



RAAMWEG 47, *the Hague*

Redevelopment of a vacant office building

Employing architectonic elements with a focus
on experience and sensual perception

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RMIT studio Mixed Projects Delft/The Hague
Graduation plan

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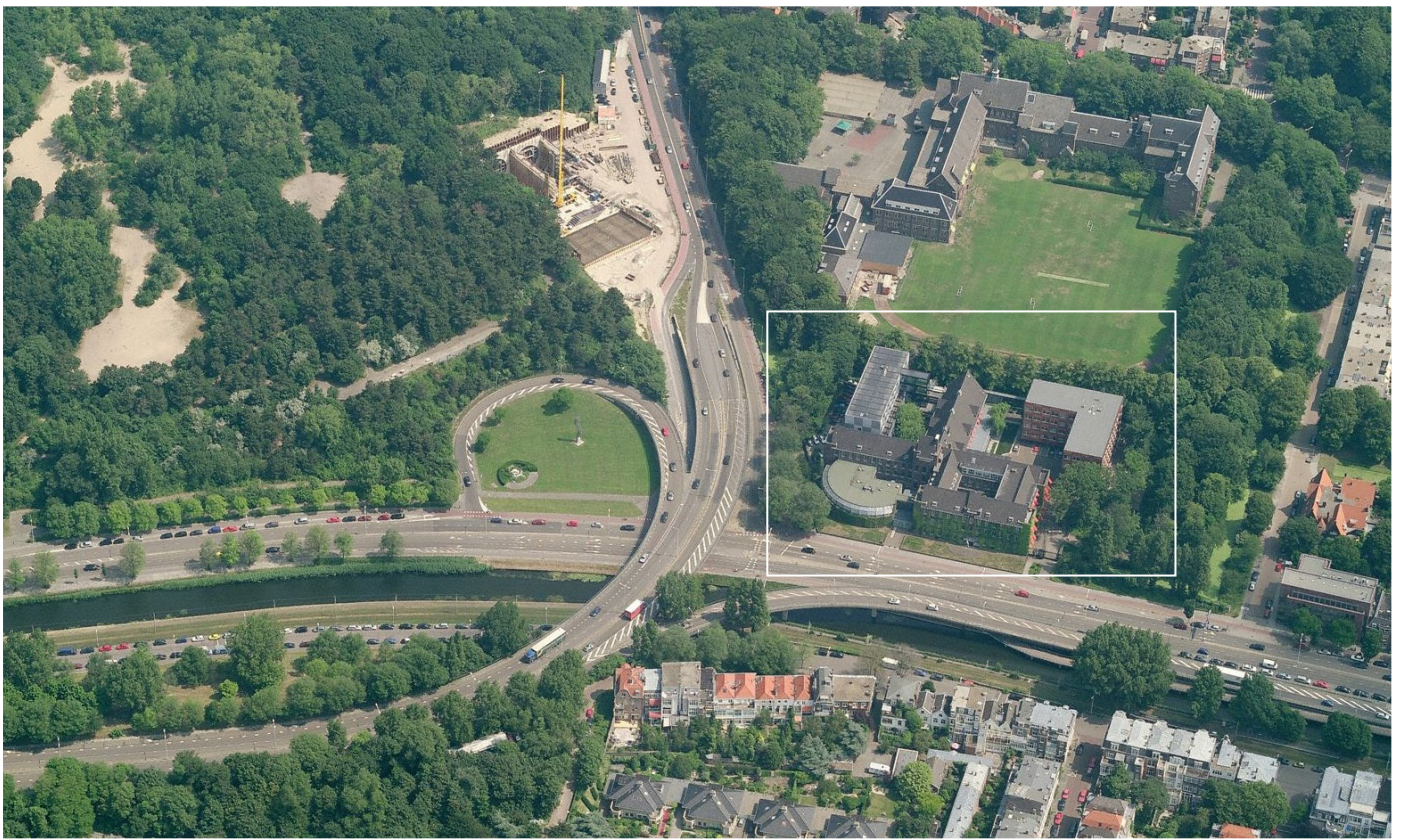


Fig. 1| Raamweg 47 around 2001 (source: bing.com/maps)

01.

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02.

 Studio

theme	Experience and sensual perception
architecture	ir. W. L. E. C. Meijers ir. W. Willers
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Throughout my bachelor in Architecture, Building and Planning at Eindhoven University of Technology, I learned that I found working on a re-design for a building challenging, but also much more interesting than designing a new structure. So for my masters I decided to study at the faculty of Architecture at Delft University of Technology, with the R-MIT department. This specialisation focuses on gaining knowledge through design and research on transforming our existing building stock.

The aspects that I very much appreciate about old buildings are the care for detail and material, the visibility of handicraft, previous use, the imperfections, and its presence. The story the building tells is like observing a painting; it is always a personal interpretation of the reality. (Reality in this sense is understood as a phenomenological reality, opposed to the modern scientific definition of reality as *'the state of things as they actually exist, as opposed to an idealistic or notional idea of them'*¹. Phenomenological reality is that what is perceived in the mind, through the body, before any thinking about it takes place in the intellect.²

The complexity of a re-development assignment lies in the fact that the subject of study was initially built for a specific function. Re-development often requires radical transformation to house a new function. Next to this, several changes have to be made to adapt the building to the current building regulations. These demands for change are not always compatible with the existing structure, and the building can therefore be at risk of losing its characteristic elements. It is a very interesting challenge because the building offers a palpable starting-point. It has a presence

that can (unconsciously) be understood through mere perceptual experience. An old building already has a history and takes part in the context and people's memories. Also, the creative process of solving design problems frequently leads to exciting design solutions that often would not be considered when the building was built new.

As graduation project I chose for the studio Mixed Projects: Delft/The Hague, to work on a project in The Hague. I chose to graduate with this specific studio because first of all, I like to work on an existing building (and preferably a building that is nearby and that I can visit often). Secondly, we were allowed to select and choose our own project from the vacant office buildings in The Hague. Also, I wished to work on a very relevant issue. The Hague currently copes with more than 800.000 square meters of vacant office space.³

From the selection of vacant office buildings in The Hague, which are all of considerable size (>10.000 square meters), vacant or soon to be and many of them are governmental buildings, I chose for the building ensemble of the Raamweg 47 (fig. 1) as redevelopment assignment.

The reason for choosing this building is primarily based on my positive first impressions and intuition. I am very interested in place experience and sensual perception; these subjects are always at the core of my designs. Designing for experience requires an understanding of the identity and presence of the building. To feel some kind of connection with the building is, in my opinion, crucial to be able to make a good design. My interest for this building was aroused by strong presence it conveys, due to the beautifully ivy-grown front facade constructed in brick (in contrast to the surrounding green), the plasticity of the building volume (stepped in height and width) and by the quiet open place that is enclosed by many trees, a ditch and a high fence, especially pleasant in contrast to the busy road.

03.

 Problem statement

The main building was a former Jesuit institute for Catholic boys age 12-18, built in 1927 in a cloistral building typology that is typical for active congregations. It has undergone many changes and additions since construction. This has to do with the change in users: it was claimed by the German occupation in 1940, in use by CRI (the police division of the ministry of Justice) from 1945 and taken over by Europol (European Police Office) in 1995. The pe-

1. Oxford English Dictionary of Current English, Oxford University Press, 2005.

2. McCrea, J. J. Truth in Philosophy. 2013, from sites.google.com/site/truthinphilosophy/scientific-vs-phenomenological-reality.

3. According to Stephan Bekx, Urban Development, Municipality The Hague.

riod from World War II is marked by the enhanced security measures that were necessary for the several authorities that occupied the building. Alterations can be found in the building structure, in the building ensemble, for example: in 1942 a bunker and Atlantikwall were added (both remain the latter just partially) and the whole became part of the coastal fortifications system as defence against an anticipated Allied invasion.

On several scale levels there are challenges for the re-development of this building. Much quality can be obtained on the scale level of the interior. Several hallways and some rooms are rather dark, the floor height is a bit low due to the lowered ceilings, the internal structure is not very organised, the spaces are outdated (carpet, strange corners and partition walls, small rooms), there's single glazing and the building's energy consumption is high. The energy performance certificate shows that the building scores very low (an E on a scale of A to G).

Looking at the exterior scale level, several changes have been made through time in the facade. Several windows are filled in with brickwork, the chapel windows were replaced by the regular windows, and dormers were added or replaced in a different style. Other possible problems are the introvert character of the facade and the very different expressions and materials used for the added building volumes. These additions of building volumes have led to a strange typology. The ensemble has some characteristics of cloistral typology, L-shaped typology and a closed building block with inner courtyard. Also, the added building parts are built on the same grid, but have a different logic, order and appearance. They seem carelessly connected by the glass volumes that just fill the residual space between the eldest building parts and the additions. Another challenge is how to give a place to the bunker and the remaining part of the Atlantikwall in the design, as valuable objects from a cultural/historical point of view.

Lastly, the building is quite excluded from its surroundings. Alongside the front side of the building runs a busy road, next to it is a channel. Only very few bridges cross the water, and the exit of the fly-over blocks the sight. Hence there is little connection with the other side of the canal (district Archipelbuurt). The plot is enclosed by a fence, combined with a ditch, surrounding trees and a height difference of roughly one meter. From the two entrances only one is in use. That entrance leads to a quiet and open parking place, in contrast to the busy road.

Over all, there is the problem of finding a suitable function for this specific building, at this specific location and in

the current economic climate. Then there is the challenge to develop the building, adjusting it for the new function, second life and to the current building regulations, without losing the elements that make this building special and valuable to transform. Summarizing the problems on the different scale levels, the biggest assignments are to restructure the interior and the ensemble, define the cultural and historical interest of the bunker and Atlantikwall for the city and the location, and redefine the boundaries and presence of the plot.

04. Position

My interest in architecture lies in how people experience space, and how I as an architect can create spaces that lead to a positive experience. Places with, for example, a sense of time, changing light, spacious; for the mind and the body to wander about, subtle use of colour and materials, or places that make people aware of their experience. "Only architecture can simultaneously awaken all the senses."⁴, wrote Steven Holl in *Questions of Perception: Phenomenology of Architecture*.

Experience is the result of "perception and reflection"⁵, explained by the French philosopher Maurice Merleau-Ponty (1908-1961). External stimuli are captured by the senses, processed into cognitive information and interpreted, influenced by associations, memories and the context, or the place of thought. Our built environment influences our experience, for it is a large part of our context and place of thought. In *The Eyes of the Skin*, the Finnish architect Juhani Pallasmaa (1963) explains: "Architecture reflects, materialises and eternalises ideas and images of ideal life. Buildings and towns enable us to structure, understand and remember the shapeless flow of reality and, ultimately, to recognise and remember who we are."⁶

The Danish architect and urban planner Steen Eiler Rasmussen (1898-1990) writes in *Experiencing Architecture* (1964) about the art of architecture. "Architecture is not produced by adding plans and sections to elevations. It is something else and something more. It is impossible to explain precisely what it is - its limits are by no means well-defined. On the whole, art should not be explained; it must be experienced."⁷ As Rasmussen explains, it is dif-

4. Quote from Klaske Havik (2006): Steven Holl, in: Steven Holl, Juhani Pallasmaa, Alberto Pérez-Gómez, 'Questions of Perception: Phenomenology of Architecture', A+U July 1994 (special issue), 41.

5. The Visible and the Invisible, editorial, page 5. A reference to the posthumously published book of Maurice Merleau-Ponty, *Le Visible et l'invisible*, Parijs, 1964.

6. Pallasmaa, 2005, p. 71.

7. Rasmussen, 1964.



Fig. 2| The ivy-grown facade, red brick, stepped volume.

difficult to capture what architecture is in words. The same goes for expressing the very personal and subjective *experience* of architecture, as is the experience of other forms of art such as sculpture, painting, music or literature. Despite this analogy, the way how architects work is very different from other artists, because of the large scale of our designs. Whereas other artists often operate on the actual scale of the design (and meanwhile designing encounter the result of their choices), architects design on paper on a smaller scale. A building is created by drawing floor plans, sections and perspectives, or by building scale models. Only when the design is built, we ourselves can perceive the actual effect of our choices. Therefore an architect requires an extensive insight in the use of architectonic elements (such as light, colour, texture, structure, materials, and so on), and the relation between his/her intentions on paper and the final result.

Consequently, having the opportunity to work with a real-life one to one model is great, and this is where redevelopment architecture comes in. Designing for a transformation of an existing structure does not start with a pen stroke; it begins with a large model, which is the actual building. It is possible to experience the spaces in real life, feel the atmosphere, and touch the materials. It helps to imagine and to understand the effect of your design choices.

05. Research question

As I explained in the previous paragraph, architects should have a very good understanding of the relation between the design on paper, and the final outcome. Of course anticipating the personal experiences of different users of the building is difficult. However in my opinion, a better insight can be obtained with more research on the experience of space. Therefore my research question for this project is the following:

How can I employ architectonic elements for a successful redevelopment of the building ensemble at Raamweg 47 and attain a meaningful and positive experience of various spaces?

06. Episteme

My research and design is focussed on aspects within the framework of phenomenology and praxeology. Phenomenology is the study of being, of intuitive experience of phenomena and of getting to know the essence and the meaning of things. Praxeology is *'the deductive study of*

*human action based on the action axiom*⁸ (an action axiom embodies criteria for recommending action). In other words, it is concerned with *'the conceptual analysis and logical implications of preference, choice, means-end schemes, and so forth*⁹. The combination of these two frameworks is interesting; in my opinion they complement each other. Phenomenology regards the subjective perceptual experience and memories, whereas praxeology concerns our general behaviour. Together they address both personal preferences and a collective factor; it becomes applicable in design.

07. Goal

My goal for this project is to better understand the influence of architectonic elements on space experience, and to bring the theoretical knowledge on experience into practice. In order to design for space experience, it is essential to empathize with the future users of the building, to understand their wishes and perceptions.

Considering the redevelopment, my aim is for the old and the new to exist next to each other, complementing one another. The new should add an analogous layer to the building without doing harm to the old, continuing the past and connecting both identities. However, visibility of the past is only desirable in service of the present or future; it should not weaken a vigorous future. It is about reviving what is there and finding potential, latent qualities in the old. The design can find its point of departure in these latent architectonic qualities, or in the littlest detail, rather than in an all-covering concept. Also, I think it is important that there is a level of imperfection, of ambiguity or friction between the old and the new. It can offer a new form of harmony and proximity and they do not necessarily have to be solved or formed into a synthesis.¹⁰

To illustrate this need for ambiguity, I would like to draw a parallel with the experience of art. According to Merleau-Ponty in one of his radio-broadcasts about phenomenology in 1948, the essence of art is not to represent reality, but to form a meaningful world on its own.¹¹ One can say that the experience of art (and architecture) is based on an identification of self with the experienced object, or the reflection of the self on the object. Jorge Louis Borges describes this very aptly: *'The taste of an apple is not in the apple, but in the encounter of the apple and the*

8. Source: archive.lewrockwell.com/rothbard/rothbard38.html

9. Source: praxeology.net/praxeo.htm

10. Re-arch. Nieuwe ontwerpen voor oude gebouwen. Rotterdam, Summer 1998, Uitgeverij 010.

11. Merleau-Ponty, M. (2006). *De wereld waarnemen*. Amsterdam, Uitgeverij Boom.

palate.¹² Merleau-Ponty explains that classical painting is dominated by dogmas: the conventional use of measures and the use of perspective with a horizon, and vanishing point. He describes these paintings as lifeless, flat representations of the reality, dominated by a look in the distance. In contrast to classical painting, the work of the modern painter Paul Cézanne's work was much appreciated by the philosopher. The painter always stayed true to his experience, rather than conform to classical painting laws; he painted the sight at Mont Sainte-Victoire many times, and every time the view found its own expression on the canvas (fig. 3 and 4). There is a need for ambiguity in architecture as well, imperfection or some kind of friction in the encounter of people and space. Only then people can be absorbed into the 'canvas', instead of being pushed away.

08. Method

In the first semester of the R-MIT graduation studio we do research on the scale levels of the city, the context of the building, the building exterior and interior, and building technology. Past, present and future are all engaged in the research, which starts with gathering as much knowledge as possible, is followed by an analysis of selected information, and results in conclusions and a value assessment. Next to this more 'general' analysis I formulated my own research questions per scale level, regarding my personal interests. For example, I researched the identity of city of The Hague, working according to the phenomenological research method Gordon Cullen describes in *Townscape*. In a sequence of eighteen drawings I portrayed the places I encountered on a typical route through the city, from the railway station Hollands Spoor, to the Noordeinde Palace. (Fig. 5 and 6)

From the conclusions and the value assessment I designed a master plan of the area around the Raamweg 47. After this I deliberated what could be a suitable function for the location and/or the building, and decided to house a healthcare function combined with facilities for the neighbourhood. It will either be an institution for youth care, or elderly housing (dementia, geriatric psychiatry, somatic care). Both would imply small-scale group housing. Next to working on the implications of the program for the building, I am researching different interventions with the building as starting point.

Hands-on designing is my favourite working method, like drawing and making sketch models to try different possibi-

lities. By making models I can better understand the space and the implications of my actions. I can see how the light works in a space, if the composition and measurements are right, the relationship between spaces, and so on. Often I find new possibilities that I had not even thought of before. Furthermore, I will visit the Raamweg 47 building often, to experience the spaces and be able to draw different design solutions on the spot.

I have studied literature about phenomenology of perception, which has led to a better understanding of the notion but is still very theoretical. Practical research is necessary to understand the use of architectonic elements in relation to space experience. From my visit to Bauhaus (1926) in Dessau by Walter Gropius (fig. 8) I very much appreciate the visible care for the whole and the littlest detail. Also, the colours are used in a subtle way, influencing the experience of space in an unconscious way. The Nordic Pavilion (1962) by Sverre Fehn in Venice (fig. 7) is special because of the layered concrete construction (of beams of 6 cm. by 100 cm) giving texture to the space, the feeling of being inside and outside at the same time; Fehn incorporated the trees into his design, and the diffuse light that comes in through the construction. The elements that make the Bruder-Klaus-Feldkapelle (2007) by Peter Zumthor in Wachendorf (fig. 8) very special are: the setting in the hilly landscape; the exterior takes on a colour in the surroundings, the perspective changes; it is not an orthogonal design, the proportion of the building; impressive in the landscape because of the solitary, the scent and visibility of burned trees to construct the interior. In conclusion, this small building is in harmony with its surroundings, complementing the landscape and relates the landscape, the viewer and the chapel to each other. From these visits I have learned that I value the attention for all scale levels very important, the connection with nature, and within a larger gesture; the subtle use of architectonic elements to define space.

Visiting redevelopment projects will be very interesting in comparison to my plans for the Raamweg 47, analysing the way the old and the new are brought together. The buildings I want to visit are either related to cloistral typology, healthcare function or to a more analogue redevelopment attitude, for example: St. Jozefklooster in Deventer, Kloosterkwartier in Sittard, CaballeroFabriek in The Hague, Van Nellefabriek, Rotterdam: former tobacco, coffee and tea factory, now housing creative companies. Also, I will try to understand my target group as good as possible, by having conversations with residents, the health care management and families.

12. Quote from Jorge Luis Borges in: Pallasmaa, 2002, p. 21.

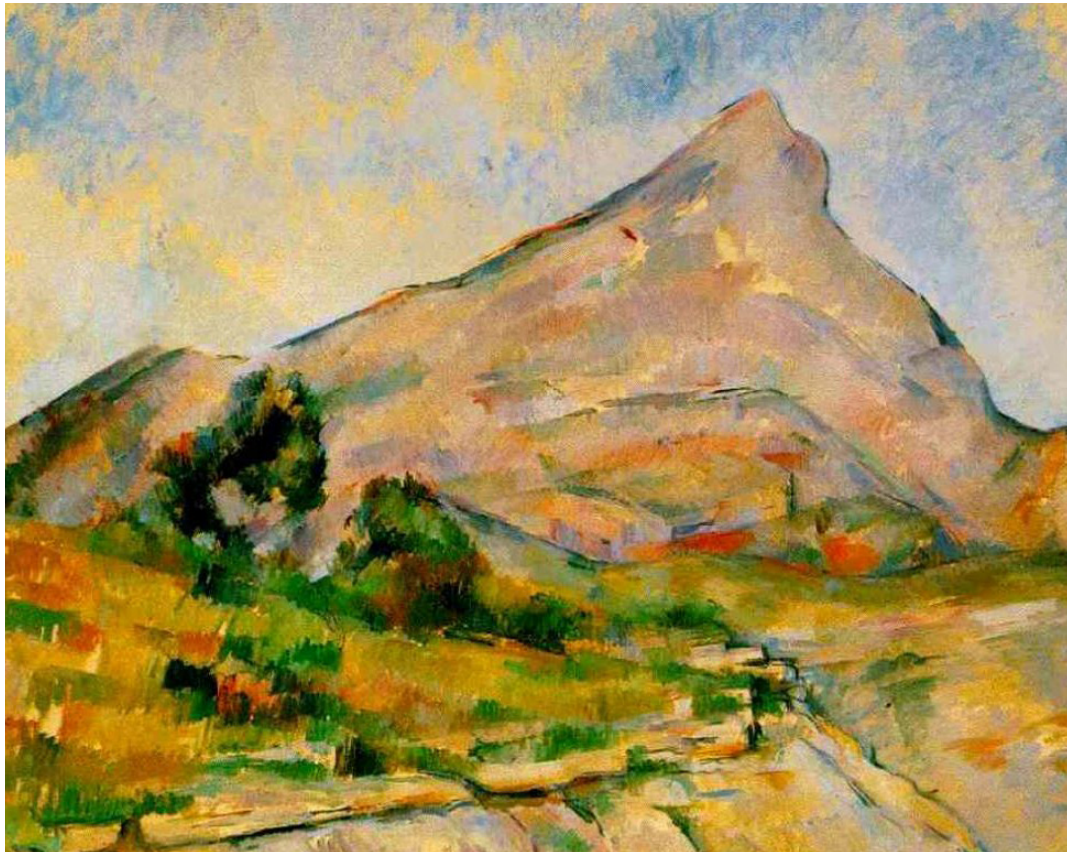


Fig. 3 | 1898 Mont Sainte-Victoire, oil on canvas. Paul Cézanne. (source: Philadelphia Museum of Art.)



Fig. 4 | 1902 Mont Sainte-Victoire, oil on canvas. Paul Cézanne. (source: Philadelphia Museum of Art.)



Fig. 5 | Drawing 9 from the sequence, taken from the Bierkade: far view into the street, line of trees.



Fig. 6 | Drawing 11: 300 meter further in the street: Chinatown's many small shops and shop signs.

09. Conclusions

My central position in this paper considers the importance of the sensual perception and personal experience in architecture. I stated the following research question: *'How can I employ architectonic elements for a successful redevelopment of the building ensemble at Raamweg 47 and attain a meaningful and positive experience of various spaces?'*

From my research up to now, I have distilled several elements that I think are important for a valuable redevelopment:

- restructure the interior and the ensemble;
- define the value/use of the Atlantikwall and bunker for the city and the location;
- redefine the boundaries and presence of the plot;
- the old and the new should exist next to each other: connecting and complementing the identities;
- continuation of the past should be in service of the future;
- find imperfections, ambiguities and paradoxes;
- possibility for personal interpretation of space;
- various spaces with different architectonic qualities;
- defining the needs and wishes of the target group concerning spatial qualities.

And for the employment of architectonic elements:

- find potential or latent qualities;
- attention for all scale levels;
- subtle use of architectonic elements next to a larger 'overall' concept;
- connection with nature: transition inside-outside.

At the end of this graduation project I will be able to reflect upon the answer I have given with my design.

10. Literature

These are the sources I have used so far; I will still add sources on architectonic elements, space experience and on the program and users.

Brendan O'Byrne, P. H. (2008). "Architecture and Phenomenology." Footprint 3(Autumn 2008).

Coenen, J. (2006) The art of blending.

Cullen, G. (1971). The Concise Townscape. New York, Routledge.

Habraken, T. (2011). "Continuïteit en verandering. Oud en nieuw met elkaar verbonden." de Architect interieur 8 mei: 79-85.

Havik, K. (2006). "Geleefde ervaring, gelezen plekken: naar een stedelijk alfabetisme." OASE Tijdschrift voor Architectuur (70): 37-50.

Hauptmann, D. (2002). "Interval & beeld in de belichaming van het geheugen. Over Henri Bergsons Matière et mémoire." OASE 58(Zomer 2002): 97-112.

Merleau-Ponty, M. (1964). "The Visible and the Invisible." 2013.

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Pallasmaa, J. (2005). The eyes of the skin. Chichester, John Wiley & Sons Ltd.

Rasmussen, S. E. (1964). Experiencing Architecture. Cambridge, The MIT Press.

Slatman, J. (2006). Inleiding. De wereld Waarnemen. Amsterdam, Uitgeverij Boom.

Toadvine, T. and L. Lawlor (2007). The Merleau-Ponty reader. Evanston, Illinois, Northwestern University Press.

Zijlstra, H. (2009). Analysing Buildings from Context to Detail in time. ABCD research method. Amsterdam, IOS Press BV.

11. Relevance

Redeveloping an existing building has become a very relevant topic in the past years. Prof. dr. ir. Jo Coenen, head of the R-MIT department, stated: *'The primary objective is no longer to build the new, but to add to the existing structures.'*¹³

We have come to re-appreciate our cultural heritage and find that redeveloping our existing structures contributes to the development and preservation of local identity. Designing for a historic site or next to heritage is becoming the rule rather than the exception. Therefore I think it is very important as an architect to have experience and a position within this field. Secondly, the concept of sustainability has become particularly important in our society.

13. Jo Coenen 'The art of blending', Inaugural lecture delivered on April 19, 2006 by prof. dr. ir. Jo Coenen on his acceptance of the chair of Professor of Restoration in the Faculty of Architecture at Delft University of Technology.



Fig. 7 | Nordic Pavilion: texture through construction, thin beams, material, diffuse light.



Fig. 8 | Bruder-Klaus-Feldkapelle: essential part of the landscape. (Photo from Alejandro Campos Uribe).



Fig. 8 | Bauhaus: subtle application of colour, changing light, care for detail.

Re-using our current buildings often proves to be a more efficient and sustainable way to take care of our natural resources. The amount of material and energy needed to conserve a building and transform it, is less in comparison to breaking it down and built a new building.¹⁴ Lastly, the focus on our current building stock has become even more significant due to the 'economic crisis'. Currently a percentage of 15 of the office space in the Netherlands is not in use.¹⁵ Re-using these buildings also has a social objective, to prevent vacancy, decay and maintaining a pleasant street scene, or even structurally improve it.

In this light, the transformation of the Raamweg 47 building is an assignment that has to be solved in the near future. The question of how to do this is of relevance for the many other vacant buildings in The Hague and in the Netherlands.

Besides this there is the relevance of the research into space perception and experience. Architecture is of such significance in the way we encounter 'the world', it can evoke feelings, structure our lives and give us a feeling of belonging. Many modern buildings do not seem capable of evoking a feeling of connection, due to rationality and lacking attention for space experience. I believe it is important to not only build in consideration of functional and practical aspects. A building should be about designing spaces that matter to people, and that are cared for.

08.

Time planning

14. Habraken, T. (2011). "Continuïteit en verandering. Oud en nieuw met elkaar verbonden." *de Architect interieur* 8 mei: 79-85.

15. Source: rijksoverheid.nl.

