

# DE-CONSTRUCTING SPATIAL ATMOSPHERE

an attempt to analyse  
the Marineterrein

1	INTRODUCTION	3
2	DEFINITION OF SPATIAL ATMOSPHERE	7
3	HOW CAN SPATIAL ATMOSPHERES BE MENTALLY PERCEIVED?	9
4	HOW CAN SPATIAL ATMOSPHERES BE PHYSICALLY RECOGNIZED?	17
5	CONCLUSION: WHAT IS THE ROLE OF DESIGNERS?	23



# 01 INTRODUCTION

## OBSERVATION IMAGES



#1 The truck containers of innovative projects still occupy the central public place in Marineterrein



#2 The helicopter field provides no facilities to sit on



#3 The terrace of the open swimming pool was fullfilled with people enjoying their leisure time



#4 Instagram page with position hashtag #Marineterrein

# 01 INTRODUCTION

## WHAT

This research paper deals with my personal observations at the Marineterrein in Amsterdam. These observations evolve around theoretical research based on the question: how can spatial atmospheres be perceived as an embodied experience at the site and in what way they can be physically recognized?<sup>1</sup>

I start with exploration and reflection from a user's perspective, in order to achieve a more realistic understanding of spatial atmospheres. What I hope to draw here is the position that a spatial designer can take in dealing with design tasks about spatial atmospheres.

## WHY

My motivation began with two paradoxes from my observation:

Firstly, since 2013, Marineterrein is gradually opening to the public as 'a new city quarter'<sup>2</sup>, which overlooks the demand of the public to use Marineterrein as a spot for leisure activities<sup>3</sup>, or walks after lunch<sup>4</sup>. In the centre of Marineterrein, facilities like truck containers meant for innovative projects largely occupy public space, while public facilities, such as benches and toilets, are in constant shortage.

Secondly, according to the 'strategic decision'<sup>5</sup> document published by local authorities, 'inspiring people to help build the future of the Marineterrein'<sup>5</sup> has always been part of the development strategy. However, the past military influences of the past and over-functionalised space, such as the helicopter field without any sitting facilities, partly limit the behaviour of the users. In summertime, the open swimming pool is



fulfilled with visitors while the helicopter field, surrounded by military walls, remains empty<sup>6</sup>.

The above paradoxes lead to an interesting scenario: even though the Marineterrein is planned to be 'a new city quarter'<sup>2</sup> that encourages collective contribution, the behaviours of users are still specified and separated. For instance, truck containers meant for innovative projects leave no public space for leisure activities, while the open swimming pool also leaves no space for innovative practice.

The scenario has led to different spatial atmospheres described from different perspectives<sup>7</sup>. But it also proves that an analysis of spatial atmospheres that I perceived at the site may help to unlock these reasons underneath the paradoxes in Marineterrein.

## HOW

My research method starts with defining the spatial atmosphere, which leads me to two following questions: how the spatial atmospheres are perceived by users and how local geographical conditions affect spatial atmospheres.

I will unlock the two questions by testing the spatial atmospheres from a user's perspective. My testing method will investigate my personal experiences and group research observations, as a phenomenon to explore, invoke two theoretical case studies from a book 'Architecture in Psychoanalysis'<sup>8</sup> by architectural historian Jane Rendell, and an article 'Prospect and refuge theory'<sup>9</sup> by architect Annemarie S. Dosen and architect Michael J. Ostwald.



## 02 DEFINITION OF SPATIAL ATMOSPHERE

In the architectural field, spatial atmosphere is depicted as 'the very initial and immediate experience of space'<sup>10</sup>. Finish architect Juhani Pallasmaa described his immediate experience in the Laurentian Library in Florence:

"I immediately get tears in my eyes when I step into that space. [...] architecture admits me and authorises me to feel this feeling, which I would otherwise suppress."<sup>11</sup>

Juhani's experience indicates that the spatial atmosphere immediately releases his feeling in the architecture, which reveals that the spatial atmosphere, as a medium, influenced by physical spaces and activates human's mindful feeling. However, the exact manners of how the medium operates are still uncertain.

In the next two chapters, I will explore in which ways the spatial atmospheres activate mindful feelings and get influenced by physical spaces.

#5



# 03 HOW CAN SPATIAL ATMOSPHERES BE MENTALLY PERCEIVED?

## OBSERVATION IMAGES



#6

The open swimming pool facing Amsterdam centre



#7

One swimmer was enjoying the noise from Amsterdam centre



#8

A Dog walker and his dog were sitting on the tiny hill in helicopter field



#9

One beautiful doggy was playing around the tiny hill in helicopter field



# 03 HOW CAN SPATIAL ATMOSPHERES BE MENTALLY PERCEIVED?

## OBSERVATION

From my perspective, spatial atmosphere seems easy to capture, but difficult to analyse, which also puzzled Mark Wigley (architect, author):

"After all, atmosphere is something personal, vague, ephemeral, and difficult to capture in text or design, impossible to define or analyse. Atmosphere is precisely that which evades analysis."<sup>12</sup>

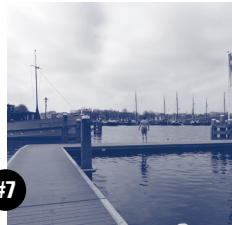
For instance, in an early spring morning, I stepped into Marineterrein and immediately grasped an atmosphere along the swimming pool:

The remote noise from Amsterdam centre vibrated like ocean tides, the thin skyline, the salty breeze, the occasional tweeting... those overall senses brought my mind far away to seaside, but suddenly then I realized that I was simply walking along a shaky board path...

My perception of the spatial atmosphere was pretty like 'a complex multisensory fusion of countless factors which are immediately and synthetically grasped'<sup>13</sup>.

That atmosphere was so vivid, but also quite undefinable, which reminds me of the sense of poetry:

"We might say that we know something only when we are unable to define it. . . . This is what we know what poetry is. We know it so well that we cannot define it".<sup>14</sup>



## THEORITICAL RESEARCH

However, the seemingly mysterious spatial atmosphere becomes reasonable according to a commentary by Juhani Pallasmaa on Rainer Maria Rilke (Bohemian-Austrian poet and novelist, 1875-1926):

"Rilke believes that verses in poetry are not mere feelings, they are experiences. But these experiences have to be forgotten and turned into the blood in the poet's veins before they can give birth to the first line of verse."<sup>15</sup>

Rilke believed that poetry would connect poet's 'forgotten experiences' with readers through verses.

Likewise, the swimming pool atmosphere in Marineterrein indeed reminded me of some fragments of my past experiences about seaside, through countless factors: sounds, images, tastes, and so on, in which process I would analogize the spatial atmosphere as an 'experience reminder'.

# 03 HOW CAN SPATIAL ATMOSPHERES BE MENTALLY PERCEIVED?

## OBSERVATION

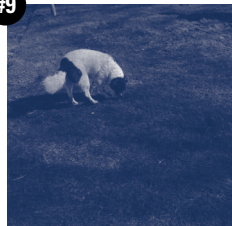
From the perspective of psychoanalysis, spatial atmosphere as an 'experience reminder' can be further elaborated.

For example, as I was sitting on a tiny hill in Marineterrein for the first time, I felt somehow that I had been there before, and all surrounding elements recalled my old memories: a warm afternoon covered by a scorching sun, a few noisy friends wandering around the glittering lawn...



Though I knew it was the first time I had been there, I fell into the recall of past memories, recognizing the unfamiliar things as familiar, fictionalising merely a sense of experience.

#9



## CASE STUDY

My personal experience in Marineterrein suggested that the spatial atmosphere linked my present experience with my past memories. From a book 'Architecture in Psychoanalysis'<sup>16</sup> of architectural historian Jane Rendell, my experience gets further interpreted. Jane Rendell explored the interrelationship between psychoanalysis and architecture, suggested two applications of psychoanalysis in spatial design:

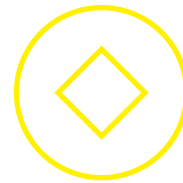
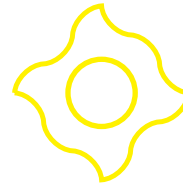
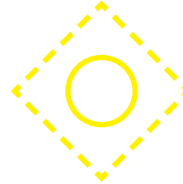
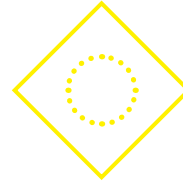
'Déjà vu': a substitute memory used in order to aid repression and to cover up something secret.<sup>17</sup>

'Uncanny': "the opposite of what is familiar" and "frightening precisely because it is not known and familiar."<sup>18</sup>

In Jane Rendell's opinion, the two terms above extracted from psychoanalysis theory, are useful both in design practice and research. She refers to architectural historian Anthony Vidler's research about uncanny in contemporary buildings:

Vidler compared the 'haunted house' as 'unhomely houses', to sharpen the 'contrast between the last and most intimate shelter' and 'the invasion by alien spirits', exposing 'the alienation of modernism' in the field of architecture.<sup>19</sup>

Besides, Jane Rendell also proposed to pay attention to 'déjà vu experiences' involved by the practice of architecture to trigger 'unwanted and often repressed responses in us (as users)'<sup>20</sup>



# 03 HOW CAN SPATIAL ATMOSPHERES BE MENTALLY PERCEIVED ?

## REFLECTION

When I deal with information from interviews of the local users<sup>21</sup>, Jane Rendell's research offers me a new method to understand how the spatial atmospheres of Marineterrein get mentally perceived:

Interviewees firstly found Marineterrein attractive for natural factors: water, lawn, quietness, and so on. As the interview processed, the natural factors evoked 'd  ja vu' experience of the interviewees, such as a peaceful island life in childhood, a summer vacation in Greece, social housing community vibe from 20 years ago.

Besides, some interviewees pointed out an 'uncanny' scene of Marineterrein: back in summer, the helicopter field would remain almost empty while the swimming pool would be over-occupied, for which reason I will further elaborate in the next chapter.<sup>22</sup>

<p>NEARBY DWELLER / LUNCH WALK</p> <p>*Not willing to be interrupted; Prefer walking around water; Non-busy place, quiet, technological events;</p>	<p>PERSONAL TRAINER / WORK</p> <p>*Only office buildings around; Prefer to be in green area - less green in Amsterdam; His military memory has faded away;</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"I would like more chairs...seeing people walking or train running on the other side really makes this side more tranquil, suitable for thinking or just spacing out...luxurious to see a natural scenario in NL.</p>
<p>NEARBY DWELLER / RELAX, GET LOST IN NATURE, SWIM, LAPTOP WORK</p> <p>Prefer to be in public, crowded, but also green fields; Historical place, but also nothing to do with him;</p>	<p>START-UP COMPANY EMPLOYEE/ WORK BREAK</p> <p>*Not really hang out, limited near to the office building / even Safer with the military symbols; Prefer to watch swimming pool area the most;</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"Toilet is needed!...It's the only empty place near centraal...sometimes I wanna do ballet or soft sports here the grass filed."</p>
<p>NEARBY DWELLER / WALK, CHILL</p> <p>Prefer to walk along the water, go for picnic in front the museum, meditate; Festival favourite place in Amsterdam / Ordinary people community;</p>	<p>START-UP COMPANY EMPLOYEE WORK BREAK</p> <p>*Not really hang out limited near to the office building / Safe; Nothing to do with her memories;</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"I would like to have more space on the bridge to enjoy, because people keeping walking around and disturbing us."</p>
<p>NEARBY DWELLER / DOG WALKER</p> <p>Prefer to go around the water, but not to do sports; Open, public park;</p>	<p>START-UP COMPANY CO-FOUNDER</p> <p>*Very much safe, partly public but also confined; *Feel safe to park his car which is important to him; Prefer the young atmosphere, but not willing to join;</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"There are two sides of the island, one is 'people/busy/' side and the other is 'dog/quiet' side...military walls make me feel there are stories here, it's quite unique to explore."</p>
<p>NEARBY DWELLER / WALK, DO SPORTS WITH FRIENDS</p> <p>*Military symbols are interesting and mystery, because its not like police, but also a bit afraid of military guys; Prefer to be by the water - spatioous;</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"For me being only in underwear is indeed a bit wierd, but with a lot of people doing the same, then it is ok."</p>	<p>CHILLING YOUNG PEOPLE</p> <p>"I feel easy to be only in underwear not in swimsuits, because everyone here is young and elder people of course would not care."</p>



# 04 HOW CAN SPATIAL ATMOSPHERES BE PHYSICALLY RECOGNIZED?

## OBSERVATION IMAGES



#10

A group of young people was sitting in a boat, enjoying their leisure time in the open swimming pool



#11

Several groups of young people were sitting on the lawn, enjoying their leisure time towards the open swimming pool



#12

The helicopter field remained almost empty at the same time as image #7



#13

Some dog walkers with their puppies were walking around the tiny hill in helicopter field, without much talking



# 04 HOW CAN SPATIAL ATMOSPHERES BE PHYSICALLY RECOGNIZED?

## OBSERVATION

In this chapter, I try to explore how spatial atmospheres get influenced by different physical conditions of Marineterrein, such as water, hills, lawns, and affect users' behavior. I start with my observation:

In good weather conditions, the open swimming pool area would be over-fulfilled with people, while the nearby helicopter field would remain empty, which left a considerable impact on people's behaviours.

Around the open swimming pool, people would sit in a circle or side by side, facing towards the water, their stay can last for hours.

According to interviewees, in the summer of 2020, this phenomenon was also prevalent on the lawn next to the open swimming pool and in the fringe area facing Amsterdam centre.

However, in the same weather conditions, the helicopter field surrounded by military buildings would remain almost empty, with few people sitting but mostly walking around.



## CASE STUDY

The case study of 'prospect and refuge' theory provides an explanation. It was originally proposed by ecological psychologist Jay Appleton in 1975, specified in architectural analysis by architects Annemarie S. Dosen and Michael J. Ostwald.

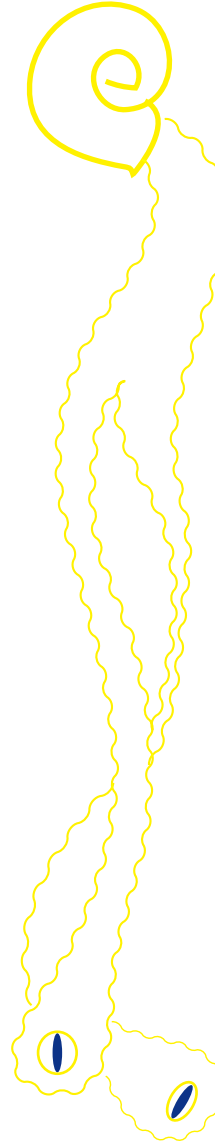
The 'prospect and refuge' theory suggests that humans seek out environments that make them feel secure, such environments usually provide sheltered space as 'refuge', like caves, tree shade, low eave, etc, and open views for observation as 'prospect', like hilltops, balconies.<sup>23</sup>

In 2010, a research paper dealing with 'preferences for seating areas'<sup>24</sup> practiced the 'prospect and refuge' theory in public domain.

148 users from the park were asked to mark various features (prospect, refuge, preferred seating area, non-preferred seating area, etc.) corresponding to their location on the master plan. The term 'prospect' and 'refuge' features in the park were respectively cited by the authors as 'views towards the black sea' and 'features of topography and vegetation'.

By overlaying the answers to each feature on the master plan, it was shown that there was a high correlation between the places identified by the 'prospect' and 'preferred seating area' features. However, the 'refuge' and 'preferred seating areas' features did not show a high correlation, which was interpreted by the authors as being related to the high level of security of the park.

Besides, the authors also mentioned that the desire to explore in public spaces also drives users to prefer 'prospect' instead of 'refuge'.



# 04 HOW CAN SPATIAL ATMOSPHERES BE PHYSICALLY RECOGNIZED?

## REFLECTION

Applying the 'Prospect and refuge'<sup>25</sup> theory to my observation in Marineterrein, I draw two reasons to explain the difference in spatial atmospheres between the open swimming pool and the helicopter field:

Firstly, the open swimming pool area has a wider view towards the centre of Amsterdam, whereas the view of helicopter field is blocked by trams and buildings.

Secondly, in the open swimming pool area, various sensory factors, such as water, light, paths that invite people to explore, make this area more attractive, while in the helicopter field, the sensory factors and the variation of space are relatively monotonous, that diminishes the desire of people to explore and stay.





# 05 CONCLUSION: WHAT IS THE ROLE OF DESIGNERS?

Juhani Pallasmaa remarked that spatial atmosphere is 'an unfocused quality'<sup>26</sup>, it has to be experienced in 'an unfocused and partly unconscious manner'<sup>26</sup> which brings designers with a great challenge: how to use tangible tools to interfere with intangible atmospheres?

#14

What I have obtained through my research is that spatial atmospheres are crucial for evoking users' memory, it provides users with presumptions of how to use space. Besides, spatial atmospheres are also recognizable from physical factors that trigger users' sensory experience, such as water, lawn, hill, and so on. Therefore, as a designer, understanding the site and its users is necessary.

It is also important to note that the role of the designer changes in the process: the atmosphere cannot be formed by the designer alone, but with the designer as the initiator, coordinating the balance between the physical conditions of the site and the activation of users' imagination.

Juhani Pallasmaa said the nature of public space 'is not to specify action, but to invite action, [...] should not specify emotion, but should invite emotion.'<sup>27</sup> Likewise, the atmospheres in Marineterrein should not specify people's action, but should be more inclusive for the public to join in.

As a designer, I do not see my role as emphasising a particular spatial atmosphere of Marineterrein, but as using spatial atmospheres as a tool, to discover spaces that contain the potential to be activated.



Malte Leon Sonnenschein  
Georgina Patazopoulou

# 06 REFERENCES

1

As a result of the chapter 'definition of spatial atmosphere'

2

<https://www.amsterdam.nl/projecten/marine-terrein>, English page by Google Translate

3

See image #4

4

Concluded by interviews to the local users, most of the frequent users said that they use Marineterrein as a walk place for most of the times.

5

[https://www.marineterrein.nl/wp-content/uploads/2014/09/samenvatting\\_strategienota\\_marineterrein-2.pdf](https://www.marineterrein.nl/wp-content/uploads/2014/09/samenvatting_strategienota_marineterrein-2.pdf), published by the central government and the municipality of Amsterdam city in 2013, Page 2, English translated by DeepL

6

According to interviews to the local users, cooperated with Georgina Pantazopoulou

7

See for 3.4.6

8

Jane Rendell, *The Architecture of Psychoanalysis*, 2017

9

Annemarie S. Dosen and Michael J. Ostwald, *Prospect and refuge theory: Constructing a critical definition for architecture and design*,

Article in *The International Journal of Design in Society*, January 2013

10

OASE 91-3, Klaske Havik, Hans Teerds and Gus Tielens, Editorial, *Building Atmosphere*

11

OASE 91-33, *Atmosphere, Compassion and Embodied Experience: A Conversation about Atmosphere with Juhani Pallasmaa*, 2012, Page 43

12

Mark Wigley, 'Architecture of Atmosphere', in: *Constructing Atmospheres*, Daidalos, no. 68 (1998).

13

Juhani Pallasmaa, 'Space, Place and Atmosphere' lezing (Den Haag: Koninklijke Academie van Beeldende Kunsten/STROOM, 24 April 2012).

14

Jorge Luis Borges (Argentine short-story writer, essayist, poet and translator, 1899-1986), from the Charles Eliot Norton Lectures 1967-1968, in: *This Craft of Verse* (Cambridge, MA: Harvard University Press, 2000)

15

'For poems are not, as people think, simply emotions (one has emotions early enough) – they are experiences.' Rainer Maria Rilke, *The Notebooks of Malte Laurids Brigge* edited and translated into English by Stephen Mitchell (New York: Vintage International, 1990 [1910]), 19.

# 06 REFERENCES

16

Jane Rendell, *The Architecture of Psychoanalysis*, 2017

17

Jane Rendell, *The Architecture of Psychoanalysis*, 2017, Page 14

18

Freud, 'The "Uncanny"', Page 220.

19

Anthony Vidler, *The Architectural Uncanny: Essays in the Modern Unhomely* (Cambridge, Mass.: The MIT Press, 1992). Page 1

20

She explored this issue in a new project, *May Mo(u)rn*. See for example, Jane Rendell, 'May Mo(u)rn: A Site-Writing', Nadir Lahiji (ed.), *Essays in honour of Frederic Jameson*, (London: Ashgate, forthcoming 2011). See also two text-image works, Jane Rendell, 'May Morn', Gareth Edwards (ed.), *The Re-Enchantment: Place and Its Meanings*, (an Arts Council of England funded publication) (2010) and Jane Rendell, 'May Mourn', Sophie Warren and Jonathan Mosely (eds), *Beyond Utopia* (Los Angeles: Errant Bodies Press, 2011).

21

Group work by Georgina Pantazopoulou, Chen Liu, Malte Leon Sonnenschein and Caterina Tioli. Interview questions are mainly about users' personal experiences in *Marineterrein*.

22

See for the next chapter 'How can spatial atmospheres be physically recognized?'

23

Annemarie S. Dosen and Michael J. Ostwald, *Prospect and refuge theory: Constructing a critical definition for architecture and design*, Article in *The International Journal of Design in Society*, January 2013

24

Sema Mumcu, Tugba Düzenli and Ali Özbilen, *Prospect and refuge as the predictors of preferences for seating areas*, 2010, Page 1

25

See for the first paragraph of the chapter 'How can spatial atmospheres be physically recognized?'

26

Referring to his discussion of peripheral vision in his lecture in the series 'Architectural Positions', 10 May 2007, Faculty of Architecture of Delft University of Technology; published as Juhani Pallasmaa, 'Inhabiting Space and Time-the Loss and Recovery of Public Space', in: Tom Avermaete, Klaske Havik and Hans Teerds (eds.) *Architectural Positions. Architecture, Modernity and the Public Sphere* (Amsterdam: SUN Architecture, 2009), 125-133.

27

Klaske Havik and Gus Tielens, *Atmosphere, Compassion and Embodied Experience A Conversation about Atmosphere with Juhani Pallasmaa*, Page 43