



# *Elements for Appropriation*

*Cultural and ecological values  
of interstitial urban spaces  
in the Netherlands*

Timon Kuiters

P5 report

# *Colophon*

Timon Kuiters  
4848365

First mentor:  
Dr. Alexander Wandl  
Department of Urbanism, section of Environmental Technology and Design

Second mentor:  
Prof.ir. Adriaan Geuze  
Department of Urbanism, section of Landscape Architecture

P5 report  
October 22, 2024

All images are the author's own work, unless noted otherwise

*Cover image: Zoetermeer*  
*Back cover image: Zoetermeer*



# Abstract

Interstitial urban spaces form an exception in the very organised urban-rural monocultural landscapes in the Netherlands. These unplanned in-between spaces are rarely valued from a traditional planning perspective, in which they are seen as “empty” or “unused”, thus ready for development. They are, however, an important refuge for people and wildlife alike, who do not fit in the monocultures of urban life and agriculture. However, the unplanned character that is core to their nature and arguably their value might be easily disturbed by design activities, and thus urban densification in the Netherlands is a threat to the existence of these spaces. Through the research question “How could urban interstitial spaces in the Netherlands provide cultural and ecological value?” The aim is to find a better way to describe, design, and value these spaces. Next to theoretical exploration, site analysis and field-work, explorative design is used to imagine how interstitial urban spaces could look and function to support and sustain the cultural and ecological values for the people and wildlife that make use of these spaces, could encourage bottom-up spatial development and inspire by illustrating what is possible.

**Keywords:** in-between spaces, bottom-up development, spatial appropriation, spatial development, landscape photography





# Table of Contents

<b>Motivation</b>	<b>5</b>	<b>Test Case: Vlietzoom</b>	<b>80</b>
		Introduction	80
<b>Introduction</b>	<b>6</b>	Definition & Delineation of the area	80
research aim	8	Tussenruimte-beheer	85
societal relevance	8	15-year interbellum - three scenarios	87
scientific relevance	11	Basis of new plans	108
report overview	13		
<b>Problem field</b>	<b>14</b>	<b>Discussion &amp; Conclusion</b>	<b>112</b>
Biodiversity loss	14	<b>Reflection</b>	<b>116</b>
Lack of space for alternative individuals and communities	14	<b>References</b>	<b>122</b>
Densification	15		
Problem statement	15		
<b>Theory &amp; Concepts</b>	<b>16</b>		
<b>Research &amp; Design approach</b>	<b>25</b>		
Research Questions & methods	25		
Analytical framework	27		
<b>Analysis</b>	<b>28</b>		
Ecology	30		
Culture	35		
Conclusion of the Analysis	68		
<b>Elements for Appropriation</b>	<b>70</b>		
<b>Manifesto for in-between spaces</b>	<b>76</b>		





# Motivation

For some time I have been fascinated by in-between spaces in cities: post-industrial areas or the “frayed edges” (rafelranden in Dutch) of urban areas. In 2023 Q4 I followed an elective course that focused on one of these spaces, the Land van Chabot in Rotterdam. This course reaffirmed my fascination, and provided me with a new term for them: interstitial urban spaces. The concepts surrounding these ambiguous spaces themselves seem to reflect their ambiguity; there are many related terms to refer to these spaces. One thing that is certain, however, is that alternative functions seem to find refuge there. People active in fields not easily fitting into the rules of urban economy, for instance artists, seem drawn to these unregulated spaces in both where they work and as the subject of their work. I myself, as a cinephile, became more explicitly aware of this when I watched Jim Jarmusch’ debut feature *Permanent Vacation*. Next to a refuge for certain groups of people, these ambiguous urban spaces also seem to provide refuge for wildlife, as they provide ecological value too. Ecology and a focus on not just human users is a theme in many of my previous projects as well, so combining these interests in this thesis seemed a natural fit.

*Land van Chabot, Rotterdam*

# Introduction

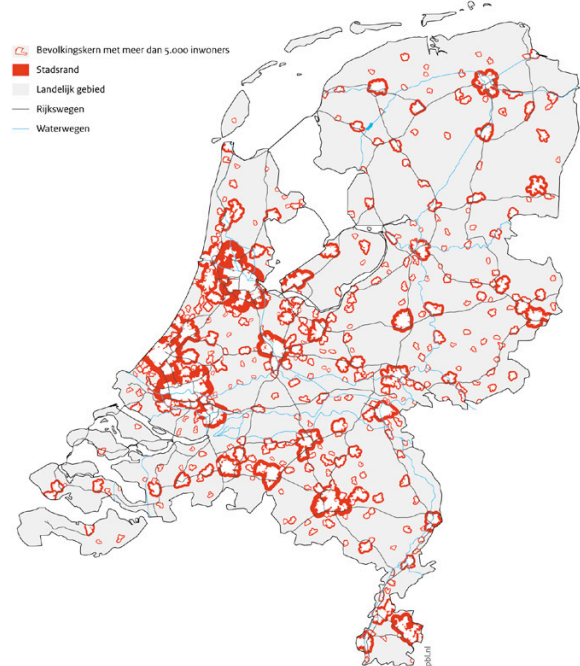
The Netherlands is known for its extensive patterns in organised spatial planning. It looks very neat, from a satellite view, and also when experiencing some of its infrastructure. This is the case both for its urban developments and its rural landscapes. Agricultural areas are carved up in neat plots divided by ditches to manage the water levels, and even “natural” areas are often clearly delineated, planned, and often man-made. The practice of spatial design is focused on planning either this urban or rural landscape. However, it is often overlooked that in reality this urban-rural dichotomy does not exist. Rural-urban edges are very much blurred and much more ambiguous. As an example, while on a small scale the edge between an urban and non-urban space can appear distinct, often at a larger scale this non-urban area is just a green structure within a larger urban structure, and the edge is not an edge at all. Also, the other way around, at a large scale some pattern can look like an edge but, zooming in, the transitional zone might not at all be perceived as such. So in practice these ambiguous spaces are often hard to define and grasp as they appear different at different scales.

Next to providing space for golf courses and allotment gardens, some dog-walking parks and sports facilities, these left-over spaces, often nestled in-between infrastructure in the fringes of the city, seemingly forgotten by planners, are where alternative functions appear to seek refuge. They are not only or always located in-between urban and rural areas, but are characterised by a typology that is in-between a multitude of con-



(top) Almere Buiten. photo Maarten van de Biezen  
© Holland Luchtfoto

(bottom) City fringes around Dutch population centres with more than 5000 inhabitants. At many places, it looks more like a patchwork than distinct edges. source: Stadsranden. Schakelzones tussen stad en land. PBL, 2018, p. 17



Bron: CBS, bewerking PBL

(right) Rural-urban edges can appear differently at different scales  
Imagery: PDOK



0 100 200m

## Arnhem

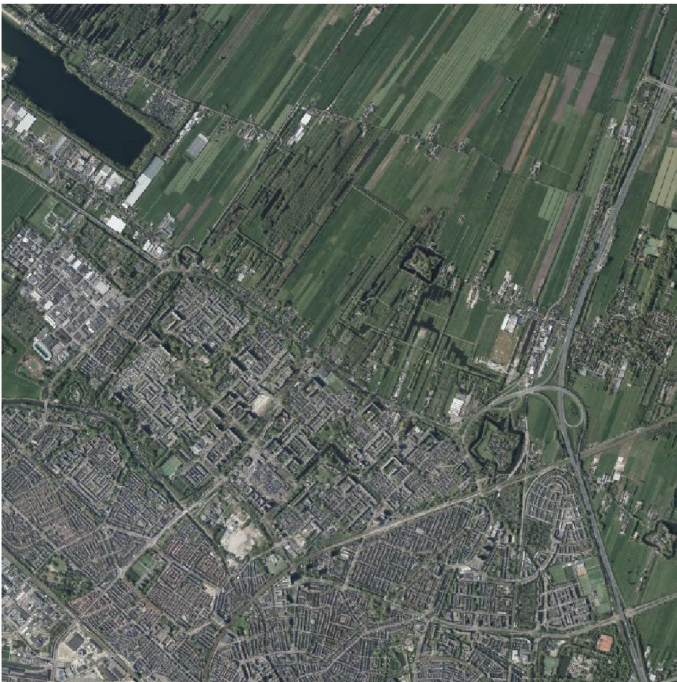
0 1 2km



0 1 2km

## Utrecht

0 100 200m





cepts. Homogeneity resulting from structured urban design leaves little room for improvisation and non-prescribed use on the user's part, so perhaps that is why it is these ambiguous spaces, lacking a master-plan determining the way they are (dis)organised, that seem to provide refuge for people who don't quite fit the mould prescribed by the planned city, and an alternative cultural development can find its place. A kind of culture that needs space like this because it would be out of place anywhere else in the urban context but which still requires the urban context to exist in, and is integral to the vitality of urban culture. So these ambiguous spaces can become home to diverse & eclectic communities and "designs", and develop their own cultural identity, precisely because they have been neglected or overlooked in traditional spatial planning. I think it is this cultural identity of misfits in the traditional plans that drew me to these ambiguous urban spaces.

So while it may look untidy and unstructured, and perhaps undesirable from a traditional planning perspective, from the perspective of a wandering human being, an animal, or a plant, it looks or feels very different. In between the monocultural land-management of the agricultural areas and the human and pavement-dominated urban environments, these ambiguous in-between spaces provide refuge for wildlife as well, so next to their cultural value, they also provide ecological value.

## Aim

The aim of this study is to gain a better understanding of the values of interstitial urban spaces in the Netherlands to different valuable and vulnerable groups of people and wildlife. Throughout this thesis the term 'wildlife' is used to refer to all forms of spontaneous non-human life, thus including animals, plants, fungi. I will study these spaces mainly through two lenses: those of the cultural and ecological values they provide. In that way I will attempt to develop a better way of understanding, describing, designing around, and appreciating these not straightforward to name spaces.

By studying interstitial urban spaces throughout the Netherlands through the perspectives of cultural and ecological values the aim is to gain insight into how these values can be protected or maybe even enhanced. By using explorative design the intention is to combine values for multiple actors, to benefit healthy and biodiverse ecosystems, while preserving value as refuge for people as well. While design will be used as a method of exploration and research, the aim is explicitly not to produce a single project or plan that could be realistically implemented, but to imagine how interstitial urban spaces could look and function to support and sustain the values and ways of living of the target groups, and inspire by illustrating what is possible.









## *Scientific relevance*

While the topic of in-between spaces has been discussed widely at different scales and contexts, my thesis will focus on the unique Dutch context.

In design practice there seems to be a lack of attention and appreciation for the values that these ambiguous urban spaces provide. In theory however, while there is no crystallised terminology, there is a growing abundance of terms used to describe different variations of concepts and perspectives related to these spaces. This terminological fluidity is inherent to the typology of these places and fruitful for further conceptual developments and explorations in urban design. Matos (2009) also argues that the study of this subject is relevant for finding new ways of approaching urban design. Meanwhile, the typologies that are the subject of this thesis are very prevalent and cover a significant portion of the country.

To gain a better understanding of these spaces the focus of this thesis will be on the perspectives of cultural and ecological values. Research by design will be used to study ways to combine these values, and thus provide inspiration for the value these places could bring to vulnerable and valuable people and wildlife.

Discussing the social and ecological value of parks and park-systems, Wandl et al. (2016) highlights a “need to better understand, plan and implement multifunctional green spaces.” (p. 58), illustrating the relevance of studying and combining both cultural and ecological values.

*Land van Chabot, Rotterdam*

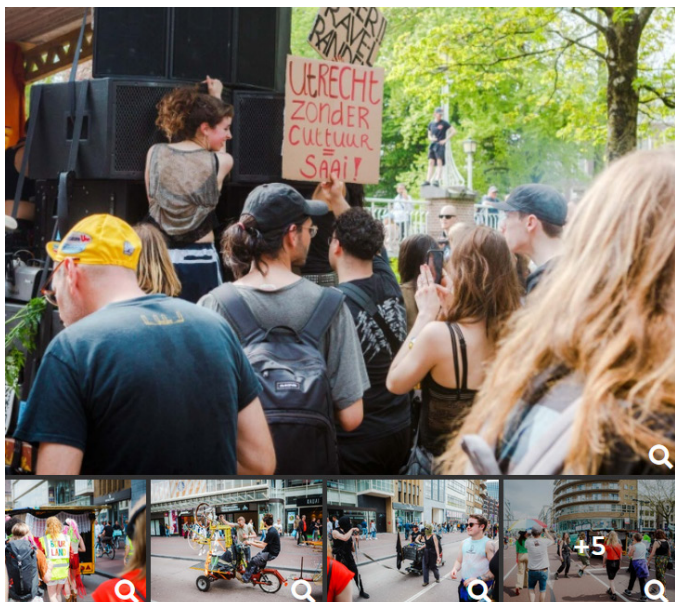
## *Societal relevance*

The topic of this thesis deals with issues concerning vulnerable groups and segregation in a few specific ways. The spaces in the margins of cities that are the topic of my thesis now often function as an informal place for marginalised communities and activities. A base for the project is the recognition of the value these spaces can provide for spontaneous developments nowhere else at home. Concerning new developments in these spaces it is a challenge to strengthen or at least retain the social functions they are developing and prevent their premature demise.

Often the character of these spaces is temporary, almost by definition. Because from the perspective of traditional planning these spaces are perceived as left-overs, as soon as an opportunity for further development presents itself these spaces are easily lost to new planning following well-trodden paths.

In the Netherlands, a consequence of the policy to densify existing cities instead of further urban expansion is that the blurred edges of cities are no longer continuously shifting outward. But still these informal spaces are seen as non-productive parts of the city, so eagerly developed into planned parts of the dense city. Thus, densification forms a threatening pressure to the existence of these more ambiguous remnants in the urban fabric.





3voor12 Utrecht

9 MEI 2023 / DOOR MIREL MASIC

## Demonstratie Rave voor de Rafelranden trekt door Utrecht

Initiatiefnemers vragen aandacht voor kostbare culturele vrijplaatsen

Op een zonnige zaterdag 6 mei trok een demonstratieve rave door het centrum van Utrecht. De organisatoren achter deze [Rave voor de Rafelranden](#) vragen aandacht voor de zogenaamde 'rafelranden' van de stad, plekken waar onafhankelijke kunst en cultuur mogelijk worden gemaakt. Utrecht heeft zijn rafelranden (zoals Buurland of Hof van Cartesius bijvoorbeeld), maar er is volgens de organisatie geen

## Waarom Grunn rafelranden moet koesteren in plaats van volbouwen. Zonder wordt Stad een saaie eenheidsworst

20 augustus 2022, 17:07 • Actueel

Deel dit artikel



Laatste rafelrand van Zuid dreigt te verdwijnen: 'Je kan zo'n plek makkelijk opheffen, maar je krijgt het niet meer terug'



So it is important to highlight and investigate the value that they actually have, and advocate for preservation and cultivation of those values, through imagining developments in a virtual left-over space.

Although seemingly overlooked from a planning perspective, and often depicted as untidy (Nabielek et al., 2013b), there surely is some public acknowledgement that these spaces have irreplaceable value. In news articles like “Laatste rafelrand van Zuid dreigt te verdwijnen” (Van Gelder, 2023) and “Waarom Grunn rafelranden moet koesteren in plaats van volbouwen” (SIKKOM Redactie, 2022) the in-between spaces lost to urban developments are lamented. In summer of 2023, in Utrecht a “rave voor de rafelranden” (rave for the frayed edges) called for municipal policy to protect these spaces and prevent their demise (Masic, 2023).

The unplanned and relatively wild character of these spaces could be cultivated in a way to foster opportunities to reconnect city-dwellers with close natural elements. Recognising and protecting the ecological value of these often informal urban green spaces also contributes to the urgent planetary topic of countering biodiversity loss.

## Report Overview

Following this introduction, first the problem field will be discussed to provide more background on the key problems surrounding interstitial spaces - the pressure of urban densification, biodiversity loss, and loss of space for alternative or experimental communities and for the unexpected.

Then the concepts and theories that are pertinent to the topic of these ambiguous spaces are discussed. Next, research questions are introduced, followed by an outlining of the methods used to investigate each question, and providing an overview of how in the rest of the report these questions are answered.

*Dutch news articles featuring “rafelranden” and that they must be protected.*

*Sources:*

*Masic, 2023*

*SIKKOM Redactie, 2022*

*van Gelder, 2023*



# Problem Field

## Biodiversity loss

As agricultural practices have greatly intensified and become ever more efficient in their production output, rural agricultural areas have become extremely impoverished in providing space for its natural inhabitants. Agricultural development is linked to biodiversity loss worldwide (Tilman et al., 2017). Next to these uniform monocultures in agricultural areas, cities are in a sense monocultures too, as they are human-dominated built environments. Vink et al. (2017, p. 7) argues that as modern countryside is less suited for wildlife, and an increasing proportion of the population is living in expanding urban areas, the place of nature and wildlife in cities is of increasing importance.

Informal urban green space, which in-between spaces often are, also provide ecological value, and form a potential for biodiversity (Rupprecht et al., 2015).

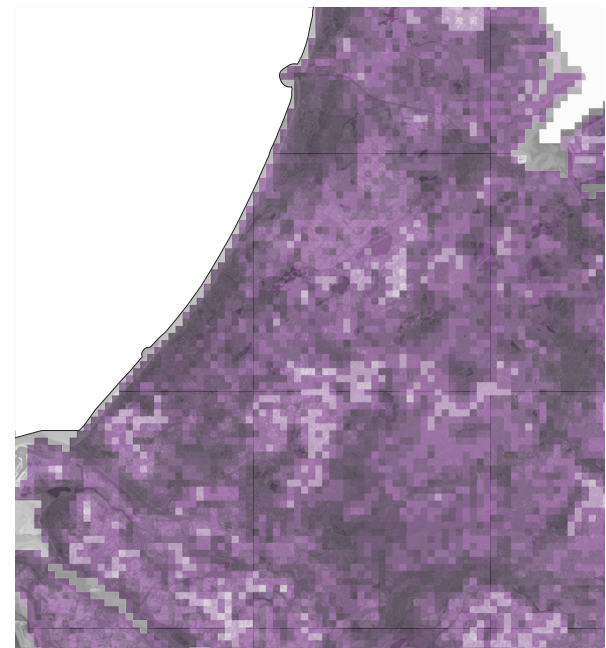
Monocultures are inherently not diverse mixed places, and different groups are often segregated from each other. Thus, monocultural environments in cities and rural areas result in multiple forms of segregation between groups: wildlife species, different groups of people, also separation between people and wildlife (wildlife here includes all non-human life, so plants as well). In these constellations the left-overs of planned design often function as unplanned opportunities for connecting the separated and to diversify life.

*Diversity of species per square kilometer. Lighter means fewer species. Remarkably, green heart a green agricultural area, has relatively few species. (data: Soortendiversiteit in Nederland, Bij12)*

## Lack of space for alternative individuals and communities

These unplanned spaces on the fringe of the city seem to function as a kind of refuge for people and functions that can find no place in the planned urban environment, but nonetheless are a part of city-life in general.

A short search already reveals numerous articles where these spaces are valued and threatened. This threat is often the reason why they appear in media, but always they are described in their valuable and irreplaceable role.



Apart from the three articles already discussed in the societal relevance, a series of articles about Meinerswijk in Arnhem, an in-between space that also functions as a homosexual meeting place, discusses the needs and values of spaces like this, the relation to mainstream norms, and attitude of authorities, and its uncertain future. (Duineveld, 2016)

A well-known refuge for counter-culture, Ruigoord in Amsterdam, which provides space for people who do not fit into mainstream urban life. The place has already existed for 50 years, but still its future remains uncertain, as authorities recognise its value but still put increasing restrictions on its freedom. (Knijnenburg, 2023)

## ***Densification***

Interstitial spaces in the fringe of cities were traditionally seen as temporary spaces as the city expanded (Nitsch, 2015), but as the focus for modern Dutch cities is more on densification than expansion, the modern Dutch context is different. Still, the pressures of developments impact these spaces. In a report exploring the possibilities for densification in the Netherlands (Nabielek et al., 2012), locations on the inside of the city edge are named as one of five types of future locations for densification.

## ***Problem statement***

Interstitial urban spaces form an exception in the urban-rural monocultures. These vary widely in size and appearance, but often they are less organised than the (especially in the Netherlands)

very organised and planned urban and rural landscapes that surround them. These unplanned in-between spaces are rarely valued from a traditional planning perspective, in which they are seen as “empty” or “unused”, thus ready for development.

They are, however, an important refuge for people and wildlife alike, who do not fit in the monocultures of urban life and agriculture. While they also present an opportunity for developing more bio-diverse environments, there is a possible conflict between the needs of human and non-human users of these spaces, and the unplanned character that is core to their nature and arguably their value might be easily disturbed by design activities. Next to this, densification of the urban areas in the Netherlands is a threat to the existence of these often undervalued spaces as well.

These in-between spaces are left-overs of planning activity, and never in a permanent and stable condition. However, functioning as a refuge for people and wildlife alike, they fulfil an important function in the urban context, which could easily be disturbed by traditional planning activities. Matos (2009) emphasises the importance of understanding these spaces for their protection: “it is imperative to proceed to an appropriate and intentional reconstruction of these spaces as a vital condition for its defence, which can be guaranteed by understanding and utilising it.” (p.61) The challenge in urban design this implies is that while action must be taken in regard to these spaces, it is imperative to develop alternative ways of acting upon these spaces to avoid their destruction in doing so, and instead enrich their value.



# Theory & Concepts

The typologies that are the subject of this thesis are very prevalent and cover a significant portion of the country. The abundance of terms used in literature is itself an indication of the ambiguity specific to this subject. This inherent terminological fluidity of these places is fruitful for further conceptual developments and explorations in urban design. Depending on the perspective an aspect of the subject will be highlighted and a different name will be used to define it.

Between around 1500-1800 fortifications protected the city inside, while outside these walls all kinds of functions related to the city were located, from places to escape and stroll around to allotment gardens, plague-houses and industrial work-places. After the mid-19th century, when city walls were demolished, city expansion started. New workers' housing was built at the edges of cities to house the growing worker population (LOLA landscape architects, 2011). Lucas and Van Oort (1993) note that although from around 1900 the attention was shifted from avoiding building around the city to explicitly building around the city, this did not lead to specific policy concerning the urban fringe. After WWII the development of the city fringe gained momentum, and in the following decades, memorandi on spatial planning (Ruimtelijke nota's) steered the spatial development of the country. While this planned nature of city expansion led to a clear definition of edges between rural and urban space, the Fourth Memorandum on Extra Spatial Planning (Vierde Nota Ruimtelijke Ordening Extra, or VINEX) in 1991, resulted in sharp edges being blurred more as mar-

ket forces and municipalities had more influence in the precise elaboration of plans. (LOLA landscape architects, 2011) According to LOLA landscape architects (2011), the focus on carefully managed VINEX locations distracted from other in-between areas. It is in these spaces, neglected by planning policies, that this thesis has its main focus.

The Dutch situation of in-between areas is often seen as distinct from international examples. Apart from the unique planning tradition that shaped the development landscape after WWII, one of the things that sets the Dutch situation of in-between spaces apart from international examples is the relatively smaller scale (Lucas & Van Oort, 1993). A report by the Netherlands Environmental Assessment agency states that one of the key differences is that in the Netherlands urban functions only started spreading over the previous periphery in the 60s, while in other countries this happened much earlier (Hamers et al., 2009).

*A word-cloud depicting some of the terminology used to describe the concepts of the spaces that are the topic of this thesis*

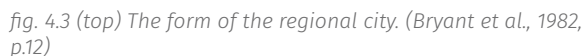
ambiguous space  
residual space  
loose space  
interstitial space  
shadowland  
brownfields      vague  
                 terrains vagues  
territories in-between  
                 areas in-between      chaos  
                 in-between land  
                 urban-rural  
                 urban void      fringe  
heterogenous      peri-urban      margins  
                 undefined      peripheral  
                 diverse      zones  
left-over      transition  
                 eclectic  
                 edae





Using an adaptation of the quantitative methods described by Wandl (2014), a map was produced depicting an indication of the territories in-between of the Netherlands. It shows the 500x500m grid cells with a population between 38 and 1250 people, as well as areas marked by the CORINE land cover data as industrial or commercial units, road and rail networks and associated land, port areas, airports, mineral extraction sites, dump sites and construction sites, with areas marked as “highly urban” removed. In this map, the territories in-between cover 23.5% of the land area in the Netherlands.

(left) An approximation of the territories in-between of the Netherlands. Method after Wandl (2014)  
data: CBS, CORINE land cover 2018



The diagram illustrates a city model with concentric zones and various urban features. The zones are labeled as follows:

- Perifeer gelegen landelijk gebied
- Stadsrandzone
- Peri-urban gebied
- Bebouwde kom
- Stadsrand
- Overstadsrand- gangsgedebied
- Stadsrandzone

The diagram also shows various urban features and their distribution:

- bebouwde kom, agglomeratie met gemeentegrenzen
- suburbane gemeente
- infrastructurele stadsexclaves
- stadsrand exclaves
- stadsrand enclaves
- new town
- exurb
- rurale kern
- groeikern overlooppgemeente
- geïsoleerde niet-agrarische woning
- verborgen suburbanisatie

Bron: naar Bryant 1982, van Oort 1986.



of the Dutch situation, which is not represented by this graphic of an island city with rural surroundings, but a much blurrier fabric.

In a report called **Tussenland** the Dutch Environmental Assessment agency described “tussenland” as “between city and countryside, has many properties, but cannot be traced back to either one” (Frijters et al., 2004). They highlight the view of hidden lands as havens and incubators, in which free-spirited minds want to withdraw from, activists want to confront, and artists want to reflect on society.

David Hamers used the term **Shadowland** (Wandl et al., 2014) to describe “in-between areas characterised by administrative and spatial fragmentation” (Nabielek et al., 2013a, p. 970), and refers to the Tussenland study to characterise it “by the coexistence of different functions that have little in common” (Nabielek et al., 2013a, p. 970)

While shadowland can be perceived as ‘untidy’, it is recognised they offer opportunities for “small-scale local activities” (Nabielek et al., 2013a, p. 970), but also that those activities that may have a positive effect on the area may be banished as more are being transformed into business parks or commercial areas, mostly through demolition of what is there.

(Nabielek et al., 2013a) suggests that “a more sustainable way to transform Shadowland could be to strengthen the local identity and landscape qualities and to improve (public) transport connections” (p. 970)

This provides one possible strategy to engage with these spaces as Matos (2009) suggests.

Luo and De Wit (2022), from a landscape architectural design perspective, see **leftover spaces** as “**urban interstices** that are open to spontaneous socioecological appropriation, complementary to defined and managed urban open spaces”, and also highlight both their social and ecological value. Next to the spatial aspect of in-between spaces they also consider their vagueness and fluidity in a temporal sense.

Ecological function of a landscape is not easily appreciated by the general public, unless trained for it, people often perceive it as messy and not very valuable (Nassauer, 1995). Nassau (1995) also states that “Nature is a cultural concept frequently mistaken as an indication of ecological quality”, and that at least from an American perspective, the cultural concept of nature as it is appreciated is based on beauty and how picturesque something looks, not an indication of ecological value.

To help appreciation of more ecological landscapes Nassau proposes to frame these ecological developments in design elements she calls “**cues to care**”. These help balance ecological value with looking attractive to people as well. An essential quality in these cues are signs of human intention, as these signal to people that a place is cared for, and therefore more valuable.

While the concept of cues to care originated mainly in an American context of landscape design, it is relevant and applicable to Dutch interstitial urban



*Le Terrain Vague. Man Ray, 1932*



spaces as well. These spaces are often perceived as messy and thus under-appreciated while possibly providing significant ecological value.

Central to the discussion on cues to care is the tension that exists between ecological value of places and the human appreciation of those places, and the existential requirement of some public appreciation for their protection and continued existence in a human-dominated environment.

Luo and De Wit recognise the paradox in designing these spaces, as part of their defining quality is that they are not planned: “design projects a set of definitions onto the site that erase its indeterminacy” (Luo and De Wit, 2022, p.32).

They also cite Ignasi de Solà-Morales’ notion of the term *terrain vague* as opening “people’s perception of the city through breaking with the familiar acceptance of everyday urban images” (Luo and De Wit, 2022, p.34).

While the term **terrain vague** originates from the transition period around 1800 when city fortifications were broken down (Nitsch, 2015), an essay by Solà-Morales’ from 1995 was foundational in its current use. Next to Solà-Morales’ essay Nitsch (2015) also cites a report by Philippe Vasset on his excursions into ‘blank zones’ of Paris as influential on the notion of the term.

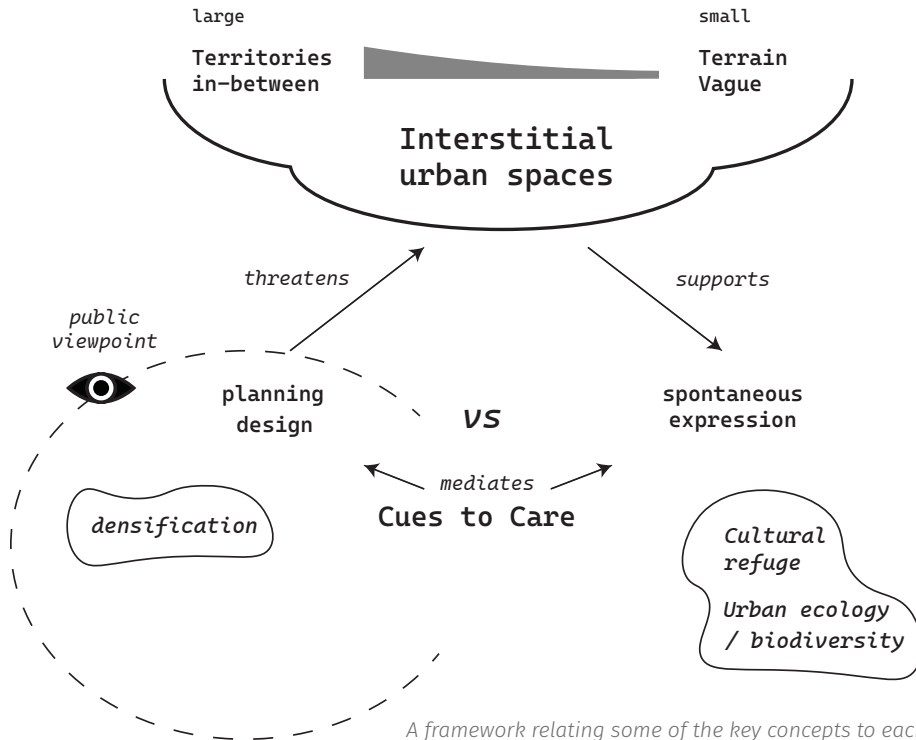
In his essay De Solà-Morales explains and analyses the french term *terrain vague*, which cannot be directly translated into english, in parts: The french *terrain* alluding to a less precisely defined territory than the english word, and with more of an urban quality; and the french *vague* as both

empty, unoccupied, free, and available and alluding to movement, instability and fluctuation, as well as related to the english meaning of *vague* (imprecise, blurred, uncertain).

Nitsch argues that *terrain vague* can be seen as a modern and extreme example of a heterotopia, which Foucault described as “identifiable ‘counter-places’, outside everyday lived-in space, that manifest their defects or compensate for them” (Nitsch, 2015). Nitsch does note an important difference between *terrain vague* and Foucault notion however: “The latter are invariably purpose-designed spaces, while the *terrain vague* is one that has come about randomly and without authorisation.” (Nitsch, 2015)

De Solà-Morales further (1995) remarks that “the relationship between absence of use, of activity, and sense of freedom and expectancy is fundamental to understanding evocative potential of *terrains vagues*” (p.3) “filmmakers, sculptors of instantaneous performances, and photographers seek refuge in the margins of the city precisely when the city offers them an abusive identity, a crushing homogeneity, a freedom under control” (p. 5) He rather pessimistically concludes that when urban design tries to deal with this vacant space, “they seem incapable of doing anything other than introducing violent transformations, changing estrangement into citizenship, and striving at all costs to dissolve the uncontaminated magic of obsolete into the realism of efficacy” (p.5)

Another author, Léveque, sees the two views on *terrains vagues* on these spaces as antagonistic, as either places of disorder or places of freedom,



and both views limited by some sort of idealism. Interstitial spaces are the product of, but at the same time, seem to exist in opposition to the uncompromising, inhuman productiveness of modern society.

Richard Senett also stresses that too great an emphasis on economic and financial value of the city compromises on vitality, freedom and dynamism that form the essence of urban life (Milikowski, 2021, p. 45).

In the early 20th century Polanyi in his book *The Great Transformation* discussed how our market-driven capitalist economy developed in 19th century industrial England. His research object while studying economic processes was the “livelihood of men” (Novy, 2024, p. 214) and thus he distinguished four socioeconomic principles: reciprocity, redistribution, householding and exchange. While the market-based principle of exchange has been emphasised in neoliberal economies, redistribution – via taxation through the state – has played a more limited correcting role in those systems. (Novy, 2024)



Namely Polanyi's principles of householding and reciprocity can be seen as relevant to the value created in interstitial spaces, and people producing valuable space for themselves and for others. These are more locally focused, "aim at "habitation", securing the livelihood in specific places and for specific households and communities" (Novy, 2024, p. 219), contrasting with the incentives created by the globalised exchange economy.

Polanyi widens the view of economy beyond just market exchange economy by emphasising other often overlooked parts of the economy that focus on local values and that can help in comparing issues we face now. These lend themselves to be emphasised in interstitial spaces.

Léveque argues that a wider concept of interstitial space provides more freedom to work with all elements of these spaces such as openness, porosity, breach and relationship, but also includes a temporal dimension of the interstitial, emphasising the importance of process and transformation through time.

To gain a better understanding of these spaces, this thesis will focus more specifically on cultural and ecological values. The goal of this project is to develop a better understanding and find new ways of appreciating and cultivating the values of these spaces, experimenting with design, not with the goal of realising a project but of developing a way of designing and taking care of these spaces.

# Research & Design approach

Key in this project is to gain an understanding of interstitial urban spaces in the Dutch context, as the planned nature of the Dutch landscape provides a unique context for these unplanned spaces. This chapter provides an overview of the analyses through the different research questions, and introduces the methods of research and design I have used to explore and answer those questions.

## Research Questions

The main research question of this thesis is:

**How could urban interstitial spaces in the Netherlands provide cultural and ecological value?**

To answer this question, it can be split up into sub-questions, which will all be explored in turn through different analysis/design methods, and build on one another. A visualisation of their relation can be seen in the analytical framework on page. Next to the goals of each question, the methods used to answer each question are also briefly introduced, and further developed in the sections themselves.

**1a. How do interstitial spaces provide ecological value for wildlife?**

**1b. How do interstitial spaces provide cultural value for people?**

After defining one common study area, these two questions are explored separately in the analysis chapter. The ecological question mainly through analysis of ecological data and interpretation of satellite imagery and other geospatial data along with principles from literature. The cultural question is explored mainly through fieldwork, observing landscapes using a lens based on the Dutch New Topographics photography movement.

### Methods:

**scientific literature review:** *used to provide general insights and background information from prior academic work, taking into account the wide variety in related terminology used for the topic of interstitial spaces. Next to this it was also used to provide a theoretical basis for and site analysis of ecological values.*

**News literature:** *Accompanying scientific literature, some opinion essays and new articles helped provide more of a social context to the cultural value analysis.*

**data research:** *Synbiosys geospatial data on landscape types in the Netherlands was used to map the value of the landscape in the study area. Other geospatial data such as protected areas was used as a starting point for site analysis.*



**Site analysis:** *geospatial data, combined with principles from literature, serve as a starting point for a more manual analytical approach on the study area scale to explore the ecological network and connections of interstitial spaces.*

**public media analysis:** *A basis of methods to use in field work is the analysis of the methods Dutch landscape photographers of the New Topographics used to produce their work.*

**field work:** *To investigate the cultural value, a large part of analysis is field work, experience from eye-level. Through observation inspired by research done through public media analysis.*

## **2. How could interstitial spaces be used to provide value to people and wildlife?**

Using insights from the analyses from the previous questions, explorative design is used to investigate how to deal with these interstitial spaces to strengthen their ability to play a role in providing ecological and cultural value. Using the concept of cues to care design elements for appropriation are provided to illustrate a range of ideas on how these spaces could inspire to provide value. The goal of this design experiment is explicitly not to produce a design project or concrete proposal, but to study a way of design and of dealing with these spaces, their description and appreciation.

### **Methods:**

**Popular and scientific literature review:** *In addition to previous questions of which the results inform the answer to this question as well, scientific and popular literature is used to further develop and inform the ideas around cues for care and elements for appropriation.*

**explorative design:** *mainly used as a communicative method to illustrate and provoke ideas.*

## **3. What role could interstitial spaces play in the wider process of spatial development?**

To put these ideals into the larger context of how they could benefit society and how they could fit into the spatial planning practice, a manifesto for in-between spaces is presented. Finally, this manifesto is applied to a test case (the Vlietzoom in the Hague) to detail how it would fit into the real world context and evaluate its opportunities and challenges.

### **Methods:**

**Field work:** *experience from field work informed the perception of the space, and was key in the choice for the Vlietzoom as test case.*

**Geographic data visualisation:** *data on functions in the area and parcel ownership was used to inform the design decisions.*

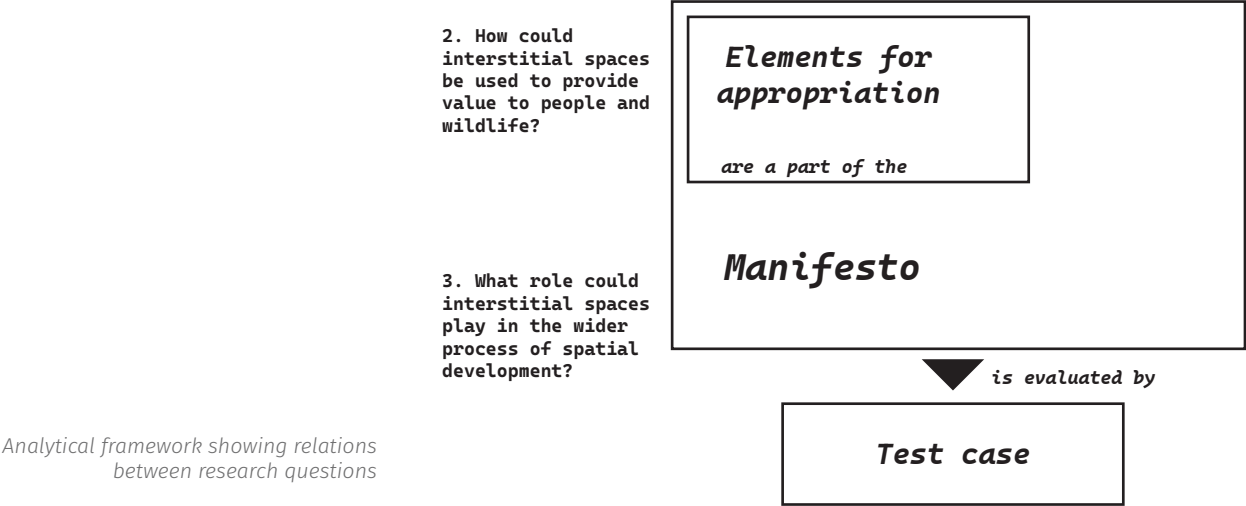
**Diachronic analysis:** *to evaluate the interstitial status of a space and understand how it formed into its current form. Old maps were used as a basis, as well as geographic datasets of historical municipal borders and other internet sources to supplement the historical maps.*

**Explorative design:** *an imagination of a 15-year scenario in which the manifesto is applied and various policies and elements imagined over time, which is used to critically test the manifesto. This is expressed in sketched illustrations of the site using Google Earth data as a base, and accompanying text.*

**Policy document review:** *to evaluate and compare future plans, policy documents as well as local news reporting on those documents were used.*

## Analytical framework

This section provides an overview of the research and design process, how research questions are linked to the report sections in which they explored.



Analytical framework showing relations between research questions

# Analysis

## Defining the study area

The study area for the analysis is the area that will be focused on for the fieldwork and other spatial analyses. An area diverse in urban patterns was required, that I was also familiar with and that was accessible for field work. This is why a 50 km diameter circle that includes both the Rotterdam and The Hague urban areas was selected.

This is still too large an area for analysis, so focus would be on the territories in-between within this circle that interstitial spaces are a part of. To accomplish this the highly densely populated areas were filtered out (1250 or fewer inhabitants per 500x500m square, based on (Wandl et al., 2014)). From that also the agricultural areas, water, and natural areas were filtered out (based on CORINE land cover 2018), and a 250m buffer was added because the interstitial spaces of interest could be found in these fringes that could be located in transition zones.

*Areas with 1250 or fewer inhabitants  
data: based on CBS*

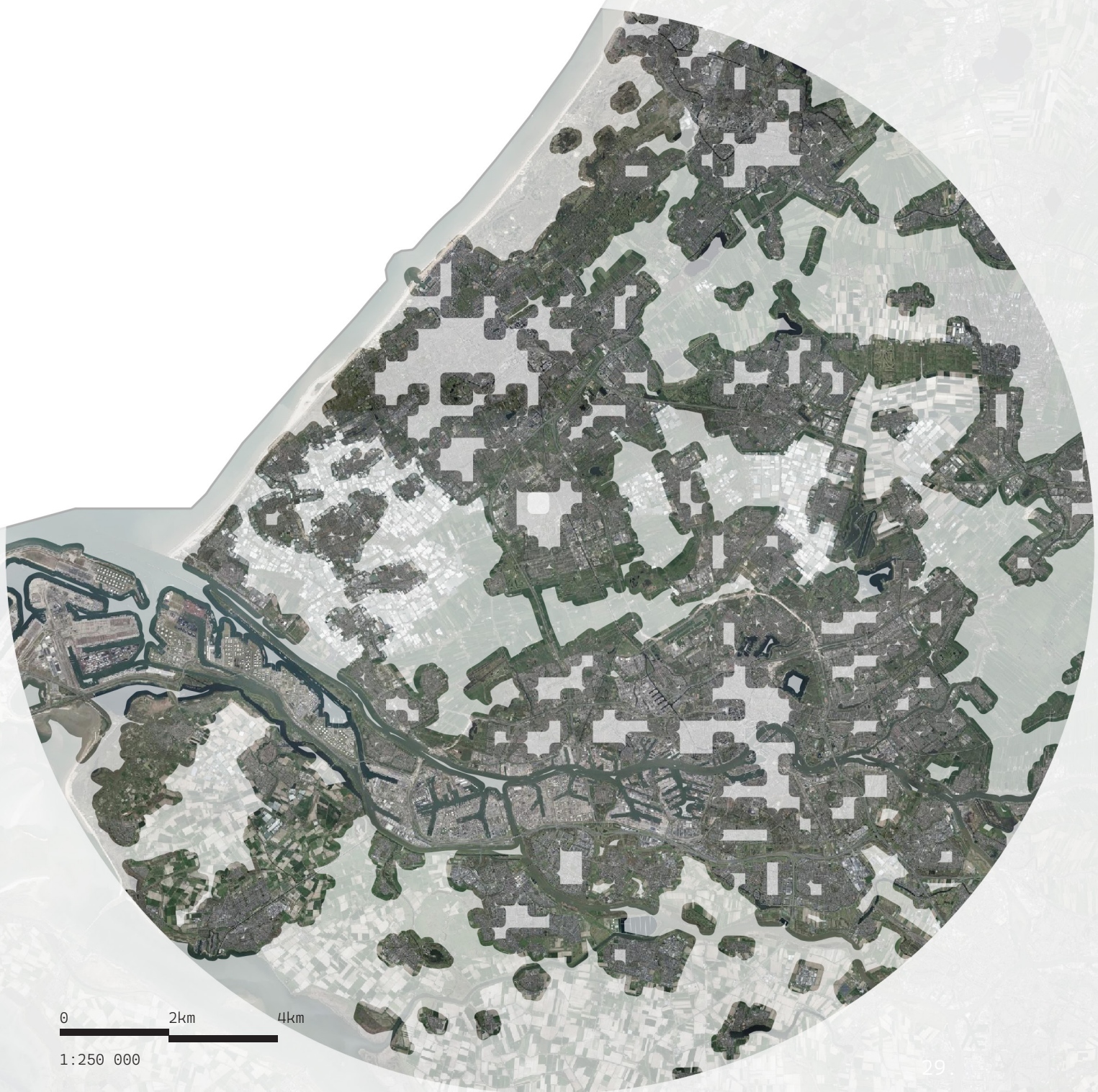


*The study area without buffer zone  
data: based on CBS, CORINE land cover 2018*



*(right)  
The study area, including buffer zone  
data: based on CBS, CORINE land cover 2018*





0 2km 4km  
1:250 000

## Ecology

Ecosystems are very complex collectives of organisms. They are linked to the concept of biodiversity, where quality is not necessarily about the quantity of different species but which is valuable as it enables complex interactions and connections between species and living systems.

This makes it not straightforward to evaluate ecological value in a relatively wide area, but using available data combined with principles from theory allowed me to come to a general evaluation of ecological values.

Firstly, the ecological value of the landscapes themselves will be analysed, followed by the ecological value of their spatial connections. Together they provide a general sense of ecological value of the areas. Since the focus of this thesis is on urbanism and not ecology in itself, these general analyses will suffice as a basis for further ideological development. In this study the value of healthy ecosystems is taken as inherent in themselves, which is why there is no explicit focus on how ecosystem services provide economic value.

### Value of landscapes

Generally, increased genetic diversity leads to “increased resilience of the system through increased redundancy” (Threlfall & Kendal, 2017, p. 351), and wild spaces can provide a crucial and unique habitat for animals not found elsewhere in cities.

The often temporary character of interstitial spaces does not mean they are ecologically less valuable. On the contrary, the opposite could be true. A study that modelled “dynamic land-use” where urban plots are left alone for a period of time before being redeveloped versus “static land-use” where development and protected areas are fixed shows that using this temporality to effect can provide opportunity for development of higher ecological complexity and more species. A 15-year period before new redevelopment was found as optimal for biodiversity. (Kattwinkel et al., 2011)

To assess the local ecological values of the study area, data about landscape types in each square kilometre in the Netherlands was used that is available from SynBioSys (Syntaxonomisch Biologisch kennisSysteem).

With the assumptions that more habitats would facilitate higher biodiversity, but also borders between different habitats are generally more diverse, the number of different landscapes present in each square kilometre were counted. This can be seen in figure 6.5.

Another general principle is the idea that rarer landscapes are more valuable, as their disappearance would be a greater threat to the species that depend on these habitats than more abundant landscape types. As an estimation of this the number of square kilometres each landscape type occurred in the Netherlands were counted, and rarer landscapes were assigned a higher weight when adding them up. This resulted in the map in figure 6.6, which is a bit more pronounced and shows some more areas of value.





0 25km 50km

fig. 6.5. Number of landscape types per km<sup>2</sup>  
data: SynBioSys

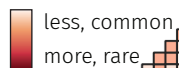


0 8km 16km

1:650 000

fig. 6.4. (top) All landscape types in the study area as distinguished by SynBioSys

fig. 6.6. (right) Number and rarity of landscape types per km<sup>2</sup>  
data: SynBioSys





These are all of course very rough estimates, first of all only on a kilometre resolution, but also based on very general principles and assumptions, not for example taking into account the actual specific landscape type values or the state these landscapes are in. But still they do provide a general indication of which areas within this circle are especially interesting ecologically.

### Value of landscape connections

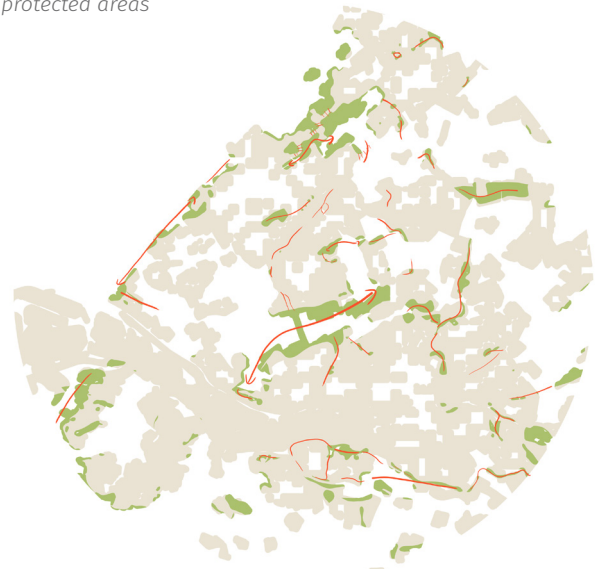
Absence of human intervention provides space for organisms to “respond to their base instincts or self-assemble” (Threlfall & Kendal, 2017, p. 348). Depending on the shape and size, areas can play different and important roles in connecting patches of habitats across urban areas, and their temporality can make them act as refuge space when not available in other – more managed – areas (Threlfall & Kendal, 2017).

Dramstad et al. (1996) provides a series of useful guiding landscape ecology principles related to patches, edges, corridors, and mosaics, that provide a basis for analysing the role these areas play in a spatial network. Interstitial spaces are often surrounded by infrastructure and barriers; a typology of many patches that are related to one another.

Small patches can act as stepping stones (small patch benefits (Dramstad et al., 1996, p. 22)), and groups of connected patches can together act as a habitat for species that could not live in a single patch (grouped patches (Dramstad et al., 1996, p. 23)). Edges can dampen the influence of surroundings (edge as filter (Dramstad et al., 1996, p. 29)), thus protecting the inner patch from its surround-



*Estimation of valuable green areas based on different kind of protected areas*



*Valuable green areas and corridors*

0 8km 16km

1:650 000

*Valuable green areas, corridors,  
and barriers*

- case study area
- valuable green areas
- corridors
- barriers

0 2km 4km

1:250 000



ings. If choices need to be made in the conservation of some patches, that could be based on how they contribute to the whole system, and how unusual or distinctive they are (patch selection for conservation (Dramstad et al., 1996, p. 24)), which shows the value in analysing both the landscape type and landscape connection in this analysis.

To estimate the value of connections in the case study area, different layers based on landscape ecology principles and satellite pictures were combined. As a base, different kinds of protected areas (nature 2000, nature network, stiltegebieden, etc.) were overlaid, which, used together with satellite imagery, were used to roughly outline valuable green areas.

Then the corridors could be identified, which are the areas of value or potential value. Next to corridors, barriers were also identified from the satellite imagery; mainly big roads, railways, and waterways. These barriers, when crossing a connection, divide the area and form an obstacle to ecological connections. However they can also form a buffer to protect the ecologically valuable area from other negative influences. This is especially the case when located along a corridor, although this distinction of course is not completely clear.

### **Conclusions - ecology**

Interstitial spaces provide ecological value for wildlife through both providing unique habitats for species that are not found elsewhere in cities, as well as being part of a network of spaces that provides more value than any individual space. Both these core values are manifested in complex systems that are difficult to generalise, but valu-

able to map to gain understanding of the system through the combination of general principles and spatial analyses. These larger-scale analyses can be used to understand values of a space on a smaller scale as its role in a larger network and its unique characteristics compared to its environment is uncovered. In an ecological network interstitial spaces can act as refuge and provide connections, their non-fixed temporality is also a strength as their continual development actually strengthens biodiversity.



Man Ray  
*Le Terrain Vague*, 1932



## Culture

Inherent to this idea of wildlife is the idea of spontaneous development. By definition one can't design spontaneity, only provide the space for it. Likewise, cultural development is inherently also spontaneous, so it is necessary to have a distance from planned spaces for things to develop onto themselves without needing to answer immediately and be subservient to economic interests and plans. A human sense of *wildlife*, as it were.

Interstitial spaces are often talked about as providing refuge for alternative local activities and people. When these are threatened by more planned development, as often tends to happen, there are people who see their value, as can be seen in the newspaper articles discussed in the societal relevance chapter of the introduction (p. 13).

Field work can be useful to identify some physical details about functions and locations that are not reflected (accurately) on available objective data



Jannes Linders  
*Aan de voet van de dijk, 1989-1990*

and maps. As these spaces are known for their spontaneous development, maps will likely not reflect everything relevant taking place. More importantly, this eye-level experiential perspective will provide a sense of the atmosphere and direct spatial experience of a place that is impossible to know in another way. Then the challenge is how to analyse and depict that. I have used photography to document my excursions, but I have also employed other techniques to attempt to record and analyse the subjective experience.

### **Photography - The lens of the Dutch New Topographics**

As the spaces that are of interest to this research project function as havens for some artists, and are known through their depiction in art, it is insightful to analyse the cultural value of these places through their depictions in media. Specifically, the medium of photography proved to be useful in understanding these spaces.

The French term *Terrain vague* as related to interstitial spaces was introduced through discussing the medium of photography as it can be used to capture these places (De Solà-Morales, 1995). Among the artists named by De Sola-Morales is Man Ray, who in his photo titled “*terrain vague*”, uses his surrealist minimalist style to construct this image and capture the vagueness and intrigue of these places. Because of the ambiguous nature of both these places, and also of cultural value as a concept, this analysis is not so straightforward.

Jannes Linders, a Dutch photographer who makes landscape photos of the Dutch landscape, is also mentioned by De Solà-Morales. He provides a more honest view of the Dutch landscape. There is still a subtle monumentality to the landscape, but the landscape is not an imagined unobstructed landscape where all the lampposts and infrastructure are hidden. In Linders landscape photos barely any people present, which at first might seem like a limitation when analysing their cultural value to people. But it can also be a strength, as through how the viewer looks at the photograph, and the photographer at the landscape, you don’t need this third perspective of the person within the photo, those two are enough.

Linders is one of a number of Dutch landscape photographers that share a similar sensibility. A number of them - including Jannes Linders, Hans Aarsman, Theo Baart, Wout Berger - had their work exhibited together in the 2008 exhibition *Nature as Artifice* (Van Den Heuvel, 2015).

These Dutch photographers travelled the country with large-format cameras, making these composed and open shots of the landscape. The way these artists observe and capture the landscape in front of them has parallels in the mainly american movement of the New Topographics from 1975 (Van Den Heuvel, 2015).

With these large format cameras their composition and viewpoint is always very deliberate, and provides an open frame by not looking at the landscape as framed by other objects, but instead they have landscape itself as their subject.



*Jannes Linders  
IJsselmonde, 1989-1990*



*Jannes Linders  
Woerden, 1989-1990*



Their “democratic” perspective as it has been called shows what is there without much simplification, and providing context. These are not details or overly manufactured photographs. In this way they do manage to highlight the juxtaposition of elements in relation to each other in a landscape.

Through resisting visual simplification but deliberate composition through choice of viewpoint they offer a unique perspective and interpretation of these places. Not an unambiguous explanation

or interpretation, as it is not a text, but fitting for ambiguous interstitial spaces.

During fieldwork I went on cycling trips through my study area to look specifically at how these places were being used, to be able to explore their cultural value and qualities. In doing so I found it useful to use the lens of the Dutch New Topographics to observe. There were differences in my method, as instead of travelling by van, as some did, I chose to travel by bike. This meant I could not cover as large of an area as easily, but I could



Theo Baart  
*Westelijk havengebied. Groot-Amsterdam Metropool in ontwikkeling, 2020*

look around with more attention and stop more easily. I also didn't use a large format camera on a tripod, but a full-frame digital camera, handheld. Still I did take extra care to compose the elements in each shot through a deliberate choice of view-point and to not just snap a picture. With a wide angle lens (16-35mm) to get an "open" picture of the landscape, keeping the horizon largely in the middle to avoid perspective distortion and allow for a more neutral view of the landscape.



Theo Baart  
*Werklust*, 2015



## My excursions - observations

In Tussenland (Frijters et al., 2004) it is stated that although these “in-between lands” are not easy to point out on a map, they do feature in our mental maps. The technique of drawing mental maps produces a visual representation of the features that stood out in the personal experience, and puts them in subjective spatial relation to each other. By comparing a mental map to a topographical map, the difference between the “objective” space and the experienced space can be illustrated. The annotated drawings in Jan Rothuizen’s *Soft Atlas of Amsterdam* (2010) are great examples of this.

Using a combination of gps traces on satellite imagery combined with sketches from observations during fieldwork, I compiled a spatial overview and “notes” of observations made during the fieldwork that are linked to the spatial context of the places, which in addition to the photographs themselves helped interpret the landscape. Some of these notes are depicted on the next spread.

During my excursions by bike, while paying special attention to how interstitial spaces were being used, I discerned a number of different typologies of space, which, from a cultural use perspective, I divided into 6 types.



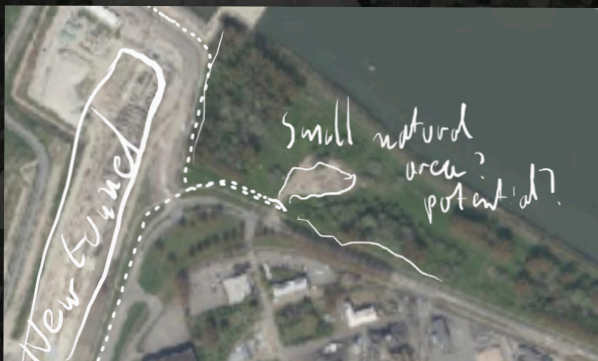
Theo Baart  
*Werklust*, 2015



*Field work routes and locations  
the photos were taken*















*Bergschenhoek*





*Vlaardingen*



### **1. Left-over spaces - cultural interest.**

These were interesting places where I couldn't easily point a finger on what was going on there. They seemed left-over spaces from spatial planning, where things happen that almost certainly weren't planned beforehand by spatial planners.

Sometimes a strange combination like the very fresh sidewalk and entrance pavement next to these ambiguous container installations.

*Vlaardingen*











*Maassluis*



*Leiden*



## **2. Open left-over space. Nothing happening yet**

These spaces seemed similar to type 1, except there were no clear signs of apparent use. Instead these open spaces seemed ready for occupation or use. Most of this fieldwork was done in early spring, but perhaps at other times of the year or at some occasions these spaces might be used by (groups of) people, but there were no remarkable physical traces of that as I came across them, however promising they seemed.

Rozenburg









Rodenrijs





*Hoogvliet*

### **3. Industry landscape**

When moving through these fringes, it mostly struck me how much was planned. I had to resist the temptation to become more cynical in my photography as I struggled with this characterless space that was the planned spatial fill-in of the landscape. There were empty areas in the port. Very practical industrial landscape, “gebruikslandschap” as Theo Baart (2015) would call it, but that doesn’t hold real potential of any cultural value, as this would only hinder the industry it serves.

*Botlek*







#### **4. New residential developments - building sites**

Even though at the BK faculty there is a strong focus on urban densification in our education, I passed many places with active building projects, all low-density vinex-type neighbourhoods being built. Full of unfinished roads and unclear routing, they were exemplary terrain vagues, but very temporary and already in process of transforming into another typology.

*Rhoon*









*Bergschenhoek*





Rodenrijs

## 5. New residential developments

This landscape was also closely related to the previous type, but instead of being in transformation, these were finished and in-use, although at some locations the sand between the pavement was still fresh.

Fresh new neighbourhoods, meticulously planned out and with many people and children outside - the weather was nice that day and helped a

lot - but still I found them quite depressing. Yes everything was planned out, but so unimaginative, so bland and manufactured. There was no sense of authentic place, yet so many people living there. There is no connection to its surroundings except for overly literal and fake signposting.

*Waddinxveen*









Rodenrijs





*Zoetermeer*

## 6. Dog-walking park-like areas.

In these fringe areas many spots are filled in by park-like areas. Dog-walkers, bushes, paths, some benches and a bin to dispose of your dog's poop, and more or less neatly mowed grass. These parks, while perhaps used for dog walking and perhaps a bit more in nicer weather, still felt similar to those Vinex neighbourhoods; without distinguish-

ing qualities, a sense of sameness. Filler from the left-overs of urban planning. Leftover, but made neat in a way that does not allow for spontaneity, for improvisation in space, for appropriation, and the formation of identity.

*Spijkenisse*









*Den Haag*





*Den Haag*

## *Conclusion of the analysis*

From fieldwork it became more clear that interstitial spaces provide cultural value for people through their suitability for appropriation. They can provide space for spontaneous development.

The industrial landscape types and other purely functional sites are not useful for spontaneous appropriation. Likewise, building sites as well as new residential sites seem too fixed and orderly in function. New low-density neighbourhoods (type 4) space for spontaneity would be difficult to combine with their spatial order. However, there are some spaces to provide opportunities. In the leftover spaces discussed as type 1 this is already happening. These could perhaps be used to incentivise or expand similar uses in the vicinity.

In unused leftover spaces (type 2), light interventions could perhaps be used to incentivise use. Likewise, fill-in park-like areas (type 6) would need some elements to signal for or encourage appropriation of the space. But more importantly, in these spaces no spontaneity seems possible now due to restrictive maintenance. So, a change in their maintenance would be necessary. Less, more deliberate and minimal maintenance, to give more space for people to fill in the space themselves.





# Elements for Appropriation

## Elements for Appropriation as Cues to Care

Instead of designing these new places with a prescribed signposting of cultural identity while denying them real cultural development, we should enable interstitial urban spaces as places of more freedom. We should imagine what could happen if we would stop their prescriptive maintenance to retain the orderly but boring and anonymous status quo.

We should strive towards spatial appropriation as an ideal, as improvisation and spontaneity are essential in fresh and genuine cultural development. Next to participatory spatial appropriation through human “wildlife” in these spaces, natural wildlife can also benefit from increased opportunity for appropriation of space by nature, instead of being managed and cut back by maintenance.

This ideal is perhaps comparable to squatting: occupying unused space but also taking care of that space, actively involving people in the development of their own space for themselves but also with larger urban and social/cultural development, while through non-commercial means and goals, creating social networks and facilitating urban life, “squats remain as a sort of “anomalous institution”, neither private nor state-owned, but belonging to the “common goods” of citizenship, like many other public facilities” (Martínez, 2014)

In an overview of squatting in the Netherlands (focused on Amsterdam) Schmetz (n.d.) mentions that next to artists and politically motivated squatters also wild squatters, undocumented squatters and land squatters, the latter occupying not buildings but pieces of land to live on and take care of. A relatively recent example is the squatting of land near Uilenstede in Amsterdam in 2023, for student living space in the context of the housing crisis, even if it is close to the noise from Schiphol airport (Schut, 2023).

Designing spaces like this, as discussed earlier, is paradoxical: they lend essential parts of their quality from a lack of design. Thus it would not make sense to design or propose some specific appropriation, as the thesis is against top-down design and proposing a design would be contradictory. However just these ideals would provide an overly general and vague view. Instead, the concept of *cues to care*, introduced in landscape architecture context (Nassauer, 1995) (see theory chapter, p. 20), provides a framework to work with in illustrating some design interventions.

If a place has minimal maintenance it might look unkept to people. Cues to care are small design interventions that can help people see a space as valuable, thus inviting them to care for it. In the case of this thesis the goal is not *just* to care, but to appropriate (although unofficial caring for public space could be seen as appropriation on its own), thus I want to propose elements *for* appropriation as cues to care.

I want to emphasise that these proposed elements are not a direct design plan for any specific space, nor are they a generic design toolbox



to apply directly to any specific project. Not all of them are even realistic to implement, but that is not their goal. Instead, these elements should inspire a different way of looking at and dealing with the landscape around us, and draw attention to the values and potentials of interstitial urban spaces that might be accessible and thought-provoking for people outside academia as well. They are imaginations of opportunities and possibilities for appropriation. This shows how interstitial spaces could be used to provide value to people and wildlife.

In the following elements for appropriation speculative design is used to explore ways of designing these spaces, and the spatial influence of putting cultural and ecological values at the centre of design. Precise CAD tools do not seem appropriate for the kind of undetermined spaces. Instead, sketches provide a less precise and more imaginative form of illustration, which seems more suitable.

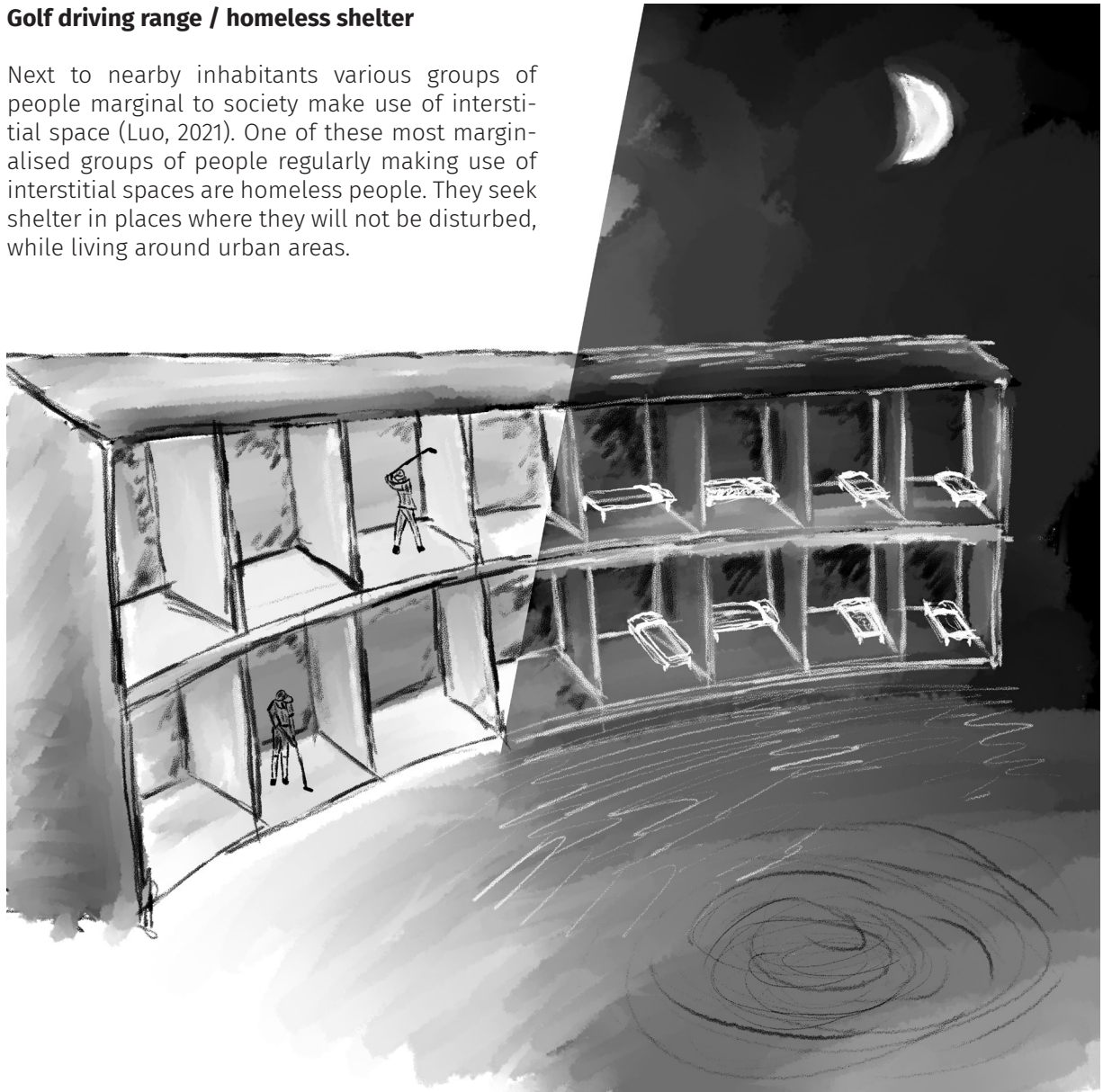
## **Signposting / signage**

In a way this element is plainly obvious and very direct in its goal: I want to encourage and stimulate the spontaneous appropriation of space, thus, these would be signs encouraging just that.

The intervention itself would be a small act of appropriation, next to the other signs that are already there. Signage is used a lot in public space, to provide directions to the passer-by, warn of hindrances, provide information about the environment, but many times it is to tell what *not* to do. These signs would use the same visual language and way of communicating of those restrictive messages, but with an opposing message: feel free to do whatever you want. This might provide a nudge to people that otherwise wouldn't assume or think that appropriating public space is even a possibility. People are not used to this concept. They would be a tool to spread (very local) awareness. In areas like parks (type 6 in analysis) this would likely not be enough, as more minimal and less restrictive maintenance would also be needed in conjunction with these signs.

## Golf driving range / homeless shelter

Next to nearby inhabitants various groups of people marginal to society make use of interstitial space (Luo, 2021). One of these most marginalised groups of people regularly making use of interstitial spaces are homeless people. They seek shelter in places where they will not be disturbed, while living around urban areas.





Another function that requires open space that can very often be found in these areas are golf courses. The driving range, a sometimes multi-storey structure meant to practise your golf, could be used as a homeless shelter at night. This brings together two vastly different types of human users where they would normally not interact, but both are very typical of these types of spaces.

### **Sofa behind a fence**

A fence closes off an area, but what if there was an inviting opening in that fence? Some steps to help you step over it. Maybe this fence, meant to close off, was also *meant* to be crossed by someone? And what if, then, behind this fence, there was a nice open space with a very inviting red couch? This element explores the tension between a closed off space that is also inviting at the same time.



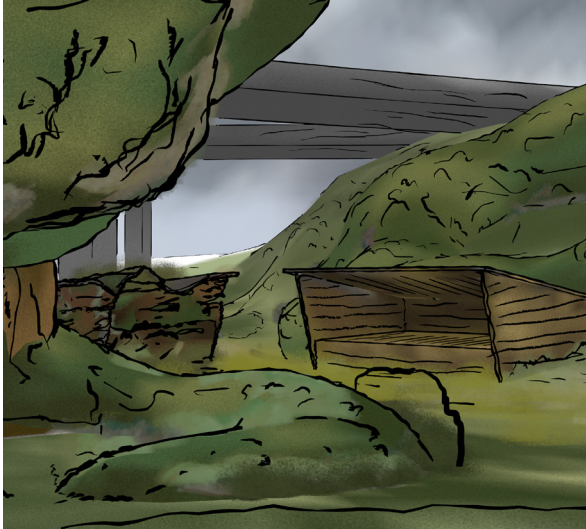
## Observation tower

An observation tower is an intriguing and inviting building that if accessible, people will want to climb on. If positioned right, it could provide a new perspective on the surrounding area, making people more aware of how this space exists by changing their perspective.

## Shelter / dead wood

In much of Scandinavia there are many shelters that trekkers can use for free to camp. They provide a wooden platform to put a sleeping mat on, basic walls on three sides and a slanted roof. Some require a small fee or a reservation, some are completely free to use.

Dead wood is very good for biodiversity: lots of species rely and can use dead wood, from fungi to insects.



This element consists of two shelters, next to each other, almost identical in shape, but for very different purposes. One is to provide shelter for people. The other, while looking similar, is built from local dead wood. As a shelter for people it would look like it is in very bad shape, and seem of no real use. The decaying wood would however be a home to many more insects and other wildlife than the pristine one that people could use. When not in human use, might even provide shelter to some larger animals?



## Bat guidance

During roadworks if bat flying routes are disturbed, temporary guiding screens should be placed to help them find their way. To us they may look strange especially if we don't know their function. They look very basic in shape to us, but because bats navigate by echolocation, these structures work well enough to emulate the trees they replace, illustrating the different ways different species perceive the world. Could placing these in an open space also provide new routes for these animals, and widen their world?



A bat guidance screen at the A16 highway construction site in Rotterdam.  
source: <https://ecoassist.nl/projecten/monitoring-vliegroutes-a16/>

# Manifesto for interstitial spaces

## Introduction

Where the elements for appropriation should inspire around the potentials of strengthening the opportunities for spatial appropriation by both natural and human *wildlife*, here I outline a vision of how we could use planning instruments to protect and facilitate spontaneity in landscapes, and how putting this central in spatial development practise could improve the practise of spatial planning itself.

While the Netherlands is a very neatly organised country, it is in the urban fringes we encounter the limits of this organisation. They are still quite neatly organised and delineated, and yet not place-specific. A way to deal with these places is *place-making*, where designers impose their vision of a place onto a site, which is then often related to phenomena like gentrification. This is a top-down design-led approach only furthers organisational desires. Instead, we should embrace the qualities of these *tussenruimtes* or interstitial spaces to use those as a basis of urban development.

This shift from continual new project development to focus on bottom-up spontaneity in which individual and collective *care* for space plays a significant and shaping role for spatial development

helps in shifting the emphasis from an economy dominated by a free market system to also include other economic principles like householding and reciprocity (as outlined by Polanyi and elaborated in the theory chapter).

Urban interstitial spaces in cities offer space in an urban context for functions that don't fit anywhere else in the planned urban area. A core strength of these "left-over" areas is the spontaneous development that can take place, both ecologically and culturally, which is vital for the culture and ecology of the city. As left-overs from spatial planning projects, these spaces are undervalued. But, if the strengths of these spaces are enhanced, they can play a key role in improving urban development.

To accomplish this, changes in policy and maintenance at two different scales are needed, from *within* and from *around* these interstitial spaces, that aim at protecting these spaces and putting their strengths central in spatial development.

## Definition/designation

First, an official definition and delineation of interstitial spaces is necessary, and a prerequisite for policies to specifically target these spaces. Buffer zones and spaces surrounding existing and new spatial plans should be designated as such interstitial spaces. In this the core of the plan and its fringe should be taken into account, and the fringe if not a main purpose of the plan (such as a crucial park) should be labelled as "interstitial" space.



## **Part 1: Protecting the typology of interstitial space**

These areas often span boundaries of different municipalities, thus a separate inter-municipal organisation is needed to unify their maintenance: *Tussenruimte-beheer*, tasked with the management and maintenance of these newly defined interstitial spaces. Their mandate should be to use the spaces they manage to protect and enhance their value as spaces for spontaneous ecological and human development.

In these zones, there should be a mandate for minimal maintenance. Lawn-like grass fields will transform into valuable grasslands, by mowing less but more purposefully. Hedges will be trimmed less to allow a new urban wilderness to flourish. This encourages spontaneous natural development and helps in the development of valuable ecological systems.

At the same time, money saved by practising minimal maintenance should be reinvested in the same zones to encourage people to appropriate the space and make it their own. Among this new urban wilderness, which to people can give an disorderly and uninviting impression, should be elements for appropriation as cues to care: Small designed interventions that invite to appreciate, participate and appropriate the space. While *tussenruimte-beheer* is responsible for the selection and budgeting of these interventions (from budget saved by practising minimal maintenance) they should be built by individuals or collectives with the requirement they are accessible to the public.

While these elements for appropriation should kickstart and inspire more spatial appropriation, in-between zones should then also have a higher tolerance for self-built basic structures, thus encouraging this bottom-up development.

As a consequence of these mandates, interstitial spaces will be empowered to develop in the properties that make them most valuable: providing space for spontaneous development of both wildlife (through limited maintenance) and people (through elements for appropriation and tolerance for other basic structures). These spontaneous bottom-up developments can be the key to new forms of spatial development.

## **Part 2: 15 year interbellum**

Next to using and expanding the values of interstitial spaces for spontaneous development, the continued existence of the typology of interstitial spaces should be protected.

Space, especially in the Netherlands, is a limited resource. To protect our non-urban areas, urban expansion as practised in the past cannot continue. This is why there is an increased focus on densification as opposed to expansion. However, in doing this, we must also take into account the protection of the valuable typology of interstitial spaces. These spaces are inherently temporary in character, traditionally forming at the fringes of a growing urban area, or staying behind as a city shrinks. In a future where new spatial development takes place within existing boundaries of urban areas to protect the spaces beyond those boundaries, the places that exist on those boundaries should not be forgotten.

The inherent temporality of interstitial areas, originating from urban expansion, must change. One could imagine either the loss and decline of interstitial spaces as more are taken over by urban project development, or their fixation in time, both of which would be detrimental to their inherent character. Instead, we should protect the *typology* of the urban interstitial space.

A sustainable method to guarantee the existence and utilise the bottom-up development strengths of interstitial spaces in such a circular spatial development system is needed.

When an urban area loses its old function - industry moves, infrastructure patterns change, or buildings don't conform to contemporary needs - there would either be a building-level transformation to adapt it into a new function, or new urban project development. The possibility of this new development drives land price speculation, exacerbating the price of new housing. Instead of allowing this immediate project development, in any urban area that loses its old function no new project development should be able to take place for at least 15 years. Instead, this new interstitial space would be put under management of *tussenruimte-beheer*. This measure should have a negative effect on speculation with land price as any new vacant land can't be used for expensive new project development in the short term, and protect the continued existence of the *typology* of interstitial spaces.

### **Part 3: Spontaneous development as basis of spatial planning**

When traditional project development takes place, interstitial spaces are turned into urban spaces. In a system of sustainable urban development inclusive of interstitial spaces, traditional project development in an interstitial space should only be allowed when a new interstitial space becomes available in the same urban region. In this cyclical system for a post-urban-expansion context, when an urban space would traditionally be redeveloped from vacant land, it instead has to be nurtured as an interstitial space for at least 15 years. A different interstitial space that has existed for at least 15 years can be redeveloped instead. These places to be redeveloped won't be "vacant land" though. They will have been appropriated by nature and people in various ways. Bottom-up spatial development nurtured by *tussenruimte-beheer* can form a basis in redevelopment plans, helping make traditional development more organic, less top-down and more inclusive.

By protecting and enhancing the qualities for spontaneous development of urban interstitial spaces, and protecting their existence and strengthening their constructive role in a cyclical urban development, the developments of these spaces can form the basis for a new kind of spatial development that is more participatory, and place-specific, and help serve the needs of the city over the monetary interests of project developers more directly.





# ***Test case: Vlietzoom***

## ***Introduction***

To evaluate what the opportunities and challenges of a practical application of the manifesto would be, it has been applied to a specific test case area. This chapter explores the potential of applying the ideas from the manifesto, imagining what could happen, and contains discussion on the potential but also the possible limitations and challenges in its implementation. All parts (definition/delineating and three parts) of the manifesto as they could be applied to the test case are discussed in turn.

During fieldwork I cycled through an area in The Hague which was a very typical example of interstitial space, and thus a good candidate as a test case area. The elongated area around 4 kilometres in length in the south of The Hague is flanked on the north-western side by the Vliet canal, and on the south-east by the A4 highway. Inside are many different functions, but seemingly no real planned structure. A park next to the entrance of a tunnel is flanked by a golf course that seems to fill in all the space it can get. In-between this fragmented area are still some fields, and a large part of it is occupied by sports fields. Some plots are used as allotment gardens, and various logistics companies form an industrial island to the side. These, together with its limited accessibility, seeming-

ly disused and dead-end paths, and the lack of routes that lead through the area make it a typical interstitial urban space.

Although the area is sometimes referred to as the “Vlietzone”, it is most often called the Vlietzoom, as “Vlietzone” is also used to refer to the entire area along the Vliet canal from The Hague to Leiden, in which case the Vlietzoom is used to refer to the part that belongs to the municipality of The Hague.

## ***Definition and delineation of the area***

The traits and observations that make this area a good fit for a test case of a typical Dutch interstitial space to study, would not be sufficient to implement policy on this area. As the ideas proposed in the manifesto would entail a different type of maintenance policy within these areas, and put restrictions on traditional development within them, it is of extra importance that the area be defined in a clear way. This is challenging as “interstitial space” and other related terms don’t have unambiguous definition; they are defined by ambiguity instead. So, in essence there is a need to both clearly define a space as interstitial, and to delineate that space to be able to apply specific policies to the space.

Infrastructure barriers are a defining aspect of many interstitial spaces. The Vlietzoom, too, is enclosed on all sides by infrastructure: a canal on the north-west side, a railroad and train depot on the north-east side, a highway on the south-east side and a road on the south-west side. Thus de-

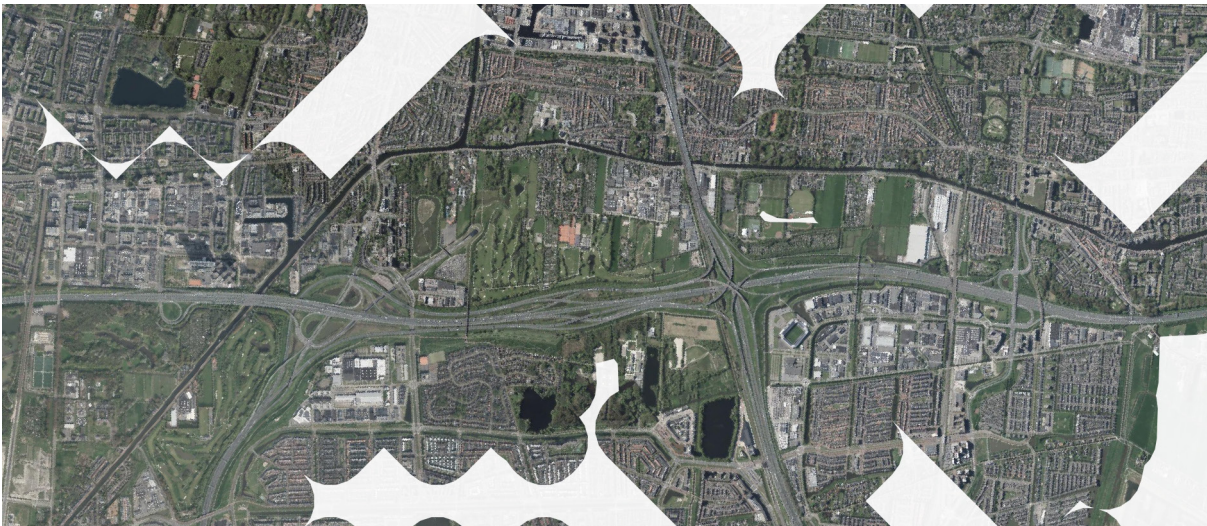


lineating the area by these infrastructural borders would seemingly be quite straightforward. However, the area is also split in two by the A12 highway, with the only way to cross this barrier being the road along the canal. Thus it makes sense to recognise the Vlietzoom as two distinct interstitial spaces. While both are studied as one area in this test case, this distinction would affect the possibilities for redevelopment after the 15-year interbellum. More on this later.

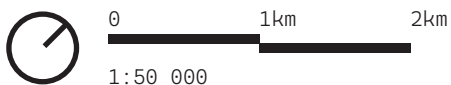
A starting point in evaluating the interstitial status of an area are the criteria used to select the study area in the analysis chapter (lower population density and filtered functions with 250m buffer). In the manifesto the character of interstitial spaces as 'left-over' is highlighted, so it makes sense to turn to an analysis of the historical development of the surroundings of the area to investigate if and how it became a left-over space in-between other spatial plans.

As spatial development takes place over decades and plans overlap and are proposed, set aside, changed, and not fully implemented all the time, it is difficult to base the analysis of the left-over status of an area on planning documents from archives. So while it would be useful to study historical planning decisions around the interstitial space to indicate its status as a "left-over" space, for the Vlietzoom historical maps that should reflect the situation as it was were used to study how the area developed over time.

In the first half of the 20th century the area between the Oude Lijn railroad and Vliet canal was gradually urbanised. Beyond the Vliet was an agricultural area. During this time, the space between the railroad and Vliet was in-between space, so the Vlietzoom and its predecessor urban fringe reflect the classic image of interstitial space on the fringes of an expanding urban area.



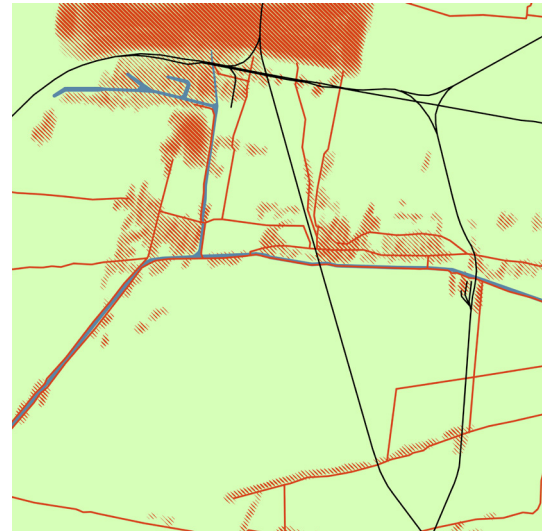
*A detail of the study area, focused on the Vlietzoom. Based on study area, p. 29*



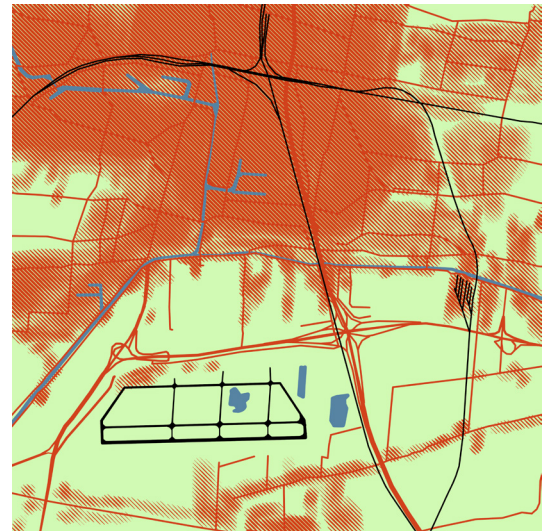
In 1936 the airport of Ypenburg opened to the south of the future Vlietzoom area. While the small airport is visible on the topotijdreis.nl maps used for this analysis, it “disappears” from the map after a few years, most likely because it was designated as a military airport. Therefore estimations of size of the airport in the 1952 and 1962 maps are based on other sources, such as the construction date of the air traffic control tower that has been preserved (1956, according to BAG) and satellite images from the 70’s (*Ypenburg: Air Base*, n.d.). In the mid-50’s the airport was expanded (*Vliegveld*, n.d.), before reappearing on historical maps in the ‘80s. While urbanisation continued, the nearby presence of this airport likely contributed to restrictions of development in the Vlietzoom, as is key to acquired and kept its interstitial status.

In the 1960’s the A4 highway was built in this so far rural area, and a new zone nestled between the Vliet and A4 highway was created: the Vlietzoom. Before the development of the highway some plots along the Vliet fringe were developed on the rural rural side, such as the Leeuwenberg country estate that a small contemporary villa neighbourhood in the area is named after. After the construction of the highway, these places became enclosed between the Vliet canal and the highway, which was expanded in the following decades.

Interstitial spaces located in urban fringes are often around municipal boundaries, and the Vlietzoom is no different: Largely it belongs to The Hague (with a small part belonging to Leidschendam-Voorburg), though to the north and south it is enclosed by Leischendam-Voorburg and Rijswijk respectively. Historically the Vlietzoom area

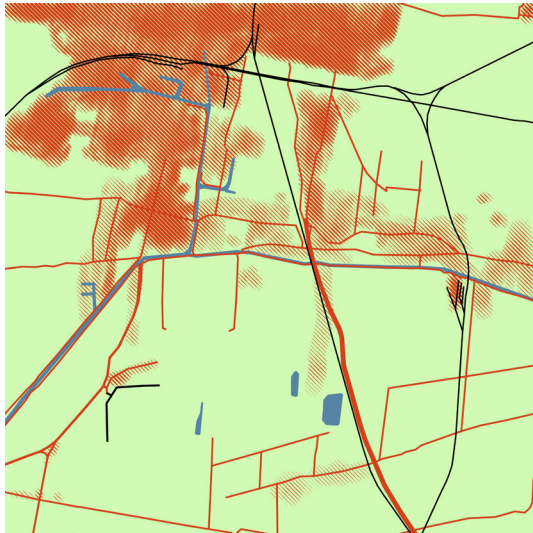


**1925**

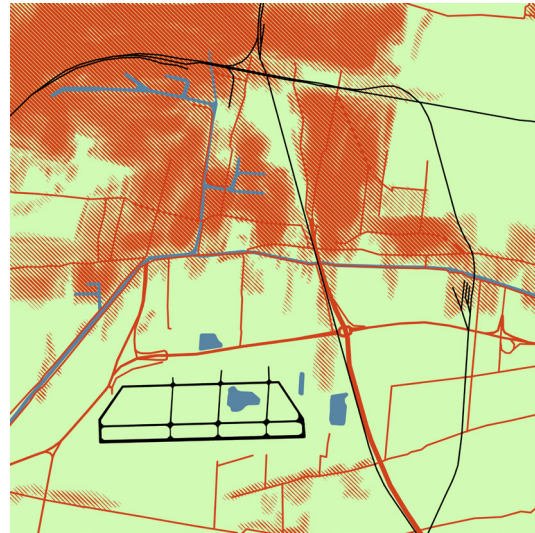


**1988**

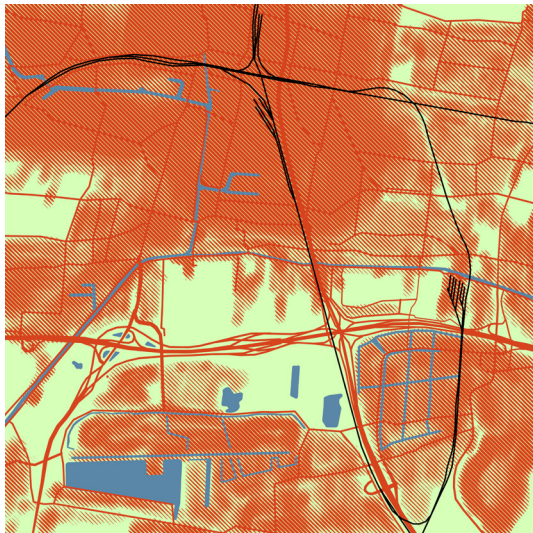




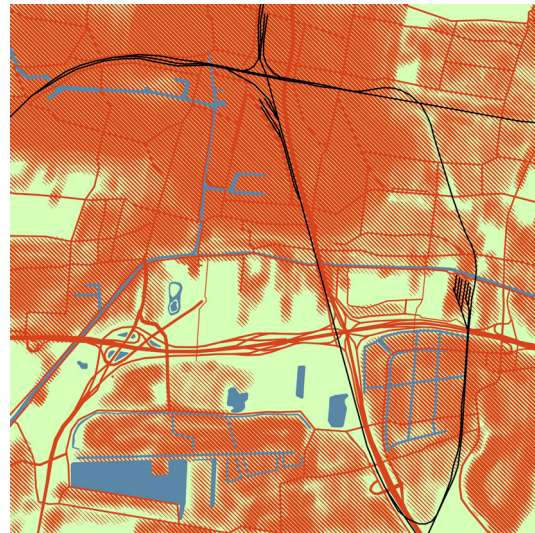
1952



1962



2010



2021

-  urbanised area
-  water
-  roads
-  railroad
-  airport



0 2km 4km  
1:90 000 83.

had largely been part of the municipality of Leidschendam (a small portion on the south-western end belonged to Rijswijk), but when municipal borders were redrawn and the municipality of Leidschendam merged into Leidschendam-Voorburg in 2002, the Vlietzoom area was annexed by The Hague, along with the Ypenburg neighbourhood.

Ypenburg airport closed in 1992 to make place for Vinex housing, and by 2010 it had made way for the development of the Ypenburg neighbourhood. Some fields were converted into a golf course, which through time added adjacent fields.

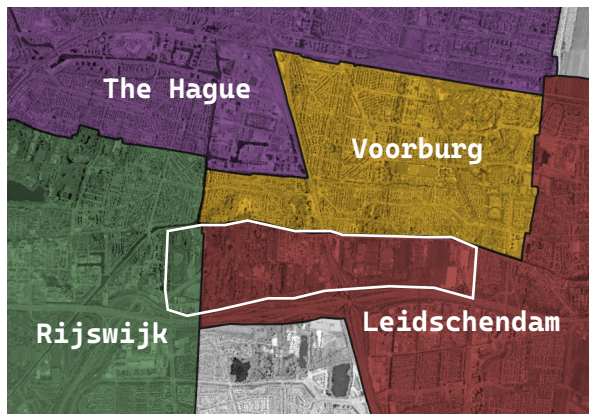
Similar to the Land van Chabot interstitial space in Rotterdam in which a tunnel entrance for the A16 highway is being built, the Vlietzoom area was used for a tunnel entrance for the Victory Boogie Woogie tunnel, which was opened in 2021.

In the Netherlands, there are no officially unplanned spaces; every piece of land belongs to a plot of which its function is defined in a land-use plan. While recognising some areas as “left-over”

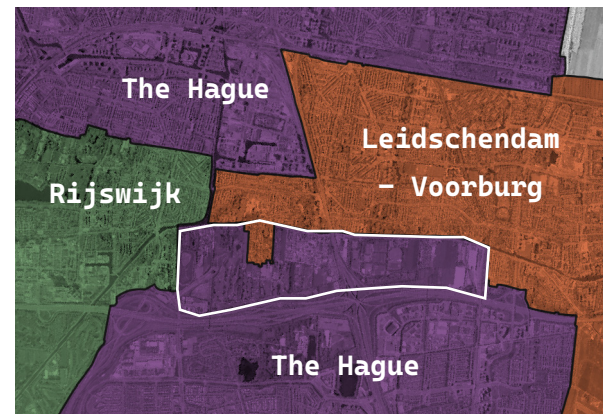
from plans is largely what this thesis is about, defining those areas by their left-over character from other spatial plans will always involve a value judgement, and never be entirely clear-cut, even in a typical interstitial space like the Vlietzoom.

Moreover, next to evaluating the status of the area, defining its extent can also be difficult. While infrastructure barriers, which are common around interstitial spaces (such as those that enclose the Vlietzoom) can serve as fairly unambiguous borders, not every interstitial space is as clearly enclosed, and even the Vlietzoom can be seen as either one or two interstitial spaces.

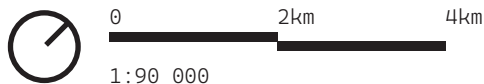
Still, even though there can be some ambiguity in delineations of the space, the designation of a space as interstitial is much more unclear. This vagueness is a major limitation of the practicality of the manifesto, as some severe limitations are placed on the planning possibilities within areas of focus, so the clearer and unambiguous their definition could be, the more fruitful it would be.



Municipal borders around the Vlietzoom in 2000  
data from <https://www.gemeentegeschiedenis.nl/>



Municipal borders around the Vlietzoom in 2003  
data from <https://www.gemeentegeschiedenis.nl/>





## Tussenruimte-beheer

Every parcel in the Netherlands is subject to a land-use plan (bestemmingsplan) that allows for the use of land for a particular function. The core mandates, freedoms and limitations proposed in the manifesto would apply to interstitial spaces, defined as zones. As such, these new rules would probably need to be implemented using “gebiedsaanduidingen”, which add rules to all parcels within a zone. These gebiedsaanduidingen would:

- Limit the immediate re-use of land for new project development for a minimum of 15 years to discourage land speculation and protect the typology of the interstitial space. This would not necessarily change any current function but would have an impact on the expectations of what can happen after a function disappears or is canceled.
- Allow more free developments, to facilitate “human wild-life”. A higher tolerance for self-built

basic structures to encourage development through appropriation of the space would essentially make squatting, which has been outlawed in the Netherlands since 2010, officially possible again in these areas. The 15-year interbellum guarantees at least temporary available space for such developments.

- Mandate a minimal maintenance policy, to facilitate natural wildlife. This would be implemented by a new organisation, tussenruimte-beheer.

Tussenruimte-beheer as an inter-municipal organisation to manage interstitial spaces is useful as these fragmented areas are often at the fringes of municipalities. The Vlietzoom is mostly part of The Hague, but small bits belong to Rijswijk and Leidschendam-Voorburg. Having an organisation that always looks beyond municipal boundaries and instead has these fringe spaces at its centre would be better equipped to manage them.

While a large part of the Vlietzoom consists of privately owned land, significant parts of it are



Ownership of parcels by the municipality of The Hague. Green is owned by municipality, yellow is leased from the municipality, and red is privately owned.

data from <https://data.overheid.nl/dataset/kadastralepercelen>



0 500m 1km  
1:25 000

■ owned by municipality  
■ owned by municipality, leased  
■ not owned by municipality

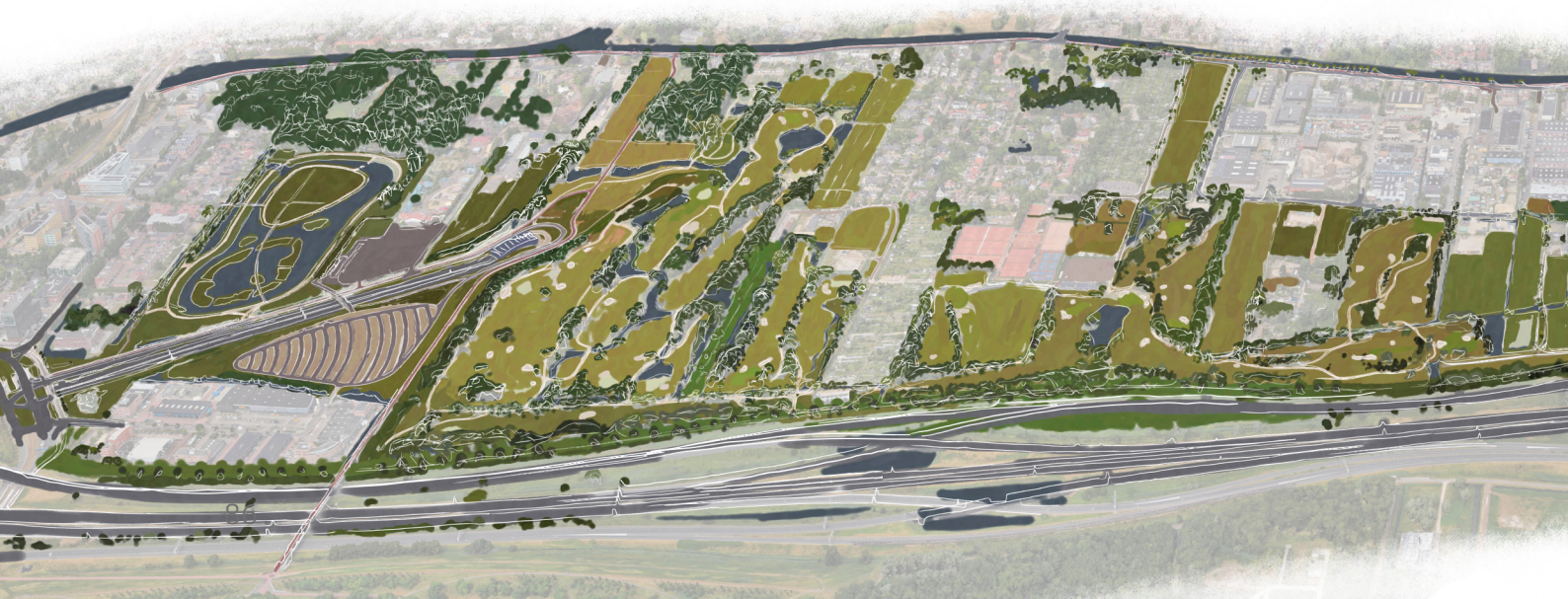
owned by the municipality. This includes roads, the Molenvlietpark along the South-West edge, the golf course, which is leased, and some fields.

The land that is both owned and managed by the municipality forms a good starting point for tussenruimte-beheer to implement a policy of minimal maintenance. Tussenruimte-beheer can not only help bring multiple municipalities together, but can involve other governmental land owners too. Collaborating with Rijkswaterstaat - which manages the highway - could further enhance and connect the area's minimally maintained plots.

Next to these providing a bridge between the different governmental organisations around the same area, tussenruimte-beheer can focus on involving local stakeholders as well.

A study of the Vlietzoom (Vlietzone, n.d.) (this title indicating a larger area than the test case) by the province of South Holland, in collaboration with municipalities, water boards, inhabitants and other interest groups lists these other stakeholder organisations as involved:

- Vlietzoom Alliantie
- Sportpark Westvlietweg
- Inwoners Vlietoevers
- Wijkvereniging Oud-Voorburg
- Stichting Mooi-Voorburg
- Houd Vlietrand Groen
- Vrienden voor Vlietland
- Recreatiecentrum Vlietland
- Vereniging Park Leeuwenbergh
- Wijkvereniging Oud-Zuid Leidschendam





As tussenruimte-beheer focuses on maintenance enabling bottom-up development, it would be useful to look beyond these interest groups and focus especially on collaborating with local stakeholders that directly own or manage a part of the area, such as the allotments associations, golf club and private landowners. These organisations could help improve useful access and awareness of the space, connect and expand minimally maintained space, and play a role in another significant part of the activities of tussenruimte-beheer: providing elements for appropriation.

These elements, built by locals with the help of tussenruimte-beheer, should be accessible to the public. The next part, 15-year interbellum, explores what could happen if no new development could take place within the next 15 years at least, and tussenruimte-beheer implemented a policy of minimal maintenance, and facilitated some elements for appropriation.

## *15-year interbellum*

The manifesto allows for building-level transformations, which allows for sustainable and effective use of versatile buildings, but imposes a 15-year minimum interbellum period of no new project development if building transformation does not happen. This simple limit would have a large impact on how continuous urban development works, and its effects are difficult to predict. When an urban area becomes vacant and becomes interstitial space, no new permits will be given for this area, and its future use is also not yet determined. This could lower the land price in the short term, but as bottom-up development happens on this municipal-owned land, its value might increase. At the same time a new in-between area becomes available, another piece of in-between land can be zoned again and permits given for its formal development, which will increase the land price. Almost certainly developers or previous owners will try to avoid the interbellum period after a building loses its function, so perhaps they will consider transformation of existing buildings more readily, which could be a welcome development. Where previously land-owners could sell their land directly to new developers,



*Bird-eye view impression of the current situation of Vlietzoom area.*

instead tussenruimte-beheer would be responsible for the land for at least 15 years, and could compensate the previous owners with money from selling of land to new developers of another interstitial space that became available to develop, but this would be a different piece of land, and thus not equivalent. If land loses its immediate value to sell, it would probably work against land price speculation, and perhaps change how land is treated as a commodity entirely. Further research exploring the impact on land prices of such a development interbellum policy would be very useful to assess the real-world consequences of the ideas proposed in the manifesto.

The following paragraphs describe an imagination of what could happen if a 15-year minimum development interbellum would also be applied to the Vlietzoom as a current interstitial space, and

tussenruimte-beheer would be in charge of implementing a minimal maintenance policy as well as providing and facilitating various elements for appropriation.

Three scenarios are explored, highlighting distinct aspects of the manifesto. They can be seen as different interpretations of the manifesto. First, a scenario depending on elements for appropriation and interventions led by tussenruimte-beheer is presented, using some local functions to build upon. A second scenario is more focused on what could spontaneously happen. Here, a large squatting community plays a central role in appropriating the space. The kinds of vegetation that would grow and form the basis for appropriation by wildlife is also outlined. Lastly, a different context for this appropriation is explored by imagining a change in water level of the polder area.





## 1. Led by Tussenruimte-beheer

### Observation tower

The construction of an iconic observation tower provides a first signal that things are changing, however slowly, and serves to create awareness of the place. This element is placed at the highest point of the Vlietzoom, near the entrance of the Victory Boogie Woogie tunnel. Its purpose is to invite people to climb it and observe their surroundings, to be more aware of the place they are looking at. By providing an overview and a unique novel perspective of the whole area, normally not accessible as one. Located next to one of the few routes that cross the area, it is an accessible element as a destination to visit and stop at.

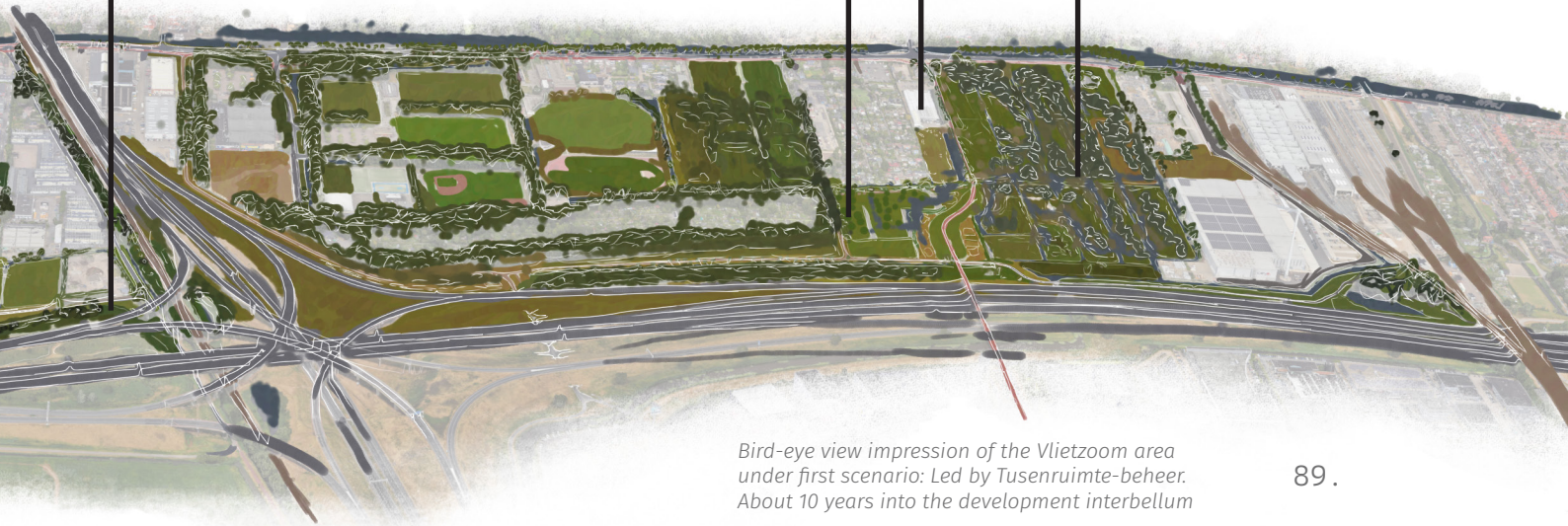


two kinds of shelters

expanded allotments

a brewery

nature friendly banks



*Bird-eye view impression of the Vlietzoom area under first scenario: Led by Tussenruimte-beheer. About 10 years into the development interbellum*





**Accessible golf course**

Currently it is quite difficult to experience the Vlietzoom as a whole, as the routing is fragmented such that there are no real ways to move through it end to end, except over the adjacent Westvlietweg road next to the Vliet canal from which the area is mostly hidden from view. Limited access can be a positive for interstitial spaces, as they can provide some escape from busy city life, but in order to facilitate appropriation of the space, one should be able to experience it, thus increasing accessibility without turning it into a shortcut route is desirable. A large part of the side of the Vlietzoom

south-west of the A12 highway is taken up by an expansive golf course. There is a whole network of paths criss-crossing the area, but none are publicly accessible. Tussenruimte-beheer could work with the golf club to open a limited number of key paths on the golf course, mostly around its edges, to the public. This would greatly increase (foot) access to the area. Adding a couple of short sections of paths and re-opening some short gated sections would allow the traversal of the length of the south-western part of the Vlietzoom.



## ***Reclaimed by wildlife***

The fields and public spaces maintained before by the municipality will now be left alone by tussenuimte-beheer. Notably the golf club states they already manage 1/3rd of the area of the course with a strategy of minimal maintenance (Broersma, n.d.), so these patches can provide valuable ecological stepping stones as wilderness slowly grows. After a few years a patchy pattern of shrubs has formed, which provides increased cover for birds and small mammals. Through the years some of these islands of new wilderness grow more connected as some companies leave their facilities which can't be replaced due to the development interbellum and are then added to the area left to re-wild, at least temporarily.

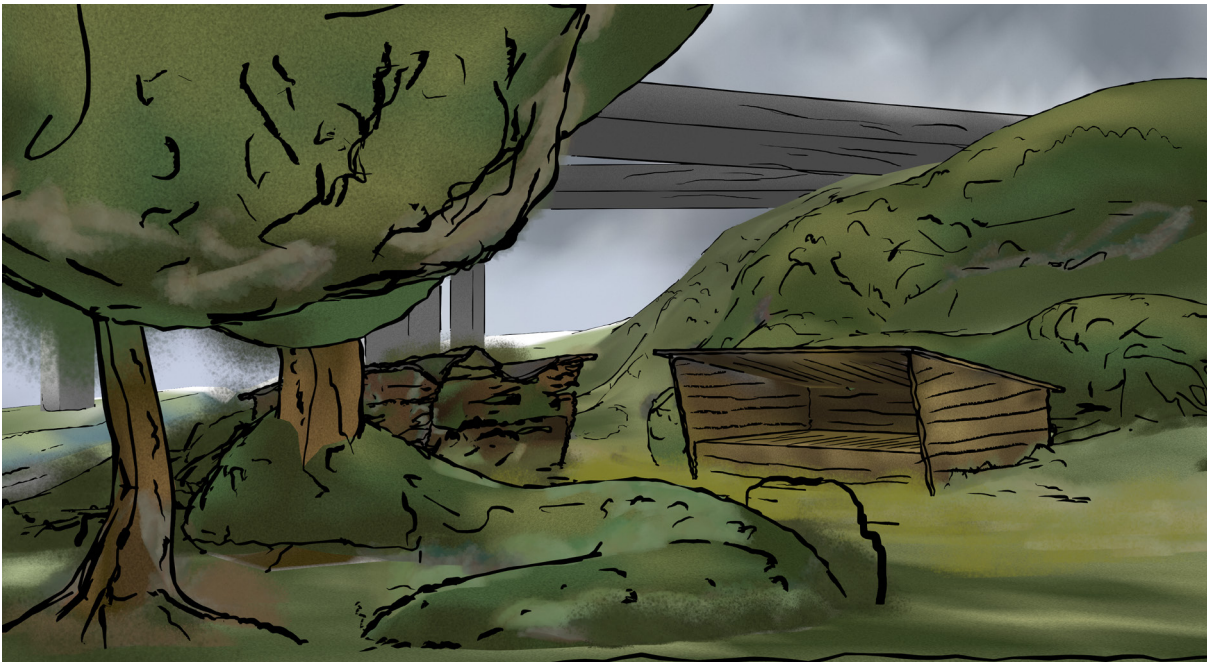


*A stripped back version of the illustration on page 89 shows where most rewilding has taken place.*



## ***Two types of shelters***

Under a highway viaduct and next to a railroad is a corner that is relatively sheltered due to its non-central location and growing shrubs. Next to the highway, this place is owned by Rijkswaterstaat, but managed in part by tussenruimte-beheer. It can't be completely rewilded as it is quite narrow and the highway infrastructure is close-by, but after about 10 years of minimal maintenance it is still slowly being reclaimed by shrubbery. This provides enough cover to add a second element from the elements for appropriation examples: the two shelters, one habitable for people, one for wildlife, highlighting the relation, similarities and differences in places to shelter for humans and wildlife.

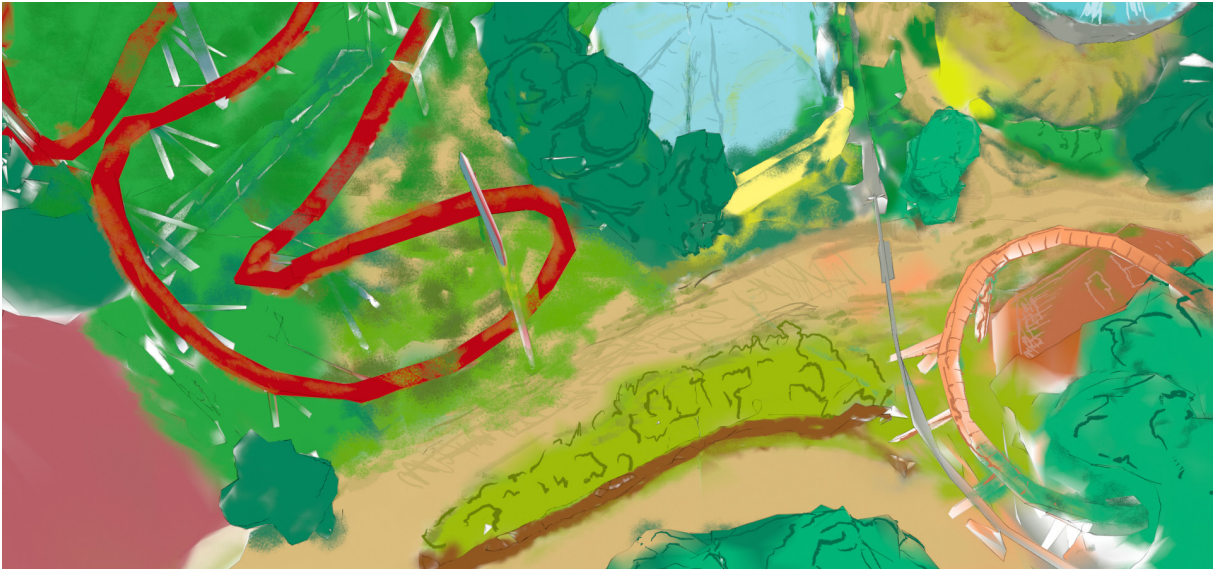
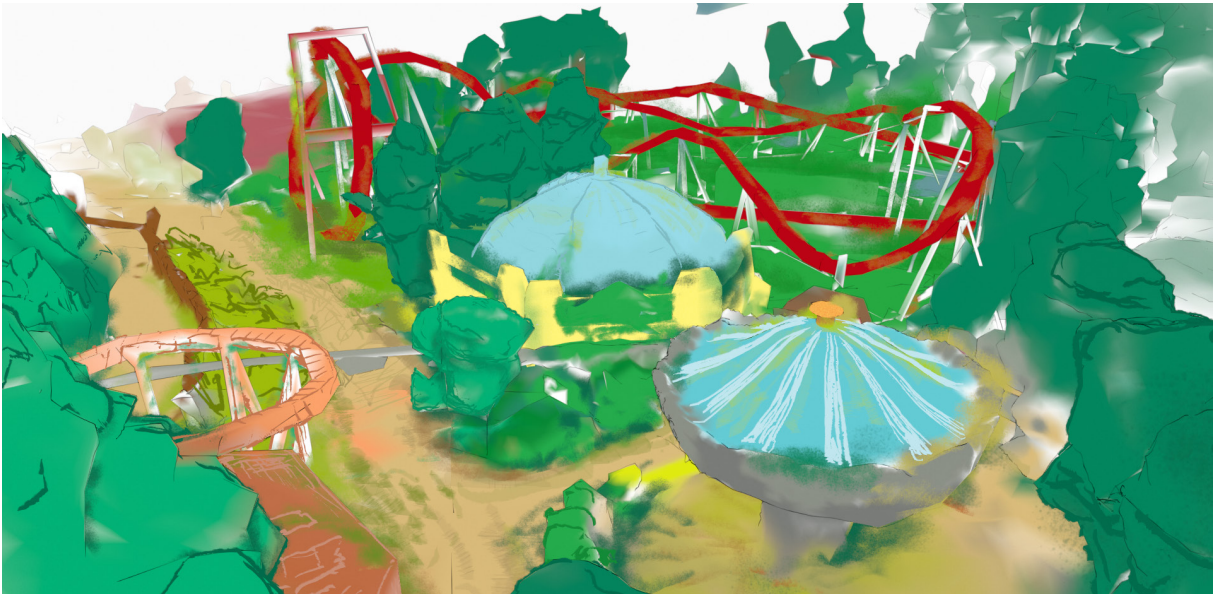


## ***Amusement park***

Unfortunately after about seven years the Drievliet amusement park closes its doors to the public. Due to the development interbellum, it is abandoned as is, and the roller-coasters and carousels are slowly taken over by vegetation. After another seven years it is no less of an attraction than when it was open for some, as the slightly eerie atmosphere of the abandoned and overgrown ruins have become a well-known purpose for a walk to locals and the occasional tourist alike. The observation tower close-by is an attraction that provides a visual connection to the whole area, and the haunted house still has visitors.







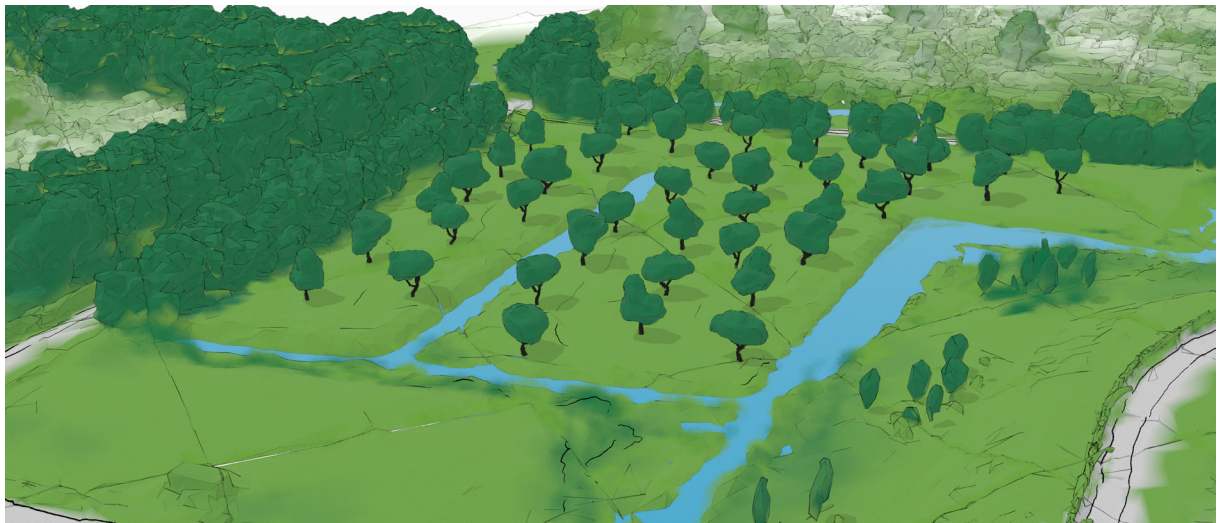
### ***Nature-friendly banks***

One of the first interventions by tussenruimte-beheer is the softening of the ditches in the fields on the north-eastern side of the area. These newly created nature-friendly banks (natuurvriendelijke oevers) are visual signals the area is being maintained differently and structural things are changing. More importantly, they are elements for appropriation by wildlife, as these softer gradients from wet to a dryer environment enable greater biodiversity.

As the largest continuous area owned by the municipality, rewilding with the help of nature-friendly banks has turned these fields into a more valuable area, richer in opportunities for animals and vegetation. Moreover, these elements for ecological appropriation are also in the vicinity of some of the new cultural destinations in the area.

### ***Expanded allotments***

Around the same time as close-by the ditches are being reworked into nature-friendly banks, the allotment association nearby enters into an arrangement with tussenruimte-beheer regarding the land adjacent to their complex, which is owned by the municipality. Every member of the association already has their own small parcel of land to cultivate, but now the association is allowed to collectively expand beyond their limits. With support of tussenruimte-beheer they plant an orchard of local fruit trees cultivated in South-Holland in the field next to the complex. They can use this public land to grow the versatility of their harvest, but, as is the case for all elements for appropriation supported by tussenruimte-beheer, it has to be accessible to the public. The first years the small trees are still settling in the field and there isn't much to experience as a visitor, but after about 4 years the trees start to bear fruit, and







*A bird-eye impression before any changes.  
Only the terrace of the brewery is just visible on the right.*



*After around 7 years, the banks of the ditches are nature-friendly,  
there is an orchard, and a community of people living next to the  
brewery*

the open field with spots of shade from the fruit trees becomes a great place for a picnic, especially combined with a visit to the brewery that has just opened nearby.

### **A brewery**

After two years of tussenruimte-beheer a warehouse in the Vlietzoom area closes shop. A year later, a small group of people asks tussenruimte-beheer about the possibility of opening a small-scale brewery in part of the abandoned warehouse. They do need some extra infrastructure to support the industrial equipment they need. They get permission to open a brewery, provided it is publicly accessible. So, a year later, the brewery opens, with a terrace of beer tables on the adjacent empty plot. As hoped, the brewery and its terrace are a success, and soon the place gains some notoriety, located next to open fields. Children have plenty of room to play on the empty plot of land next to the terrace, except soon it isn't that empty any longer. Via the nearby rail depot, a regular at the brewery has managed to get a disused railway car to put on next to the terrace, which can come in handy for the brewery to use at the lively outdoor events like live music and a regional market they now organise every few months. In return for arranging the railway car, which has become its own small attraction, the person asks if he can set up his yurt a bit in the empty plot. Slowly, the place grows less empty, as more people join the small community of people living on the plot. After a few years, the first settler offers again to bring in a few more retired railway cars from the rail depot onto the plot, a railyard in a field...





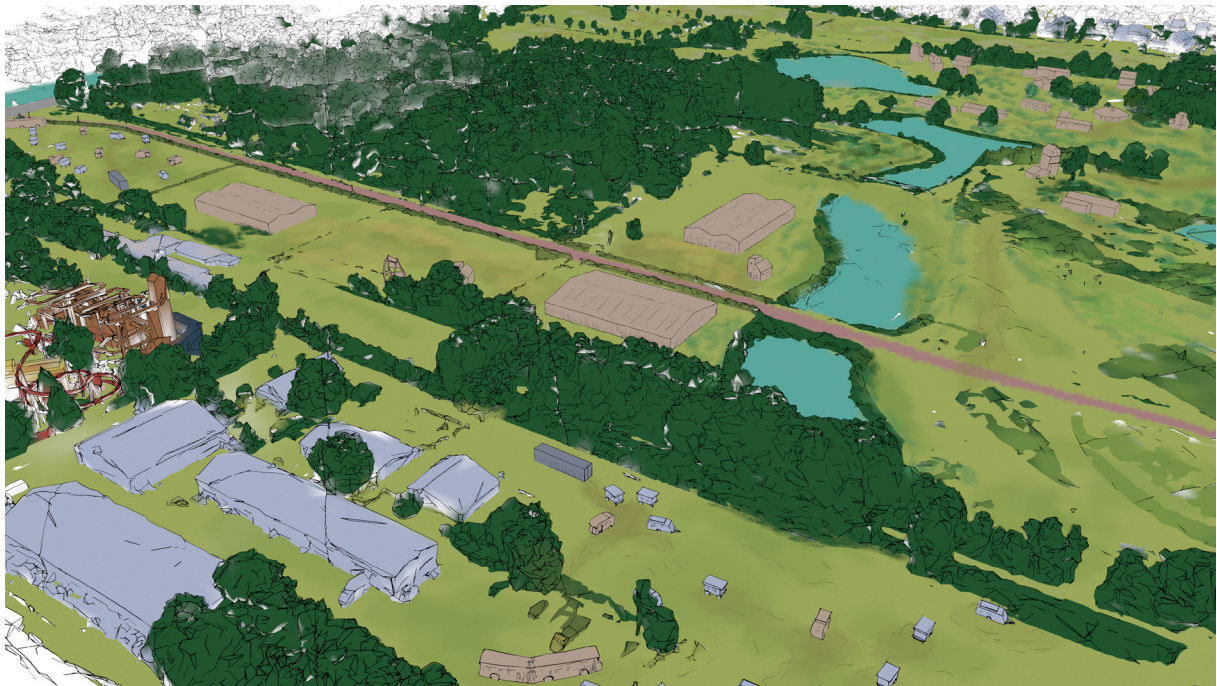


## 2. Led by appropriation by squatters

In this second scenario there is less emphasis on the policy of elements for appropriation facilitated by tussenruimte-beheer. Instead focus is shifted to the other significant policy applied to interstitial spaces in the manifesto: a higher tolerance for self-built basic structures to encourage bottom-up development. A basic limitation for this development is that no new connections to utilities (like electricity and internet) would be provided, which, together with no long-term guarantees of settlement, should inhibit regular redevelopment plans.

## *Cultural development*

Central in this scenario is a group of squatters that appropriates the land, so a large part of the Vlietzoom is turned into a large squatted area. First, mostly mobile vehicles, an eclectic collection of campervans, caravans, living wagons occupy fields around the Drievliet amusement park. Some seek temporary stay, others more permanent. As the 15-year development interbellum prohibits new project development, buildings that lose their old function are left empty, and more land becomes available, which provides opportunity for the squatters to appropriate those and extend their squat.





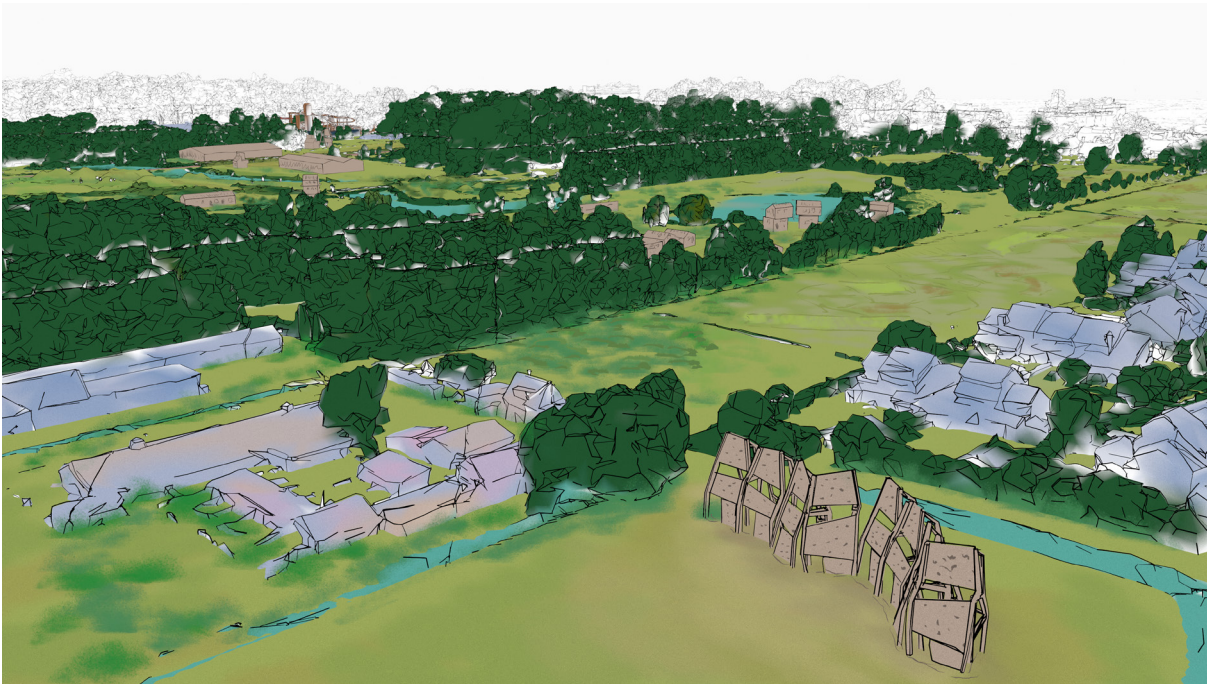
Some parts of the fields are left as more open space to organise events, also next to the amusement park. Some larger improvised structures help the community in organising both outdoor and indoor events.

Closer to the Park Leeuwenbergh neighbourhood and other sports facilities, structures purpose-built for climbing are erected, while close-by, in the fields north of the golf course the squatters experiment with urban agriculture.

Part of this scenario is the assumption that the golf course would be abandoned. The area now

occupied by the course is spread extensively throughout the Vlietzoom, so by opening up this area to appropriation, there is a chance to link the whole Vlietzoom area together.

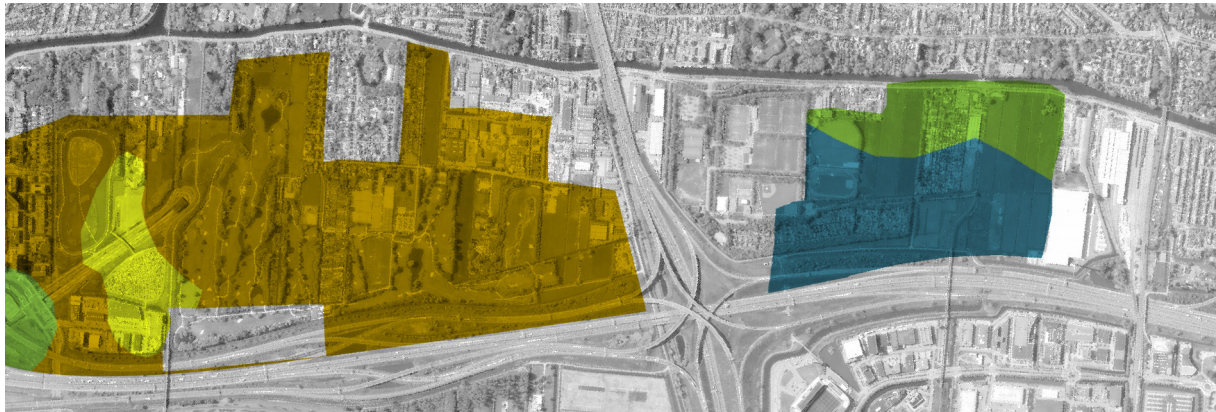
Through its occupation by more permanent self-built structures, this former golf course area becomes central in linking together the various squatting activities and forming one continuous squatted area. While the Vlietzoom squat is relatively tucked away, as is the whole Vlietzoom area, it is bisected by a bike path that cuts through the Vlietzoom and keeps it accessible.



## Ecological development

In the south-western part that is depicted in sketches, various clayey soils are most prominent. The edges of areas used by squatters and other parts of the former golf course will stop being maintained, so new dense vegetation will provide an extended and diversified habitat for insects, birds and other animals.

Because it is quite nutrient-rich, wild vegetation will take over the cultivated grass fields within a few years when no longer actively maintained. First tall growing grasses and herbs, followed by dense shrubs of Blackberry, Hawthorn, Elderberry, making it more difficult to traverse. After a few years this will be complemented by growth of trees like Ash, Maple, Oak and Elm.



Various types of soils in the Vlietzoom area. Most are low in calcium (kalkarm), and consist of either clay (klei), a mix and sand and clay (zavel) with deeper layers of peat.  
data: bodemvlakken from PDOK



0 500m 1km  
1:25 000

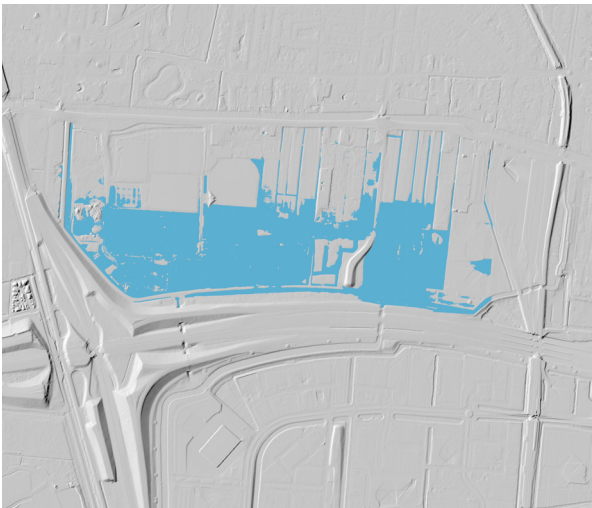
- Kalkarme leek-/woudeerdgronden; klei
- Kalkarme leek-/woudeerdgronden; zavel
- Kalkrijke leek-/woudeerdgronden; zavel
- Liedeerdgronden; zavel



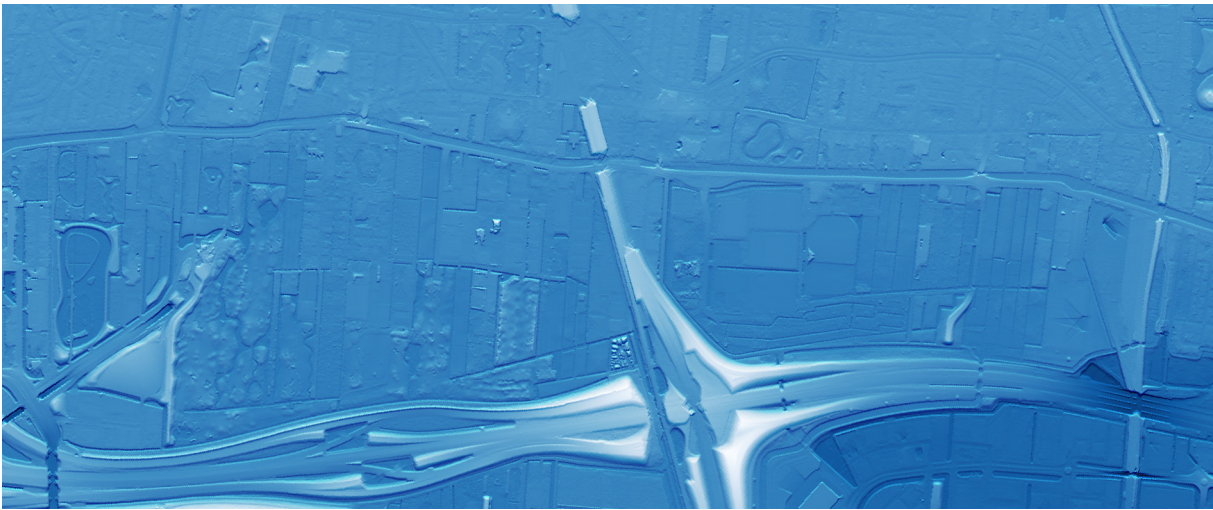
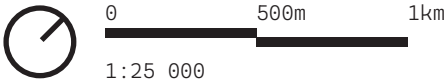


3. A flooded land

This third scenario differs from the second by proposing a change in the water management of the land. Across the Vlietzoom, from the Vliet towards the A4 highway, the area slopes downwards slightly. The groundwater level is already quite high, in the north-western part sometimes reaching 20 centimetres below the surface. The wettest area is now already occupied by rougher vegetation. Raising this water level by only a few decimeters in this north-western part would put a large part of the area under a shallow layer of water. This may help against subsidence because of deeper layers of peat, but also prohibit many of the functions that occupy the area now. The exploration here is what specifically this changed landscape would mean for its occupation by wildlife and people.



The north-eastern part of the vlietzoom, flooded by a few decimeters



ground elevation of the Vlietzoom area.  
data: DTM 0.5 m from PDOK

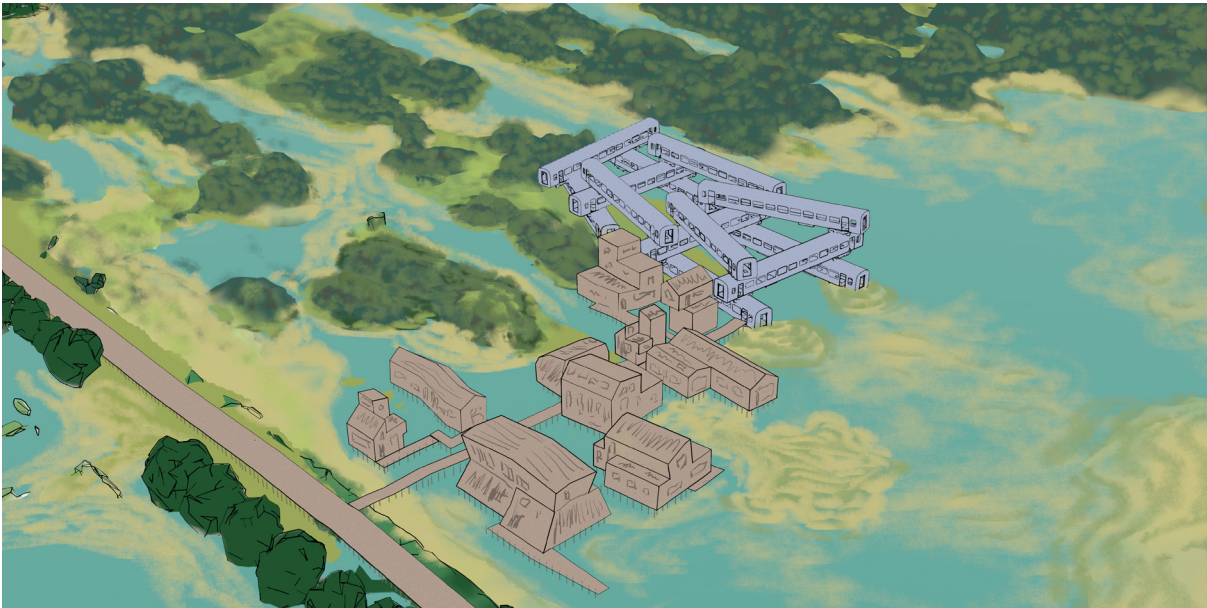




## **Ecological development**

The heightened water level and flooded land will have a huge impact on the wildlife and types of wildlife that can flourish in the area. Without maintenance and largely abandoned by people, within a few years the flooded parts of the nutrient-rich Vlietzoom land will be dominated by extensive reed lands, while the parts that are not completely flooded but still significantly wetter

than before will be covered by equally inaccessible swamp vegetation, dominated by willow trees and bushes. As the area is largely inaccessible to people, it can provide an even better cover for wildlife. These types of reed lands, once developed, don't feature a very large variety of plant species, but do support a rich variety of birds, insects, and other life in the water (Schaminée et al., 2000, p. 246).



## **Cultural development**

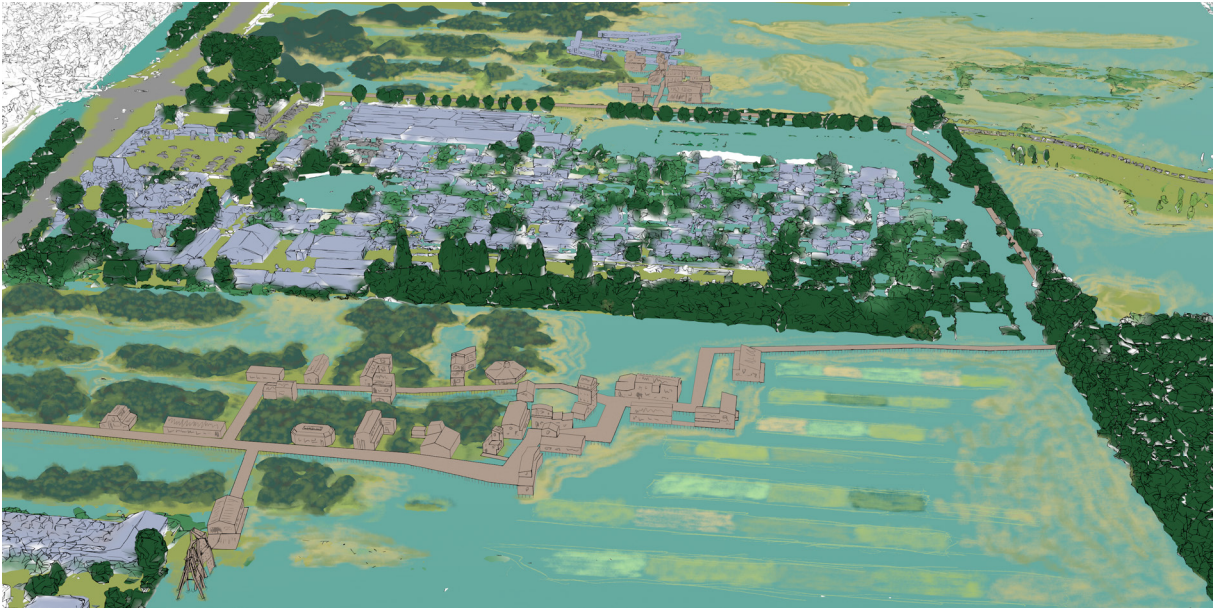
Turning the area largely into a swamp makes it significantly harder for people to use, thus changing the balance between cultural and ecological appropriation.

Some of the people that rely on urban interstitial spaces the most, such as homeless people, generally have the least means to acquire the required materials to construct a structure to keep dry feet in a flooded area. Thus even though these explorations are largely focused on what could happen if people themselves appropriate the space, as flooding the area poses an extra challenge for human occupation and appropriation, it seems fitting for Tussenruimte-beheer to provide some starting point for appropriation in the new swamp. Old rail cars from the nearby train depot are stripped and their shells stacked in the partially flooded field next to it. As iconic land art they draw attention to the possibilities of this new space. But it is not just an installation to observe: the shells can be occupied and provide shelter for people. A boardwalk connects the stacked railcars to the nearby bike path that crosses the area. This route is also preserved by raising it on a boardwalk. Along the boardwalk connecting the bike route to the rail cars, squatters occupy the land by building wooden houses on stilts. Another former bike path is also converted to a boardwalk that leads in-between willow trees to more flooded fields. Along the edges of these fields more squatters build various houses and other function structures, and close to the partially flooded sports facilities the squatters take the initiative to build structures for climbing and bouldering.

Next to these buildings in a more open field people initiate experiments with new forms of agriculture in the wet area. A part of the field growing rice is being experimented. This crop can be interesting in the Netherlands in peatlands with higher ground water, possibly in conjunction with catfish (Helfenstein, 2024). Other forms of paludiculture (a form of agriculture focused on wet or aquatic environments) are used to test the growing of reed, bulrush, and willows, which can be used as biobased building materials (*Paludicultuur – Natte Teelt - Natuurinclusieve Landbouw*, 2021).

This radically changed landscape together with its tolerance for experimentation allows for the exploration of new economic opportunities through nontraditional forms of agriculture, building, and living.





## *Basis of new plans*

After 15 years of no new project development in the Vlietzoom, and another area in The Hague becoming available as a new interstitial space, there is the possibility for more formal plans and developments, which can take as a basis what has formed in the area over the years.

In the first scenario, 15 years earlier, the observation tower first drew attention to space. Around the same time, newly opened paths made the area explorable for people. Some people didn't like the "messy" looking fields and verges, but some others thought it added to the character as the area started playing an increasingly important role as ecological corridor alongside the A4 highway. Over the years the area has transformed from a tucked-away corner into a known destination. A community of people seizing the opportunity of spatial allowances has transformed the space into a place. The community that popped up in an empty plot as the brewery became successful has expanded beyond the core people living on the plot, and wants to take initiative in developing a more permanent housing solution for more people in the plot next to it. They are also interested in revitalising the largely outdated business park nearby.

The second scenario relies even more on appropriation. Here this happens on a larger scale than in the first more guided scenario, as a large part of the land is squatted by an expanding community. 15 years of activity in this community and collaborating with other local initiatives, has resulted in more permanently valuable spaces and activities

for the public. These new public spaces can form the backdrop for new housing developments, while some of the more mobile part of the squatting community moves away to a newly available interstitial space, linking the communities of both spaces together.

In contrast, the direct urban redevelopment after 15 years in the flooded third scenario is less straightforward. The human interventions, less expansive compared to the non-flooded scenario, are however more experimental in nature. The squatters experiment with new ways of doing agriculture in wet areas, as well as living in these areas. Therefore after 15 years instead of brand new developments it would be more likely the initiatives that have already developed will have a chance to be enhanced and to expand with access to proper utilities and chances to build more permanent infrastructure to manage in the swamp, while the wilderness that developed in a large part of the area when it was flooded will largely be kept intact.

As referenced earlier, municipalities, the province and other stakeholders are actively developing plans focused on the Vlietzone, of which the Vlietzoom is a part. Some of the goals in their vision for the area seem to align broadly with the goals of my manifesto, such as new developments contributing to an ecologically valuable area, and striving towards more public access (BoschSlabbers landschapsarchitecten et al., 2022, p. 53), others less so. For example, even though no large-scale urban expansion seems planned, the option for small-scale linear settlements (lintbebouwing) and space for "modernised business park"

*(right) Timelines to provide a rough indication of the order of significant events in the three test case scenarios*



*year 0* *year 15*  
 Observation tower  
 Orchard planted  
 Accessible golf course  
 Nature-friendly banks  
 Brewery opens  
 First fruit from the orchard  
 Amusement park closes  
 First settler near brewery  
 Two shelters

Led by Tussenruimte-beheer

*year 0* *year 15*  
 First mobile vehicles arrive  
 Fields used for urban agriculture  
 Climbing facility constructed  
 Larger building to support events  
 Self-built houses on former golf course

Led by appropriation by squatters

*year 0* *year 15*  
 First boardwalk replaces  
 cyclepath  
 Land is flooded  
 Railway cars stacked  
 Self-built structures next  
 to railway cars  
 Self-built structures on  
 second field  
 Climbing facility constructed  
 Paludiculture experiments

A flooded land

are desirable (*Plannen Voor Vlietzone/Vlietzoom*, 2021). But their different way of approaching development in the area is exemplified by their stated goal of reducing the cluttering (*verrommeling*) of the area. Even if local stakeholders or groups representing local stakeholders were involved, the plans still represent a somewhat abstract projection of their vision of what the site should be.

From various requirements and goals they are generating a design for a place. In contrast, the manifesto in this thesis calls for a very different approach to place-appropriate and specific developments in which the goal is not to design a place with predetermined goals, but to enable the circumstances from which a space can be used to its potential.

Interstitial spaces could play a role in the wider process of spatial development as a key typology to enable a more place-specific and bottom-up approach. The imagination around the Vlietzoom above illustrate how implementing the ideas of the manifesto, by using time, some triggering interventions, and probably some luck, could lead to the formation of a place that can trigger a new re-development of the area that is deeply embedded in the structures that have formed in the space over time. This alternative model for long-term spatial redevelopment embraces and encourages bottom-up initiatives and nurtures spontaneous development instead of designing a place directly. Place-making is replaced by place-growing.





# Discussion & Conclusion

Spontaneous development is key to the usefulness the manifesto proposes, but this relies on the essentially unpredictable factors of spontaneous social action. While outcomes from analyses are what led to these proposals, they do remain theoretical ideas for a different way of approaching spatial development, which is of course unproven. The potential benefits are explained, and some of its practical limitations discussed too, but a further behavioural study into appropriation of land and public space could add to the substantiation of the ideas put forward in the manifesto. Likewise, because this thesis is written from an urbanist perspective, a further less generalised ecologically focused research would provide additional value to the subject matter.

The worlds of people and wildlife seem increasingly alienated from each other, exemplified by the threat our modern way of life forms for our natural environment. But also in a non-threatening way, our way of life seems incompatible with that of our non-human neighbours; animals often stay out of sight until human activity has been withdrawn. In the situations explored in this thesis those two worlds meet again, although their inherent (in)compatibility is not an explicit theme. Differences in balance between these two worlds are illustrated through a difference in context by contrasting test case scenarios with and without flooding, but further research and design explorations with the explicit theme of how to achieve peaceful cohabitation of humans and wildlife

would be of additional value to the themes explored in this thesis.

The explorations of test case scenarios where elements for appropriation are central and where spontaneous development is central illustrates the two sides of the intermediate role of *tussen-ruimte-beheer* in fostering culturally valuable spaces. Two contrasting possible strategies are explored, one in which developments need to be initialised, invited, provoked and helped, the other in which spontaneous developments need to be kept in check somewhat, without dominating.

The means used in the scenarios to somewhat restrain the spontaneous developments in the space next to their potential temporality of 15 years is a restriction on new connections to utilities. While its purpose is to encourage more independent developments and restrict “normal” project development, there could be practical problems with this restriction. For example, the lack of provided electricity could be solved by off-grid developments, but a lack of managed sewage could lead to health risks for inhabitants, so perhaps providing not individual but communal access to some essential utilities could be a middle ground for *tussenruimte-beheer* in fostering spontaneous developments.

Society needs new ideas, innovation and developments to regenerate, to prevent stagnation or getting stuck in the side effects of older solutions. The dynamic of society benefits from the room to play that some members of it need to operate, temporarily protected from some of society's pressure, demands and restrictions. Therefore for 15 years new spontaneous developments in interstitial spaces are protected by *tussenruimte-beheer*, but after this interbellum the developed ideas are once again to be exposed to "normal" society. This exchange is necessary to enrich and ultimately benefit society. It would be undesirable to have a complete isolation of some developments that removes them from society entirely. So providing space for spontaneous developments should not provide pure escape from ruling regulations, but foster initiatives that ultimately provide value to society. The organisation that makes sure this space does not lead to isolation but stays beneficial is *tussenruimte-beheer*. On one side they should provoke and empower new initiatives, while also making sure there still is some minimal regulation to foster the experimental character of developments. Thus the role of *tussenruimte-beheer* is between stimulating developments and keeping them in check without being itself a dominant force.

While in the theoretical development international literature and thus terminological development is formative, the analytical and design focus of this thesis is very much on interstitial urban spaces in the Netherlands. Even though nationally relevant themes in spatial planning are addressed, the particular interventions discussed in the Vlietzoom test case are mostly place-specific, so these are less transferable to another location

than the underlying ideas of the manifesto. Those are intended to be applied to interstitial spaces in the Netherlands to address Dutch spatial planning practice in general. The policy proposals in the manifesto are specified with the Dutch planning context in mind, which is not directly applicable to any other country and landscape, but the ideas behind these specific policies are theoretical proposals based on the assumption of people willingly or even eagerly using opportunities for appropriation. These assumptions are general but could be different across cultures, and there is no reason to think they would work better or worse in the Netherlands than in other places.

To add an extra layer of depth to the manifesto, an analysis of the possible effect of the development interbellum period on land prices would specify the economic context of this proposal.

The core subject of this thesis, interstitial space, is ambiguous by nature. Instead of simplifying their nature too early on, significant effort was put in finding novel ways to analyse these spaces while including their inherent ambiguity. However, to effectively implement the proposals put forward as a result of this analysis, an unambiguous definition would be required. That proved challenging to tackle in this thesis, but further research into hard criteria could make implementing desirable policies in these spaces more effective.

Using the artistic lens of landscape photography was essential in providing an understanding of the landscape, and led to an appreciation of the unique opportunities for spontaneous development these spaces provide in the urban spatial context, both to people and to wildlife. By being open to spontaneity, urban interstitial spaces in the Netherlands can provide cultural and ecological value.

Moreover, by developing policies that focus on emphasising and enhancing the opportunities for spontaneous cultural and ecological development using this spatial typology, this strategy can result in a new kind of spatial development directly connected to the life that people and wildlife can build in an urban environment, and can be part of a sustainable long-term life cycle of urban development.





# Reflection

## 1. Introduction

The starting point for this thesis was my personal fascination with the topic of interstitial spaces. Studying literature about these spaces shaped my understanding of them, and revealed the real inherent ambiguity that is central to this topic. Throughout the project I had to find my way to appropriately approach every next step in the process of exploring these spaces. Early on I sensed the cultural and ecological values these spaces provide, so I chose to focus on exploring and analysing them especially through these two aspects.

It made sense to split the analysis into two parts, ecological and cultural. The ecological analysis was relatively straightforward and largely data-based, though I had to find a balance on how deep into ecology I was going to dive. I used literature to provide general theories and ideas, and some data to apply those general principles in analysis. This provided a useful indication of general value, but could have been stronger on the specific value of spaces in the study area.

Cultural value analysis was more challenging to assess. Both cultural value as a concept and the topical spaces of interest are relatively vague by definition. To tackle this I used nontraditional methods of analysis to be able to find a lens to analyse these spaces through. This is a rather subjective method, but to anchor my analysis and be able to relate it and assess it outside of purely my own interpretation, I used the lens of Dutch New Topographics photography movement.

First analysing the work of a number of relevant photographers as it relates to viewing these spaces of interest, then applying that to my own. While mainly based on subjective interpretations, adopting this discipline for viewing the landscape did allow me to find an interpretation of what makes these places valuable that proved useful in the further development of the thesis.

After gaining insights into the cultural and ecological values through analyses, I struggled to determine the role of design in the thesis, while keeping true to the undesigned nature of interstitial spaces. This seemed like a paradox, designing undesigned spaces. I did some experiments with applying “ideal” design ideas to a real area in The Hague. This seemed inappropriate and inconsistent with the values I identified for these spaces, which is why I did not set out to design a project. Instead of designing a project, I illustrate ideas about the values of these spaces through designing elements for appropriation. However, the story was not yet complete without testing how these ideas fit into the larger picture, and exploring the significance and opportunities of interstitial spaces in the wider process of spatial development. To explore this I wrote a Manifesto for Interstitial spaces. I then applied the ideas from the manifesto and inspirations from some elements for appropriation to a real place in The Hague (Vlietzoom), to explore and evaluate them. This is similar to the step I wanted to take earlier, but this time the role of the design in this space was fitting and not misplaced.



Through these peculiar interstitial spaces I came to question the practice of spatial planning as a whole. I feel like I developed as a critical thinker as this thesis gradually developed as I found a story to tell and viewpoint to communicate. Exploring long-term opportunities these typologies present challenged me to think about the future of the practice of spatial development and the role we as urbanists and designers might play in it. Deliberately manoeuvring through this complex topic has led to some unique and non traditional methods that are very useful in tackling complex issues like this.

## **2. Relation to the Urbanism graduation studio Metropolitan Ecologies of Place**

This graduation project's central focus is on understanding, designing and appreciating interstitial urban spaces through their cultural and ecological values. These values are core to the social and ecological focus of the studio Metropolitan Ecologies of Place. The studio approaches space as capital and has transformation and transition as central themes, which is reflected in this thesis through its focus on long-term (re)development and spatial sustainability while putting the cultural and ecological value of these particular typologies central. Within the field of urban design and spatial design in general the discussion on how to deal and design in and around interstitial spaces which seem to develop their value as a result of a lack of planning is very relevant.

## **3. Relation between research and design**

The starting point for this thesis was a fascination with the ambiguous typology of interstitial spaces, with a goal to gain a better understanding of these spaces. Thus the project was focused more on research at the start. However part of the process in understanding the value of these spaces was an exploration of the role that these spaces could play in spatial planning, which is a design discipline. This is where design would be useful in forming an understanding and envisioning the value of these spaces, which is the goal of the project. As one of the central acknowledgements in my approach to the topic is recognition of the value of these spaces lies in their unplanned qualities, from the inception of this thesis the role of design has been an issue to contend with. The central goal was not to design in the traditional sense, but to offer some alternative to the current way of treating these spaces that allows for more spontaneity in use. Through designing elements for appropriation I employed creative design techniques to explore, illustrate and communicate ideas without restricting the project to a traditional plan. The manifesto that followed was applied to a test case. Hypothetical scenarios that were developed for this test case were more similar to traditional design projects than the stand-alone elements for appropriation, but with some key differences. Instead of designing interventions, the goal was rather to imagine a process given certain conditions.

In three designed scenarios I tested the strength of the manifesto with different accents. This led to a more nuanced understanding of the consequences of some of the ideas proposed there.



By not using design in a traditional sense, but instead imagining hypothetical scenarios in which spontaneity played a large role, I gained a better understanding of the possibilities to use design as a method to gain a more nuanced understanding of possible processes, with minimal use of top-down interventions.

#### **4. Value of my way of working**

My way of working throughout this thesis has been very exploratory. While the topic of interstitial spaces and the focus on ecological and cultural values within this topic were clear from start, the approach to research and design evolved.

To analyse the ambiguous typology of interstitial spaces, it was clear that traditional urban analysis frameworks, such as distinguishing and separating different layers of substrate, network and occupation, would not provide useful insights into the nature of the spaces I was interested in. So I needed to develop my own perspective and method to understand these spaces. Resistance to simplify in studying spaces led to developing valuable ways of working, employing non-traditional analysis techniques, and using the methods of design in a more experimental way.

It was challenging within a scientific context to use methods like photography and design, which have a subjectivity inherently embedded. A natural limitation of the project as a result of using these methods for important parts of it is a lack of objective analysis results. Instead the main results are presented in the form of an interpretation. However, as the topic of the analysis itself is not unambiguous, this limitation is only natural

and fitting; it would be contradictory to present an objective analysis of a type of space that escapes definition.

After embracing this subjective viewpoint, I presented a manifesto to emphasise the insights gained from subjective analysis and clarify them. This approach and these methods have shaped the project. Especially using photography to analyse space and embracing its ambiguity also reflected in how I then approached design.

#### **5. Academic and societal value**

This thesis contributes to the study of interstitial spaces. In academia these typologies (under many different names) are studied and discussed by people from a range of spatial disciplines, from geography to landscape design. The focus of this thesis is specifically on the Dutch context. Different methods not traditionally used in academia, are used in this thesis to get a grip on these spaces.

The topic of how spatial development happens, how we organise, plan and shape our living environment, and how we live in this environment, are of great societal relevance. As densification forms a threatening pressure to the existence of these more ambiguous remnants in the urban fabric, it is important to highlight and investigate the value that they actually have, and advocate for preservation and cultivation of those values. I studied ways to combine these values, and thus provide inspiration for the value these places could bring to vulnerable and valuable people and wildlife.

Furthermore, urban expansion is a pressure on rural and natural areas. Cultural development on the fringes of cities is easily pushed aside. Therefore this current practice of spatial development is not sustainable. While this large scale was not initially a goal of the project, discussing sustainability in the context of the long-term implications of the practice of spatial development flowed naturally from it. This project gave me the opportunity to think about sustainability as a concept not just related to our current pressing and prevalent issues of climate change and nature conservation, but on a larger time-scale about a process for sustainable and circular spatial development.

## **6. Transferability of results**

Even though the test case scenarios that were developed are very place-specific, the themes touched upon in their discussion are applicable to the manifesto as a whole, which is focused on the Dutch context of interstitial spaces.

The insights gained into the typologies are very specific to the Dutch context, and have a degree of subjectivity, as subjective analysis methods were used. However, the general methods of analysis used are not limited to Dutch context, but could be applied in any (peri)urban area.

In this thesis many different topics from different disciplines were touched upon, that could all benefit from more specific studies within their specific discipline. Ecological, sociological, and economic viewpoints would all be valuable to assess the long-term impact of radical changes proposed.

## **7. On working with ambiguous concepts**

Central in the thesis are the concepts of interstitial space, ecological value, and cultural value. A deliberate choice was made to not first simplify and overly define those values before the analysis, to prevent oversimplification and work with the complexity and ambiguity inherent in the topics.

It necessitated the use of non-traditional techniques and led to a more nuanced approach to the topic. However, this nuance also brings challenges. It is common to simplify any topic to clarify its understanding, and embracing inherent complexity like I did in this thesis prevents any simple or unambiguous answers. Instead, the subject of the questions themselves, including that of the meaning of the terms of cultural and ecological value, became more clear along with the results of the analysis.

## **8. Photography as a method for analysis**

I wanted to explore interstitial spaces through subjective perspectives of work produced by people who worked on and in these spaces and produced work about them. The essay "Terrain Vague" by De Solà-Morales (1995) was central in developing the idea to use photography to understand the cultural value of interstitial spaces. De Solà-Morales introduced the concepts of terrain vagues through referencing photographers and photographs. Through the Terrain Vague essay I found the work of a number of Dutch landscape photographers. By studying insightful interviews with some relevant photographers, literature discussing the work, the work itself, I sought to gain

an understanding of their perspective and way of looking and working, and gained an appreciation of their precise way of looking, and artistic method.

To use that artistic method in the context of a more academic method, I analysed and discussed the artistic lens I deliberately adopted to perform this analysis. The New Topographics photography movement itself - which my exemplary photographers are related to - has been described as “scientific rather than artistic” (Van Den Heuvel, 2015) which facilitated my use of this specific lens.

Some of these photographers themselves also struggle with this tension between documentation and aesthetic filtering. Hans Aarsman even explained this is why he stopped producing photography himself. He describes a struggle to escape from the “regime of the photogenic” (Photo31, 2023, 19:30) and highlights that on beautiful pictures there isn’t much to see. However he also recognises that “you need photography to really start looking” (Photo31, 2023, 52:40)

Studying these photographers not only played a central role in exploring landscapes that are hard to grasp as part of the thesis, but also changed my own perspective on landscape photography.

As many photographers do, I used to avoid signs, and lamp-posts, trash-cans and other “distracting” elements from my photos. I had struggled to take pictures in the polder landscapes around Delft and in urban fringes - these are not classical picturesque landscapes. But studying these Dutch New Topographics invigorated a newfound appreciation and way of looking and taking pictures.

Instead of trying to create a beautiful picture of a landscape, to aim to capture the landscape as it is, and to do so in a way that shows something and has some meaning, however ambiguous.

## **9. New spatial planning instruments**

The vision as laid out in the manifesto of this thesis does not fit in the current paradigm of spatial planning practice that current interstitial spaces left-over from. The recent interest in these spaces not only searches for new ways to use these spaces but also new methods for developing urban space in general.

The specific policy proposals in the manifesto aim to let people occupy and colonise some urban space without permits. Not planned. This is very radical in a bureaucratic and completely planned setting like the Netherlands. As squatting was outlawed in 2010 (Schmetz, n.d.), this proposal is moving in the opposite direction. With more room for anarchy, and spontaneity as a core value, it calls for spaces with less prescriptive planning. In essence a transition from a default of top-down to a new bottom-up spatial planning is needed. Currently these plans usually originate from government bodies and large institutions. We are used to this as a society. To change this practice and this assumption, both rules and instruments need to change, but also awareness of new possibilities and individual or collective proactiveness is required. So not only a shift in policy but also mentality and in thinking about using space is needed.





# References

- Baart, T. (2015). *Werklust: Biography of a landscape in transition*. Nai010 Publishers.
- BoschSlabbers landschapsarchitecten, Van Der Veen, G., Warmerdam, M., Akrivou, M., Vlaar, R., & Bouw, W. (2022). Rapport Toekomstbeeld Vlietzone. In *Provincie Zuid Holland* (No. BS21-066). <https://www.zuid-holland.nl/onderwerpen/ruimte/landschapspark-zuidvleugel/vlietzone/>
- Broersma, B. (n.d.). *Natuur in de baan*. Leeuwenbergh Den Haag. <https://www.leeuwenbergh.nl/de-baan/natuur-in-de-baan/>
- Bryant, C. R., Russwurm, L. H., & McLellan, A. G. (1982). *The city's countryside: Land and Its Management in the Rural-urban Fringe*. Longman Publishing Group.
- De Solà-Morales, I. (1995). Terrain Vague. In *Anyplace* (pp. 118–123). MIT Press. <https://esquerdadireitaesquerda.files.wordpress.com/2014/04/terrain-vague-sola-morales-21.pdf>
- Dramstad, W., Olson, J. D., & Forman, R. T. (1996). *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*. Shearwater Books.
- Duineveld, M. (2016, December 12). 1. Blote billen in de rafelranden van de Nederlandse Ruimtelijke Ordening. Arnhem-Direct.nl. <https://www.arnhem-direct.nl/berichten/blokken0201/>
- Frijters, E., Hamers, D., Johann, R., Kürschner, J., Lörzing, H., Nabielek, K., Rutte, R., Van Veelen, P., & Van Der Wagt, M. (2004). *Tussenland*. NAi Uitgevers / Ruimtelijk Planbureau.
- Hamers, D., Nabielek, N., Piek, M., & Sorel, N. (2009). *Verstedelijking in de stadsrandzone: een verkenning van de ruimtelijke opgave*. [https://www.pbl.nl/sites/default/files/downloads/verstedelijking\\_in\\_de\\_stadsrandzone\\_web.pdf](https://www.pbl.nl/sites/default/files/downloads/verstedelijking_in_de_stadsrandzone_web.pdf)
- Helpenstein, J. (2024, May 16). Polderrijst in Nederland: gaat het dit jaar wel lukken? WUR. <https://www.wur.nl/nl/nieuws/polderrijst-in-nederland-gaat-het-dit-jaar-wel-lukken.htm>
- Kattwinkel, M., Biedermann, R., & Kleyer, M. (2011). *Temporary conservation for urban biodiversity*. Biological Conservation, 144(9), 2335–2343. <https://doi.org/10.1016/j.biocon.2011.06.012>
- Knijnenburg, L. (2023, December 20). *Hét toevluchtsoord om uit te burgeren*. De Groene Amsterdammer. <https://www.groene.nl/artikel/het-toevluchtsoord-om-uit-te-burgeren>
- LOLA landscape architects. (2011). *Stadsrandenatlas van de zuidvleugel*. LOLA landscape architects, Rotterdam.
- Lucas, P., & Van Oort, G. (1993). *Dynamiek in een stadsrandzone: werken en wonen in de stadsrandzone van de agglomeratie Utrecht*.
- Luo, S. (2021). *Disclosing interstices. Open-ended design transformation of urban leftover spaces*.
- Luo, S., & De Wit, S. (2022). Augmenting socioecological dynamics in urban leftover spaces: Landscape architectural design as a foundation. *Journal of Landscape Architecture*, 17(3), 32–45. <https://doi.org/10.1080/18626033.2022.2195227>
- Martínez, M. A. (2014, May 14). *Squatting for justice, bringing life to the city*. ROAR Magazine. <https://roarmag.org/essays/squatting-urban-justice-commons/>
- Masic, M. (2023, May 9). Demonstratie Rave voor de Rafelranden trekt door Utrecht. 3voor12. <https://3voor12.vpro.nl/update-7b7ffcab-8444-45c4-b152-06f6e4d2dbec-demonstratie-rave-voor-de-rafelranden-trekt-door-utrecht-.html>
- Matos, R. (2009). Urban landscape: interstitial spaces. *Land-scape Review*, 13.
- Milikowski, F. (2021). *Wij zijn de stad: de buitenwijk als klopend hart*.
- Nabielek, K., Boschman, S., Harbers, A., Piek, M., & Vlonk, A. (2012). Stedelijke verdichting: een ruimtelijke verkenning van binnenstedelijk wonen en werken. In Planbureau Voor De Leefomgeving (No. 500233001). *Planbureau voor de Leefomgeving*. <https://www.pbl.nl/sites/default/files/downloads/PBL-2012-Stedelijke-verdichting-500233001.pdf>
- Nabielek, K., Kronberger-Nabielek, P., & Hamers, D. (2013a). The Rural-Urban Fringe in the Netherlands: a Morphological Analysis of Recent Urban Developments. *RealCorp*. [https://programm.corp.at/cdrom2013/papers2013/CORP2013\\_64.pdf](https://programm.corp.at/cdrom2013/papers2013/CORP2013_64.pdf)
- Nabielek, K., Kronberger-Nabielek, P., & Hamers, D. (2013b). The rural-urban fringe in the Netherlands: recent developments and future challenges. *SPOOL*, 1(1), 101–120. <https://doi.org/10.7480/spool.2013.1.624.g759>



- Nassauer, J. I. (1995). Messy ecosystems, orderly frames. *Landscape Journal*, 14(2), 161–170. <https://doi.org/10.3368/lj.14.2.161>
- Nitsch, W. (2015). Terrain vague. Poetics of the Urban Inter-space in French Modernity. *Comparatio*, 5, 1–18. <https://www.terrainvague.de/node/6>
- Novy, A. (2024). Articulating Polanyi's socioeconomic principles for transformations at multiple levels. In *Gesellschaft in Transformation* (1st ed., pp. 214–224). Beltz Juventa. <https://research.wu.ac.at/en/publications/articulating-polanyis-socioeconomic-principles-for-transformation>
- Paludicultuur – natte teelt - Natuurinclusieve Landbouw. (2021, February 2). Natuurinclusieve Landbouw. <https://www.landbouwmethnatuur.nl/maatregelen/paludicultuur-natte-teelt/>
- Photo31. (2023, January 11). 42e editie Photo31: aan tafel met schrijver, fotograaf en rasverteller Hans Aarsman [Video]. YouTube. <https://www.youtube.com/watch?v=amtScmBcvm4>
- Plannen voor Vlietzone/Vlietzoom. (2021, July 1). Vlietnieuws. <https://vlietnieuws.nl/2021/07/01/plannen-voor-vlietzone-vlietzoom/>
- Rothuizen, J. (2010). *De zachte atlas van Amsterdam*.
- Rupprecht, C., Byrne, J., Garden, J. G., & Hero, J. (2015). Informal urban green space: A trilingual systematic review of its role for biodiversity and trends in the literature. *Urban Forestry & Urban Greening*, 14(4), 883–908. <https://doi.org/10.1016/j.ufug.2015.08.009>
- Schaminée, J. H. J., Van Duuren, L., & Hazebroek, E. (2000). *Atlas van plantengemeenschappen in Nederland*.
- Schmetz, I. (n.d.). *Squatting: from ban to duty*. Collectief Eigendom. <https://www.collectiefeigendom.nl/en/activism/squatting>
- Schut, J. (2023, May 19). Woningzoekenden kraken braakliggend terrein naast Uilenstede: 'Ik heb minder last van de vliegtuigen dan van de woningnood.' *Het Parool*. <https://www.parool.nl/amsterdam/woningzoekenden-kraken-braakliggend-terrein-naast-uitenstede-ik-heb-minder-last-van-de-vliegtuigen-dan-van-de-woningnood-b-013d5c9/>
- SIKKOM Redactie. (2022, August 20). *Waarom Grunn rafelranden moet koesteren in plaats van volbouwen. Zonder wordt Stad een saaie eenheidsworst*. Sikkom. <https://www.sikkom.nl/actueel/Waarom-Grunn-rafelranden-moet-koesteren-in-plaats-van-volbouwen.-Zonder-wordt-Stad-een-saaie-eenheidsworst-27983867.html>
- Threlfall, C. G., & Kendal, D. (2017). The distinct ecological and social roles that wild spaces play in urban ecosystems. *Urban Forestry & Urban Greening*, 29, 348–356. <https://doi.org/10.1016/j.ufug.2017.05.012>
- Tilman, D., Clark, M., Williams, D., Kimmel, K., Polasky, S., & Packer, C. (2017). Future threats to biodiversity and pathways to their prevention. *Nature*, 546(7656), 73–81. <https://doi.org/10.1038/nature22900>
- Van Den Heuvel, M. (2015). New 'Masters' of Dutch Landscape. Photographs of the Most Man-Made Land in the World. *Depth of Field*, 7(1). <https://depthoffield.universiteitleiden.nl/0701a04/>
- Van Gelder, L. (2023, September 10). Laatste rafelrand van Zuid dreigt te verdwijnen: 'Je kan zo'n plek makkelijk opheffen, maar je krijgt het niet meer terug.' *Het Parool*. <https://www.parool.nl/amsterdam/laatste-rafelrand-van-zuid-dreigt-te-verdwijnen-je-kan-zo-n-plek-makkelijk-opheffen-maar-je-krijgt-het-niet-meer-terug-bb8ac5e3/>
- Vink, J., Vollaard, P., & De Zwarte, N. (2017). *Making urban nature*. Nai010 Publishers.
- Vliegveld. (n.d.). Historische Vereniging Buitenplaats Ypenburg. <https://historischypenburg.nl/vliegveld/>
- Vlietzone. (n.d.). Projectenboek Leidschendam-Voorburg. <https://projectenboek.lv.nl/p15317/vlietzone>
- Wandl, A., Nadin, V., Zonneveld, W., & Rooij, R. (2014). Beyond urban-rural classifications: Characterising and mapping territories-in-between across Europe. *Landscape and Urban Planning*, 130, 50–63. <https://doi.org/10.1016/j.landurbplan.2014.06.010>
- Wandl, A., Rooij, R., & Rocco, R. (2016). Towards Sustainable Territories-in-Between: A Multidimensional Typology of Open Spaces in Europe. *Planning Practice and Research*, 32(1), 55–84. <https://doi.org/10.1080/02697459.2016.1187978>
- Ypenburg: Air base. (n.d.). Military Airfield Directory. <https://www.mil-airfields.de/nl-netherlands/ypenburg-air-base.htm>











Timon Kuiters  
4848365

First mentor:  
Dr. Alexander Wandl  
Department of Urbanism  
section of Environmental Technology and Design

Second mentor:  
Prof.ir. Adriaan Geuze  
Department of Urbanism  
section of Landscape Architecture

P5 report  
October 22, 2024