

# ARCHITECTURE THAT SATISFY THE SPIRIT AS WELL AS THE EYE

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## I INTRODUCTION

This paper is written during my graduation year at the faculty of the TU Delft for the course of Research Methods. Until the first lecture of this course and before I read the book of architectural Research Methods, I was not aware of the different research approaches in architecture and the fact that these approaches could lead to other outcome. To write this paper I used, among other things, the book *Architectural Research Methods* by Linda Groat, professor of Architecture at the University of Michigan's Taubman College, and David Wang, Associate Professor of Architecture and Coordinator of the Master of Science in Architecture program at Washington State University. Reading the preface, their motivation to write the book caught attention. According to Linda Groat, architecture as a field can be strengthened and enriched through research, then the power of architecture to enhance people's lives will be strengthened as well<sup>1</sup>. David Wang writes: "This book will addresses research methodologies that, in essence, grapple with the multiple connections between human experience and build form".

In the past, during my bachelor of my building engineering study of four years, I started my design projects always by decomposing the context in layers. Thereafter I collected the requirements of the program and their measurements. The priority was the best outcome for the future users. The inventory of the users' needs was mostly based on my own imagination as a future user of the building and my own preferences. I've always been aware of the need for research but until recently I would rather describe this as the need of gaining background information.

During my study at the TU delft my knowledge about architecture has increased and my approach changed. When I started the premaster I read multiple papers about architecture for the course called 'plan analyse'. I read the chapter about space in the paper of Adrian Forty by the title 'words and buildings'<sup>2</sup>. This paper was about the different interpretations of 'space'. I found out that the word 'space', which is, in my believe, the main subject in architecture, had so many different definitions. For this reason, I questioned myself: 'how do people experience space?'

My graduation studio, in which I did not yet have any experience, is Heritage and Architecture. The studio focuses on the reinvigoration of heritage. The purpose is to bring life back into abandoned or dilapidated buildings or areas<sup>3</sup>. The abandoned area which is the subject of this studio is the former military industrial area called Hembrug, located in Zaandam. The area has been divided in several ensembles. I have chosen for the ensemble by the name Campus South. The aim is to transform this ensemble into a residential area mixed with work and public facilities. It will be a combination of existing and new buildings, structures and function. The future users and the historical cultural value are my priority during my graduation project. The research question for this paper is: "how can the experience of people contribute to the transformation of the ensemble?"

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<sup>1</sup> Linda Groat, *Architectural research methods* (Canada: Wiley, 2002), ix.

<sup>2</sup> Adrian Forty, *Words and buildings* (United Kingdom: Thames & Hudson, 2000), 256.

<sup>3</sup> TU Delft, *study guide - Heritage and Architecture, revitalizing Heritage*. (Delft, 2018).

## II RESEARCH-METHODOLOGICAL DISCUSSION

In this chapter I will examine the relation between research and design. Firstly I will explain my research approach and my motivation to choose that methodology. Thereafter I will reflect on how this certain approach could shape my project.

The first assignment of this graduation year was analyzing a reference project, KNSM island. A former industry terrain that is transformed into a residential area. In the meanwhile we went to visit our actual graduation project, the Hembrug terrain. This visit was without any preparation. The teacher didn't want us to prepare so we could formulate our first impression of the area at that moment we were there. We were asked to make 10 sketches of scenes we were impressed by. After walking around for a while the group came together and we were asked to define our experience of the area in one word. For me it was 'industrial'. Underneath you can see two of the sketches I have made during my visit. I wanted to capture the industrial, closed off feeling I had when I was there. The elements of the terrain made me feel that this space was not originally made for human but for industrial processes.



Figure 1: Authors first sketch Hembrug area

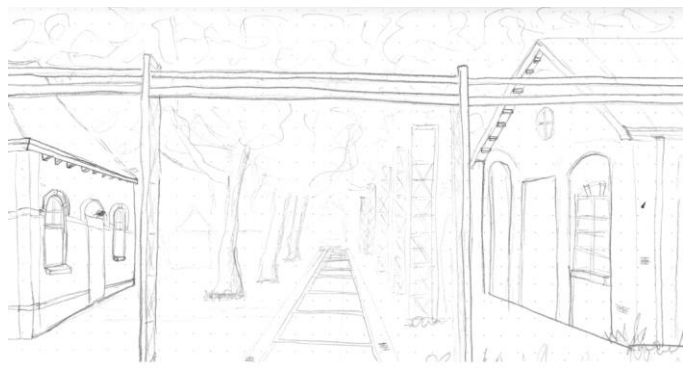


Figure 2: Authors second sketch Hembrug area

To make sure the spectator of my sketches understands the atmosphere of the area I already notice that these images itself are not enough. I have to describe what my experience was. I use to think that architecture was a tree dimensional form of art. Art is a way to convey atmosphere or emotion by stimulating certain senses. Music, for example, is an art form that stimulates the audience. The atmosphere or emotion that music produces depends on various aspects, such as pitch and rhythm. The same applies to painting, but there is also a visual art form. Which senses play a role in experiencing architecture and can be an architect determine how users will feel in a certain space?

Comparing with other art forms, architecture is best at addressing multiple senses at the same time. This is because architecture is not only about the visual aspect, as is often assumed, but also about feeling, hearing and smelling. By increasing the focus on these last three sensory elements in designing, a more complex experience will be evoked that stimulates more senses than just vision. Approaching architecture from the sensory perception of the human body is also called the phenomenological approach to architecture. The word 'phenomenology' comes from the Greek word *phainomai*. This refers both to the phenomena and to the active process: to let appear. This explains why it is so difficult to capture the feeling I had during my visit of the Hembrug terrain. It is not possible to express the full experience by sketch only. Phenomenology is a qualitative research method that is used to describe how human beings experience a certain phenomenon. A phenomenological study attempts to set aside biases and preconceived assumptions about human experiences, feelings, and responses to a particular situation<sup>4</sup>. To express my experience of the former industrial area I have to describe it.

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<sup>4</sup> A. Giorgi, *The descriptive phenomenological psychological method* (2012), 3-12.

Due to the fact that this project has a specific context, the abandoned former military industrial area, special attention research was needed. To make sure that the development would react on the existing we had to understand the past activities the ensemble once served for and capture the traces of former use and function. It started with qualitative research resulting in drawings and diagrams of the existing situation. The nature of historical narration has different lenses through which to view past phenomena<sup>5</sup>. Of primary importance is evidence that can situate the object of study in the time and space of the one historic world. Archaeological methods can be used to uncover different states of the a structure's evolution<sup>6</sup>. We used photographs and maps from the past to identify how this ensemble was formed and functioned in the past. These materials served as determinative evidence. Besides that, I read the story of one of the former employees of this area, Goos Vonk. By the way he wrote about his experience I could imagine how people participated in that place, in those days. Although this is my interpretation of his story.

We analyzed the context of today to gain more information about the past. According to me and my colleague this ensemble has a different atmosphere that the rest of the terrain. It feels less industrial. By defining the elements that contributes to this qualities we created analytical drawings of the different layers the ensemble consists of. According to David Wang all research, including historical research, involves personal interpretation. Although the research may be subjective, it was urgent for our architectural research.<sup>7</sup>At this moment the phase of analyzing is mostly done. Although the analyzes will continue to develop during the rest of the process, the fundamental key points for the design process are captured.

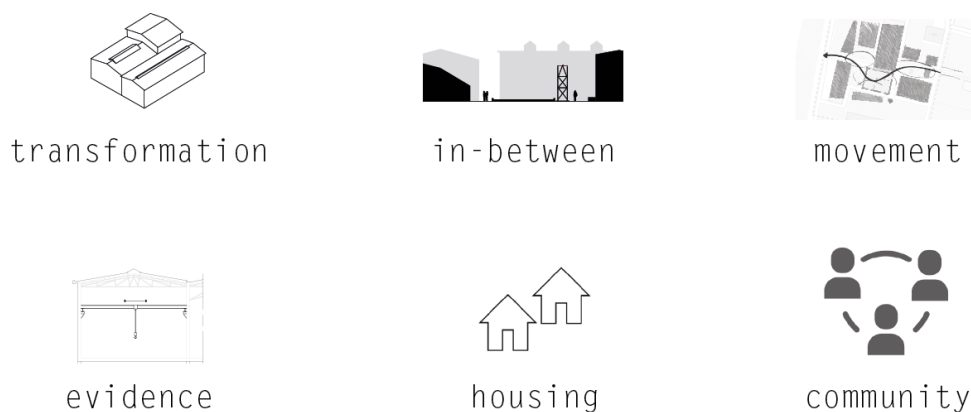


Figure 3: authors starting points for redevelopment of the ensemble

<sup>5</sup> David Wang, *Architectural research methods* (Canada: Wiley, 2002), 137.

<sup>6</sup> David Wang, *Architectural research methods* (Canada: Wiley, 2002), 154.

<sup>7</sup> Ray Lucas, *Research Methods for Architecture*, (London, Laurence King Publishing, 2016), 36.

### III RESEARCH-METHODOLOGICAL REFLECTION

August Schmarsow is known as the first architectural theorist to insist on a spatial approach in the study of architecture. The embodied human individual has a central position in Schmarsow's historiographies. He described how the dimension of depth encourages humans to move through architectural space and both proposed that it is this movement that gives the individual the capability of not only experiencing but also forming architecture<sup>8</sup>. According to Schmarsow "space exists because we have a body"<sup>9</sup>. This sentence intrigued me. I noticed that for any of my design project I prioritized the user but I questioned myself, how can I design architecture, if I don't know how people will experience it and where their experience is based on? My interest in the experience of people in certain spaces could be an explanation of why I felt triggered by Groat and Wang's reason for writing the book. Groat is talking about people's lives we influence by practicing our field and by the suggestion Wang makes about the multiple connections between human experience and build form.

Architecture is everywhere around us. People live their lives surrounded by the built environment: the house we live in, the streets we walk through, the faculty we spend most of our time in during the week. After realizing that architecture is a large part of our existing, I felt a certain responsibility as an becoming architect. I felt powerful but mostly motivated to gain more information about research methodologies I can use to understand more about people's behavior and experience to increase the quality of the architecture I will design today and in the future.

I did research about architects and designers who have attempted a more humanist approach to building, emphasizing the qualities of materials and the experience of place over the smooth surfaces, structural logic, and open, empty spaces of modern architecture. Notable figures include Juhani Pallasmaa who argues for a more sensual and multi-sensory experience<sup>10</sup>. According to the architect Juhani Pallasmaa, architecture is not experienced as a collection of isolated visual pictures, but in its fully embodied material and spiritual presence<sup>11</sup>. For Pallasmaa, the atmosphere is a blistering physical sense that people can experience by connection with the world throughout the tactile sense. The ears, eyes, nose, and mouth as an extension of the sense of touch. He describes them as adjustments to the enveloping skin tissue. For Pallasmaa, architecture is the primary way of relating from our humanity to space and time. Man is in space and time. Both are limitless, immeasurable and insignificant. Pallasmaa suggests there is 'life quality enhancing' architecture if all the senses are addressed simultaneously. This brings the human body together with the world.

Written speech has the ability to capture the emotions from all senses involved. This is a phenomena expressed by Juhani Pallasmaa in the *Eyes of the Skin*. Pallasmaa has gone onto use narratives as a way of designing architecture with all senses in consideration, a notion shared by Peter Zumthor. Both architects, place the human at the epicenter of their design, in a Vitruvian analogy, with the intention to design a building that has the ability to 'move someone'. In effect, creating spaces of corporeal presence<sup>12</sup>. The work of contemporary architect Peter Zumthor pays close attention to the experiences and interactions of people in the places they create. The field of interior design is likewise concerned with the experiences of inhabitants and tends to emphasize the sensory qualities of materials and spaces. Through attention to the surfaces, details, and objects that people come into direct contact with, interior design remains attentive to the needs and experiences of inhabitants<sup>13</sup>. Architecture has evolved from being just a built form that one inhabits, but to one where someone dwells<sup>14</sup>.

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<sup>8</sup> Johanna Gullberg, *Voids and bodies: August Schmarsow, Bruno Zevi and space as a historiographical theme* (Journal of Art Historiography, 2016), 1.

<sup>9</sup> Adrian Forty, *Words and buildings* (United Kingdom: : Thames & Hudson, 2000), 261.

<sup>10</sup> William Mangold, *The People, Place, and Space Reader* (New York: Routledge, 2014), xxv.

<sup>11</sup> J. Pallasmaa, *The eyes of the skin: architecture and the senses* (Chichester: Wiley, 2014), 44.

<sup>12</sup> Havik, *Buildings atmosphere* (OASE, 2013), 99.

<sup>13</sup> Lois Weinthal, *Toward a new interior / an anthology of interior design theory* (New York: Princeton Architectural Press, 2011)

<sup>14</sup> Heidegger, *Buildings, dwelling, thinking* (1993),

Another architect that inspires me is Steven Holl, for whom the sensory perception of the human body is also central to the design. Times Magazine once wrote the following about his work: '*Buildings that satisfy the spirit as well as the eye*'. The main idea of Holl is that man perceives from the physical perspective of the world. For Holl, 'the body in space' is a starting point. Phenomenology is a recurring theme in Holl's work. The phenomenological views of Holl are based on the theory of the French philosopher Maurice Merleau-Ponty. Merleau-Ponty wrote two important works: *la structure de comportement en phénoménologie de la perception*. This shows, among other things, that 'la perception', which means the observation, must be seen as the starting point in philosophy, as a separate active dimension. In his conception of phenomenology, the body plays a central role in both observation and expression. Merleau-Ponty claims that a human is not only the world but also belongs to the world. Architecture not only allows people to be spectators, but also shows that we are part of the world and therefore inextricably belong to the world.

Another idea from environmental social science that challenges architecture is a shift in emphasis from space to place. From psychology, we have a better understanding of how and why people like or dislike particular places, and what makes them feel comfortable or uneasy. Sometimes labeled place attachment, this research has shown that the formal or aesthetic aspects of design are only part of what creates connection between people and their physical settings. Memories, social interactions, the ability to modify surroundings, and a sense of security are all significant contributors to attachment. These qualitative and affective aspects of the relation people have to their environment contribute to what makes a space a place<sup>15</sup>.

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<sup>15</sup> William Mangold, *The People, Place, and Space Reader* (New York: Routledge, 2014), xxvi.

## IV POSITIONING

As I described in this paper my priority goes out to the user of the architecture I will design. The research question for this paper was: “how can the experience of people contribute to the transformation of the ensemble?” Phenomenology is a qualitative research method that is used to describe how human beings experience a certain phenomenon. A phenomenological study attempts to set aside biases and preconceived assumptions about human experiences, feelings, and responses to a particular situation<sup>16</sup>. Besides the phenomenological research I am using, could I, in the future, increase my knowledge about the user group throughout another methodology? One of the lectures of this course was the lecture of Marieke Berkens about praxeology. Praxeology is the study of human action and conduct. Berkens looks at the build environment as stage for everyday practice. I agree on this statement. She believes that by studying the praxis of architecture, one can develop an eye for the actual users of the building, and not the imagined ones<sup>17</sup>. Although my priority was the user group, I now question myself if my manner of research was conforming enough.

Praxeological research focuses on what would be a good place to live, mapping the use of people. During the lecture Berkens questions herself: ‘what is quality from the perspective of the inhabitants?’ Activities that contribute to praxeological research could be interviewing inhabitants, developers and municipality, observing which results in pictures and drawings. According to Walter Benjamin the manner in which sense perception is organized, the medium it is accomplished, is determined not only by nature, but by historical circumstances as well<sup>18</sup>.

Ethnography is systematic study of people and culture. Ethos is Greek for folk, people, nation and grapho means ‘I write’. This study explores cultural phenomena where the researcher observes society from the point of view of the subject of the study. The typical ethnography is a holistic study and so includes a brief history, and an analysis of the terrain, the climate, and the habitat. In all cases, it should be reflexive, make a substantial contribution toward the understanding of the social life of humans, have an aesthetic impact on the reader, and express a credible reality. It is field-based. It is conducted in the settings in which real people actually live, rather than in laboratories where the researcher controls the elements of the behaviors to be observed or measured<sup>19</sup>.

I think I would increase the quality of my research and by that the quality of my design project by doing more research about the wishes of the future users. I want to develop the ensemble into a residential area combined with work and public facilities. To make sure I make the residential area in the future suitable for the user group, I have to do find out what the needs and wishes of this group is. For now as well as for in about 10 years. I hope the architecture that I will realize in the future will satisfy the spirit as well as the eye.

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<sup>16</sup> A. Giorgi, *The descriptive phenomenological psychological method* (2012), 3-12.

<sup>17</sup> Marieke Berkens, *lecture Praxeology* (Delft: TU, 2018)

<sup>18</sup> Marieke Berkens, *lecture Praxeology* (Delft: TU, 2018)

<sup>19</sup> J. Preece, H. Sharp & Y. Rogers, *Interaction Design: Beyond Human-Computer Interaction* (Wiley, 2015)