Reaserch

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reaserch. 01
Suggestive language of facades

The following research is centered around the idea of understanding architecture - it deals with a problem of shared comprehension, of architectural semantics, that on many levels inform the way space is shaped. The investigation focuses on the phenomenon of an ordered facade, composed of altered holes and masses. The spatial pattern, defined in antiquity, that dominated most of the Western post -renaissance architecture production, undeniably influencing the shape of our modern cities, that is so overly familiar we may not be aware of its origin or even existence. It is also complemented by analysis of notions directly connected to facades and classical ordering, such as systems of proportions, ornamentation, and tectonics.

The investigation has been driven from an understanding that the use of architectural elements is very much similar to the use of a language. Therefore if there is a language, constructed of vocabulary, syntax, and meaning, architecture becomes readable. The below-presented analysis also seeks answers to how the language has been originally constructed, if it is universally known, and if it is connected with the most basic human abilities of perception.

The connection between architecture and language has been made evident by Vitruvius (1st century BC) and Semper (XIX century), both vindicating that architecture and language are primordially civilising institutions, preconditions for as well as expressions of human culture. In the book „The formation of space and cultural meaning" Sophia Psarra draws attention to the fact that: *"all meanings are socially constructed" as well as that "people understand complex spatial patterns intuitively even though they cannot describe them linguistically, as in language we do not think about syntax while we are using it."* We can simply admit that there is a huge variety of codes to be used by architects, that impact the understanding of the design, some of them implemented subconsciously, based on the author's experience and knowledge. The codes may suggest function, status, importance or political orientation of the building.

Architects use, for example, scale and proportion to indicate certain expressions that they want to impose on the users of their designs. That is why walking in the city we can differentiate buildings that are monumental from the domestic ones. As Adolf Loos has stated :

> *" Architecture awakens different moods in people. An architect's task is therefore to specify this mood. A room must be comfortable, a house must appear livable. The courthouse must look like a threatening gesture towards furtive vices. The bank building must say: your money is in the trustworthy hands of honest people. An architect can only achieve this by drawing on buildings that have thus far evoked this emotion in people."*

In light of this quote, we can simply assume that by use of a certain spatial language, architects can affect interpretation of the facade by the users, not only in the aesthetical abstract sense (based on emotions composition evokes, facade understood as an artistic expression), but also can create links that are being understood intellectually through the lens of general historical and cultural knowledge possessed by the society. Language consists of words and grammar but also cultural understanding. Sophia Psarra illustrates that well by describing the order of a facade: " that content is never transparent, but the attached meanings draw attention to the fact that, seen in isolation from architectural signification, the grid is purely abstract and logical." Cultural connotations result from the adoption of a certain interpretation of a given expression (eg. idioms). The same logic can be applied to the understanding of the language of a facade in the context of architectural history and tradition.

Following the outline set by Semper that : *"Any discourse should go back to the simple origin of the subject under review, trace its gradual development and explain exceptions and variations by comparing them with the original state"* the research tracks back the development of the elements of order from Vitruvius to modern times to conclude with proposal of „modern" equivalent of the concept. The research is complemented by drawings, investigations, notes on ideas and material tests that have helped to develop the methodology for the second phase: the design. The aspect of getting familiar with the theory, it's summarizing it in writing and it's interpretation, has been considered a valid element of the design process. Therefore the research text and represented here ideas, implement the drawings and vice versa. As nineteenth-century french theorist J.N.L. Durand wrote, while reflecting on drawings as a primary medium for architects ideas articulation: "All language, to fulfill its object must be the perfect harmony with that is the ideas of which it is to be the expression"

1.01
Tovværkgade 5A,
Amagerbro Kbh, 1926

Stripping facades from historical detail and ornament, only looking at the way they are composed with means of proportion and rythm can we read their purpose? A starting point to conduct this analysis was a small building in Amagerbro, that is now a residential block, but clearly one can point out that it has been secondary adopted to this function, by reading the proportion of the openings in the wall.

”
the longer you look at a word, the stranger the word appears
”

Karl Kraus

denotation
(noun)

the literal or primary meaning of a word, in contrast to the feelings or ideas that the word suggests.

/

the action of indicating or referring to something by means of a word, symbol, etc.

reaserch. 02
Semantics : definitions of order

"If the architecture does not create order by arranging conceptual relations, there would be no need to have architecture at all" remarks Adrian Forty. There are 32 definitions of the word „order" in the English language, while four of them have connotations to architecture and the built environment. Those are :

The attainment of beauty, throughout a relationship of parts to the whole

The avoidance of chaos, to resist the tendency to disorder

5 classical orders associated with styles of columns

The representation of ranks in society

The ambiguity of the meaning, brings depth to the understanding of order in the field of architecture, from the very particular (5 column orders) to the very general or even philosophical (resistance to chaos). The many meanings of order, further suggest there exists a certain rich network of connections between each of the readings, some strands of which can easily be defined and others require deeper investigation, nevertheless still are present.

The Renaissance notion "decorum" bonds together: the order understood as one of the classical styles in architecture and the social order. It defines the appropriate relationship between the perceived rank of the building (as desired by the owner and the users) and the language of its aesthetic. A similar principle was already distinguished by Vitruvius in his VI book on architecture: " if buildings are planned with a view to the status of a client [...] we shall escape censure". That statement reveals clearly how the structure of the society is reflected in the aesthetics of its physical fabric -architecture.

Another worth considering, correlation connected to the notion of order is an idea of a universal legitimacy of certain elements of the architectural expression. In the search for that legitimacy, architects of all ages turned towards nature and the human body - as the original normative phenomena, and conceived a system of mathematical tools used to describe the spatial relations between the elements in our environment - proportions, measurements, and formulas.

What is interesting, even if a certain order has been inspired by the rules observed in nature, the only way to describe it, so it can be understood is by means connected with the field of mathematics such as - measurements, proportions, etc.

Davelier, French architect from the XVII century points out: " The origin of architectural orders must be almost as ancient as humanity itself". Hence if the order in architecture is so basic and primordial, it must stay constantly valid, and will until human behaviors and basic biological and emotional needs remain analog to the ones in the beginnings of the development of our civilisation.

Therefore one could argue that if in a design practice we will accept as a principle, to first understand the roots of a certain behaviour (of the users) or the rule that organises a particular spatial experience, and then we recreate it with different means of modern architectural expression we shall still obtain the feeling of harmony and relevance that has been attained in traditional architecture of the past.

" So we shall emphasize the organic principle of order that makes the parts meaningful and meastwhle while determining their relationship to the whole. [...] we want an order that gives to each thing its proper place, and we want to give each thing what is suitable to its nature. "

Mies Van der Rohe

reaserch. 03
Vitruvius and Alberti

The column has for ages been a crucial element in facades vocabulary. One of the denotations of word order has been associated with classical styles of columns, as there is Doric, Ionic and Corinthian order in architecture. Three classical orders of columns (classified first by Vitruvius) seem to be an element known to anyone who doesn't have even the slightest interest in architecture - it is a type of knowledge acquired at the earliest stages of education.

Although Vitruvius work as a theoretician has been mainly associated with this specific notion of order, precisely portraying proportions of the columns, spacing between them, decoration elements that belong to each of the styles, in his treatise "De Architectura" he also writes about order in more broad sense, that refers to the general appearance of the building. Defining how relations between singular elements contribute to the creation of the whole.

> *" Order gives due measure to the members of a work considered separately, and symmetrical agreement to the proportions of the whole. It is an adjustment according to quantity. By this I mean the selection of modules from the members of the work itself and, starting from these individual parts of members, constructing the whole work to correspond."*

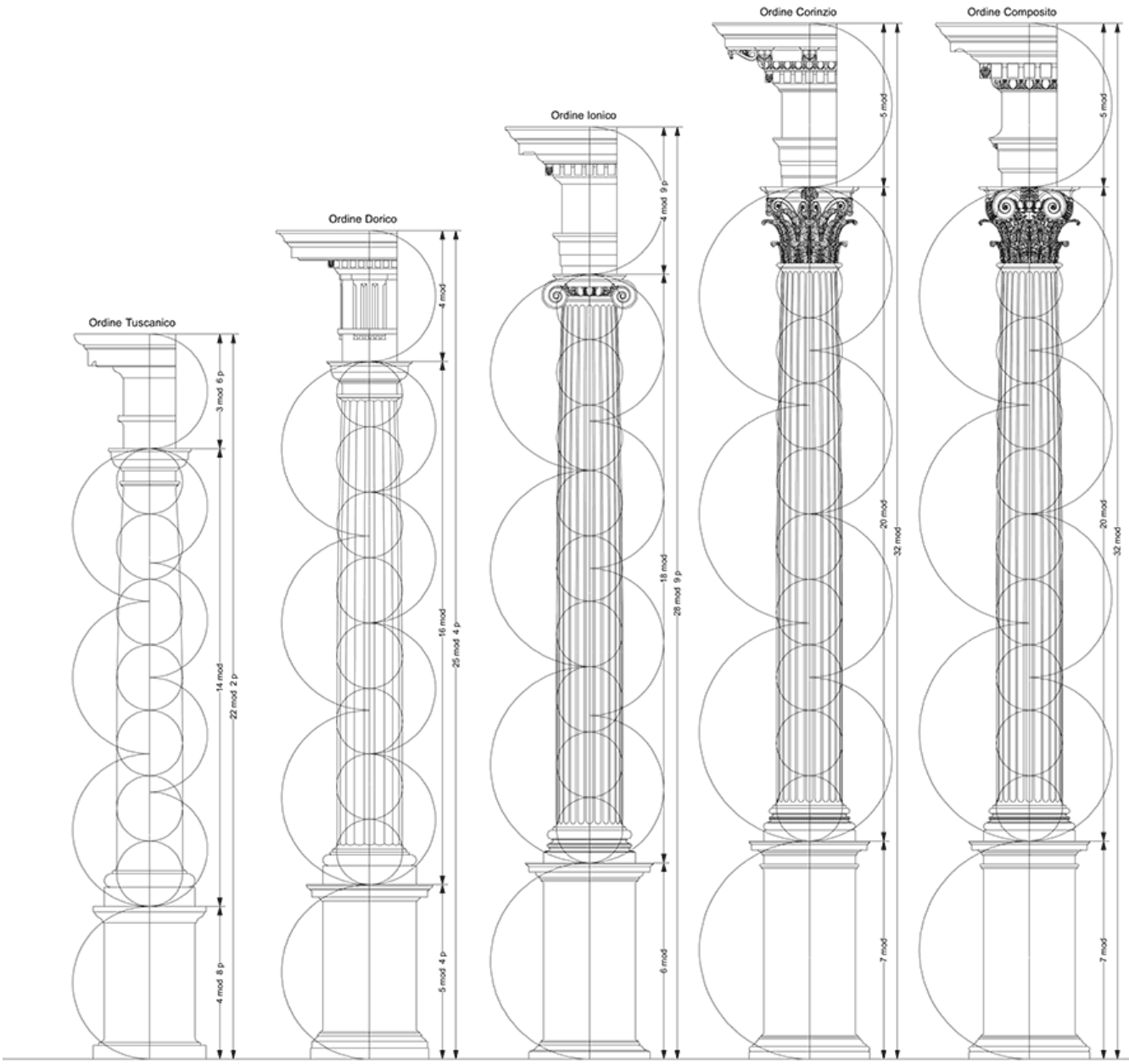
Analysing this citation, one can point out that general order is created through a specific arrangement of well--proportioned elements that combined create a holistic composition. Elements repeated may create a rhythm, they may create a symmetrical composition. What is important is that architecture acts in both directions - both singular elements contribute to the appearance of the whole as the whole highlights the qualities of singular elements. The mean of scaling makes both of the particles and the whole relatable and interconnected. Elements have to be chosen wisely and with moderation, or due to a universal method that provides harmony, and makes the arrangement aesthetically pleasing.

> " There is no kind of material, no body, and no thing that can be produced or conceived of, which is not made up of elementary particles. [...] If one of these elements, becomes predominant in any body whatsoever, it destroys and dissolves all the others with its violence."

> "There is nothing to which an architect should devote more thought than to the exact proportions of his building with reference to a certain part selected as the standard."

In Renaissance, the rules described by Vitruvius became helpful aid for decoding classical ruins, the object of great interest of contemporary architects, such as Alberti, Palladio, and Serlio. With means of a newly devised tool of perspective drawing, they have erected the writings into a visual form that then has informed their individual designs and spatial investigations. Alberti in his writings also specifies how laws of perspective are themselves ruled by proportion and that the eye has not only an inclination to perceive proportion: it perceives the world proportionally as well. Thus the act of seeing is at the same time physical (sensing) and intellectual (understanding).

Alberti, based on empirical studies of classical architecture, extended the classification made by Vitruvius adding two new orders: Tuscan and composite. Following the thought of Vitruvius regarding the importance of proportion, in his writing stresses the importance of understanding mathematics and optics in the architectural profession. He also made use of Vitruvius' six terms (ordinatio, dispositio, eurythmia, symmetria, distributio, décor) ending up with the production of relevant terminological innovations intended to influence the following practice and theory of proportion in architecture.


Ordine Tuscanico
3 mod 6 p
14 mod
22 mod 2 p
4 mod 8 p
Ordine Dorico
4 mod
16 mod
25 mod 4 p
5 mod 4 p
Ordine Ionico
4 mod 9 p
18 mod
28 mod 9 p
6 mod
Ordine Corinzio
5 mod
20 mod
32 mod
7 mod
Ordine Composito
5 mod
20 mod
32 mod
7 mod

1.04
Joseph Michael Gandy
1836

"Architectural composition to show the comparative characteristics of thirteen selected styles of architecture" a painting from the collection of sir John Soane, is a perfect illustration of how the 19th century architects aim to classify and therfore to understand the history of the evoultion of architectural styles throught time.

reaserch. 04

19th century : Gottfried Semper

In the 19th century many architects decided to revisit styles of historical architecture, and with their means and language create a new architecture. Facade became the means of expression, that was revealing the purpose and function of a building by creating a reference that was readable to the society of the given period. As mentioned before, as language exists in a certain cultural context, it is fully understandable to a user that is familiar with the context and apart from a direct meaning can also understand all references connected to the use of the particular phrases.

Investigations of the past styles and epochs in architecture, bring into the light how the classical language of forms rediscovered in Renaissance, has been modified in succeeding centuries to fit changing fashions and social rituals. As architecture historian Adrian Forty has written: " For architects, the development of historical science in the nineteenth century could be a great benefit, for it provided them with the means to discover general principles common to the architecture of all times".

The process of acquiring and classifying the historical knowledge would be then based on the investigation of the theoretical work and through an empirical study of the historical buildings in real life. Any use of detail in the 19th-century building was usually, therefore, an expression of a study conducted on a historical site, by the architect behind the design. Many architects along with their design work, were also dedicated to more scientific work on architecture that aimed to track the origins of its elements. Perhaps the most significant work in this field has been conducted by a German architect Gottfried Semper.

Due to the dynamic growth of cities in the late 19th century and increasing need for new buildings, architectural eclecticism has spread with enormous speed. In many countries, guidebooks with details and typical designs were published leading to increased standardisation and trivialisation of the architectural debate. Initial search for answers and understanding has been lost in this act of mass production of architecture.

In reaction, German architect and theoretician Gottfried Semper has decided to oppose this phenomenon. In several publications, he confronts the attempts towards the construction of a contemporary style in architecture that is based on the past. In Semper's view, contemporary attempts to fabricate a "style of our time" were fundamentally flawed both artistically and intellectually. The nineteenth-century city, in his view, was turning into a pretentious assemblage of lies and idiosyncrasies.

The failure of contemporary architects consisted not so much in their borrowing from the past as in their lack of understanding of the present: their inability to see that a true style must grow out of actual forces in contemporary society. To import a historical style without regard for its conditions of becoming was to Semper not only wrong but also impossible. Style, in his view, was neither a matter of creation ex nihilo nor of literal copying; rather it was a product of old factors modified according to new conditions. In his opinion, none of his contemporary historical architects, have addressed the complex relationship between society and art.

In his understanding of art creation and succession of the discipline's development, he makes a link to the processes that have been present during the formation of the cosmos - balanced and simultaneous destruction and formation. Semper did not criticise his fellow artists for distorting the motifs they borrowed from history. On the contrary, he criticised them for not distorting them enough, accordingly to the needs of the present. As he stated:

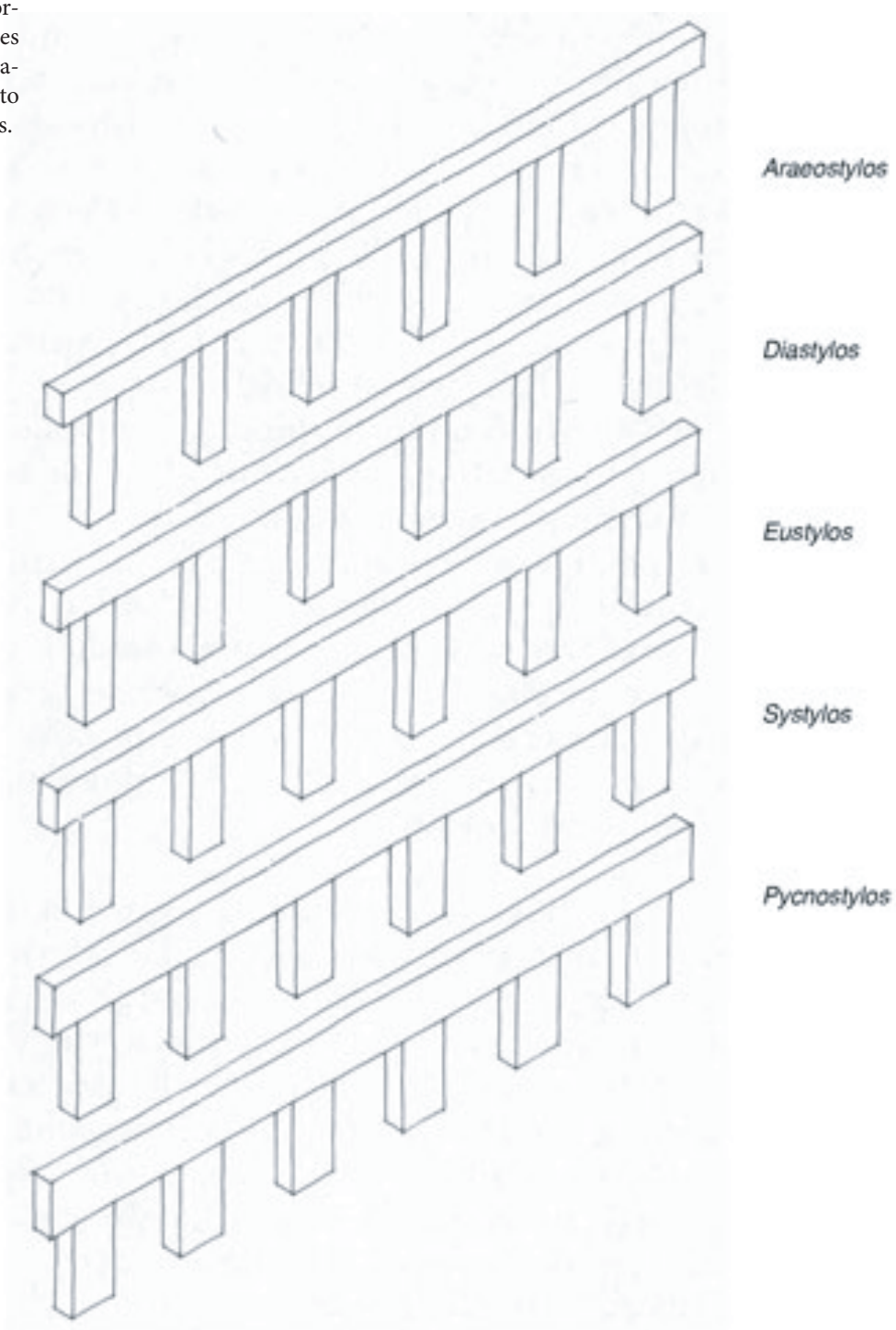
„ The solution to the contemporary crisis lay neither in the invention of a new style nor in the uncritical adaptation of past style, but rather in the modification of traditional motifs according to forces active in the present. This might not create a completely new style, but it would nevertheless be unique, as long as contemporary conditions - material, industrial, social, and political - pressed their unmistakable fingerprint on the ancient motifs. "

*T*he historicist emphasis on method over substance, the idea that the truth or correctness of an inquiry can be guaranteed by procedure rather than by content. In Semper's view, unlike the poetics, which took the opacity of the world as its point of departure, the practical aesthetics required complete transparency of history and culture before the act of making could ever begin.

There is little chance to understand detail, without knowing its initial purpose and without understanding how it has evolved through centuries. Specific gestures may be simplified, rearranged or deformed but they are still recognisable, because of the perseverance of their essence, that is derived from the act of addressing the most universal human needs that were equally as present at the very beginning of architectural practice - in antiquity - as they are now too.

1.05
The five column spacings,
Architectonic Space

Dom van der Laan uses the five column-spacings of Vitruvius. Here the column iterval is expressed as a function of the diameter of the column, fixing five distinct proportions. Dom van der Laan translates these through Plastic Number ratios, defning the column width to the distance between the columns.



reaserch. 04

Van Der Laan : poetics of order

Hans Van der Laan, Dutch architect, monk, and theoretician of the age of modernism (contemporary to Le Corbusier) best known for his theoretical work and search of "ideal" proportion based on ancient texts and philosophies. Known for moderation in his designs, simplicity, and harmony achieved by the application of a ratio that he has documented and researched for over 30 years of his life, known as "plastic number". The ratio has been driven from an empirical study of proportion - based on surveys, perspective studies, and nature studies. He has *"mastered the assemblage of absolutely ordinary elements and materials, from which a mysterious sacred aura emanates".*

What is interesting in the light of my research of the work of this architect, apart from his ratio proposal is his approach to the history of architecture and its gradual development. As he points out in his writings: "Creating architecture, did not consist of creating something out of nothing but remodeling things that already existed." As Alberto Felenga has written in Van Der Laan's monograph, " his architecture aims to bring into play the original hierarchy that dominates the life of forms, which has been hidden throughout centuries under layers of ornamentation.''

Especially considering the order and the origin of columns, the following quote from his writings becomes relevant: "the row of columns is nothing more than a wall that has been pierced in several places by openings. Indeed, when defining the column itself, it may not be wrong to describe it as a certain, solid and continuous section of the wall, which has been raised perpendicularly from the ground, upright for the purpose of bearing the roof. " In my view through this realisation, Van der Laan offers a different mode of reading space, an alternative to both: the classical practice, relating to the "order" as represented by the column, and a modernist detachment of the load-bearing structure from the architectural expression of the facade. In some of his drawings we may find, translations of spacing between columns defined by Vitruvius, redrawn with use of the plastic number.

Even though Van der Laan has based his design on significant research, the way he applied the method to his buildings was far from mechanical. Apart from proportions, he has paid high attention to detailing and choice of materials. The method has been filtered by his intuition in drawing, rearranged to meet specific requirements of sites and functions he worked with since loose margins of the method enable variation of the use of the proportion. His proportional framework is ultimately about seeing, and for him, this understanding of seeing is fundamental to the craft of an architect. It can be implemented by analysing the intuitive process of cognition, that interweaves the concrete sensorial perception and the abstracting intellect.

He claimed that we intuitively place ourselves in relation to the surrounding, reading it by measuring objects against each other. Relations are made through comparison and differentiation. Van der Laan defines architectures fundamental function, because of its relation to the process of cognition as making space readable. The encounter with architecture, therefore, is always an intellectual practice, subconsciously rooted in our understanding of the space itself. Nonetheless, the perception of space primarily connected with embodied recognition, as he concludes with words: *" nothing is in the intellect that is not first in the senses".*

Van der Laan's search of proportion has been based on the observation of nature and its phenomena. He studied modalities of perception, selection, and classification by the human eye of surrounding forms. He recognised that, although we may recognize forms similar in size, we cannot measure forms in their tendency to infinity. Although Van der Laan never aimed to define a clear denotation of beauty, in his texts we can find some references to how he understood it: "beauty can possibly result from the encounter between the morphological qualities of the building and the human intellect, [...] may be described as a feeling of pleasure caused by the total comprehension of the essential structure of the object and its internal meaning".

Van der Laan sought *"the structure, the natural grammar, of that recognizable language of forms understandable by all those who have eyes to see. "*

reaserch. 05
Modern order of prefabrication

> *" Usually we do not observe, nor do we in any way question ordinary things, while we begin to doubt, when we find ourselves faced with a manifestation, of powers that are out of the ordinary, and we face the extraordinary with wonder, although these ordinary things would also amuse us if they were not familiar to us, and if someone described them to us in detail and explained their power to us"* Plotinus (III p.n.e)

Presented selection of cases, described in the previous chapters, has been a basis for approaching the task of re-design. The following method has been informed by a multidimensional understanding of the notion of the order presented in the research. Analysis of the semantics has shaped the understanding of the ambiguity that stands behind denotation of the word itself. Insight into the origin and the first definition presented by Vitruvius enriched the recognition of the relationship between parts and the whole defined by proportion and other rules that define the "classical" language of architecture. Analysis of Semper's statements from the 19th century broadens the perception of the act of reappropriation of details and relevance of the past to the present. A close look at works of Dom Hans Van der Laan gives an example of modern attempts to understand classical philosophy, mathematics, and laws of perception that can result in the creation of a new proportional system.

Therefore in order to begin the re-design of an element one has to ask: What would be than an equivalent to order in historical architecture today? Is the notion of order relevant to the social situation of our times? One of the main issues of today's architecture and society is the sustainability of design. In my opinion, architecture, to face that problem has to become universal and timeless. Has to stand against fashion and depend on values that are themselves universal. It shall look back to the past to find typologies that have resisted changes in society and lean on these spatial solutions. Order, as the research shows has been a constant element of build environment through centuries. The use of a simple yet universal language extends the readability of the building, making the design more sustainable since it allows its readaptation to different functions.

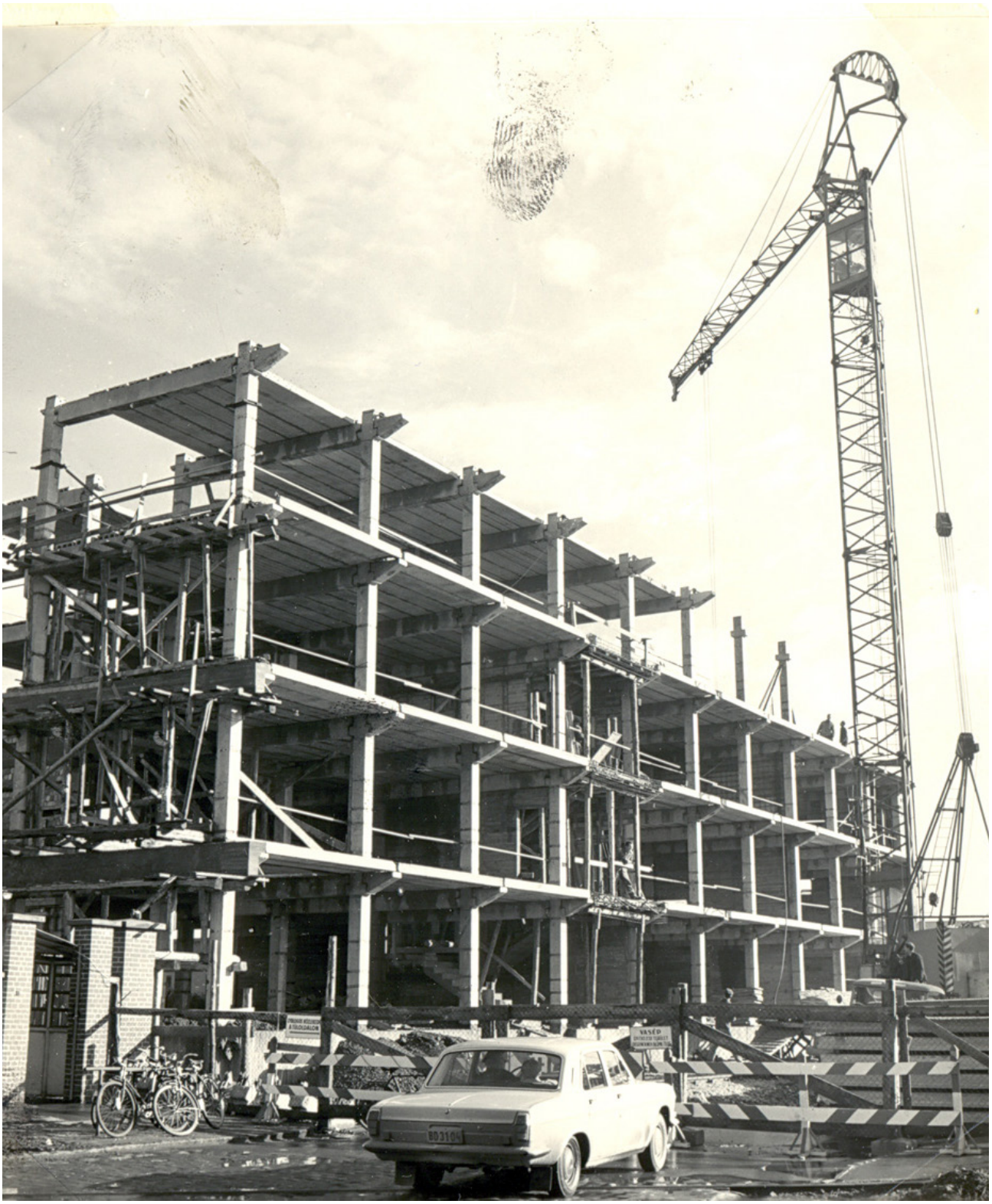
Wanting to make architecture more sustainable, we should grant it a chance to be as "comprehensible" as long as it can be, to extend the possible interpretation of the purpose of the building through the way its facade has been designed. A good example of a building that due to its unique spatial conditions has been in use through centuries is Pantheon in Rome, that from a Roman temple has been reappropriated to be a Christian church, now a space for gatherings and tourist landmark. Build in concrete, a material that is almost as time resistant as stone.

Prefabricated concrete facades, introduced to the field of architecture in the 20th century, seem to be lately in the renaissance of their popularity. The language of prefabricated facades seems to be based on many principles that are associated with many definitions of order. Such types of facades consist of elements that then repeated create a unified composition. Prefabricated facades represent what Vitruvius has defined as the order in the general sense: they are made of well-proportioned elements that relate to each other, gathered in a bigger composition that relates in scale to the singular element.

Due to the development of 3d design methods, rapid prototyping and increased use or robotic in preparation of molds, they combine craft and mass production methods. Allowing designers to, in a simple manner, introduce variations to the final products.

The same as architecture itself has to meet the need to depend on timeless solutions, architects themselves also have to re-define their approach, and rather than desperately seek for innovation should depend on solutions that have been already in use for centuries, with a creative approach to their re-appropriation in a more modern sense. As Stephen Bates has mentioned during his lecture at KADK that architects should be "looking back, as they look forward".

Adam Caruso, in an interview given to the Louisiana Chanel, mentioned that it is his understanding that the contemporary architecture too long has been seen through the lens of the modernist movement, there is a lack of education in what actually for years have been a basis to European architecture. In his opinion, understanding of the rules that shaped the classical language of the architecture of a particular place should be the basis of any design. As an art historian, he underlines the meaning of extended knowledge on disciplines history in the practice of the architect.



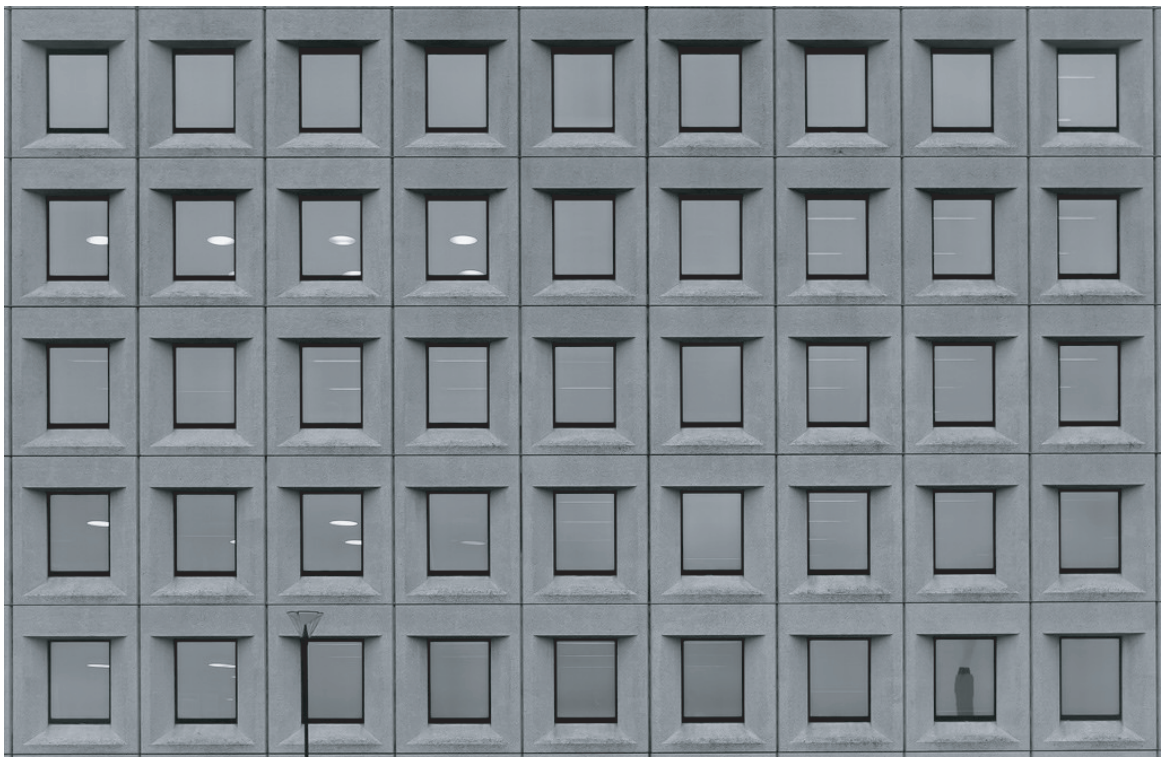
method. 01
Poliphony of orders

As a departure point for the re-design, I have considered comparing facades of two prefabricated buildings (Nyropsgade 30 and Esplanaden 50) that expose a link between composition of the facades and classical ordering described by Vitruvious. Looking at repetitions and rhythms of these facades in Copenhagen from the mid 20th century one can perhaps find them dull and limited, evoking a conclusion well stated by Paul-Alan Johnson :"order in architecture is undoubtedly considered by many architects to be too well-known to excite interest now." That can be supported by Robert Venturi's opinion on order : " Indeed a propensity to break the order can justify exaggerating it".

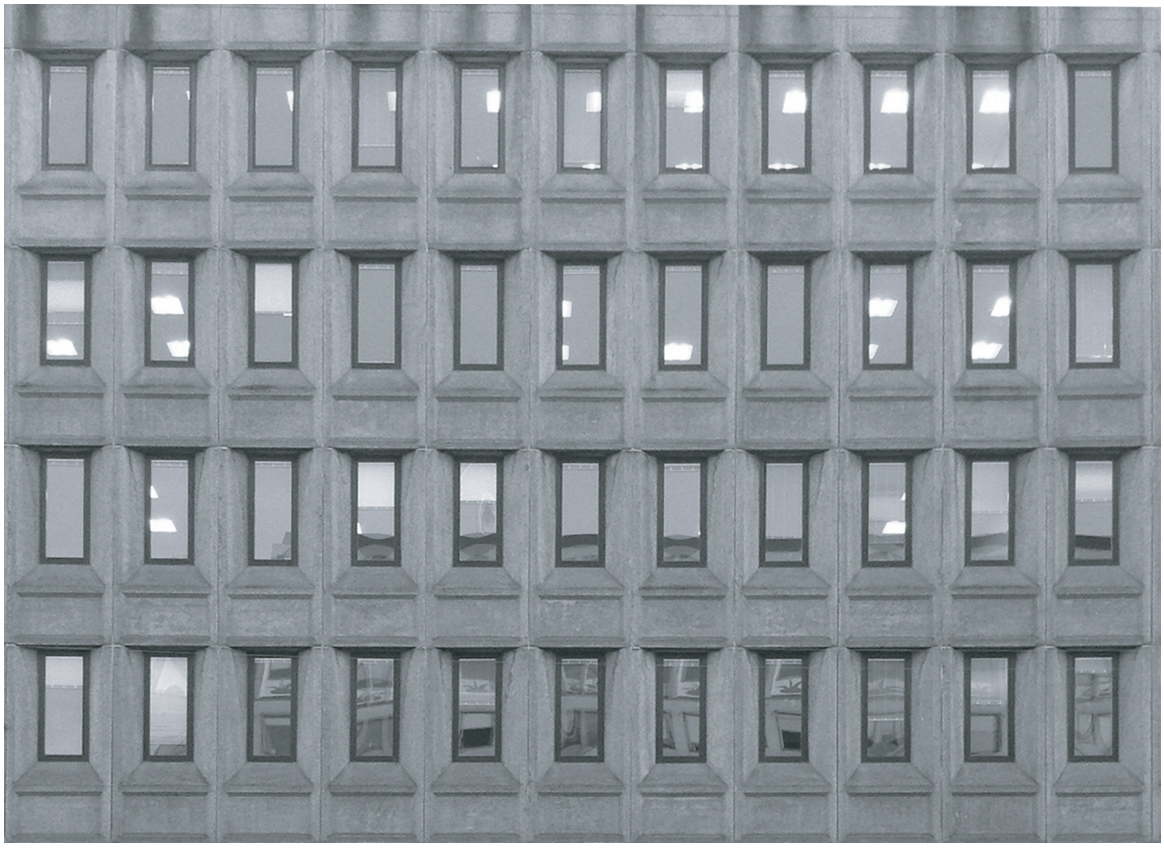
Therefore the comparison eventually concentrates on two cases of prefabricated buildings that, taking advantage of the fact that definition of order is broad and ambiguous, focus on different denotations of the word. One that understands it as a proportional composition of elements in the whole, and other that describes order as avoidance of spatial chaos. The first facade follows the logic of mathematical proportion, while the second mimics the detail of the original structure to preserve the continuity and harmony in the composition of the whole facade.

Thus the proposed method introduces clashing these two orders to create a "polyphonic" facade that is both contextual and mathematical, open in its interpretation. Proposed method becomes the tool of mediation between a mathematical guideline and historical context. Furthermore it bonds the design with a place, through the material narration. The advantage of the method is that it is general in its outlines but applied in a specific environment becomes specific for that particular arrangement.

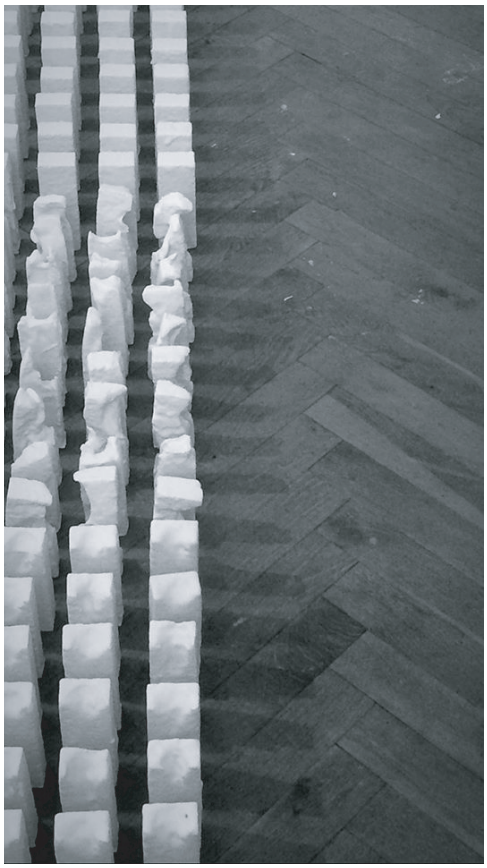
The method seeks to mediate between the mathematical language of forms (ratios) and the contextual specific elements of the decoration. It is an attempt to very carefully consider both the semiotics and syntax of the architectural language - its structure and the character of its elements. Expansion of the vocabulary creates a chance to broaden the narrative. Facade that utilises an extended vocabulary, both mathematical and contextual becomes at once more nuanced and precise. This practice, of contrasting different orders, extends the possible functions of a building and extends its lifespan, while contextuality of some of the elements embeds the building in its surroundings. In that sense, the imperfection and contrast support the meaning of the initial rule. A building without no imperfect part, can have no perfect part.



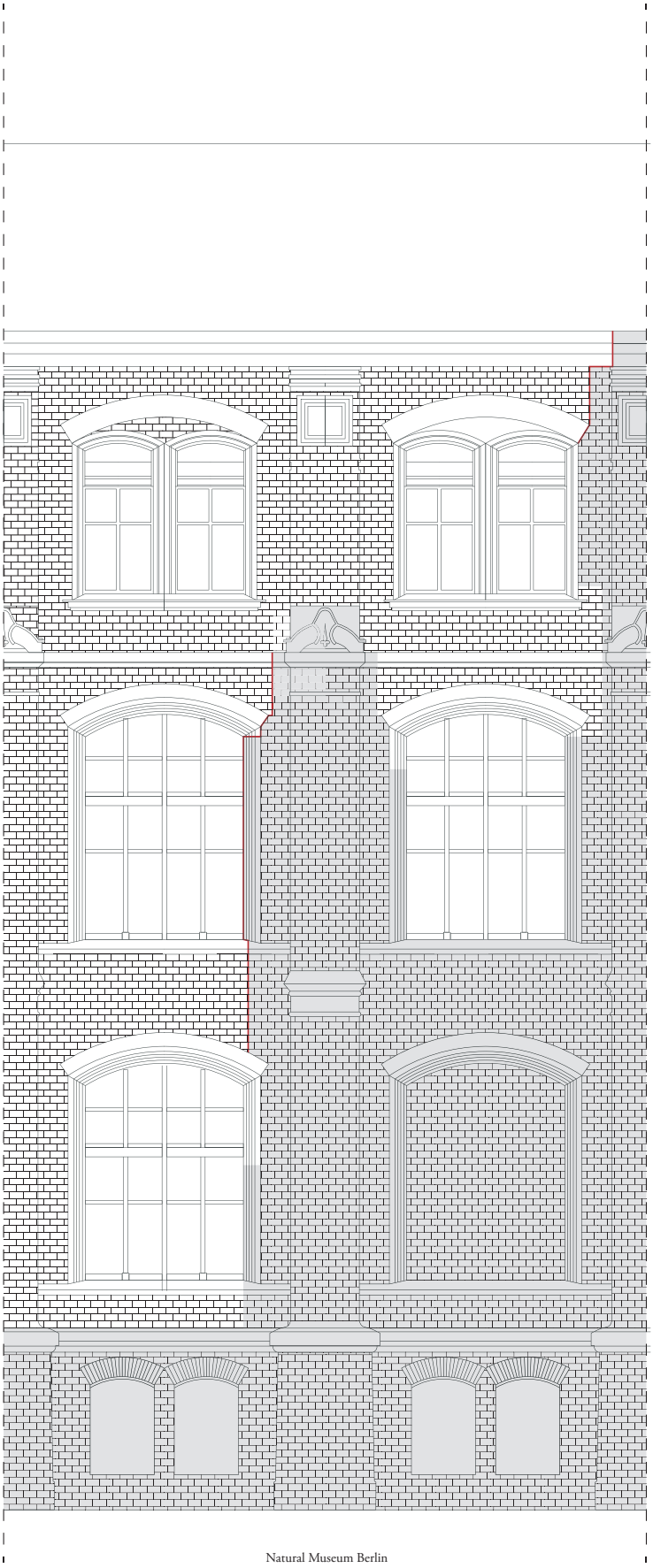
A P Møller Maersk Head Office, Esplanaden 50
arch. Ole Hagen, 1974-79



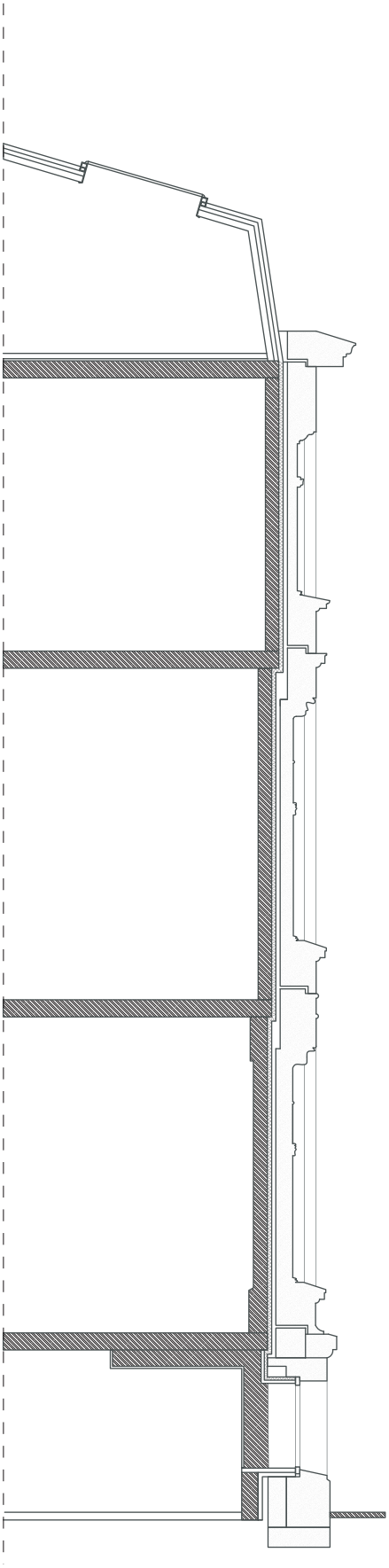
Nyropsgade 30
F.D.B.s Architektkontor ,1972

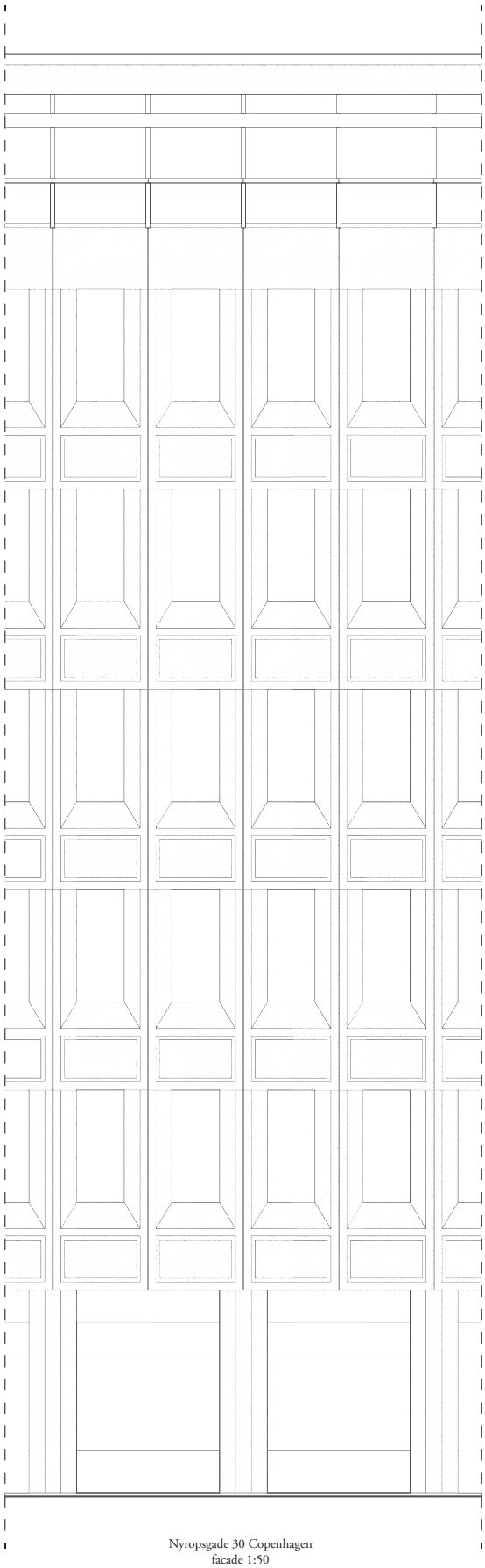


Maja Dylin & Margarette Vestvik Kleiberg
Charottenborg spring exhibition 2019

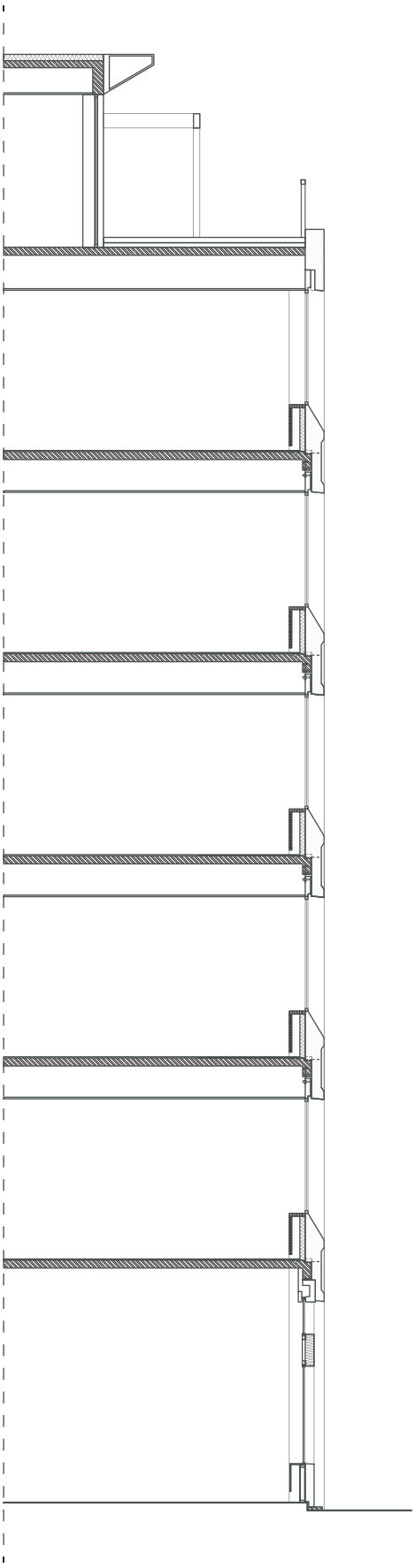


Natural Museum Berlin
facade 1:50





Nyropsgade 30 Copenhagen
facade 1:50



method. 02
Prefabrication and detail tracing

Technology of production of concrete prefabricate has an interesting quality to itself. First a negative of the element has to be prepared - a mould into which the liquid will be poured in and then taken out of. It means that to create a concrete element, there is a need of another object to be created that will give away its shape, create a mark or imprint on the surface of the final element but also will directly shape its appearance.

The process of imprinting can be understood as an element of preservation of the memory. On a hot summer day the pavement asphalt in my neighbourhood in Warsaw would become plastic. With a few kids from my building we decided to imprint our hands in the ground, marking the territory and creating spatial memory. There was something very primitive and at the same time poetic in this action, that in some sense created a bond between the user of the space and its materiality. It created a place, on a public path.

An interesting case to the process of preserving memory that is bonded with creation of moulds, is the 19th century method of popularising architectural elements from distant archeological sites. In British Museum visitors can acquaint themselves with plaster reproductions of architectural details from ancient Persia and Greece. Castings were produced by museums researchers and archeologists with use of paper mache molds produced on the archeological sites, then transported to London where plaster was poured into them. Casts were exhibited (and are to this day) to disseminate knowledge about the archeological findings of that time, and broaden understanding of ancient history.

This method of tracing architectural details, practiced in 19th century has become an inspiration to the method of creating the moulds for designed prefabricated pieces. Implemented into the main mold, traced details can create variations to the initial product. Since they would be applied to the mould as a positive, the shape they create in the surface of the element, would in fact be the negative of the original detail - as they are collected from the buildings in the nearest proximity, and inserted in scale 1:1 to the typical moulds. Therefore they are not being distorted but keep they original proportions, although they are simplified to that degree where they remain recognisable despite the fact that only a fraction of the element may be imprinted.

Since most of the historical buildings are today under conservatory protection, they cannot be covered with paper- mache. Therefore I suggest that “moulds” of the details can be collected by 3D scanning of the elements and their production from 3d digital models with use of CNC cutter.

Innovative interpretation of plaster and stone detailing, that can be observed in the works of early 20th century architects, such as Jože Plečnik or Adolf Szyszko-Bohusz, is perhaps the best example of how overlooked details of historical buildings can become an inspiration for new ornamentation that both suggests a connection to the past and expresses creativity of the author.

method. 03
Working with concrete

Investigation of the aesthetic qualities of concrete as a material reveals a link between stone and concrete. Both of the materials can have an interesting texture since they are not homogenic in their mass. A great example of a stone with imprints, is Portland limestone used in the Economist building designed by Alison and Peter Smithsons. The stone is marked with multiple small imprints that have been created by the fossils contained in it, among others snails, mussels or ammonites.

In the material dimension of the method, it is proposed to create "site specific" concrete. It is achieved by adding to the concrete mixture, organic elements and fine rubble that can be collected at the site. The interior side of the prefabricate is than polished, revealing the imprints. Visually the interior texture resembles monolith wallpaper, that creates an aesthetic a link with the decorated wallpapers used in historical buildings. Since from the internal sides of the elements are meant to be encountered form close distance, they reveal the tactility of the material itself.

In the re-design phase I have concentrated on exploring the qualities of concrete and methods of production of prefabricated structures, to then arrive with a design method that may become a framework to create re-designed concrete elements.

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Perception of the prefabricated piece depends on what side one encounters, as well as the distance from which one perceives the material. The element, being a part of the facade is being perceived individually form the whole composition of the elevation, in two particular situations. From the outside, when the element is in a distance from the observer passing by the building. What is possible to be noticed in the element from the outside, is the shape and shadowplay it creates. The internal side, that the observer encounters more directly gives a chance to notice the qualities of the material itself, the texture of the surface.

site. 01
Charlottenlund Slot

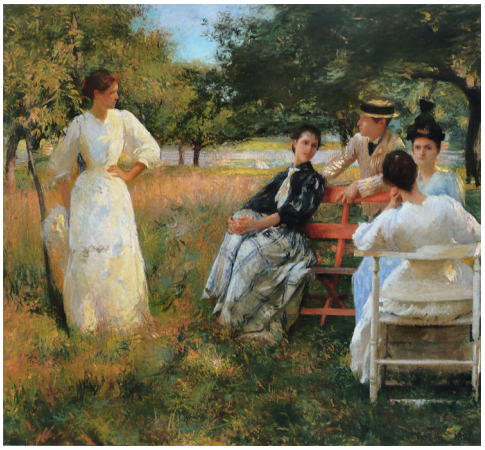
Charlottenlund palace is a former royal residency 10 km out of Copenhagen. Surrounded by 14 hectare english-style romantic garden established. Palace has been redesigned and extended several times. The present appearance of the palace is a result of an extension in the early 1880s following a project by Ferdinand Meldahl, neo-renaissance in style.

At the beginning of the 20th century the palace was used as headquarters of research institution called Danish Biological Station, and in 1939 inside the borders of the park the Danish National Aquarium was build. In 2013 and 2015 respectively both the aquarium and the biological center were moved to other locations leaving the future use of the Palace and the garden undefined. In 2015 the ministry of culture has come with a new plan for its use.

The idea is to make accessible to the broad audience the experience of staying in a summer Royal palace. Since due to its current state there is no possibility to open the Palace itself to the general public, I propose a garden pavilion that recreates the spatial conditions of palace interiors, in the tradition of garden romantic pavilions. The aim is to recapture the particular experience, originally destined for a very limited audience, and open it to the public. That is to source from a social order of the past and translate it in accordance to the norms and values of a contemporary egalitarian society

The pavilion becomes the facility for music events that can be regularly hosted in the garden. It creates spatial conditions for the most effortless and simple forms of leisure, such as sunbathing, sky gazing, reading or listening to music. Due to limitations of the function, the space enhances users to fully devote to the spatial experience offered by the romantic park and the pavilion itself.

14th hectare garden can be clearly divided into two parts : the part that resembles a park and a part that looks more like a forest. The border between the different natural atmospheres is clear, it does not fade away gradually. The pavilion has been located on the border of two. This creates special qualities that enable for the pavilion to have two different faces and create a variety of spatial arrangements, they respond differently to the existing conditions of the opposite sides of the border, creating variations of spaces that address different activities. The project aims to evoke a feeling of being inside and outside at the same time. Recreating the spatial conditions of the palaces interior, by analysis and reinterpretation of the principle that they have been based on.



1. **Roses**
   Peder Severin Krøyer (1893)
2. **Hip, Hip, Hurrah!**
   Peder Severin Krøyer (1888)
4. **The Hirschsprung family,**
   Peder Severin Krøyer (1881)