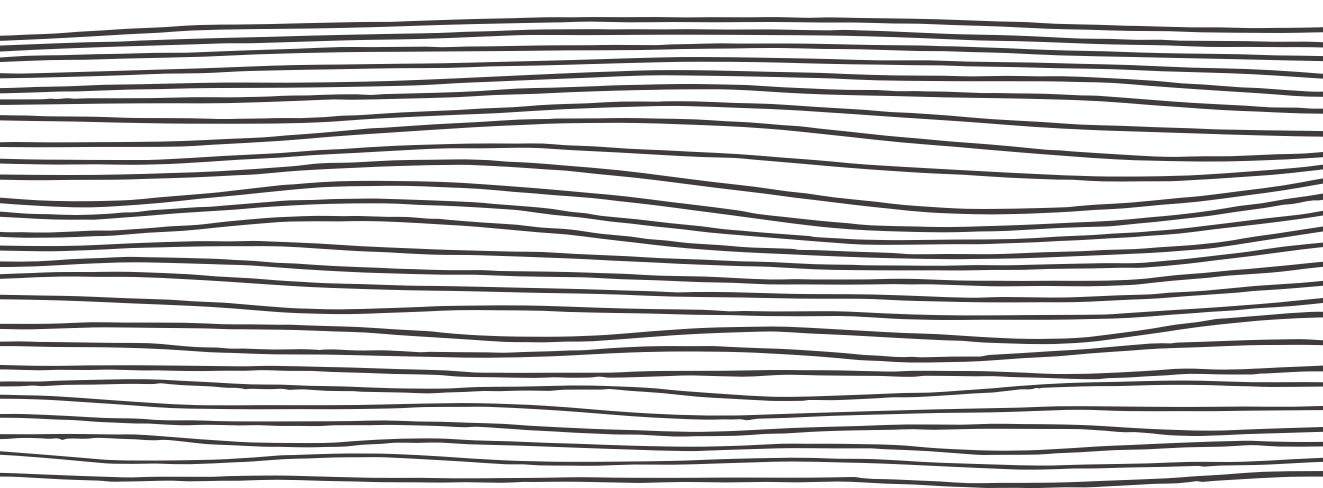


The coastal environment as a laboratory



Architecture and embodied experiences

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Architecture and embodied experiences

A research into how architecture can preserve and enhance the positive embodied experiences of the coastal environment around the harbour of Scheveningen.



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Introduction

The long-stretched shadow of my body touches the footprints in the sand in front of me. It is a cold winter afternoon and the sun is already setting. I hear the rhythm of water pulling back and passing under another wave of water. The beach is full of people many of whom presumably visit this place for the same reason as I: "uitwaaien". While walking in the wind, I empty my mind of thoughts which have been floating around in my head that day. I find comfort in being together with the wind, the sand, the sea. Even the cold wind does not bother me at that moment. "Uitwaaien" is a Dutch word that is not directly translatable to another language. Closest to an English translation would be "to get some fresh air" or in French "prendre l'air". However, these translations do not carry the same connotations as in Dutch. This shows the uniqueness of the phenomenon in the Dutch context. It involves an activity, yet also a feeling, an experience, a change in mood. According to artist and photographer Bruno van den Elshout:

"The Hague's South Beach is where I go when I want to experience space and tranquillity. Where I can connect with infinity, synchronise, let go of unfavourable thoughts, get back in touch with whatever turns out to be the most important at the moment of each specific visit." (Grieco, 2015)

What intrigues me as an architect is that this shows that an environment has such strong influence on a person's well-being. Architects are constructors of environments and therefore I believe that by researching and using the coastal environment as a laboratory, architects can learn to better understand how to design an environment that results in positively affecting its users. To explore the topic, the coastal environment around the harbour of Scheveningen becomes the laboratory.

Scheveningen is a district of The Hague, a city in The Netherlands and the area where I grew up. The Hague is the only city in The Netherlands interrupting the long-stretched dune scape with its location at the border of water and land. This makes it a location where sea and architecture meet, but also where the sea meets large groups of people living their daily life.

Around Scheveningen harbour, there are few buildings left which remind me of the fishing industry which used to be the occupation for most of Scheveningen's inhabitants. Fish is still one of the most important industries around the harbour, yet the labour has moved inside large box-like warehouses and factory-like ships. Now that the fishing industry is taking less space in the harbour, new offices, apartment blocks and warehouses are starting to appear. These new developments are a reflection of what is happening on a national level and global level. In the case of The Netherlands, the political and economic structures are creating a commercial environment in which housing developers start new building developments at a fast pace and with low budgets. The lack of action by the state in developing houses and the large housing shortage in most cities adds to this problem (Hulsman, 2021; Hulsman & de Voogt, 2020; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2020). Designs, therefore, are often reduced to the minimum standard of living as set by the building codes. The result is distanced and generalised architecture without thoughts on how these environments could positively affect the user's well-being (Hannema, 2019) (Pallasmaa, 2012, p. 34,37). In words of Juhani Pallasmaa: "homogenisation of space weakens the experience of being, and wipes away the sense of place" (Pallasmaa, 2012, p.

50).

This transformation of the current cityscape is an example of how technology has changed and will continue changing the notion of labour (Roggeveen et al., 2020, pp. 58–67). Computers, internet, smartphones, machines and automation have replaced physical labour with intellectual work in which mainly the visual and audible senses are stimulated. Also, this intellectual work can be done anywhere with cellular network technology, which results in a constant pressure to work (Alkemade, 2020, pp. 75–77). To counterbalance the overstimulation of the visual and audible sense, inhabitants of The Hague visit Scheveningen to take a break and reconnect with the neglected senses.

So, the new buildings in the harbour of Scheveningen stand in a strong contrast to the spatial characteristics of the coastal environment which provide many positive effects. How can architects make sure that also the buildings have a positive influence on people's well-being? How can buildings, instead of weakening, enhance the characteristics of the area? How can a building be specific for the Scheveningen harbour area and reconnect people with the sense of place? This research aims to identify and catalogue these specific positive embodied experiences and to provide a designer with tools and methods to maintain the experiences in their original way and to intensify or further improve the quality of them. The central question of this research therefore is:

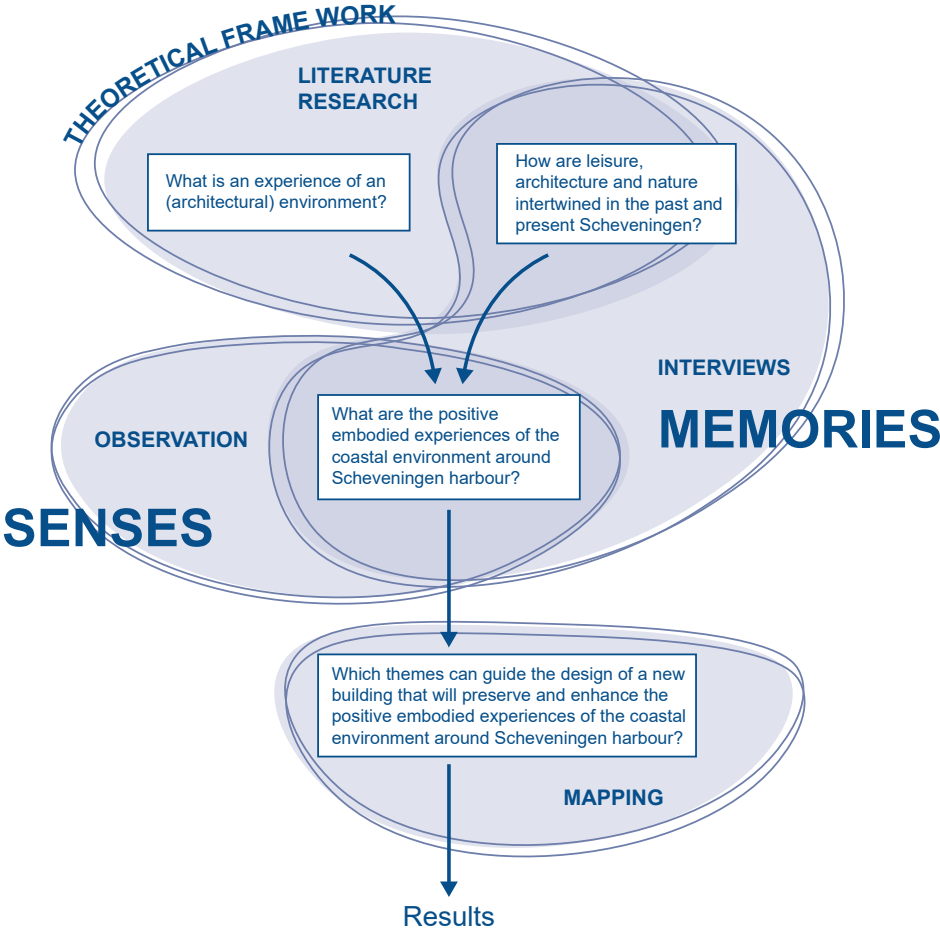
How can a new building preserve and enhance the positive embodied experiences of the coastal environment around Scheveningen harbour?





Texts and photographs will work together in this booklet to provide the story of this research. In the first chapter the methodology behind this research will be explained. Then, in the second chapter, we will get into detail about the people, their uses and the spatial characteristics of current and past Scheveningen. Third, we will dive into the phenomenon of experiencing environments as “embodied”, this will be done through the perspective of phenomenological, biological and spatial theories as well as my own findings out of observations and interviews. Fourth, the diverse and subjective embodied experiences of the Scheveningen harbour area will be illustrated by diving into seven different locations within the researched area. Collages and explanatory notes will aim to capture these specific positive embodied experiences. Fifth, as a result of the findings, seven themes will be introduced in photographs and text. These themes provide architects and designers with handholds to design a new building in the area whilst maintaining or intensifying the positive embodied experiences in their original way.

Method



To conduct the research of this project, a qualitative multi-tactical methodology is used which combines observation, interviews and mapping (see illustration on the opposite page). Additionally, literature research is used to come to a theoretical framework. The research question is divided into four sub-questions, which you can see in the diagram on the opposite page.

Literature research has focused on two topics. The first topic is Scheveningen and centres around gaining a better understanding of the spatial and social structures of past and present Scheveningen. The second topic is the understanding of the phenomenon of experiencing environments. For the latter, literature in this field of knowledge can be found from the perspective of different disciplines, such as philosophy, biology, sociology, psychology and architecture. As architecture is multi-disciplinary, this research has not only looked at the topic from the architectural perspective but has focussed on the philosophical side and biological side as well. For example, many architects have been inspired and have used the phenomenological theories of Maurice Merleau-Ponty in their designing (Lucas, 2016, p. 153). Therefore, his theories were used as a starting point and have been enhanced with texts of architects such as Pallasmaa, Kengo Kuma, and Harry Francis Mallgrave (Kuma, 2016a; Mallgrave, 2018; Pallasmaa, 2012). Mallgrave also is the main source for the biological perspective on the experience of environments.

The literature research shows the importance of both senses and memories in the experiencing of environments. Therefore, interviews and observations are the methods chosen to answer the following sub-question: "What are the positive embodied experiences of the coastal environment around Scheveningen

harbour?" Herein observations focus mainly on the sensory side of embodied experiences and interviews focus on the memories' side of embodied experiences. The literature research into this topic, not only led to develop the methodology of this research, but also the combination of literature and on-site research reciprocally contributed to understanding experiencing of environments as embodied.

Observations

The observations were carried out by me, the author, at seven different locations in the Scheveningen harbour area. At each location the architecture, the horizon and the sea are in a different balance (see illustration at page 52).

To study the senses, the division of sense stimuli into sensory systems by Gibson is used. By doing so, we consider the senses as collaborative and overlapping, yet five systems with main characteristics can be distinguished: The visual system, the auditory system, the taste-smell system, the haptic system, the basic orienting system (Malnar & Vodvarka, 2004, p. 42). The observations were done while walking, sitting or standing at the locations. To capture the observations, I recorded my voice while I described in which way, to what extent and because of which environmental characteristics –the sensory systems were stimulated. I also recorded sounds and made photographs.

The tool of recording of description is useful here as it has the capacity to capture immediate subjective experiences and to evoke feelings of the described sensory clues, as Klaske Havik argues in her book *Urban Literacy* (K. Havik, 2014, pp. 37–47). Photography contributes in the same way. When seeing an image our memories and our power to imagine –through our mirror neurons

and neural plasticity– evoke feelings. In this way the recordings and photographs made it possible to capture embodied experiences and to process and analyse them later. Yet photography, especially, turned out to be a very valuable tool. Photographing the area taught me more about the environment than describing it. The combination of experiencing the environment alternating with and without camera made me shift perspective and made me look from larger environmental essences to smaller components and aspects. It also gave me the opportunity to document how other people behaved or socially interacted at the locations. Lastly, photography would turn out to be an important tool to illustrate the written results in this research booklet. The photographs do not only complement the text but work together with the text to create a story together. All in all, photography functioned as a tool to discover hidden spatial and social structures and as a tool to capture embodied experiences to later process and strengthen my story.

Interviews

To investigate how memories alter embodied experiences, two types of interviews with a variety of people were conducted. Firstly, people encountered at the researched sites were surveyed about their sensory experience of the place. The questions were about the consciousness of the stimuli of their senses and in which way they would describe the stimuli of the sensory systems as well as about how they affiliated with the location. The information gathered from these surveys confirmed that people did visit and enjoyed the place because of its particular sensory stimulation; what these sensory experiences entailed were described very simplistically and did not provide me with more information

than my own observations. However, the surveys turned out to be a good way to start a conversation with people about the place and therefore gave an insight into the memories of the place and the subjectivity of their experience.

The second form of interviews were in-depth interviews with a varied group of eight respondents with different uses-of- and interests in -the areas. These interviews took 45 minutes to 3 hours and included questions about their own experiences of Scheveningen and how they saw different groups experiencing Scheveningen. The focus in these interviews were on the spatial and social characteristics of the area. The in-depth interviews provided me with a good overview of the wide variety of ways people experience Scheveningen and how this subjectivity could lead to clashes. The surveys were complementary in the way that they validated the variety of experiences of the locations. See the appendix for more information about the interviews, such as the people interviewed and the questions asked during the interviews.

Mapping

When the data from literature, interviews and observations was collected, the next step was "data reduction", reducing the data into manageable chunks (Groat & Wang, 2002, p. 193). This is accomplished by making descriptive notes, sketching, interpreting sounds into drawings and clustering photographs. To display the data, mapping is used. In seven collages the reduced data of the observations and the interviews is mapped. Each collage represents the stories and sense stimulations of the embodied experiences of one of the locations. While sorting, picking and translating, the spatial characteristics of the seven locations were looked at from

different perspectives. Therefore, mapping of the collages led to answering the following question: "Which themes can guide the design of a new building that will preserve and enhance the positive embodied experiences of the coastal environment around Scheveningen harbour?" A set of seven themes resulted and are presented in text and photographs the chapter 'Designing to positively bodily experience".

Scheveningen



Scheveningen

The harbour in transition

In Scheveningen the shift from physical labour to machinery doing the work has had a large impact. It has especially resulted in two changes which are of importance for this research. The first change is the transition of the spatial characteristics of the harbour which has also included transition in the social characteristics of the harbour. The second change is the emergence of emphasis on the stimulation of the visual and the auditory sense. To counterbalance these stimulations, we are seeing that people are seeking time to pause - often found in the coastal environment and described as "Uitwaaien" in Dutch colloquial language.

Scheveningen was a remote village until the end of the 17th century where life was centred around the catch of fish from the North Sea. Life was dependent on what the men caught with their flat bottomed fishing boats which were pulled on the beach to sell the fish right there between the sea and the dunes (Beke et al., 2018, pp. 13–15). It was in the 17th century when The Netherlands was united under the government of Willem van Oranje, the government found its place in The Hague and that led to interest in leisure at the beach. Important in the beginning were the international ambassadors living in the Hague, their duty consisted of a lot of waiting for letters to arrive and therefore they used to have a lot of free time (M. Pronk, personal communication, 30 November 2020). During that time a cobblestone toll road was built, straight through the dunes and perpendicular to the coastline. From then on, it was possible to easily reach the coastline by horse and carriage in turn for a fee (Crefcoeur, 2010, pp. 10–11; Graaf et al., 1997, pp. 138–155; M. Pronk, personal communication, 30 November 2020). From the 18th century also wealthy

people from different parts of The Netherlands and abroad visited Scheveningen for health-related travels and the entertainment Scheveningen offered. This included, casinos, a large concert room and a permanent circus (Crefcoeur, 2010, pp. 10–17). Also events took place like the first large international event in 1892: 'Internationale Sport-, Visscherij- en Paardentoonstelling' (M. Pronk, personal communication, 30 November 2020). This tourism for the wealthy people manifested itself in eclectic architecture around Scheveningen Bad, located North of Scheveningen Dorp. Scheveningen Dorp is the place where the fisher-families lived, in this way two completely different worlds existed; detached but next to each other. After the second world war, Scheveningen Bad became a place for mass tourism and quickly the amount of cheap hotels and restaurants grew, not leaving space for the eclectic architecture from before, which started deteriorating fast and has now almost completely disappeared (NTR, 2013).

Similar to the past, three groups with different relationships to Scheveningen can currently be distinguished. First, people who are born and raised there. Second, people who live in The Hague or Scheveningen and visit parts around the harbour because of the special characteristics that exist when land meets the sea. Third, a group who visits Scheveningen for a holiday and for entertainment. All groups have since expanded in growing numbers, which especially during the summer months show in large clashes between tourists and inhabitants of Scheveningen" (Kim & van der Poel, 2020). Nonetheless, another group is emerging in Scheveningen. It has become more and more popular to live close to the sea, thus new people move into the area. Because of this large interest in houses, the

value of houses in Scheveningen is rising and developers choose to replace social housing for more luxury apartments. Lots of families which have been living there for generations are not able to afford houses in the area anymore. As they used to be very close communities linked to the place, they are feeling unheard and left out of any concerns of The Hague municipality ('Duindorp voor Duindorpers', 2019).

Since 1857, when the law of 'Haring kaken' allowed Scheveningen to participate in fishing for herring, the area has been developed into a place full of activities. Two harbours were erected and the quays were full of wooden barrels, nets, trolleys, labourers and spectators (ter Brugge, 2006). The auction of fish moved from the beach to a building which later had to be replaced after the large amounts of fish available after WWII. The current Visafslag was built and opened in 1965 as the most modern in Europe and still reminds us of the importance of Scheveningen in the fishing industry. Scheveningen is known for its traditions around fish, the "boetsters" (women who knotted the nets), kuitrierijen (places where wood was crafted into tons) and the pull-overs fisherman used to wear with their individual marks. Also, the yearly event, Vlaggetjesdag, about inaugurating the herring season, is still celebrated as a large event (W. M. den Heijer, personal communication, 18 November 2020; M. Pronk, personal communication, 30 November 2020).

Although fish is still one of the most important industries around the harbour, large parts of the labour is now done by machinery inside the ships. The ships therefore got larger dimensions, and many moved to the harbour of Rotterdam and IJmuiden. Since the fishing





industry is taking less space in the harbour, large unused quays are used by people taking a walk, the seagulls and the summer tourists. It has also opened up space for new and other initiatives. Offices, apartment blocks, a marina, a theatre, restaurants and for example shops specialised in sailing, surfing and skating are popping up. The transformation of the harbour is a result of the municipality working together with landowners (amongst others large fishing companies), developers and urban planners (F. Mens, personal communication, 17 November 2020). This top down approach, in which an integral vision is lacking, results in clashes between different parties and the residents (J. Koningh, personal communication, 19 November 2020; F. Mens, personal communication, 17 November 2020; M. Pronk, personal communication, 30 November 2020; A.-M. van Brecht,

personal communication, 12 April 2020; H. van der Broek, personal communication, 12 April 2020). Especially the new housing developments are not well accepted by regular visitors and users of the area. On the one hand because of their appearance, the above-mentioned gentrification, and also because of the increase in people using the area and it makes former uses of the area impossible. An example of the lack of an integral vision is the arrival of the new houses while there is a signed agreement about the notion "Haven moet haven blijven" (which translates to the harbour should remain a harbour) (Revis, 2020). The resulting clash manifests in that new dwellers have complained about noise and smells from the harbour. Another intentions of the municipality are: the sport beach, with a stadium; becoming the new European surf city, which asks for showers, lockers, parkins spots



for vans of the surfer; an innovation harbour where they want to respond to offshore and maritime innovations; two large hotels in the harbour to attract more tourists. All these ideas ask for different spatial set-ups and for funds towards different sectors, of which none has been fully deployed. On top of that, we should not forget the problems with accessibility of the area as a result of the combination of industry next to facilitations for mass tourism in the summer (J. Koningh, personal communication, 19 November 2020; F. Mens, personal communication, 17 November 2020; M. Pronk, personal communication, 30 November 2020; A.-M. van Brecht, personal communication, 12 April 2020; H. van der Broek, personal communication, 12 April 2020).



Scheveningen

The quest for “uitwaaien”

In Scheveningen the difference between labour and leisure used to stand in sharp contrast. In the poor fishing village man worked 20-hour days for two full weeks until they arrived back ashore from their fishing trips. Women made and mended the fishing nets and took care of the duties around the house. Around the start of the 19th century Scheveningen became popular for health-related visits, diving in the salt water seems to cure sicknesses. Later, healing fresh air became the point of attraction. In the 1900, whole families moved for a summer long of entertainment to Scheveningen. This group of elites could continue their work as being bosses of the factories resulting from the industrial revolution, bankers or traders. They were able to work remotely with the use of the Telegraph (Crefcoeur, 2010, p. 13). This working remotely is taken to completely new levels with current day technologies. Work for many can be done anywhere and anytime. This shift from physical labour to more intellectual labour has put us behind screens and it therefore stimulates mainly the visual and auditory sense, an unbalanced sensory stimulation is the result. That this unbalance is unwanted is confirmed by new forms of recreation which are coming to the forefront. For example, retreats where you can buy silence (Metz & Brinkman, 2002). Or the 24-hour horizon observation in which I was able to take place during the fall edition of 2020. This event, organised by artist Bruno van den Elshout, is a search for tranquillity and space (B. van den Elshout, personal communication, 17 November 2020). Also, the artist and former architect Sarah van Sonsbeeck made the artwork One Cubic Meter of Broken Silence, a trace of her exploration measure silence in the city (Bohlmeijer, 2014). These patterns show in quite extreme versions that many feel the

need to counterbalance the overstimulation of the visual and auditory sense.

By another measure, the scale of the daily life, people in the Hague find a balance by going to the beach. They immerse themselves in the coastal environment, to then go home and feel calmer, more relaxed and refreshed. One of my interviewees described the coastal environment of Scheveningen as part of the “woonbeleving” of the Hague people. In other words, the beach is part of their home. Bruno van den Elshout visits, for example, the beach to, in his words “find space and tranquility and to be able to have true and honest meetings” (B. van den Elshout, personal communication, 17 November 2020). Jaap, a man I meet on the parking lot at the South beach, declares that he tells his wife that he needs to see the sea everyday. Willem Ment den Heijer, son of a generation full of Scheveningen fisherman, goes swimming every day, year-round and argues for the enormous health benefits (W. M. den Heijer, personal communication, 18 November 2020). Another example is a former fisherman on large vessels, now he is retired he still goes fishing every other week, alone or with friends. He says that it does not matter if they catch something or not, he does it to refresh. The current pandemic of COVID19 has enlarged the quest of visiting the coastal environment of Scheveningen. According to Hans van den Broek, all the skateboards in shops in Scheveningen are sold out and there is a huge increase in rental of surf boards compared to previous years (H. van der Broek, personal communication, 12 April 2020). Also, Willem Ment de Heijer sees a high increase in people bathing in the winter (W. M. den Heijer, personal communication, 18 November 2020). Interestingly this type of daily leisure contrasts to the leisure where Scheveningen

is famous for. Scheveningen is famous for its entertainment, such as restaurants, clubs, theatres and shops, and is spatially centred around the Kurhaus at Scheveningen Bad, 2km north of the harbour. (W. M. den Heijer, personal communication, 18 November 2020; A.-M. van Brecht, personal communication, 12 April 2020; H. van der Broek, personal communication, 12 April 2020). The difference between the two types of leisure lies in that the latter one is more about “being entertained” whilst the former is about “entertaining yourself”.

So, what makes the area around the harbour so attractive for leisure in which people have to entertain themselves, often on a daily basis? These experiences are what I am interested in, experiences of people with their roots in Scheveningen or The Hague or of people from far away. Although there are different interests and opinions which sometimes clash, it seems that the positive effect of the coastal environment counts for many. It is very clear that the coastal environment is a special environment, neither completely urban but also not completely natural. Yet, what are the spatial characteristics which make it possible to counterbalance the overstimulation of the senses? In what way then are the senses stimulated of the walkers, sailors, surfers, rowers and swimmers? My observations taught me that the environment is a place where we connect to all the senses in a way that we connect back to the tactility of the body. Every sense stimulated adds to the embodiment of the experience, conscious or unconscious, uncomfortable or comfortable. This will be discussed in the next chapters using established theories, my own observations and stories of others.



Experiencing the coastal environment



Experiencing the coastal environment

Embodied experience

Maurice Merleau-Ponty is an important philosopher who theorizes perception. Perception in his view is experiencing through the body, therefore naming it embodied experiencing. Experience starts with a sensory sensation. A sensory sensation in which all senses are stimulated at the same time. The senses herein are the bridge between the environment and the body. The stimuli come together in a bodily feeling; an embodied experience of an environment (Merleau-Ponty, 1964, p. xiii, 2004, pp. 10-15,55-59). Although all senses have their own characteristics, they correspond to qualities of the other senses as well. The senses of the altering sound of waves, the saline smell, the slow imprinting of feet in the sand, the fresh wind on blushing cheeks and a cold tip of the nose together feed the tactility of the body. This process can be explained neurologically as mirror neurons, according to Architect and scholar Mallgrave, who connects neurological theories to Merleau-Ponty's phenomenological theory. Mirror neurons in our brains mirror what we perceive. In this way we grasp how the perceived activity must feel (Mallgrave, 2018, p. 67,68.72,73,101). When we grasp how such an activity must feel, we connect underlying reasons to the event. We can do this as we "save experiences". The body and the senses are thus not only important in an embodied experience, also the mind is interconnected, one's very own reasoning. So the tactile sense of the body, nourished by senses stimuli and the mind, makes a person experience being in the world (Mallgrave, 2018, p. 12).

As Merleau-Ponty notes "Philosophy is not the reflection of a pre-existing truth, but [...] the act of bringing truth into being." (Merleau-Ponty, 2003, p. Xxii-xxiii). Here Merleau-Ponty rejects the cartesian notion that mind and body are

separate. Descartes believed that the senses –which he connects with the body– can only form the beginning of an understanding which then can only be explained through science and knowledge. In other words, Descartes does not trust his senses, just his intellect. Merleau-Ponty's ideas are closer to the ideas of empiricists such as George Berkeley and David Hume, who in the early 18th century based their philosophy on the notion that all knowledge is obtained by sensory experience. They rejected Descartes view because science, in their opinion, only gives approximations and an abstract analysis of things (Merleau-Ponty & Davis, 2012, pp. 1–13, 39–45). Merleau-Ponty, however, stresses the importance of the mind, the senses and the body together.

The mind in this process can be seen as memories, ideas and imagination, which make a body more sensitive to certain factors in the environment. This subjectivity of embodied experiences can be illustrated by the image of a surfboard. Many associate a surfboard with the beach, the sun and good weather. However, a Dutch surfer would probably associate it with rough weather, cold feet and the thrill of catching a wave. This association or message that an object or a part of an environment “tells” or “gives” a person is defined by James Jerome Gibson as “affordance”. Senses are active and are constantly searching for affordances in the environment (Mallgrave, 2018, pp. 45–46). In other words, the body is in constant interaction and entangled in the world. In words of Merleau-Ponty: “Our body is both an object among objects and that which sees and touches them.”(Merleau-Ponty, 1964, p. xii). It can therefore be argued that a person is what they are because of their environment (Merleau-Ponty & Davis, 2012, p.

56). Neural plasticity can explain this. When we grow up, new experiences create new neural connections and these connections grow when something is experienced more often. During a lifetime neural circuits are constantly taking new shapes and, in this way, reshaping the neural systems. Environments are an important factor in creating the circuits because the generation of memories uses the same part of the brain (the hippocampus) as the understanding of spatial environments and place. This is also the location where memories are connected to places when they are stored and grouped (Mallgrave, 2018, pp. 80–81).

The neurological side of this story proves that, biologically, environments can thus have either positive or negative effects on the well-being of people. This argument has been recognised by many researchers. Especially the number of studies on the positive mental effect of the natural environment, such as coastal environments, is extensive (Barton & Pretty, 2010; Beatley, 2016; Bowler et al., 2010; Mallgrave, 2018, pp. 124–127). That the coastal environment in Scheveningen can have such positive effects is also confirmed by the many people I spoke to during the observations and in-depth interviews. Yet, as we have learned above, embodied experiences are subjective and sensory stimuli will be different from person to person. Therefore, this chapter will first dive further into this subjectivity and then will continue elaborating on the collaboration of the sensory systems.





Experiencing the coastal environment

Subjectivity

As discussed above, memories, ideas and imagination make a person more or less sensitive to certain factors in the environment which are then experienced in its own particular way. As Scheveningen has been through a large transition there is a large difference between experiences of people who do have and people who lack memories of past Scheveningen. The sensory stimuli in the harbour today are very different than fifty or eighty years ago. As the human activity changed, so did the intensity of stimuli. The quays were filled with wooden barrels, other tools and people working. Every day at 12 o'clock a loud bell would call and remind the workers to go home for lunch. The current quays for people who remember these times lack the sensory stimuli of that time and are experienced as quiet, dull and lifeless. Also, further out of the harbour people were reminded of the harbour and its industry by the sounds of the mist horn during mist. Even the horn of the Norfolkline, a large container ship, used to sound over Scheveningen until 2006 but has now disappeared. Miech Pronk recalls the bright light of the lighthouse every night in his room, which he now misses as the light does not shine towards the city anymore and only lights up towards the sea. The lighthouse of Scheveningen came up often in my interviews as the building which people relate most to in Scheveningen. Also, when the wind is in the right direction, the sea can be smelled throughout the area. A fisherman who works for weeks after weeks offshore, would be reminded by this smell of their 'home', their home at the sea (W. M. den Heijer, personal communication, 18 November 2020; F. Mens, personal communication, 17 November 2020; M. Pronk, personal communication, 30 November 2020).

Feeling home

A smell which reminds of home, the feeling then evoked is an emotional feeling, an embodied relationship of a person and a place. Belonging to place is crucial in being. Heidegger wrote that the verb “to be” comes from dwelling place. And goes as far as to say that the home is part of ourselves. Which makes sense as indeed we cannot mentally survive in a placeless, scaleless, and meaningless place (Mallgrave, 2018, p. 118; Malpas, 1999; Robinson, 2011, pp. 1, 11, 15). It is understandable that when a place is home to many changes, this causes friction and touches people emotionally. Examples are, the many people who live around the harbour in Scheveningen and Duindorp have lived there from generation to generation and with this originate from fisher families, in which the harbour played a large role. Or for Bruno van den Elshout who sees the Southern beach which he visits regularly for its tranquillity becoming more and more busy and is afraid it will become more like the Northern beach of Scheveningen. Or when the free parking spots disappear for the vans of the surfers and kites or for the members of the yacht club or of the man who owns a small community house behind the dunes. On top of that, many people in the area feel that they do not have influence in the plans for the area. The lack of an integral vision for the area strengthens this. As a result, plans suddenly change or never happen and other plans instead get implemented (J. Koningh, personal communication, 19 November 2020; M. Pronk, personal communication, 30 November 2020; H. van der Broek, personal communication, 12 April 2020). These struggles with changes in the harbour now, might explain the opposite feeling with the beach. The beach is open for everyone and is not subject to as many changes. This

public area is for people from The Hague and thus of Scheveningen, a place that they relate to, where they feel home. One of the people I encountered during the surveys described the coastal environment of Scheveningen as part of the “woonbeleving” of the Hague people. I think a lot of people feel a sense of belonging here. And it is therefore easier to be relaxed and calm.

As discussed before, memories make a person more or less sensitive for certain factors in the environment which are then experienced in its own particular way. These memories, however, are not always coming from our own past experiences. They are influenced by others through for example stories from friends and families or literature, film and social media. On top of that, every time when a memory is recalled, the memory slightly changes. Although memories are thus not always fully reliable, they are the person’s own memory and will thus influence that person’s embodied experience (Malpas, 1999, pp. 84–87). How imposed concepts influence how people experience a place, can be illustrated by two occurrences in the area around Scheveningen harbour. Firstly, the increased investment in the area has led to displacement of parts of families which have lived in the area for centuries and at the same time has led to an influx of new people. Because of this transition, the long-term residents created an aversion to these ‘others’, which should not become part of their home or “place”. This shift to localism is emerging around the world according to Doreen Massey. The emphasis in their experience of place is defined by “their difference from other places which lay outside, beyond their border”, in some sort of supremacy of identity which cannot coexist with “others”. Place or locality in this





way “provides a safe haven to which one can retreat” (Massey, 2005, pp. 64–65). The experience of place in this way becomes an inaccurate and simplified version of the place by a concept and the multiplicity of place seems forgotten. This manifestation is a reaction of the increased investments in the area by developers and municipalities. However, I argue that they illustrate the second case in which concepts influence how a place is experienced. The municipality and developers do not take place in its multiplicity either. The municipality is blamed for being ‘outward looking’, that they act in favour of the Hague and are not concerned with Scheveningen’s traditions and identity. They sell houses with images as if the sun always shines in Scheveningen and with the sea as decoration. The buildings show this train of thought and do not show rootedness in its

context, nor in its environmental characteristics nor in the social identity of place.

Although concepts and stories of others can influence how people experience a place, I argue that I do see a group who are taking place in its multiplicity or at least value a place as it appears to the sensory stimuli; people who visit Scheveningen for leisure. The people who come to rebalance the bodily tactility and therefore connect strongly with the sensory stimuli of the place. For example, surfing is a bodily connection with the movements of the surge of the sea. According to Hans van den Broek “The first time on a board and I was addicted, I needed to move to Scheveningen” (H. van der Broek, personal communication, 12 April 2020). According to Miech Pronk: The collaboration with the wind is what makes sailing such a powerful experience. When the



lighthouse of Scheveningen, after a long trip, appears on the horizon, this evokes a feeling of home” (M. Pronk, personal communication, 30 November 2020). A pensioned seafarer, I encountered in the harbour told me: I can very well remember the first time I went so far out on the sea that I could not see the shore anymore. It was a very special experience and it made me decide to become a coxswain. Another example is Willem Ment den Heijer he is one of many who go out every day for a swim in the sea. The amount of people embracing this routine has increased rapidly throughout this year. “The bodily rush it brings, fuels me with energy and both physical and mental health” (W. M. den Heijer, personal communication, 18 November 2020).

All in all, experiences are subjective because memories, ideas and imagination influence

how an environment is perceived. However, memories, ideas and imagination of others influence the experiences as well and could lead to a growing lack of connectedness or rootedness to the place. Although there are different interests and opinions which sometimes clash, it seems that the positive effect of the coastal environment counts for many. When designing, I argue, it is therefore important to acknowledge the true, geographical place with all its sensory stimuli and also the spatial and social character of the place. In other words designers can learn from the way surfers, walkers, sailors and swimmers acknowledge place. Also Jeff Malpas strengthens that it is important to attend to the truth of the place. “To attend to truth, to attend to what is, is to do no more and no less than to attend to the place in which we find ourselves, and to what appears



before us and with us in that place" (K. M. Havik & Passinmäki, 2019, pp. 21, 13–29). He continues that acknowledging place as such, has the following two capabilities. On the one hand it has the capability to be determinate as nothing exists that is not placed, it brings things into relationality. On the other hand, it has the capability to be indeterminate, which is crucial when designing, as the quality of indetermination brings possibilities and productivity.





Experiencing the coastal environment

Senses

As Merleau-Ponty, Mallgrave and Gibson have showed us, sense stimuli are collaborative and overlapping (Mallgrave, 2018, pp. 74–79; Malnar & Vodvarka, 2004, pp. 40–41; Merleau-Ponty, 1964, p. xiii, 2004, pp. 10-15,55-59). However, this idea has been developed and is understood by many, mostly from western perspective, as hierarchical and autonomous. The idea comes from the five autonomous senses as distinguished by Aristoteles and additionally taken as truth by Plato and the great thinkers of the renaissance. Hierarchical order started with visual as the most important and touch as the least (Malnar & Vodvarka, 2004, p. 41; Pallasmaa, 2012, p. 18). Interestingly, there are also non-human senses. Eels, for example, have a sensory system of direction. Their receptors sense the earth's magnetic field to be able to navigate their journeys crossing the Atlantic ocean (Durif et al., 2013). Also, octopuses communicate using movement and colour and Caribbean squids have a language with grammar by colour signals on their skin (Meijer, 2020). The underwater world is therefore completely different as perceived by us compared to marine animals: noise or other pollution of the North Sea might cause bigger harm than until now is understood (Meijer, 2020). Although the sense-systems can thus be defined and be understood from different perspectives to research sensory stimuli it is important to use a categorization. We will use the division of Gibson in his book "The Senses Considered as Perceptual Systems", in which Gibson does consider the senses as collaborative and overlapping and therefore speaks of systems (Malnar & Vodvarka, 2004, p. 42)

The visual system

Vision can be divided into the peripheral vision and the focussed vision. Peripheral vision



strongly resonates with the body according to Mallgrave as it has the ability to assimilate the holistic atmosphere (Mallgrave, 2018, p. 75,79). Interestingly, at the beach, when looking over the sea or over the shoreline, the focused vision becomes the peripheral and the other way around. However, I do not fully agree with Mallgrave as, for example, a focused vision towards the sea can very much resonate with our bodies as well. The sea constantly changes colour and texture and the longer the focus, the more will appear. Nonetheless, at the beach the focussed vision is not forced, which is the case in large parts of the harbour. For example, at one apartment building there are letters placed in big steel letters on the façade, which force you to read words related to the coastal environment, such as “Zand” or “Meeuw” (which translates to English as Sand and Seagull). These words do

of course remind us of the coastal environment but lacks the ability to evoke an embodied experience corresponding to the coastal environment. This solely visual stimulation is a reminder of the over stimulation of the visual sense through our current society. Those visual stimuli are often not accompanied by stimulation of the other senses. Conversely, when moving closer to the sea again, almost everything which triggers the visual systems, triggers other sense systems as well. For example, the wind is felt on the skin, heard when it makes a flag thick and seen as it makes the sand move.

Another aspect crucial to the visual system are colours and contrasts. Colour schemes differ from place to place and from time to time. For example, in the middle of the first harbour where all the fishing ships are



located, there are brightly coloured ships with brightly coloured tools such as cranes and ropes. On the beach, on the other hand, colours are more alike, and the sea and the sky often seem to blend into each other. Unlike indoors, in the coastal environment, sunlight has the biggest influence on contrasts and on what is visible and what not. The rhythm of the day and night and the rhythm of seasons with its accompanied weather circumstances therefore are of large influence.

The auditory system

We are often less conscious of sounds than of vision, however as such sounds do have a very important role in spatial experience. Take for example a movie with the sounds turned off or walking through a space with noise-cancelling headphones on. Any building and any outside space has its own sound. Think for

example of the auditory harshness of an empty house or the echoing in churches. Those sounds might give an impression of silence as the architecture can block external sounds, yet true silence is very hard to achieve. Yet, especially now that sound pollution is growing, the quest for silence is becoming larger (Metz & Brinkman, 2002, pp. 195–200). Of the seven locations that I studied, the loudest was the marina (location 5). The masts and the rigging of the vessels in the marina make an immense variety of sounds. Tranquillity is often associated with the beach and also with silence (Grieco, 2015). However, the beach was not the quietest of the seven locations. Silence was strongly experienced at places in the harbour where buildings functioned as windshield.

The sounds encountered at the different



locations, I translated into drawings which are depicted on the collages. They appear as rhythms, from multiple rhythms creating synthesis to a slow flow. From the abovementioned sounds of the marina, to the harsh and penetrating sounds of seagulls which were evident at all researched locations. On the beach locations the sounds were slower and repetitive, such as the sound of the waves on the sand and the hollow to bubbly smacking of water against concrete blocks of the pier. According to Pallasmaa, silence in architecture “focuses our attention on our very existence and as with all art, it makes us aware of our fundamental solitude” (Pallasmaa, 2012, pp. 53–55). I believe the beach and the harbour, with their rhythmic noises, can do the same.

Mallgrave notes that the size of spaces influences the pace at which we speak. Currently smaller rooms make us speak faster (Mallgrave, 2018, p. 83). Would that also mean we speak slower when we are at the beach? In my observations I have noticed that the beach is a place visited for good conversations. Also artist Bruno van den Elshout confirms this with his project “Whatever the weather” in which he, throughout a year, arranges 8-hour walks on the beach for a true encounter with a variety of people (B. van den Elshout, personal communication, 17 November 2020). However, the beach is also a place which many visit on their own. Possibly, for a good conversation with themselves, a moment to contemplate.

The basic orienting system

The basic orienting system is based on the vertical direction of our bodies and the horizontal direction of the ground to which we orient ourselves (Malnar & Vodvarka, 2004, p.

42). There are two ways of orienting oneself, the egocentric and the allocentric (Mallgrave, 2018, p. 80). The egocentric orients itself from the perspective of the body and strongly relies on memories of how the body has moved. The allocentric on the other hand looks at orientation from a zoom-out perspective like maps. The egocentric way is also how children learn about space and orientation by moving, touching, throwing or even licking spatial objects (Mallgrave, 2018, p. 107,113). The latter is thus, in embodied experiences, also of more importance. Firstly, the openness and wideness is the essential feature of the coastal environment which makes it easy to orientate. On the beach the point of orientation is often a far point at the horizon. However, at almost all the different locations in the harbour there is a certain direction which opens up to the horizon. Secondly, on the beach one might follow the footsteps of a prior walker, this makes one orienting towards the direction of that person but also to the body of that person. Is the distance between the steps larger or smaller? Is the foot wider or narrower?

Balance is closely linked to the basic orienting system (Malnar & Vodvarka, 2004, pp. 244–246). Balance changes the perception of the vertical to the horizontal plane and therefore influences the orientation. This is an important factor when designing spaces. In the dunes and walking on soft sand the balance might be influenced but also the strong winds which occur frequently play a role here.

Environment thus has the capacity to lead, to make people take certain routes. At the beach this is the same direction as the sea, the sand and the dunes. The absence of other spatial characteristics here, ensures that many keep walking in a certain rhythm for a while. On the other hand, in the harbour, spatial



characteristics can give signs which help orientation. Generally, however the transition from sea to land keeps a strong line which is followed.

The taste-smell system

Smells of fried fish, running engines of the ships in the harbour, or a freshly painted fence of a newly built apartment merge in the coastal environment. Scent might be the strongest sense evoking memories (Mallgrave, 2018, p. 82). In the words of Pallasmaa "the nostrils awaken a forgotten image" (Pallasmaa, 2012, p. 58). Scent artist Frank Bloem conforms this when he explains the strong emotional experience scents can evoke. For his collection of scents of the North Sea he replicated smells solely from associations he remembers of scents (F. Bloem, personal communication, 4 January 2021).

Observing smell close to the sea takes time, the different layers of scent slowly alternate and are hard to describe. Unlike in the summer when smells get more prominent as the temperature increases, in the winter time smells seem to vanish. Most surveyed people would describe the smell as salty, however according to Frank Bloem, it is not possible to smell salt. Another description of the smell on the beach would be fresh. This is according to Frank Bloem a smell sensation closer to pain than scent and is not sensed through smell receptors (confirming the interrelation of the senses). The sea does smell because of the scent living seaweed produces, called dimethylsulfide, which he amongst others used in his North Sea parfum (F. Bloem, personal communication, 4 January 2021). I was allowed to smell the pure dimethyl sulfide and indeed it reminded me immediately of

the sea. Other prominent smells in the coastal environment were rotted seaweed or fish or sun lotion (during good weather).

Where is the taste in this story? Taste and smell are very much cooperative. Taste has, just as smell, the same power to bring back memories in seconds, often accompanied with a specific location (K. Havik, 2014, p. 51,57). It is possible to taste parts of the coastal environment as fish, shellfish and seaweeds are edible. In contrast to Asia, it is not usual to eat seaweed in Europe. This might have to do with what it looks like. A seaweed in the water has a beautiful shape, which turns in an unrecognisable heap when the water is taken away. Visual sense can very much stimulate the sensation of taste in this way, yet it also works the other way around. I used to not like the experience of seaweed touching my body in the water, until I harvested seaweed myself for the first time and got to taste it.

The haptic system

The haptic system is about the feeling of one's own body from its muscle activity to the rest of the body and about the direct contact with the environment. The latter being about the sense of touch and includes temperature, pain and pressure (Mallgrave, 2018, p. 101; Malnar & Vodvarka, 2004, p. 42). But we can perceive it also as density, weight, texture, vibration and humidity (Pallasmaa, 2012, p. 62). In the coastal environment of Scheveningen the weather influences the haptic system for a large part. Often, this happens unconsciously, however when weather circumstances become heavier or wind pushes seawater in the air, it does not leave us unaware. The only skin that touches when walking is the skin underneath our feet. We feel the mass of our body against gravity in the sand when having bare feet, or in our shoes (Pallasmaa, 2012,

pp. 63–64). The differences in the tactility of sand change when temperature differs and when water is involved. A strong haptic experience was the feel of the warmth of my body escaping through the soles of my feet when I undressed to take a dive in the sea in a cold winter month.

How this sand at this certain moment was experienced is as we experience materials. When only seeing, hearing or smelling materials, our body evokes memories of the touch of the material earlier in life. Stronger associations will be evoked when they are things made by hand or when we know how it is made and why (Steen Eiler Rasmussen, 1959, pp. 159–186). We have talked about the feet, but most things are experienced by the touch of the hand. However the whole body often experiences this touch in the coastal environment with the touch of water because of swimming and surfing and often with lying on the sand as well. In words of Pallasmaa: "The eye is the organ of distance and separation, whereas touch is the sense of nearness, intimacy and affection, the eye surveys, controls and investigates, whereas touch approaches and caresses." (Pallasmaa, 2012, p. 50)

Capturing
experience

Capturing experience



The coastal environment of the Scheveningen harbour area differentiates itself from other urban areas as a place where the embodied experiences are influenced by the interaction of land and sea. Nonetheless, the interaction of land and sea spatially manifests itself completely differently throughout the researched area. Therefore, multiple locations were chosen to study the differences and similarities. Eventually seven locations were chosen based on the diversity of balances between the architecture, the horizon and the sea.

Through observation, interviews and mapping data was gathered on stories and sense simulations in an attempt to capture the embodied experiences of each of the seven locations. In this chapter, the data on the embodied experiences of the seven locations are assimilated and presented in collages and descriptions.

Capturing experience

1. Northern pier



Whereas on the beach the boundary of the water constitutes the route, at this location the route flows perpendicular to this line. The flow is fixed by the concrete which ends at the small red and white lighthouse which marks the entrance of the harbour. I stand on the pier of which the first part was built in 1885 and the final part in 1970. The end of the first part turns away from the second part, creating a point to choose direction and a place to escape the stream of people.

The route is elevated above sea level and therefore provides a top view on the endless mass of water, making the patterns on the water visible. The patterns of light and water change with every wave, every gust of wind and every cloud. The uncountable tones of blue, grey and green blending and disappearing.

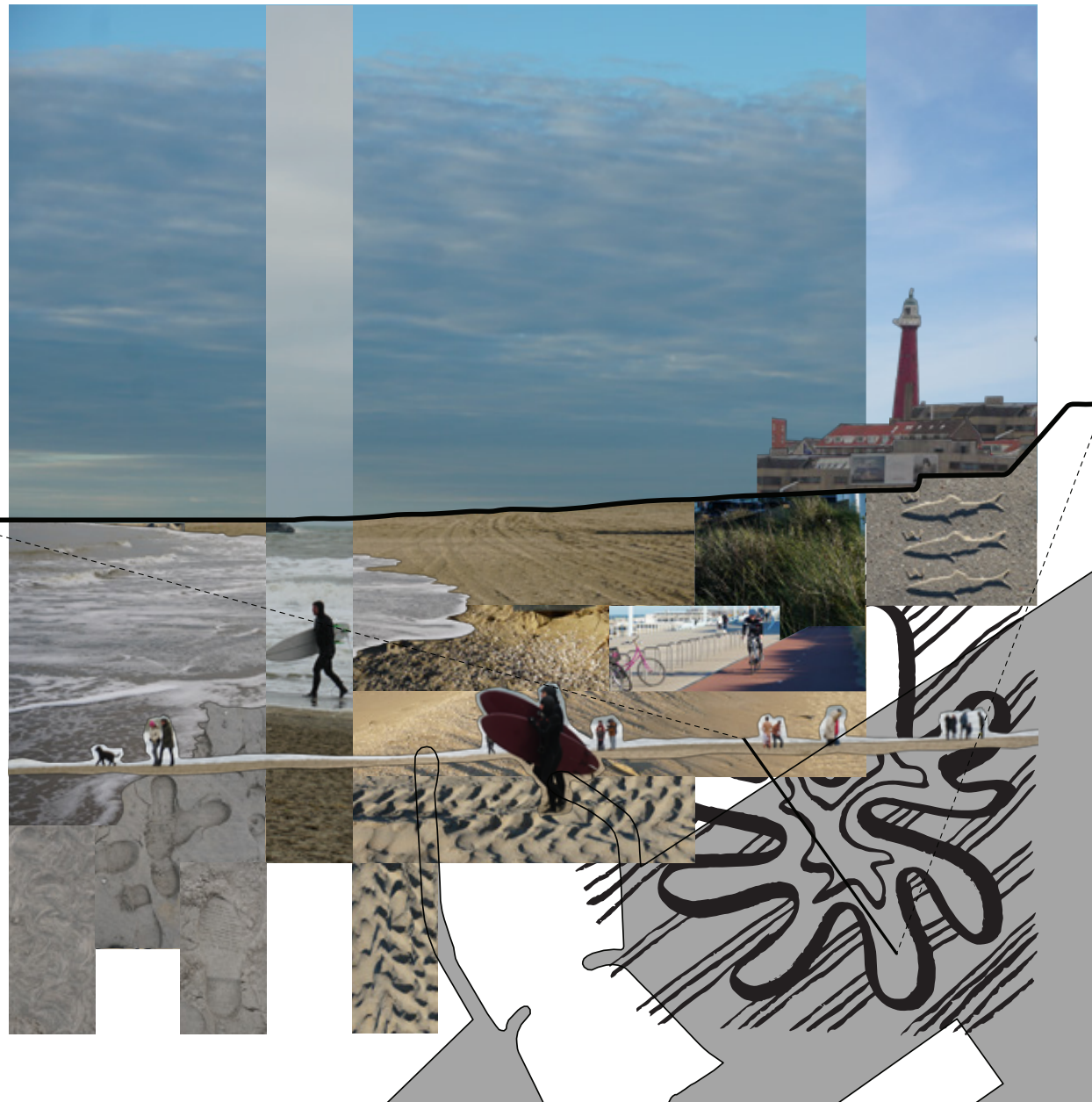
The sounds go from screaming of the seagulls, to conversations in any language, to gurgling of the water between the large concrete blocks. The latter sound comes from below the surface, looking between the blocks-- in search of the sound while the wind pushes your body-- creates dizziness.

The wind is not only felt on the skin, but also seen in the shapes of the garbage bags of the fisherman and in the direction in which the birds sit.

Situated between the mass of water makes the city feel faraway. Buildings of all eras and in every building, style unify to a distant layer. Only the old red lighthouse and a new brightly reflecting hotel unfold. A bodily feeling of being in an old but new place, synonym to the architectural situation of Scheveningen.

Capturing experience

2. Northern beach



This location is about contrast. On one side there is the sea and on the other side there is the city. From another angle there is on the one side Scheveningen Bad, with people, Scheveningen eye, the pier and on the other side there is the so-called sports beach and the harbour. Scheveningen Bad and the harbour have long been two different worlds, and it still is. Scheveningen Bad is where the tourists go and where recreation is the central theme. The harbour is where people work, where ships pass by and where people enjoy themselves on their boats or by walking on the quays. So where the former is about being entertained, the latter is about entertaining oneself. The municipality labelled the tip of this beach 'Beach City' or 'sports beach'. There is a small skate park, some sports equipment and this is the place where surfing is permitted. And indeed, the activity and adrenaline can be felt. Willem Ment den Heijer chooses this location for his daily and year-round dip in the sea. Interestingly, this part of the beach is quieter in the summer than the beach of Scheveningen Bad, whilst in the winter it is busier, especially in the morning. Willem Ment Den Heijer knows why this is the case, this part of the beach is of Scheveningers, the public is very nice here in contrast to Scheveningen Bad. The rush of the sea, bare skins, sky, clouds, boats and the yelling of seagulls fill the air. There is a choice here, on a Friday afternoon in the autumn, do I follow the stream of people or do I seclude myself from it. A line is formed precisely where the waves stop, where the water does not come. A line of people walking the one way or precisely the opposite direction. Here the body does not only relate with the openness of the space and the endless mass of the sea but also with the footsteps below. How are your steps related? Are you going to follow? Is your rhythm of steps slower or faster?

Capturing experience

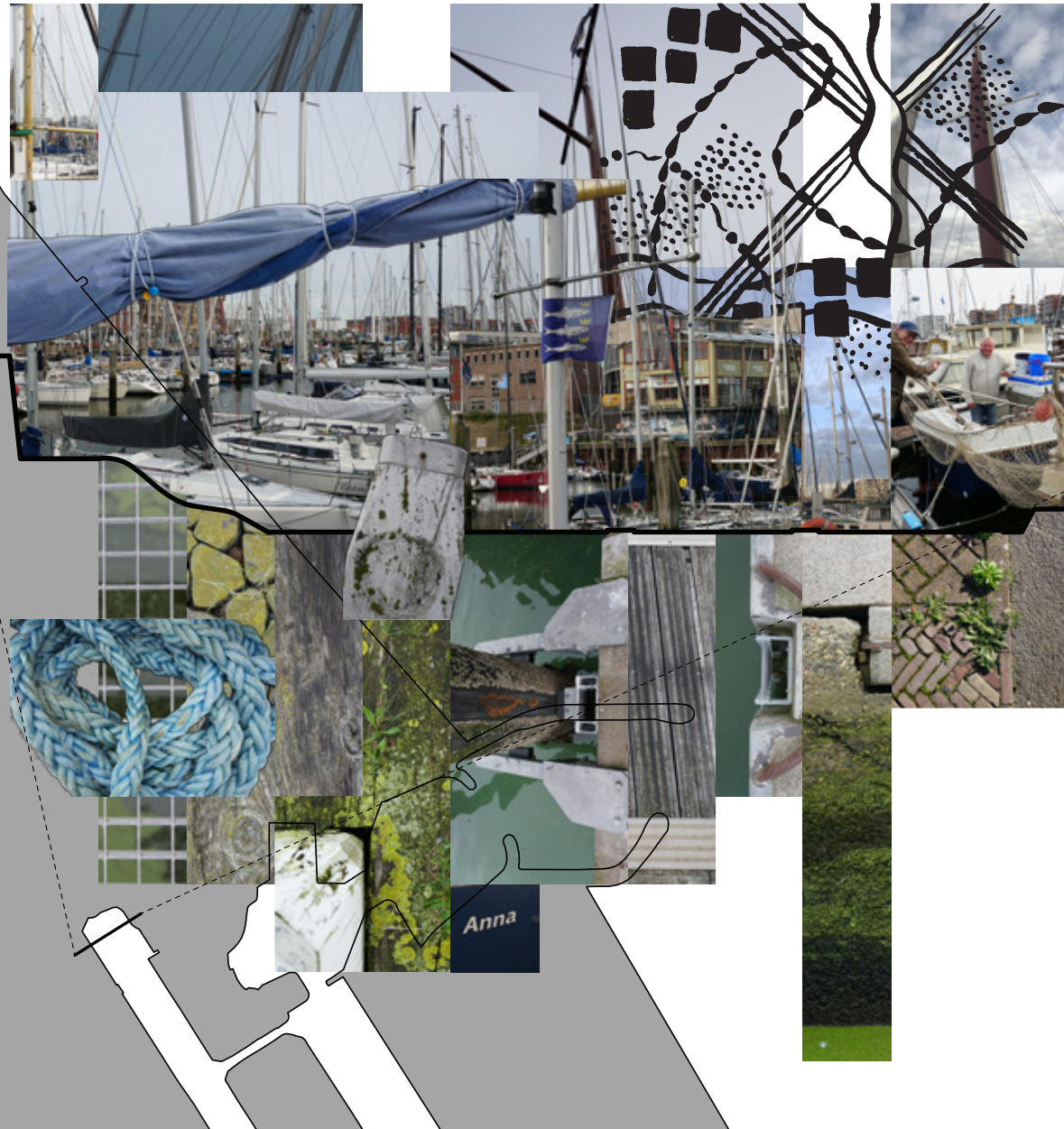
3. First harbour



The First harbour is as its name tells the oldest part of the harbour. It was ready to use in 1904 (W. M. den Heijer, personal communication, 18 November 2020). This part kept its original function, mooring places for fishing vessels. The first fish auction was located on the landside of this mass of water but because of the large amount of fish available after WWII turned out to be too small and the current building was built. Its roof shows one of the many rhythms in this area by going up and down. Other rhythms are: the continuous coming and going of boats sailing out, staying for a week to weeks on the sea and returning early in the morning with their catch. Every Friday morning the ships, arrive here to unload their fish, repair the nets and clean the vessels. In the twilight, lights on the ships show the brightly coloured patterns of the fishing nets and the slowly rocking steel frames. Women are absent. Only men walking up and down the vessels and the quay. After 10 am, only traces are left of this physical activity. Traces in the form of ropes, melting ice, rejected nets, dead fish on the ground which attracts seagulls and the smell of fish. The smell of fried fish rapidly takes over when the fish shops receive their first customers. More and more people pass by the area on the way to their destination: the beach. Surfboards pass by, handcarts filled with toys for kids, sporting equipment for adults, or people carrying nothing at all. The sea and the wind are less present here than on the other side of the dune at the beach. This shelter turns the water in a sparkling mirror. This fascinating beauty stands in sharp contrast to the box-like buildings behind it. Whereas these buildings do not remind me of any liveliness, this sparkling canvas immediately evokes a bodily reaction, like the traces of work, which evoke a bodily sensation compared to the activities of the fishermen.

Capturing experience

4. Second harbour



Swaying up, swaying down, swaying left swaying right. The movement of the masts only sometimes seem to completely calm down. And then one of them, all of a sudden, starts moving in a different pace accompanied with the movement of a motor; someone makes way to the open sea. This orchestra of swaying, rocking and moving of lines touches not only the visual sense, the auditory sense feeds the body to the largest extent. The wind makes every movable part of the boat jingle, rinkle, rattle or whistle. In the collage, the black patterns are a visualization of the rhythms audible at a certain moment listening on the quay.

The interaction of wind, water and objects is also visible in the materiality at this location. Wood has become bleached of the salty wind or green from the algae in the water. Ropes have become grey or thinner at certain parts because of weathering and of use. Steel has become red from rust, which seems to easily flow to materials around it. These interactions create different patterns and textures.

These patterns and textures add to the collage like experience the harbour evokes. The already mentioned wood, textiles, steel are alternated with the bright white epoxy of the newest yachts.

Curves are more apparent than octagonal shapes of the buildings around the harbour. This and also the smaller scale of the boats, the round windows, the tiny doors, and names painted or stuck on the boats, makes the body easily relate. The moving collage stands in a strong contrast with the buildings standing in silence around the harbour.

Capturing experience

5. New buildings



Whereas at the other locations many features recall the past, this location projects the future and therefore evokes a feeling of change, of new, of letting go with the past. Even the sea -which takes a very important place in this time-scale- is not visible at this location.

Standing here, hidden from the wind, without many sounds, gives an uneasy feeling, its very different than elsewhere in the harbour. The buildings feel cold as the metal panels on the wall look untouched by hands and weather. Some buildings are high and create a monotone shield to the dunes, in another row of houses, single houses differentiate themselves in size, shape and colour, however they all feel the same. The only features which remind us of the coastal environment are the sand coloured shades of the bricks on evenly sized panels and metal letters which form words related to the sea. Not much, thus, resonates with the context around these new buildings. Not of the context in terms of the coastal environment, which has been here since the very beginning but also not of the canal which used to clean the water streams of The Hague, or of any of the temporary programs at the brownfield. The empty plot was used over the past years as an informal tennis court, place for first driver lessons, minigolf, storage for festivals. Together with the absence of wind, sounds seem to have disappeared. Sometimes the ringing of a hidden telephone or another untraceable sound breaks the silence. Being here alone passers-by seem to notice me and seem to wonder what I'm doing.

All in all, this location evokes an embodied experience detached of place and time. An uneasy feeling, completely different from the other six observed locations and not a feeling that I would relate to the tranquillity the coastal environment seems possible to evoke.

Capturing experience

6. Sheltered beach

This hidden beach lies in the channel leading from the harbour to the open sea. On two sides the piers (In the area known as “De koppes”) block the view, yet a small opening makes it possible to look over the open sea. Because of these sheltering elements this beach is less prone to the winds making it feel friendlier than the beach on the other side of the pier. Another reason for this might be the size. People are more tempted to show acknowledgement of other people on the beach in forms of a “Hi” or a nod, often encouraged by their dogs which are allowed here year-round. It also looks like more people feel invited to sit down. All these features lead to a more social embodied experience at this triangular beach in comparison to the long-stretched beach to the north.

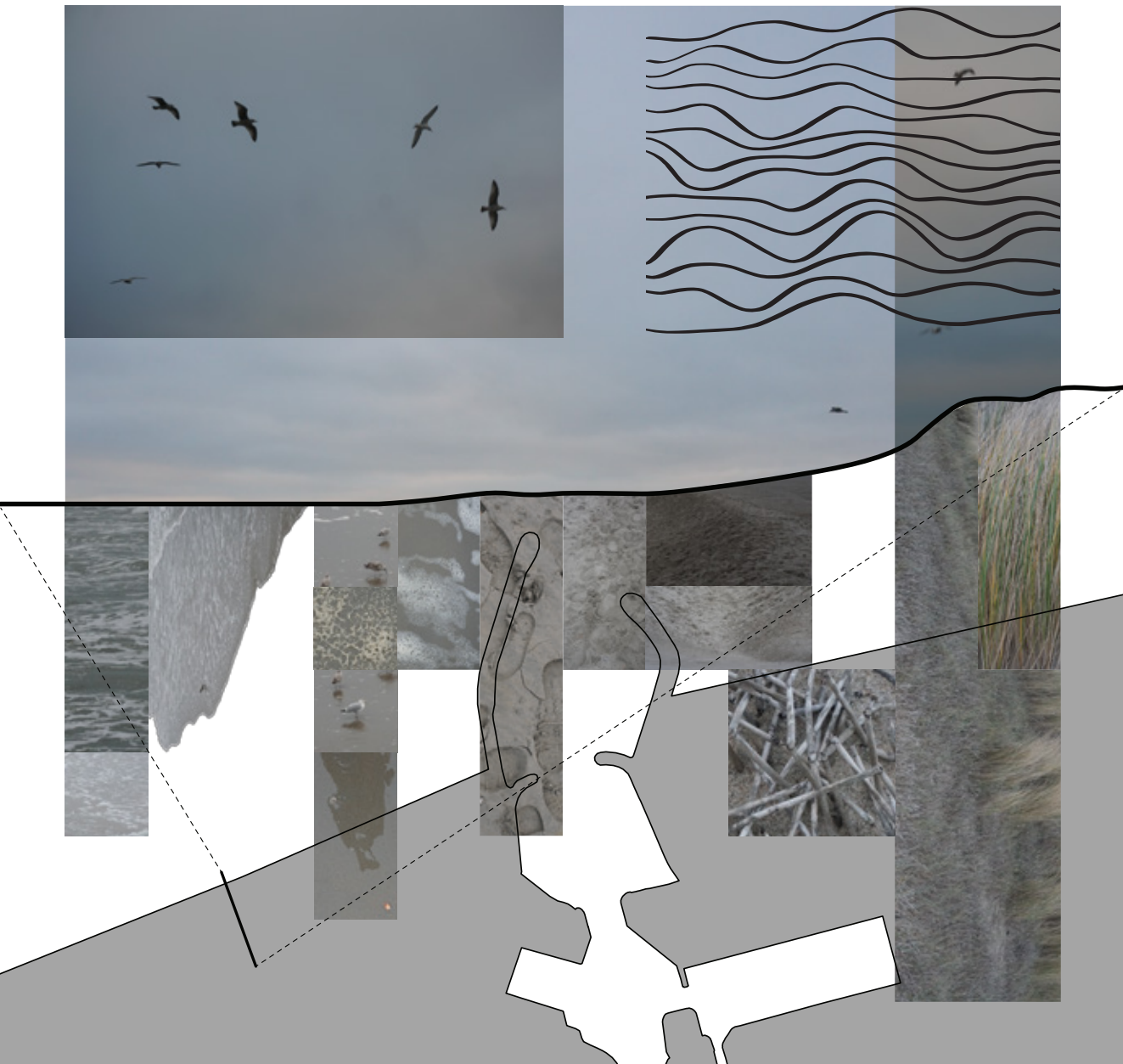
The pier, stones and other souvenirs from the sea such as mussel and razor shells, show the tidal differences affecting the area. For example, lines of green, dark and light show this flow on the bricks. This also becomes visible in the patterns the water leaves in the sand or the direction of the leaves of the seaweeds. It reveals the tactility of the force of water but also of the force of gravity. The stones heavily covered with seaweed or with sand evoke a heavy feeling. Although they are laying there, they seem in a very slow movement. The water running quickly against them sets it in contrast. The rocks and wall of the pier seem to collect layers of materials. Sand on seaweeds, on shells, on rocks. The beach on the other hand seems to be washed clean by the seawater, only occasional flotsam from the water is left behind.

All in all, this location is a calming place of balance, the place feels mutually open and sheltered, it's both a place of scattering and collecting, fast and slow as well as a place of solitude and togetherness.



Capturing experience

7. Southern beach



When watching the movement of the boats at the horizon, the realization of the timelessness of this view arrives. The boats are different but hundreds of years ago, this view would not be so different. The night view however did change in those years. The lights of the boats and of the Maasvlakte are brighter than the stars. Anyhow, the experience of it is uplifting. The time did seem to stop visually, but the sounds of the waves coming closer and pulling back again changes the timescale again. The tidal difference might seem too slow to perceive as well, yet that's not true. With upcoming tide, the moment that a wave suddenly reaches you, makes me experience the tidal difference. Also, when remaining at the same place for a longer time the changes become clear.

Most people here do not stay for very long though, especially out of the summer months, people walk next to the sea. With on the one hand a curvy, moving white bubbling line of the water and bells and on the other hand the swaying dunes. Two colour schemes which both constantly change. On a sunny day, the bright green and yellow colours of the dunes comme nowhere near the blue to silver sea. However, when its misty and cloudy everything turns grey. A cloudy light however will blacken the dunes and light up the sea by the reflection of the dunes.

Somewhere in all these alternations is the human being. The scale of this landscape reflects on the importance of its existence. The speed of the sand blown away by the wind gives this same feeling of scale. The rhythms of the waves, in relation to the rhythm of the steps, bring the human scale back again... on and on and on.

Designing to positively
bodily experience



Designing to positively bodily experience

The positive embodied experiences of the coastal environment around Scheveningen harbour are characterized by both memories and stimulation of the senses, both are important. In the chapter “Experiencing the coastal environment” it is shown that the sensory experiences need to be emphasised when looking at experiences related to Scheveningen. These stimulate you to become aware of your physical presence, this calms down and opens you up to understand the world and each other in a different way than just the mind tells us. Camilla Stig Boccardi Christensen agrees on this as she stated that there is a lot of intelligence in the senses that we should use to understand each other and our surroundings (C. Stig Boccardi Christensen, personal communication, 12 October 2020). However, we should not forget the subjectivity of experience and the understanding how this can feed the embodied experiences; they can make someone more sensitive to certain environmental characteristics and thus this stimulation will be perceived as more intense. Many architects have used a phenomenological approach to design architecture. Pallasmaa goes as far as to say that when architecture stimulates all the senses at the same time, this architecture is capable of enhancing life. In his designs he tries to design a holistic whole

through focusing on all scales, on geometry, materials and craftsmanship (Pallasmaa, 2012, pp. 12, 74-76). He also gives an example of Alvar Aalto’s architecture which interacts with memory and imagination. Alvar Aalto’s architecture “sometimes appear[s] clumsy and unresolved as drawings, but they are conceived to be appreciated in their actual physical and spatial encounter, ‘in the flesh’ of the lived world” (Pallasmaa, 2012, p. 76).

So, designing to positively influence bodily experience is not as easy as just engaging the senses. The senses should be counterbalanced for the overstimulation of some senses and the deprivation of other senses. How this happens in the coastal environment is identified, catalogued and illustrated in the previous chapter. In the current chapter we take this to the built environment. Seven themes will be explained which aim to provide a designer or architect with tools and methods to maintain the experiences in their original way, to intensify and further improve the quality of them. The seven themes will be explained by short texts and photographs which leave space for interpretation by the designer. These themes can, in this way, guide the design of a new building.



Designing to positively bodily experience

Multiplicity of tranquillity

Often when we think about calming or relaxing environments, we think about silence, tranquillity and the absence of details. This would be logical if we understand the working of mirror neurons. Yet, is it ever quiet on the beach? The way the coastal environment of Scheveningen calms is not through absence of stimuli from spatial characteristics, but through the multiplicity of stimuli. There is often wind, which is not only constantly stimulating the haptic sense of the skin/body but might also let the body feel colder or could provide a flash of sand spray in the face. The coastal environment is not particularly comforting in that sense, yet it calms us down.



Designing to positively bodily experience

Unconscious to conscious

The sensory experiences in the coastal environment often unconsciously feed the awareness of the body. Often, after a visit, when arrived at home, a moment of awareness occurs. All the sensory stimuli has changed the tactility of the body. Delving into the spatial characteristics in the coastal environment can, therefore, help to create a stronger connection to the body. In words of Camilla Stig Boccardi Christensen:

Disembodiment is a mental state that, I think, a lot of people are suffering from. You feel like you can solve every problem through your intellect and the body is just completely forgotten. Sensory experiences are in this way barely noticed. I think we really need to push to create an awareness. You know how clever and how smart and how amazing our body is as a tool to create. I think that, you know, if we start using our bodies to understand the work that we do, I think that it can prevent people from a lot of stress and anxiety (C. Stig Boccardi Christensen, personal communication, 12 October 2020).



Designing to positively bodily experience

Rhythms



The seasons: summer comes, tourists appear, autumn reappears, rest returns. High tide and low tide. Tides bring soft sand and hard sand to walk on. The sound of the waves and the movement of the waves. The wind through the lines of the ships produces jingles and whistles in a rhythm, like music.

Rhythms are everywhere in Scheveningen and our body easily reacts to them. They make us dance, make us walk slower, make us run faster, makes us feel calmer.



“There is something mysterious about the stimulating effect of rhythm. You can explain what it is that creates rhythm but you have to experience it yourself to know what it is like. A person listening to music experiences the rhythm as something beyond all reflection, something existing within himself. A man who moves rhythmically starts the motion himself and feels that he controls it. But very shortly the rhythm controls him; he is possessed by it. It carries him along. Rhythmic motion gives a feeling of heightened energy.” (Steen Eiler Rasmussen, 1959, p. 140)



Designing to positively bodily experience

Imperfection as perfection

We can become familiar with the landscape of the beach, yet this does not mean that this landscape is always the same. Weather, with its wind speed, cloudiness or cloudlessness, the brightness and the position of the sun and temperature fluctuations make no moment the same. "How is it possible that nature can create such a perfect thing as a seashell?" This is what Paul Valéry questions in his essay "Sea shells" (Valéry & Manheim, 1998). He argues that we might not want to explain it with knowledge and science but just let the aesthetics speak for themselves. Just like the landscape of the beach, there is not one formula for its spatial perfectness.

Although a shell is not perfectly symmetrical nor are the stripes not perfectly parallel, it is something beautiful in its completion. Kuma concluded the same for his project for an art event in Anyang "How marvellous [...] to learn that seemingly random or scattered elements might actually be stronger. The project confirmed my suspicions that things too neat and orderly might be hiding fundamental flaws" (Kuma, 2016b, p. 56)

Pallasmaa goes as far as to say that the result of the contemporary fear of deadness is the loss of appreciation of imperfection. "Buildings of this technological era usually deliberately aim at ageless perfection, and they do not incorporate the dimensions of time, or the unavoidable and mental significant processes of aging". (Pallasmaa, 2012, p. 34).



Designing to positively bodily experience

The long line and the detail

The coastal environment is filled with long lines, they lead the continuous pace when walking. Also the openness of it strengthens the realisation of the absence of any physical boundaries make us experience the smallness of the body's physical size. However, when we stand still and focus, details will appear. The endless volume we call the beach, shows itself as tiny grains, the sea as wet droplets, the dunes as long green to beige stems. It's the change of peripheral vision to focussed vision that reveals details that your body starts reacting to - on a smaller scale. Colours appear to change, water bubbles pop, colours get textures, and this forces your body to react.

Openness is strongly linked to Scheveningen: Willem Ment Den Heijer: The harbour used to be very open, very wide, you could see the sea already when standing next to the canal which led to the harbour. It's a shame for the atmosphere of the harbour that it's full of buildings now (W. M. den Heijer, personal communication, 18 November 2020).

Wim van Loo: I remember very well; as a small boy of 8 years old, I was put on a boat for the first time and we went out on the sea until we could not see the shore anymore. Something happened inside of me that moment. What happened inside of me that day made me later decide for a career as a coxswain on large vessels (W. van Loo, personal communication, 17 November 2020).





Designing to positively bodily experience

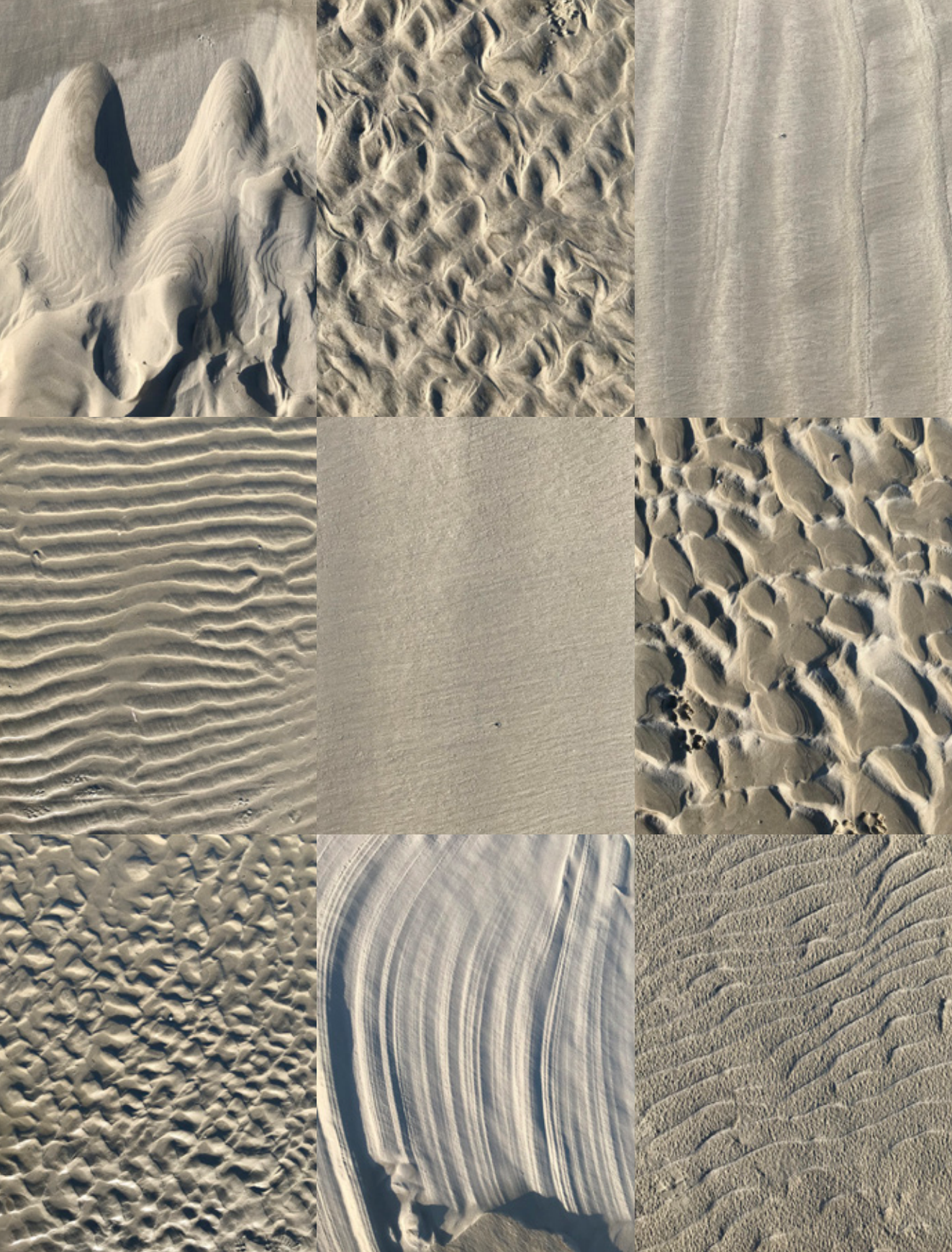
Traces of work

The brightly coloured ropes in the harbour are an example of a trace of work. When seeing fisherman repairing the nets or loading and unloading ships, mirror neurons mirror these activities in such a way that you understand these physical activities. This is a bodily reaction. However, it is not only those activities but also the prime object which reminds of such activity and which awakens bodily response. This can also be said about the craft of architecture and details. According to Kuma this is the case in architectural elements of dimensions that can be handled by an individual person (Kuma, 2016b, p. 32):

“Each [stone] is small enough to be lifted and set in place by human effort. No matter how big the building, those dimensions mediate between us and the whole structure, so that even the largest mass does not seem oppressive” (Kuma, 2016a, p. 14)

“The [architectural] work interacts with the body of the observer; the experience mirrors the bodily sensations of the maker. Consequently, architecture is communication from the body of the architect directly to the body of the person who encounters the work, perhaps centuries later” (Pallasmaa, 2012, p. 71).

“In an embodied way, we touch what we see, and what we feel is not simply the materials but how they are joined” (Mallgrave, 2018, p. 130)



Designing to positively bodily experience

The interaction of materials

Mallgrave takes the example of a person's neurological response as if it's his own skin when watching a movie of a tarantula crawling across someone else's skin. "If we respond neurologically to the touch of animate or inanimate objects that we observe, would we not also respond to architectural materials and forms touching one other?" (Mallgrave, 2018, p. 67) He goes on to show that neurological studies have shown that even inanimate objects touching activates the same neural circuits as when animate bodily parts touch (Mallgrave, 2018, p. 127).

Water and sand, sun and sand, wind and water, wood and sand and wind. The list of materials interacting with each other in the coastal environment of the Scheveningen harbour area is endless. Wind here complements gravity. "Water naturally seeks to spread [...] and the ceaseless motions across its surface – larger movements causing waves, breezes inducing ripples, ever changing light reflections, which surely no one would tire of looking out onto" (Kuma, 2016a, p. 9). The specific materials with specific environmental conditions create textures, movements, rhythms, colours. The natural process in which these often occur add to the bodily tactility it evokes.

To conclude



To conclude

Conclusion

Research into phenomenology has pointed out that experiencing the coastal environment of the Scheveningen harbour area is an act which brings memories and sensory stimuli together in a bodily tactility. This embodied experience of the coastal environment is specific in that it stimulates all senses at the same time, yet it is subjective as everyone has a different frame of reference. The specificity herein is what means that the de-stressing effect is true for many. The de-stressing effect is not just the mirroring of a calm environment, it is an embodied experience which may even be uncomfortable. It makes a person become conscious of his/her senses through a bodily feeling which is key for de-stressing in the 21st century.

The methods used in which observations of the researcher are recorded on the one hand – to investigate the sensory stimuli of the coastal environment – and interviews on the other hand – to study the subjective side at an individual and community level – focuses both on the sensory and memory aspects of embodied experiences. In this way the research goes into exploring the positive embodied experiences of the coastal environment around the harbour of Scheveningen. The methodology follows-up on observations and interviews with mapping. Working with photography and description makes it possible to identify and catalogue the specific positive embodied experiences of the coastal environment around Scheveningen harbour.

Throughout the booklet texts and photographs have worked together to provide the story of this research. Therefore, also in the final part, which introduces seven design themes, I make use of photographs and texts. This is a deliberate attempt to leave space for

interpretation of the designer. The seven themes provide architects and designers with handholds to design a new building in the area whilst either maintaining or intensifying the positive embodied experiences in their original way and to intensify and further improve the quality of them. The seven themes are:

- Multiplicity of tranquillity
- Unconscious to conscious
- Imperfection as perfection
- Traces of work
- Rhythms
- The long line and the detail
- The interaction of materials



To conclude

Reflection

The starting point of this research was my fascination for the coastal environment and the effect it has on humans. Diving into the effect of architecture made me aware of the complexities of experience; architectural experiences and environmental experience in general. It showed me how little I, but also many others, know about the working of the sensory systems and how the role of the body often seems to be forgotten. In the words of Kuma: "In the broadest sense of the word, buildings are like clothing: they mediate between harsh external environments and the vulnerable body. The only difference is that clothing designers never forget the characteristics of the body, but architects do." (Kuma, 2016a, p. 40) The subjectiveness in experiencing made me realise that it is never possible to design according to everyone's wishes. However, this research showed me the importance of the architect as a translator of those environmental experiences. Although everyone is sensitive for environmental characteristics, I –with a background or maybe only because of my interest in architecture– am able to capture and work with them. Therefore, I think, architects have the role to collect, name, analyse and reflect on the embodied experiences of specific environments. Because, in architecture not only is it that the body often seems forgotten, the notion of place is often forgotten too.

To bring back the body and the notion of place, this research has introduced seven themes architects can work with. These themes have been developed out of a research around the coastal environment of Scheveningen and are therefore directly applicable during design for the same location. However, I can imagine that the themes can also provide handholds at other locations. The themes are an assimilation

of spatial characteristics which positively influence the embodied experience and asserts that craft, materiality and architectural form can make the visitor or the user aware of themselves in relation to place.



To conclude

Discussion

The research started from the field of architecture, however since the discipline of architecture overlaps with many other disciplines, methodologies used in architectural research can vary widely. This research touches the field of philosophy, psychology and other social and cultural studies. Hence, a qualitative multi-tactical methodology is chosen, which combines literature research, observations, interviews and mapping. The phenomenological approach gave me the possibility to combine a metaphysical and a visceral understanding while observing my own body in relation to its environment. This developed during the research into more and more personal awareness of how my body stood in interaction with its environment. The combination of consulting theoreticians, myself and the users of the area (by interviewing) complement each other well. As embodied experiences are subjective, it is valuable to gain knowledge in these differences as these findings would not be possible by only consulting myself. However, because of this subjectivity, consulting only others would never give the in-depth knowledge which can be obtained by including and consulting myself as a researcher and architect with more affinity for spatial characteristics of the (built) environment. Architecture locates itself in-between science and humanities as is shown in this project. The phenomenological approach and the on-site research gave the project both a metaphysical and a practical dimension.

Photography unfolded to take up an important part of the research. Photography was first only chosen as a tool to complement the observations. Because photography is a visual medium, it did not seem an appropriate tool for sensory observation, as I believe in current society the visual has been of too

much importance. However, the photographs that I took, did exhibit and evoke sensory clues of the other senses as well. Later I learned that when seeing an image, our biological system, with the help of mirror neurons and neural plasticity, gives us the power to “feel into” a photograph and can evoke corresponding sensory feelings. Photographs were also a useful tool to remember and go back in my mind to be able to analyse key characteristics of the moments and their connected qualities and to reflect them.

Not only were my own photographs useful, photography of others gave me important insights as well. For example, the photographs of Bruno van den Elshout of the horizon seen from The Hague southern beach, taught me that what those photographed evoked was the unique feeling which I found so inspiring. That he was able to frame it in photographs made me look at the environment from another perspective and led me to the idea to use the coastal environment as a laboratory for architectural design. Another example of photography taken by others were the historical photographs of how Scheveningen used to be. These images made it possible to better imagine how people in the past bodily experienced Scheveningen and therefore to understand the transition Scheveningen harbour had gone through.

Next to the importance of photography as a tool for the observation and the further analysing of embodied experiences, photography showed its importance as a medium to tell the story of this research. This booklet has a documentary-like way of showing the research in both photograph and text.



To conclude

Further study

All observations were done between the end of September 2020 and the end of January 2021 which is the autumn and winter in The Netherlands. Because the researched area is very prone to seasonal changes in terms of people visiting the area, it would be interesting in further studies to compare observations in different seasons. In general, adding a larger focus on time could lead to more insights. For example, besides visiting the same place at different seasons, different times during the day. During this research is chosen to conduct research at seven locations, for a more in-depth research the number of researched locations could be expanded.

Due to the corona pandemic different restricted measurements in the amount of people gathering outside were applicable. Also, restaurants, cafés and recreational services were closed, and many people worked from home, making people more flexible in terms of visiting the area. This research did not focus on this societal change in detail, however a focus on this fact could be interesting as it led to different visiting patterns. More people came to walk, swim, surf, etc., and less people came to visit the beach pavilions, restaurants and recreational side of Scheveningen. Also, the handing out of surveys could not be continued because of the corona restrictions and because it was not complementary to my own observations. However, in further studies and without restrictions because of the pandemic, the number of interviews could be increased to give the study a quantitative approach as well. By doing so, a larger focus on diversity could help to get an even larger frame of reference. Although I explicitly searched for a varied group in terms of interests in Scheveningen for the in-depth interviews, the socio-cultural demography turned out not to be diverse. Seven men and only one woman

were interviewed, and none indicated to have a non-Dutch cultural background.

For future studies into sensory deprivation and overstimulation in the built environment it is interesting to follow how new developments in technology will be of influence. Virtual reality for example targets to stimulate more senses than just the visual and the auditory sensory systems. Also, research of the The Haptic Interface Technology Lab at the TU Delft works on interfaces which can create a variety of realistic haptic stimulations and aims to implement those sensory stimuli on the future smartphones (HITLab, n.d.).

This study finishes by introducing seven themes which provide architects and designers with handholds to design. The next step would be to integrate these themes in the design of a new building in the area. Evaluation could show whether the themes did lead to a building which maintains or intensifies the positive embodied experiences in their original way and/or further improves the quality of these experiences. Because the themes are left open for interpretation by the designer, every design will be unique. Also, it is important to note that I do not argue that the formulated themes are the only answers to the architectural question. Another researcher would probably have found different themes which would have led to different explorations. For the architectural investigation there is never only one solution.

List of figures

All photographs are taken by the author, except for:

- p. 21, top Onbekend / Zuiderzeemuseum Enkhuizen / 1938
https://www.zuiderzeecollectie.nl/object/collect/Zuiderzee_museum-57624
- p. 23 © Ed van Wijk / Nederlands Fotomuseum / 1945-1960
- p. 27 © Bruno van den Elshout / 2020
- p. 52 <https://google.com/maps> edited by author
- p. 54 - 66 Collages made by author

References

- Alkemade, F. (2020). *De toekomst van Nederland: De kunst van richting te veranderen*. Uitgeverij THOTH.
- Barton, J., & Pretty, J. (2010). What is the Best Dose of Nature and Green Exercise for Improving Mental Health? A Multi-Study Analysis. *Environmental Science & Technology*, 44(10), 3947–3955.
- Beatley, T. (2016). *Handbook of biophilic city planning and design*. Island Press.
- Bloem, F. (2021, January 4). *Interview with Frank Bloem* [Personal communication].
- BNNVARA. (2019, October 7). Duindorp voor Duindorpers (No. 4). In *Opstandelingen*. https://www.npostart.nl/opstandelingen/10-07-2019/BV_101393562
- Bohlmeijer, L. (2014, April 19). *Kunstenares Sarah van Sonsbeeck leert je wat het belang van stilte is*. De Correspondent. <https://decorrespondent.nl/964/kunstenares-sarah-van-sonsbeeck-leert-je-wat-het-belang-van-stilte-is/67955012928-e5554b5f>
- Bowler, D. E., Buyung-Ali, L. M., Knight, T. M., & Pullin, A. S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health*, 10(1), 456.
- Crefcoeur, P. (2010). *Scheveningen wordt mondain: 125 jaar Kurhaus, kroonjuweel van de Maatschappij Zeebad Scheveningen*. Muzee Scheveningen.
- de Graaf, J., & Camp, D. (1997). *Europe: Coast Wise*. 010 Publishers.
- den Heijer, W. M. (2020, November 18). *Interview with Willem Ment den Heijer* [Personal communication].
- Durif, C. M. F., Browman, H. I., Phillips, J. B., Skiftesvik, A. B., Vøllestad, L. A., & Stockhausen, H. H. (2013). Magnetic Compass Orientation in the European Eel. *PLOS ONE*, 8(3).
- Grieco, L. (2015, June 8). *Bruno van den Elshout and Rob van Hoesel's book New Horizons offers an escape without interruption*. <https://frameweb.com/article/bruno-van-den-elshout-and-rob-van-hoesels-book-new-horizons-offers-an-escape-without-interruption>
- Groat, L. N., & Wang, D. (2002). *Architectural research methods*. John Wiley & Sons.
- Havik, K. (2014). *Urban Literacy: Reading and writing architecture*. Nai010 Publishers.
- Havik, K., & Passinmäki, P. (Eds.). (2019). *Understanding and Designing Place: Considerations on Architecture and Philosophy* (Vol. 38). Tampere University, School of Architecture.
- HITLab. (n.d.). Retrieved 6 January 2021, from <https://sites.google.com/view/hitlabdelft>
- Hulsman, B. (2021, April 1). In de post-coronastad leven we dicht op elkaar, maar met veel groen om ons heen. *NRC*.
- Hulsman, B., & de Voogt, S. (2020, April 16). Hoe de overheid zelf de woningnood creëerde. *NRC*.
- Kim, B., & van der Poel, R. (2020, August 16). 'Het is op Scheveningen helemaal losgeslagen, net Sodom en Gomorra'. *NRC*.
- Koningh, J. (2020, November 19). *Interview with Jordy Koningh* [Personal communication].
- Kuma, K. (2016a). *Natural Architecture* (A. Birnbaum, Trans.). AA Publications.
- Kuma, K. (2016b). *Small Architecture* (A. Birnbaum, Trans.). AA Publications.
- Lucas, R. (2016). *Research Methods for Architecture*. Laurence King Publishing.
- Mallgrave, H. F. (2018). *From object to experience: The new culture of architectural design*. Bloomsbury Visual Arts, Bloomsbury Publishing Plc.
- Malnar, J. M., & Vodvarka, F. (2004). *Sensory design*. University of Minnesota Press.
- Malpas, J. (1999). *Place and experience: A philosophical topography*. Cambridge University Press.
- Massey, D. B. (2005). *For space*. SAGE.
- Meijer, E. (2020, November 18). *Wat vertellen de niet-mensen?* De Groene Amsterdammer. <https://www.groene.nl/artikel/wat-vertellen-de-niet-mensen>
- Mens, F. (2020, November 17). *Interview with Filip Mens* [Personal communication].
- Merleau-Ponty, M. (1964). *Sense and non-sense*. Northwestern University Press.
- Merleau-Ponty, M. (2004). *The world of perception* (O. Davis, Trans.). Routledge, Taylor & Francis Group.
- Metz, T., & Brinkman, E. (2002). *Pret!: Leisure en landschap*. NAI Uitgevers.
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2020). *Staat van de Woningmarkt-Jaarrapportage 2020* [Rapport]. Ministerie van Algemene Zaken. <https://www.rijksoverheid.nl/documenten/rapporten/2020/06/15/staat-van-de-woningmarkt-jaarrapportage-2020>
- NTR. (2013, August 9). Parel aan de Noordzee. In *Andere Tijden*. <https://www.anderetijden.nl/aflevering/78/Parel-aan-de-Noordzee>
- Pallasmaa, J. (2012). *The Eyes of the Skin: Architecture and the Senses*. (3rd edition). John Wiley & Sons Ltd.
- Pronk, M. (2020, November 30). *Interview with Miech Pronk* [Personal communication].
- Rasmussen, S. E. (1959). *Experiencing architecture*. MIT Press.
- Revis, B. (2020). *Een werkbare en leefbare Haven* (DSO/2019.617 RIS305850; Convenant Scheveningen Haven). Gemeente Den Haag.
- Robinson, Sarah. (2011). *Nesting: Body dwelling mind*. William Stout Publishers.
- Roggeveen, D., Hulshof, M., & Arnold, F. (2020). *The Amsterdam agenda: 12 good ideas for the future of cities*. nai010 publishers.
- Stig Boccardi Christensen, C. (2020, October 12). *Interview with Camilla Stig Boccardi Christensen* [Personal communication].
- ter Beke, N., van der Pijll, S., & Timmer, I. (2018). *Noordzeevis uit Scheveningen*. Stichting Noordzeevis uit Scheveningen.
- ter Brugge, J. (2006). Een eigen Hollandsch feest. *Holland, Historisch Tijdschrift*, 38(3), 187-190,223-234.
- Valéry, P. (1998). *Sea shells* (R. Manheim, Trans.). Beacon Press.
- van Brecht, A. (2020, April 12). *Interview with Anne-Marie van Brecht* [Personal communication].
- van den Elshout, B. (2020, November 17). *Interview with Bruno van den Elshout* [Personal communication].
- van der Broek, H. (2020, April 12). *Interview with Hans van den Broek* [Personal communication].

Appendix

Interviews

People interviewed:

- Anne-Marie van Brecht, Heritage specialist and inhabitant of one of the new developments in Duindorp
- Filip Mens, architect, used to have his office in the area and designed “Top Zeilcentrum”
- Bruno van den Elshout, artist and photographer, worked a lot on the coast of The Hague
- Willem Ment Den Heijer, born in Scheveningen, from a fisher man family and editor focussing on the fishing industry
- Geert Verhoeff, initiator F.A.S.T. (surf and event location)
- Hans van den Broek, initiator and management of sustainable surf school The Shore
- Miech Pronk, founder HollandVis, one of the largest fish exporters of Scheveningen and raised in the harbour of Scheveningen
- Jordy Koningh, owner of hostel in Scheveningen and initiator of new surf hostel/hotel in the harbour

For the side studies interviews are conducted with:

- Camilla Stig Boccardi Christensen, owner of Studio Pneuma, architecture for the senses.
- Zinzi Reimert, coordinator of the offshore test site of the North Sea Farmers
- Frank Bloem, fragrance and smell designer, part of Embassy of the North Sea

Questions asked during the interviews:

- Wat is jouw relatie met Scheveningen en Scheveningen-haven?
- Hoe vind jij dat verschillende plekken rond de haven zich tot elkaar verhouden?
- Hoe zie jij dat verschillende gebruikers groepen zich tot elkaar verhouden?
- Zie jij een verandering in hoe vrije tijd wordt besteed in Scheveningen (tijdens COVID)?
- Met welk gebouw heb jij het meest in Scheveningen en waarom?
- Weet jij meer over de plannen (van de gemeente) voor het gebied?
- Is er een programma dat voor jou mist in het gebied? Moet er iets bijkomen of moet er juist iets verdwijnen?

Surveys

The surveys are structured to firstly gain personal information and information on the reason (here the topic of leisure comes in) and frequency of visiting Scheveningen. Secondly, the data on the sensory experiences is gathered (sight, smell, hearing, touch) and the question is asked if the visit resulted in a different feeling. The last question is an investigation on stories and memories of the place. For the questions about sensory experiences the book *Sensory design* (Malnar & Vodvarka, 2004) is consulted. The surveys are conducted on the same locations as the observations of the main research. It was aimed to hand out around 40 surveys to people which varied in terms of age, place of residency and profession, yet because of the restrictions due to the pandemic, only 20 surveys were filed in.

