remain separate from the outer walls. By leaving the ceilings and characteristic mushroom heads of the columns free, the original spatiality can still be felt.

For the Expedition building Wessel de Jonge architects acted as a project architect. By making an incision in the heart of the deep building on all floors through which daylight flows in, it is now possible to realize workstations on the walls as well as on the façades. On the side of the factory street, a free placement of work rooms with a lot of general space has been chosen. This atmosphere invites informal use and visible activity at the originally liveliest part of the site. The shutters along the loading platforms have been replaced by large glass windows and reinforce this effect. The image is rounded off by the restored frosted glass canopy above the loading platforms.

Sources

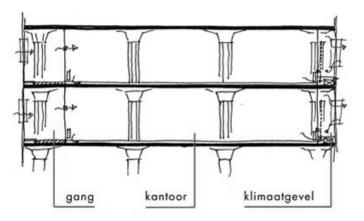
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Adambräu brewery

by Lois Welzenbacher, Innsbruck

The brew-house of the former Adambräu brewery, originally designed by the architect Lois Welzenbacher during the period 1926-1930. The classic modern industrial building constitutes a landmark in the surrounding area and during the period 2000-2004 it was transformed by the architects Rainer Korbel, Thomas Giner, Erich Wucherer and Andreas Pfeifer.¹

Original Character of the building

The architect's original intention was to design a building based on the requirements of the production process, a machine, a symbol of the potential of technology. The brewery was organized entirely outside of the then brewing technology conventions, where lack of space was the reason for the unusual, but logical conception. The brewing process worked from top to bottom after the "material" was transported to the top - which is visible as a "lantern". Vertical "filling operations" alternated with horizontal "distribution processes" and flowed into the large open space of cooking and boiling. Hermetic containers for water, grain and malt were interposed.²

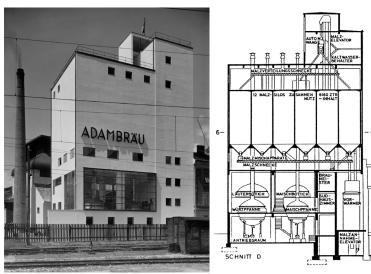
Transformation Challenges

In the beginning of the the redesign process the cool and dark silos seemed unsuited for any new function. Yet, by understanding all aspects of the such a structure, including their climatic behaviour the architects were able to find a suitable option. The thick concrete silos offered very stable climatic conditions and thus it was decided to use them to shelter an archive for architectural drawings and documents for the Tyrolean Architecture Centre, which required such an environment.

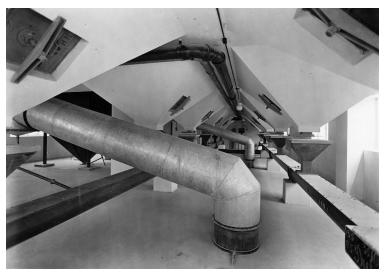
By analysing all aspects and properties of a space the designers were capable to change a "negative" or limiting aspect of the original building into a "positive" and driving aspect for their new design.³

"As soon as life was captured in precise forms, the possibilities of its transformation also emerged." Aldo Rossi

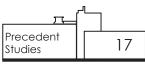
"Architecture would not survive for generations if it didn't possess the ability to adapt to changing uses, to indeed allow transformations of meanings." Friedrich Achleitner







Adambräu brewery



New Design

Similarly to the original character of the building the new spatial organization was planed in a way from top to bottom. The Archive, located in the silos area was on top and then the Forum was placed in the former cooking and boiling area at the bottom of the building. Some supplementary rooms were added above the main access level. Minimum interventions in the former silos, such as openings, were introduced so as to provide the necessary connections for the new use. The spatial arrangement, its separation and complementarity as well as the different characters of the exhibition areas evoke an inward and outward directed discursive play. Another layer covers the former machine.

Important decisions

1. The original intention was to remove the silo structure and replace it with a new steel structure, however, due to economic reasons that was not an option. The silo walls were cut at the crossing points so as to made this space accessible.

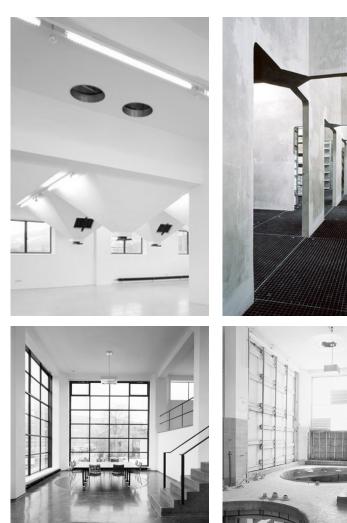
2. This decision led to the preservation of all former water tanks - the wonderful black pools.

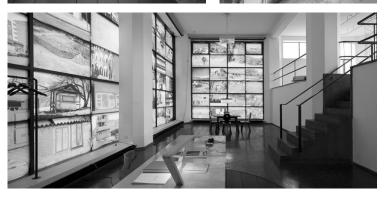
3. The "black and white theme" was defined as the color concept corresponding to the construction.

4. The four large round openings were closed differently in the course of the planning process - complete with bars, glass, etc. - until the decision was made simply to use wooden planks, which can be removed occasionally - flexibility - .

Conclusion

This building, even in a very different scale than the one we are redesigning has a lot of valuable insight to give us. First of all, how the properties, structure and behaviour of materials can define the future use of a space particularly in a case of a munument where the demolition of parts of the buildings has to be very critical. Furthermore, the way that the interior was adapted shows that flexibility is a key so as to preserve the original character of the building. This is not only true for the maintainance of the holes which were covered with wooden planks but also for the projectors installed in front of the windows. This offers the chance to have flexible space which can function both as a public, transparent space but also it can be temporily secluded from the exterior for private meetings and discussions.







by J.J. Kanters, Rotterdam

History

Jobsveem is a former 20,000m2 brick warehouse on Lloydpier quay in Rotterdam, built in 1912 by the architect J.J. Kanters. The building has been changed significantly. Since 2003, the adaptive re-use project started and was designed by Mei architects in collaboration with architect Wessel de Jonge breathes new life into the old warehouse.

Since its completion in 1913, the buildling had an extremely introverted character. This was done to protect the stored goods from too much daylight, rain and wind. The warehouse had six-storeys with a concrete silo and an office building on the head. The structure involved the use of construction methods that were very advanced for their time: long floors (130x25m) with cast-iron columns of different heights. The warehouse is an important national and municipal monument (since 2000) because the function of loading and unloading resulted in a uniquely expressive façade of concrete loading decks on the side facing the water.

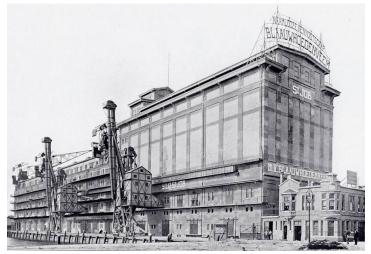
Daylight

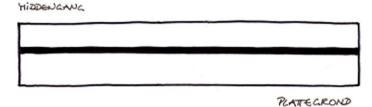
Converting the warehouse into 109 apartments and commercial spaces (on the ground floor) was an opportunity to bring daylight into the building. Three glazed atrias were created in the 125m long façade to allow daylight in, whilst maintaining the unique character of the building. They provide the adjoining dwellings with views. The concentrated intervention of the atriums preserves the characteristic appearance of the warehouse. The light courts of glass and steel emphasise the monumental components that have been carefully restored.

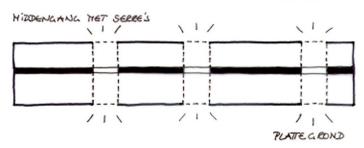
Located in the atria are the main staircases, lifts and entrances. They are lively, light spaces where residents can meet one another. These courts can also combat heat and smoke when needed. In warm weather, and also in the event of calamities such as fire, the glazed roof opens and a light breeze blows through the atrium.

Present functions

The floors could be organised as desired because of the absence of bearing walls. The same flexibility can be found in the apartment plans. The roof had to be removed because of its poor condition. Inserted in its place is a new floor that crowns the building like a shed. Housed in this new roof landscape are ten penthouses for which special large glazed sliding panels were developed.











Located on the ground floor are the commercial spaces that are imposing in appearance owing to the 6-metre floor-to-ceiling height. Space for restaurants and cafés is created in two places on the ground floor. The other spaces are reserved for creative companies. Located behind the big loading bay doors on the ground floor are glass doors that open out towards the quay. Owing to safety and light-control factors, steel frames are filled with mesh woven from stainless steel and can move up and down like lift gates. Old and new meet here.

Restoration

The original parts of the building have carefully been restored, special attention has been given to authentic details and materials and giving a new functionality to historic parts. For example, the concrete loading bays are in use as balconies, giving the back façade a very green view. The brick facades have carefully been steam cleaned, as not to damage the bricks. The small 'houses' on the roof originally used to protect lifted goods against rain have been reconstructed and are now in use as storage for the roof terraces of the penthouses. Historical colour research has been conducted to ensure the historical colours were respected.

Comparing to HAKA

With comparison to Haka built in 1933, the buildings were only built 20 years apart. The site context of Haka is very alike with Jobsveem, the front façade faces the water where the ships used to dock and to load and unload goods, whilst the back façade faces a main street where goods can be transported by cars or by rail. In regards to form, both buildings are narrow, low-rise and had a long flexible floor plan, due to the absence to load bearing walls.

In the past both buildings housed large storage spaces and offices and also a silo. The construction of Jobsveem and the HAKA Building are both built in concrete. The façade Jobsveem is made of brick, whilst HAKA Building is made of concrete. In contrary to Jobsveem (before the repurposing), the Haka has many windows on the façade giving it a much more transparent character. Allowing the abundance of daylight suggesting that the goods being stored were not as delicate as the goods in Jobsveem. The designer of Haka's design intent was also to create a pleasant and bright working space in the office, factory and packaging areas.



