A C C I D E N T A L ?
VILLAGE URBANISM

WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES

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WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES

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THESIS SUBMITTED FOR THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURAL ENGINEERING

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PART OF STUDIO JAPAN 4.0: “ACCIDENTAL CITY”

DESIGN-BASED RESEARCH ON RESIDUAL SPACE IN FLEMISH VILLAGES

EXAMINING THE SPATIAL, ECOLOGICAL AND SOCIAL STRUCTURES OF THE URBAN FABRIC: LESSONS FROM JAPAN

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ABSTRACT

As described by XDGA, Flanders today can be understood as an "After-Sprawl" condition: "a state in which a region no longer consists of a clear distinction between city and countryside, but has become fully urbanised into one continuous, diffuse network". Continuous spatial expansion has produced a dispersed landscape in which the boundary between urban and rural conditions is increasingly blurred. As the built footprint continues to grow, the question arises of what remains beyond development and occupation. Furthermore, this growth exerts increasing pressure on the remaining open spaces. Instead of continuing outward expansion, this research explores how the residual spaces already present within the territory can help counter ongoing spatial pressure.

"Accidental? Village Urbanism" investigates this residual space as the unintended remainder of the "Accidental City", where spatial fragments emerge through the gradual accumulation of unplanned decisions, spatial transformations and shifting territorial logics. Rather than approaching these spaces as empty or inactive, the research explores their potential role within the contemporary Flemish landscape.

Through a comparative analysis between Flanders and Japan, the research examines where residual spaces emerge, how they function, and what meanings they can acquire at both the local and territorial scale. This investigation is based on a broad range of approaches, including cartographic analysis, literature research, and fieldwork.

Rather than serving as a model to be replicated, Japan is approached as a context demonstrating how dense urban environments can engage residual space through small-scale interventions to accommodate ecological systems, open space and everyday life. This research argues that Flanders should embrace a similar shift proactively, before continued spatial expansion reaches its limits.

The result is a design tool(box) that enables designers to identify and engage with residual space, offering a framework for working with existing conditions and uncovering spatial opportunities within this contemporary, accidental landscape. Ultimately, the research calls for a shift in how designers regard the by-products of the design process itself: residual spaces should be treated not as leftover outcomes, but as material with genuine spatial and territorial potential.

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VIBRANT STORE EXTENDING INTO THE STREET

NANIWA-KU, OSAKA, JAPAN



EXPOSED UTILITIES, NARROW CANOPIES AND VENDING MACHINES

OSAKA, JAPAN

URBAN BEACON

UMEDA SKY BUILDING,
KITA-KU, OSAKA, JAPAN



BONUS TRACK PROJECT,
SETAGAYA, TOKYO, JAPAN



KAYASHIMA STATION,
NEYAGAWA, JAPAN



NEIGHBOURHOOD SHARING CABINET

FISHING TOWN SHIOYA,KOBE, JAPAN



FOREST VOID WITHIN THE URBAN FABRIC

TOKYO, JAPAN



BALANCING MASS AND LANDSCAPE

TESHIMA ART MUSEUM, KAGAWA, JAPAN



EVERYDAY LIFE ALONG THE SHOTENGAI

OSAKA, JAPAN

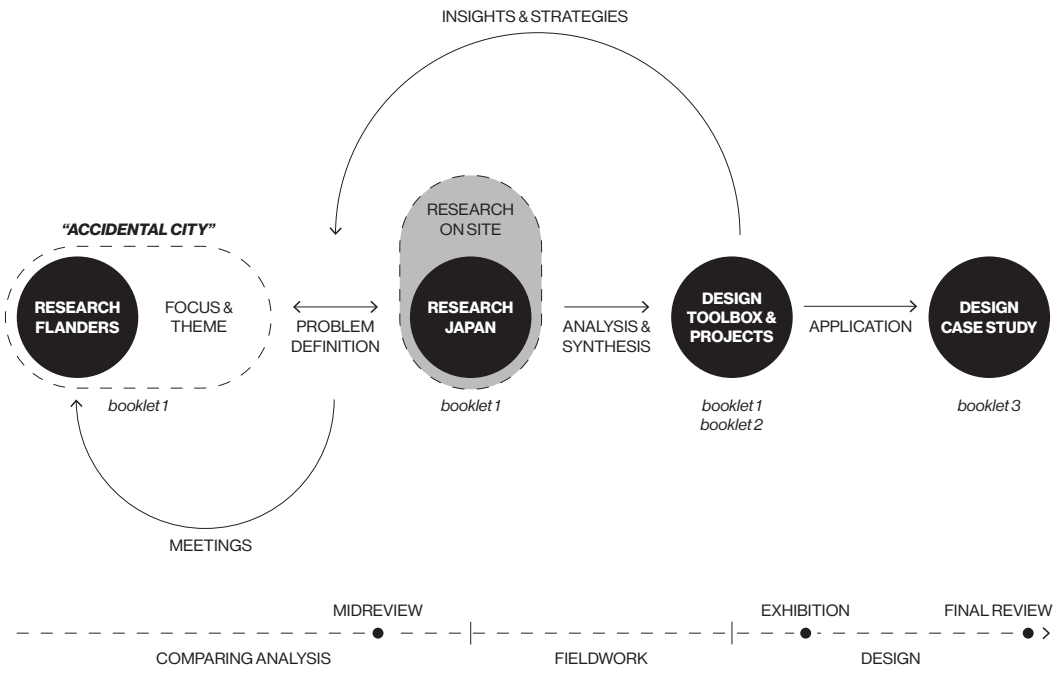


ORDERED FLOWERPOTS IN FRONT OF CLOSED SHUTTERS

OSAKA, JAPAN

FRAMEWORK

PROCESS OF RESEARCH AND DESIGN



STRUCTURE OF THE THESIS

The diagram on the left illustrates the different parts and booklets in which the thesis is structured. Moreover, it shows the various stages involved in developing potential solutions to the posed problem. It starts from the urban condition in Flanders, Belgium. This was then compared to the situation in Osaka, Japan. The result of this comparison was a clear problem statement, broader insights, and strategies.

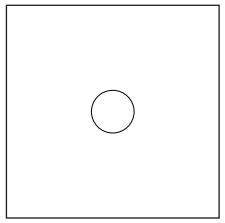
A range of methodologies was applied to gather and process information, including literature review, cartography, and fieldwork. Furthermore, interviews were conducted with different stakeholders; both professionals in the field of urban planning and local inhabitants, in Belgium as well as Japan. The resulting analysis and synthesis establish a conceptual framework around "residual space", along with a design tool intended for active application. This framework and tool are then applied to a specific design case in Flanders.

READING GUIDE

Throughout the different booklets, pages presenting information on or engaging with Belgium are shown with a white finish, while pages relating to the Japanese context feature a black fill. An additional sheet, labeled "reading guide", has also been added to the box. It outlines the overall structure and coherence of the various documents, and describes how the different sections within the five main themes are organized.

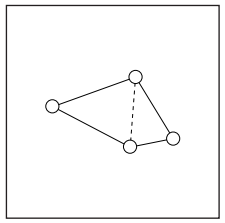
WORKING BETWEEN SCALES

The research uses a multiscalar approach to provide a broader perspective on the topic. Starting from a wider spatial context, overarching patterns and challenges are identified to establish the framework for further investigation. The analysis then moves towards more specific and tangible contexts, allowing for a more detailed and focused examination. By continuously linking these scales, local observations are connected to wider spatial dynamics, enabling insights from particular cases to contribute to a deeper understanding of the larger issues at play.



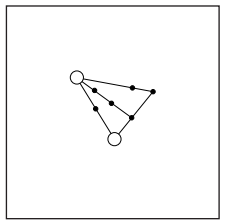
Belgium

The national scale, representing the country as a single territorial entity and its overall spatial structure.



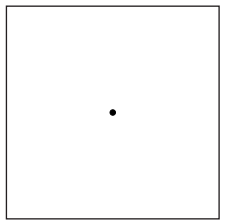
Flemish Diamond

A polycentric metropolitan region connecting the major cities of Antwerp, Brussels, Ghent, and Leuven. Rather than one dominant centre, it consists of a network of interconnected urban areas.



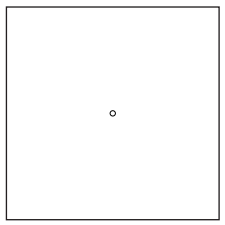
Antwerp Triangle

Subregional urban structure characterised by strong urban sprawl, where built-up areas, infrastructure and open space are closely interwoven.



villages

Often located on the periphery, these areas combine low-rise development with a rural character and close-knit community, resulting in a relatively large spatial footprint compared to their population size.

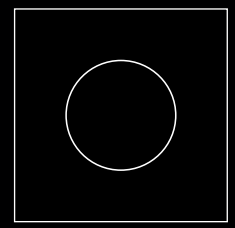


neighbourhood

Local scale of everyday life, informally shaped by residents' daily routines, encounters and sense of belonging rather than by fixed administrative boundaries.

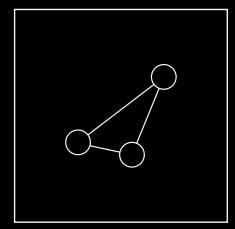
The spatial levels used for Belgium and Japan are not directly comparable in absolute terms. However, they represent a similar relative scale which, in turn, makes a comparison between both possible. Each level is briefly explained next to its diagram.

The following two pages show maps of the built environment in both countries, illustrating these scale differences and providing a spatial reference for the analysis that follows.



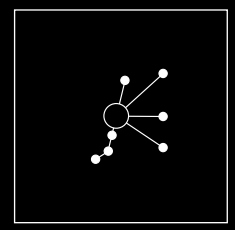
Japan

National framework for the analysis, with a territorial extent approximately ten times larger than Belgium.



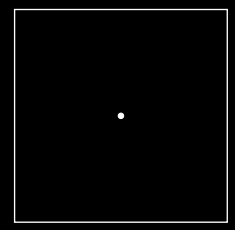
Keihanshin

Japan's second-largest metropolitan region, functioning as an interconnected urban system centred on Kyoto, Osaka and Kobe, with a highly integrated network of mobility.



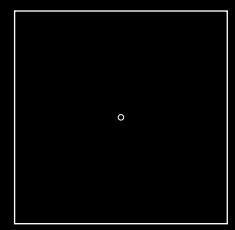
Osaka

City scale examining the internal urban structure of Osaka, revealing the organisation of districts, infrastructure and centres of activity.



ward *(ku)*

The administrative and spatial subdivisions within a large Japanese city, providing an intermediate scale between the city and the neighbourhood.

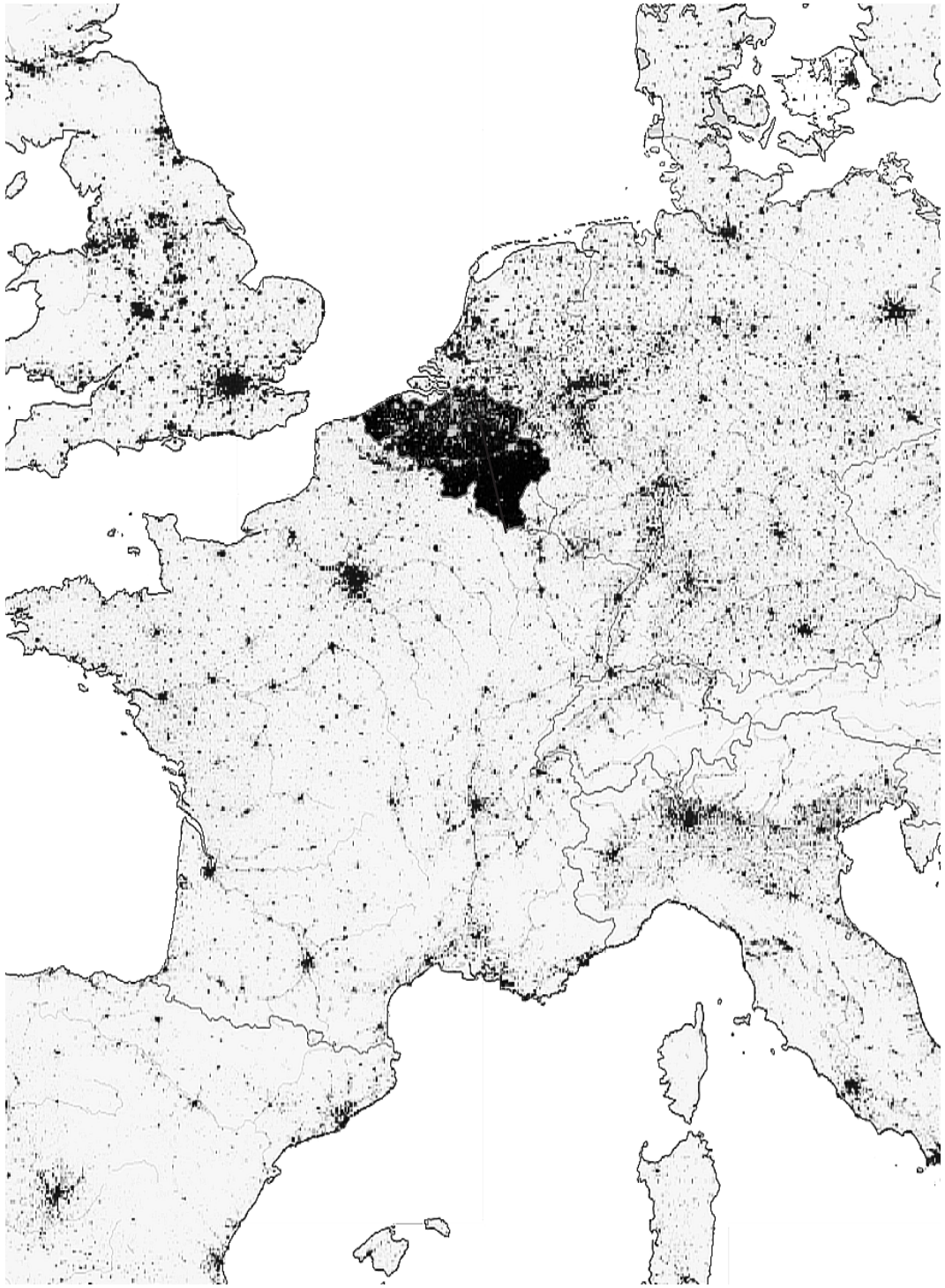


chōme

Scale of daily life, similarly shaped by informal routines and community ties, despite being formally delineated within the address system.

BUILT ENVIRONMENT BELGIUM

1:10.000.000



source: EOC Geoservice, 2024, adjusted by author

BUILT ENVIRONMENT JAPAN

1:10.000.000



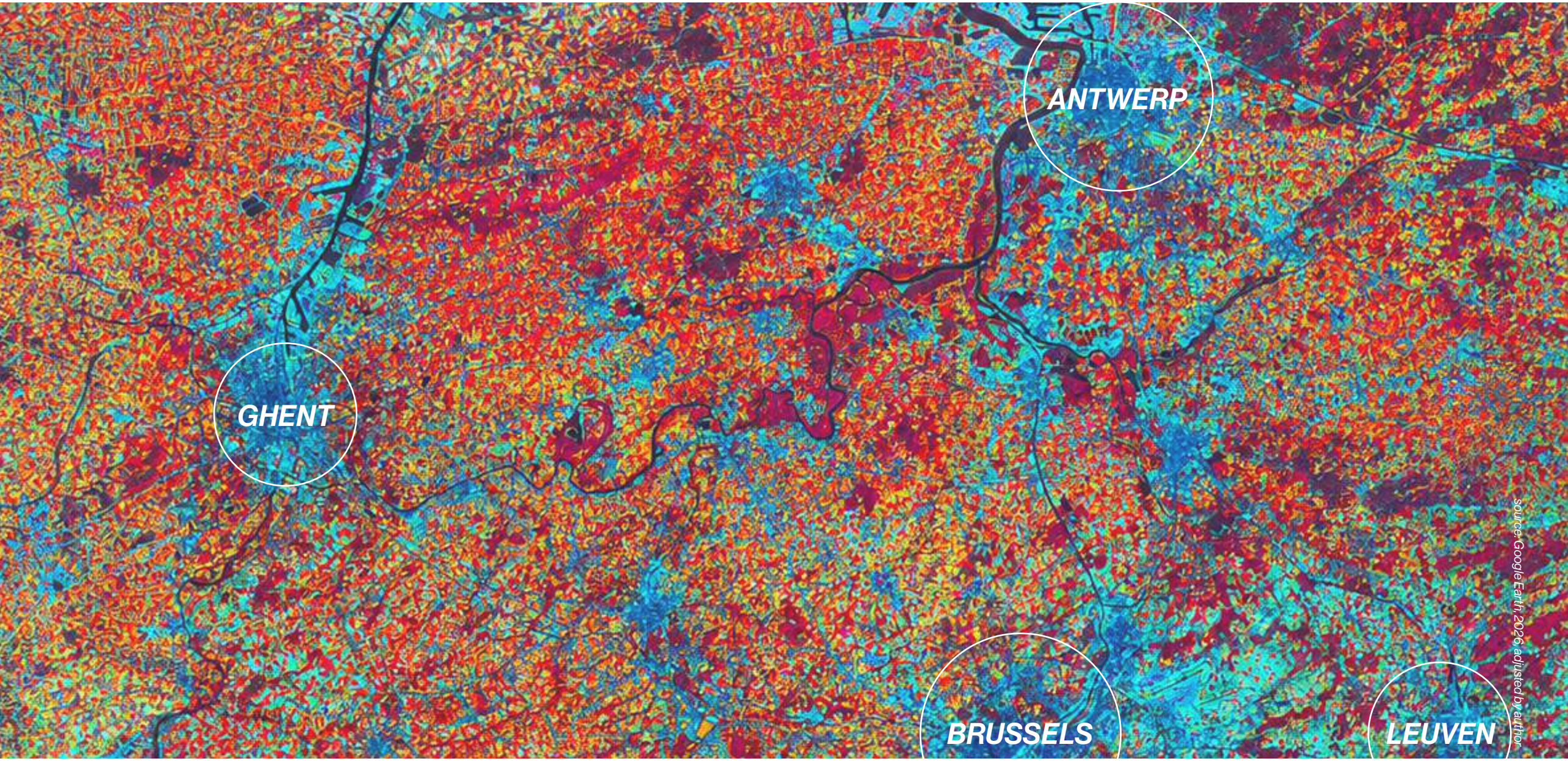
source: EOC Geoservice, 2024, adjusted by author

INTRODUCTION

HORIZONTALLY LAYERED FLEMISH DIAMOND

1:500.000

high-rise built
low-rise built
natural land
agricultural land
water



source: Google Earth, 2026, adjusted by author.

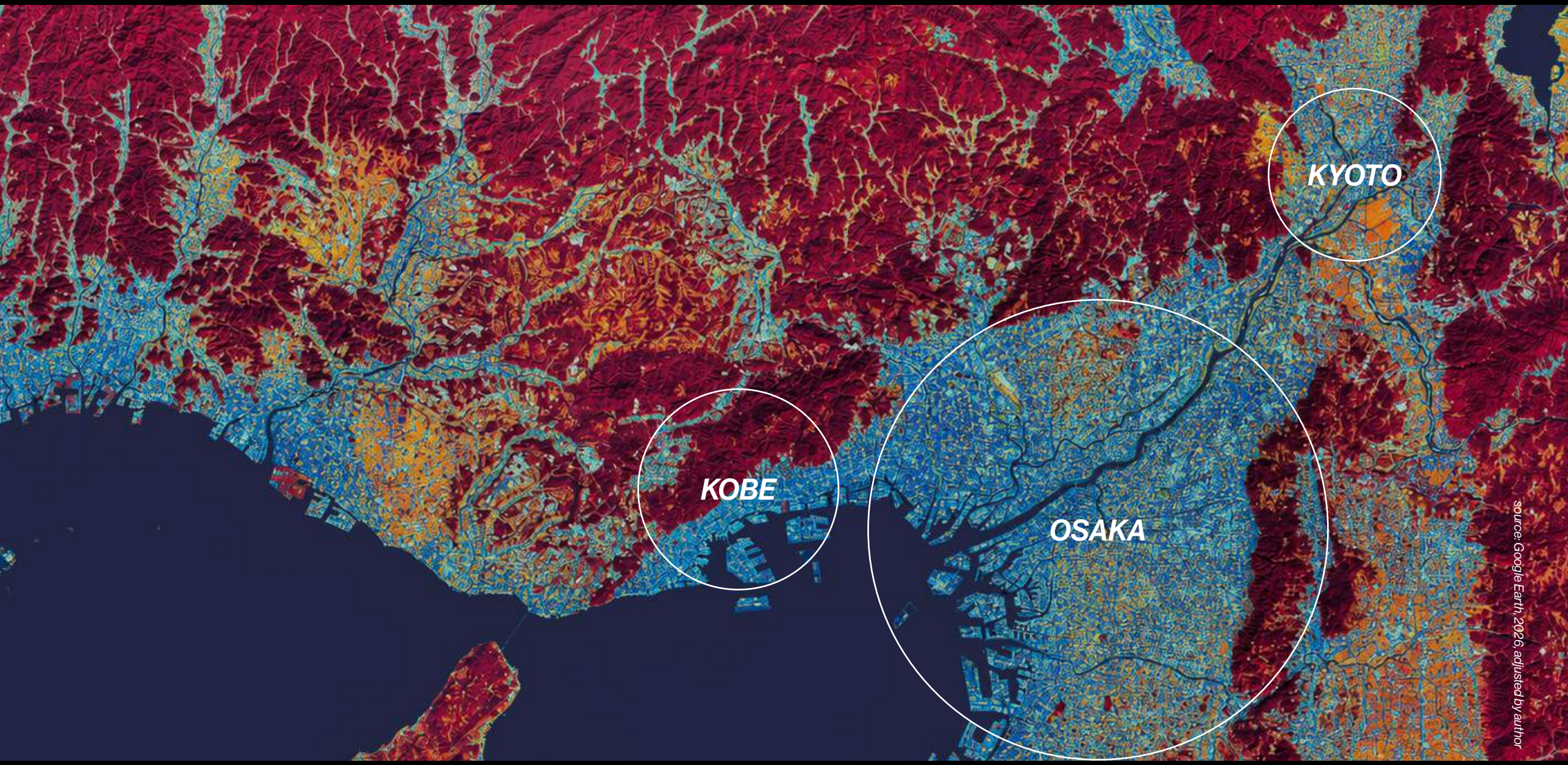
The current condition in Flanders can be described as a typical example of "After-Sprawl", in which successive layers of infrastructure, agriculture, open space and built form have accumulated without a seemingly single, coherent ordering principle. Rather than forming a clear hierarchy, these layers overlap and intertwine, producing a fragmented yet continuous landscape. While identifiable centres do exist, much of the built fabric is dispersed across the territory, blurring the distinction between urban and rural conditions.

This patchwork is largely composed of low-rise, high-density development, reflecting a tendency to expand horizontally rather than organize vertically. The result is not a city in the conventional, centred sense, but neither is it a loose collection of disconnected fragments: it is a continuous, tightly interwoven territorial condition, one in which urban qualities are dispersed across the landscape.

VERTICALLY LAYERED KEIHANSIN

1:500.000

high-rise built
low-rise built
natural land
agricultural land
water



source: Google Earth, 2026, adjusted by author

The spatial structure of Japan differs markedly from that of Flanders. Built-up areas are strongly concentrated and appear clearly separated from surrounding ecological and agricultural systems, producing a sharper distinction between urbanisation, agriculture and nature than the gradual urban-rural transition that characterises much of the Flemish territory. This clarity, however, holds only at this particular scale: as the analysis zooms in, the picture changes considerably, and the boundaries between these categories become far less distinct.

This contrast can be traced back to Japan's underlying territorial structure. The Keihanshin metropolitan region, for instance, is situated within a natural basin enclosed by mountains and the sea, which concentrates urban development within a geographically limited area. Rather than allowing for outward expansion, this topography has encouraged densification and the vertical stacking of functions within an already constrained urban footprint.

STUDIO JAPAN 4.0

The overarching theme of Studio Japan 4.0, and by extension of this thesis, is the notion of the "Accidental City". On the one hand, this concept focuses on the "low-rise, high-density" urban fabric encountered throughout Japan, but which can also be recognised in parts of Belgium. It is a fabric composed of individual (low quality) buildings that together form a seemingly chaotic whole. Rather than appearing as the result of a singular planning vision, these neighborhoods seem to have emerged incrementally, shaped by countless small interventions over time.

On the other hand, the concept of the "Soft City" also plays an essential role; the network of green and blue public spaces that act as a counterpart to urban density. These spaces provide opportunities for recreation, encounter and ecological continuity, contributing to the overall livability of the urban environment.

Both forms of "accidents" within the urban fabric can be understood as sources of innovation and inspiration. As these environments often develop rapidly, they require creative responses to contextual challenges. The result is a vibrant and multifunctional urban fabric in which living, working, production, commerce, leisure, nature, water and food systems become closely intertwined. While not always conforming to conventional notions of architectural beauty, these environments offer resilient and effective spatial responses to contemporary urban conditions.

ACCIDENTAL (?)

However, in a Belgian context, we can question whether the urban fabric is truly as "accidental" as it is often presumed. Much of what appears to be random growth is in fact the result of specific planning choices and spatial systems. Consider, for instance, the Belgian zoning plans (gewestplannen), which promoted mono-functional land use and facilitated the expansion of villages into the surrounding landscape. Similarly, ribbon development along major roads and extensive infrastructure networks enabled a strong separation between living and working, making dispersed settlement patterns both possible and desirable.

What becomes particularly interesting is the moment when these systems of planning, ownership or use begin to fail. In their most extreme manifestation, such conditions expose the limitations of the existing spatial model and invite critical reflection on alternative futures.

This raises the question of how we might engage differently with the existing built environment. One possible approach is to focus on what is already there and consider how the existing fabric can be transformed. Another lens is to shift attention towards what remains; the residual spaces that emerge as a by-product of these processes.

Rather than treating these fragments as spatial waste, they can be understood as latent resources with the potential to address some of the challenges associated with the scattered Flemish landscape. By activating, connecting and reinterpreting these residual conditions, they may become instruments for negotiating an "After-Sprawl" condition. It is this second perspective that forms the starting point of this thesis.

CITY (?)

Although the comparison between Japan and Belgium operates at relatively comparable scales, the Japanese ward occupies a position within its wider territorial system that is functionally similar to that of the Flemish village. There is, nevertheless, a significant difference in density. Despite this contrast, both systems relate to their surrounding territory in a remarkably similar way, functioning as local centres embedded within a larger and interconnected territorial network.

This allows for an alternative reading of the "city". Rather than understanding the Japanese metropolis solely as a large city, it can also be interpreted as a continuum of village-like structures, where social relationships, proximity, open space and small-scale urbanity play a more important role than metropolitan scale alone would suggest.

Although several larger urban centres are present within the Flemish landscape, these are not the primary drivers of the dispersed condition identified in this research. Instead, it is the extensive network of villages, characterised by their small scale, proximity and spatial distribution, that has played a central role in shaping the Flemish pattern of sprawl. In this sense, the dispersed Flemish territory can likewise be understood as a continuum of interconnected village structures, though operating at a significantly lower density and with a far less continuous urban fabric.

ACCIDENTAL? VILLAGE URBANISM

This personal interpretation of the studio theme places the question mark behind the notion of the "accidental". It investigates what it means for a place to emerge seemingly without a plan and how such conditions take shape within the urban fabric. Rather than dismissing these spaces as random or leftover conditions, the research seeks to understand the qualities they embody and the role they play within a territory where their function or purpose may not be immediately apparent.

Consequently, the focus shifts away from the understanding of the "city" in its conventional sense. Instead, the research adopts the concept of "village urbanism"; a territorial condition defined by the interaction of local entities, everyday practices and different landscape layers. This perspective resonates more closely with the dispersed "After-Sprawl" condition.

At the same time, this lens allows lessons to be drawn from Japan. While the Flemish territory can be understood as an after-sprawl condition, Japan represents a context in which a form of "after-After-Sprawl" has already emerged. There, density, spatial constraints and continuous urbanisation have generated alternative ways of organising urban life, offering a glimpse of what an already-sprawled territory like Flanders might still become. In that sense, looking at Japan feels less like observing a foreign context and more like looking ahead at a possible future condition of one's own territory: the future was already yesterday.

FOCUS & THEME

The focus of this thesis is the notion of "residual space" in urban villages. Rather than studying these spaces in isolation, the research investigates the spatial systems that collectively shape them. The built environment, infrastructure, nature and ecology, and community are examined as interconnected layers of the village. Each reveals different mechanisms that influence the emergence, character and potential of residual space. Together, they reveal how residual space is not an isolated condition, but the product of the continuous interaction between these spatial layers.

This layered understanding forms the basis for the cross-case comparison between Belgium and Japan and guides the design strategies developed in the subsequent chapters.

RESIDUAL SPACE

Starting from the unbuilt (negative) space of the village, residual space is understood as the unintended remainder of the Accidental City. It consists of fragments that emerge through the gradual accumulation of independent decisions, spatial transformations and changing territorial logics.

BUILT SPACE

The distribution of buildings, plot configurations and urban morphology determine density, enclosure and spatial continuity. Understanding these relationships reveals how the built fabric shapes everyday spatial experience and influences the emergence of opportunities and constraints throughout the village.

INFRASTRUCTURE

Infrastructure is understood as more than a mobility network. It functions as a support system that enables and organises a wide range of spatial processes, including social exchange, ecological continuity and economic activity. By structuring flows across multiple scales, infrastructure shapes relationships between places and the transformation of the (un)built environment.

NATURE & ECOLOGY

Nature and ecological systems are often treated as secondary components of the landscape, accommodated only where development leaves room for them. This research challenges that perspective by approaching ecology as an active spatial system that shapes, connects and transforms the territory alongside its built, infrastructural and social layers.

COMMUNITY

This theme examines how collective life can emerge within high-density settlements. Rather than viewing density as an obstacle, it explores the spatial mechanisms that transform proximity into opportunities for interaction and mutual support. By examining shared facilities, informal meeting spaces and everyday patterns of use, it reveals how spatial organisation can foster a stronger sense of community.

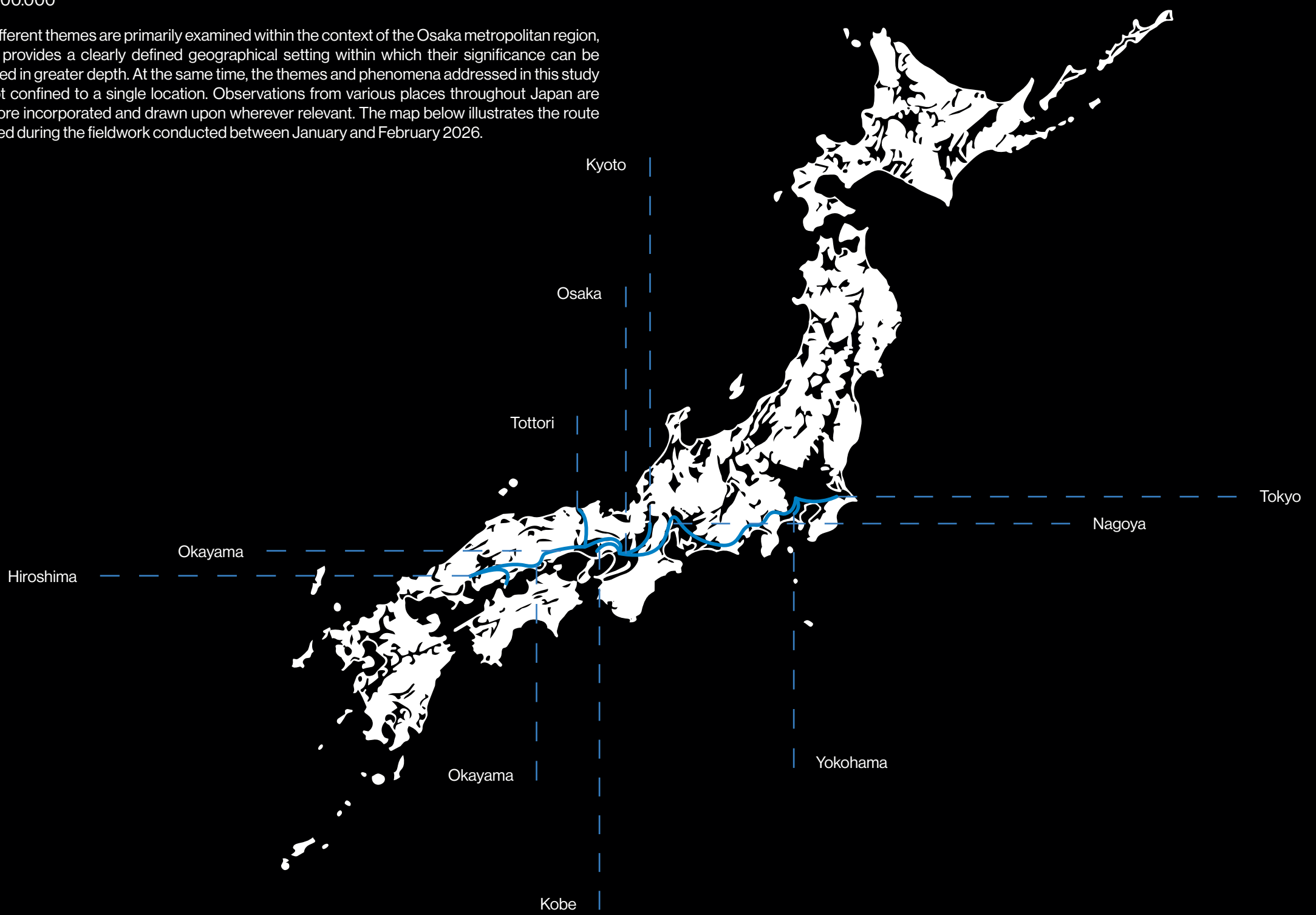


RESIDUAL SPACE WAITING TO BE TACKLED *BERLAAR, BELGIUM*

FIELDWORK ATLAS

1:10.000.000

The different themes are primarily examined within the context of the Osaka metropolitan region, which provides a clearly defined geographical setting within which their significance can be explored in greater depth. At the same time, the themes and phenomena addressed in this study are not confined to a single location. Observations from various places throughout Japan are therefore incorporated and drawn upon wherever relevant. The map below illustrates the route followed during the fieldwork conducted between January and February 2026.



LEARNING FROM JAPAN

WORKING BETWEEN SCALES

+

ACCIDENTAL? VILLAGE URBANISM

=

WHY JAPAN

Japan offers a valuable perspective on the Flemish context. Both share a fragmented, densely built fabric, yet they approach it in fundamentally different ways. While Flanders often struggles with its "Accidental City", Japan demonstrates how such seemingly chaotic structures can also generate quality, flexibility and vibrancy.

This comparison makes it possible to develop new ways of thinking. Japan does not serve as a model to be copied, but as a reference to understand alternative spatial logics, such as approaches to density, mixed-use, and informal space. Through this reflection, room emerges to critically reassess the Belgian context and formulate alternative design strategies.



A BRIGHT SPOT WITHIN THE ROJI *TOKYO, JAPAN*

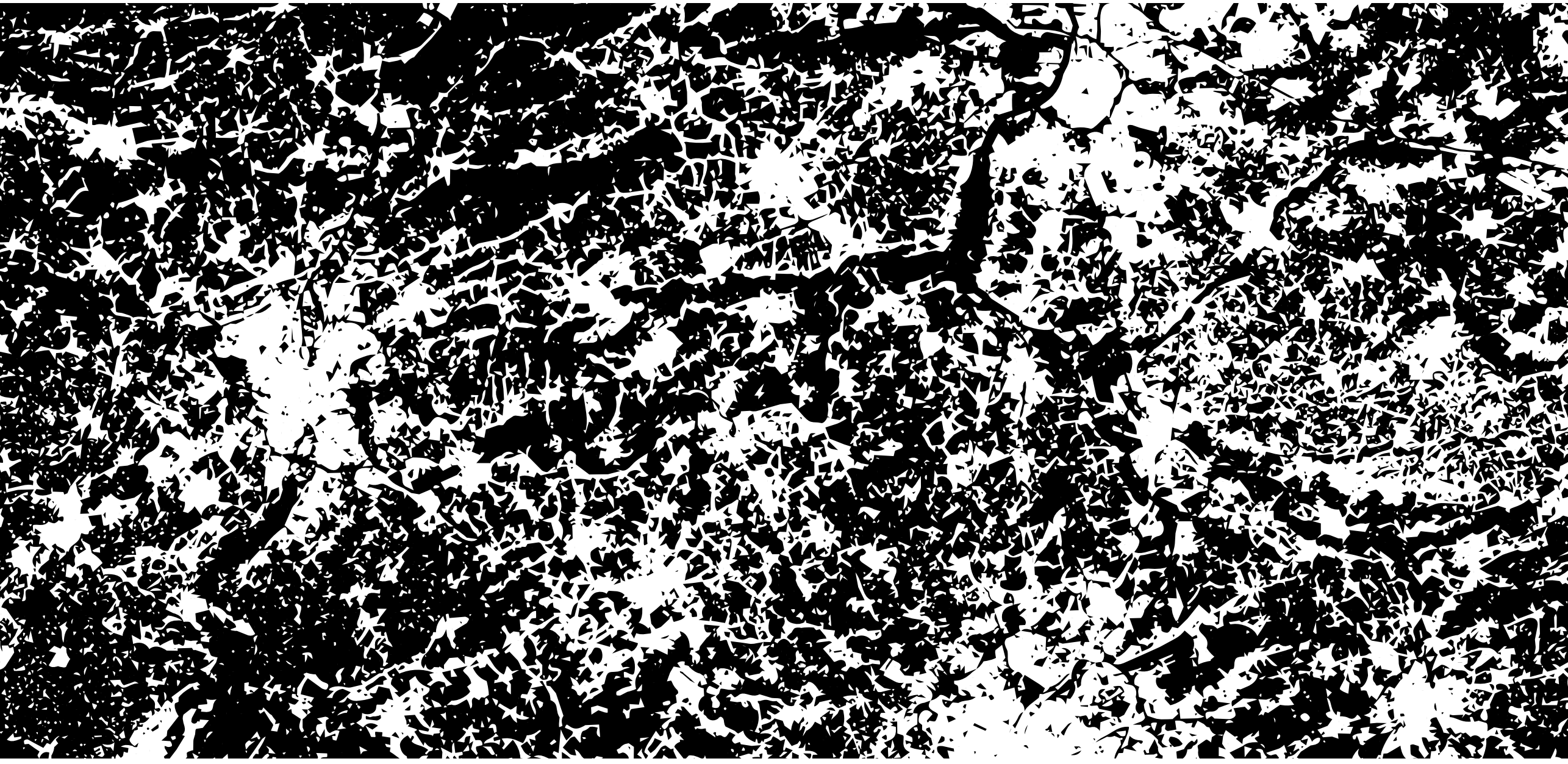
PROBLEM DEFINITION

NEGATIVE? SPACE FLEMISH DIAMOND

1:500.000

built space

unbuilt space



The maps presented in the subsequent thematic analyses are graphically inspired by those in After-Sprawl by Xavier De Geyter Architects. Their level of abstraction allows the territory to be examined at a sufficiently large scale to identify broader spatial patterns and underlying phenomena, without becoming distracted by unnecessary details that could obscure these relationships. They are intended as analytical tools that reveal the structural characteristics of the territory and support comparison across different themes and scales.

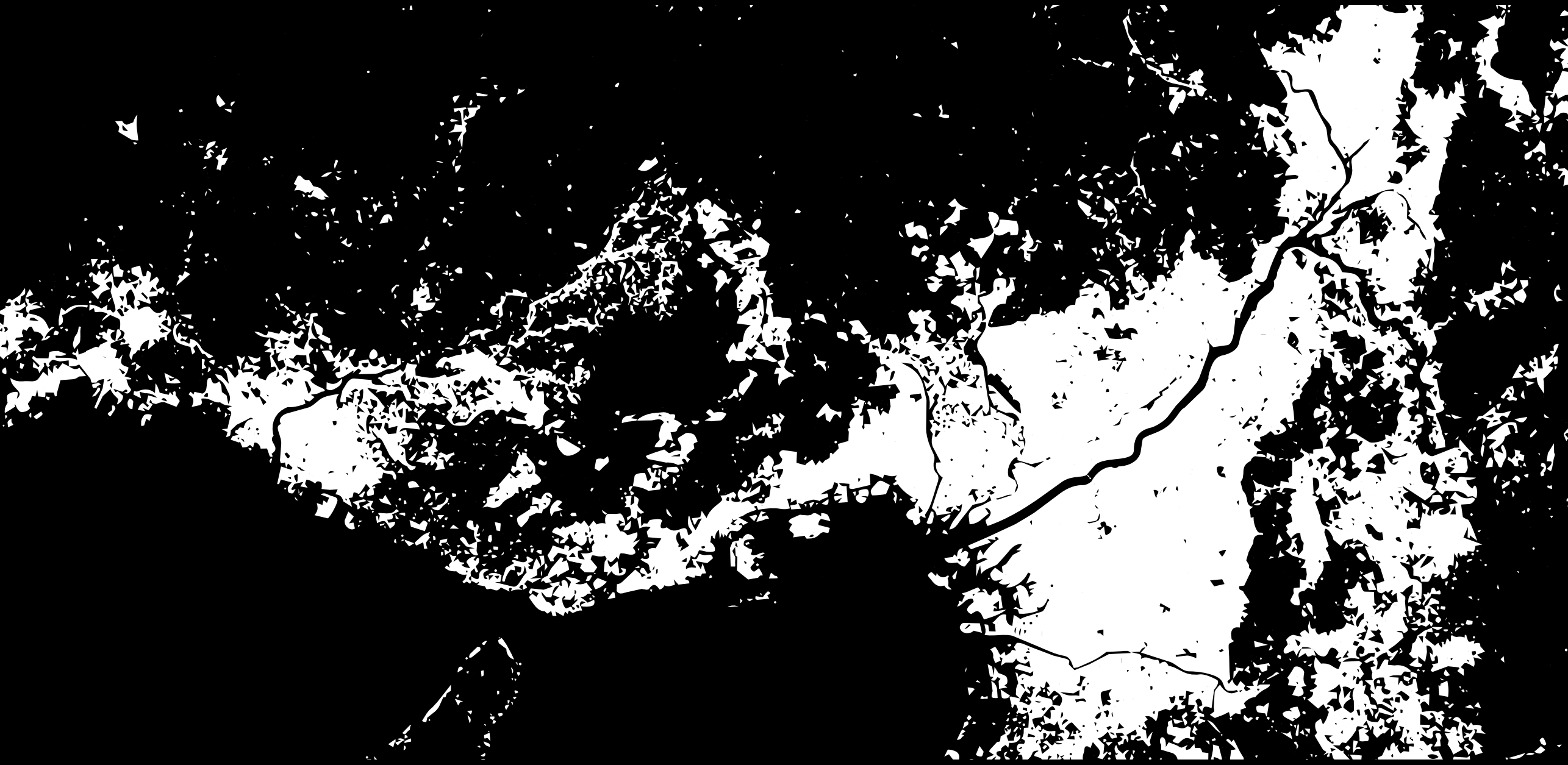
To understand the spatial resource that remains available for future transformation, the analysis begins with the negative of the built environment. Rather than assuming this unbuilt space to be empty or without value, it is approached as an open question. The question mark (?) symbolises this position, prompting an investigation into whether these residual spaces possess spatial qualities of their own and how they might contribute to future development.

NEGATIVE? SPACE KEIHANSIN

1:500.000

built space

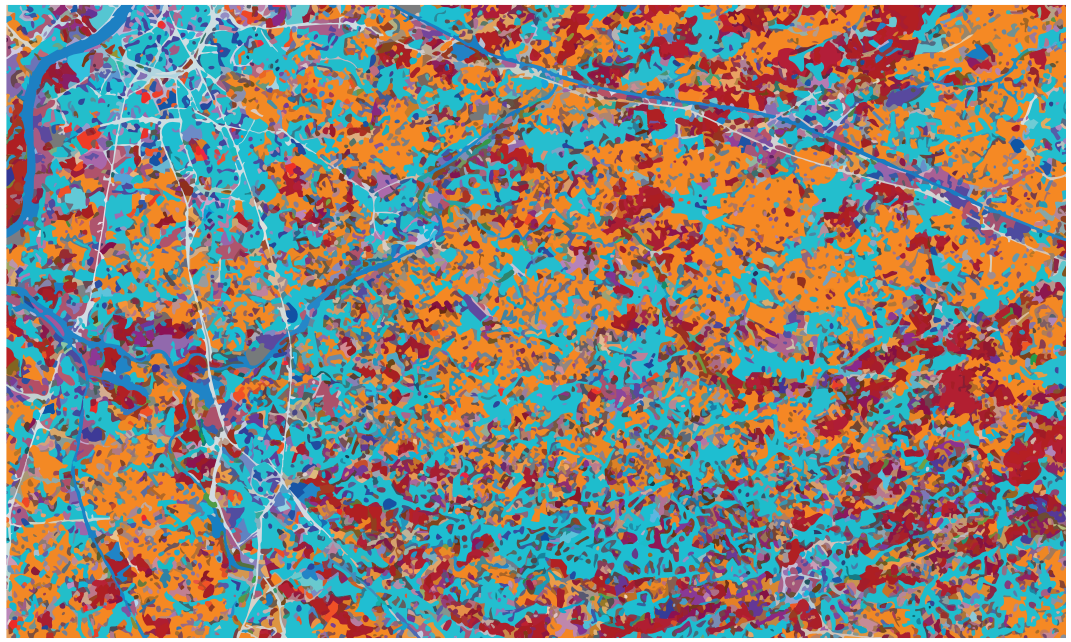
unbuilt space



Whereas the built and unbuilt fabric in Flanders is dispersed and deeply intertwined, the Keihanshin Metropolitan Area presents a much more clearly defined urban footprint. At this scale, large open systems appear to remain predominantly at the periphery of the metropolitan region, while the urban core reads as a largely continuous built mass.

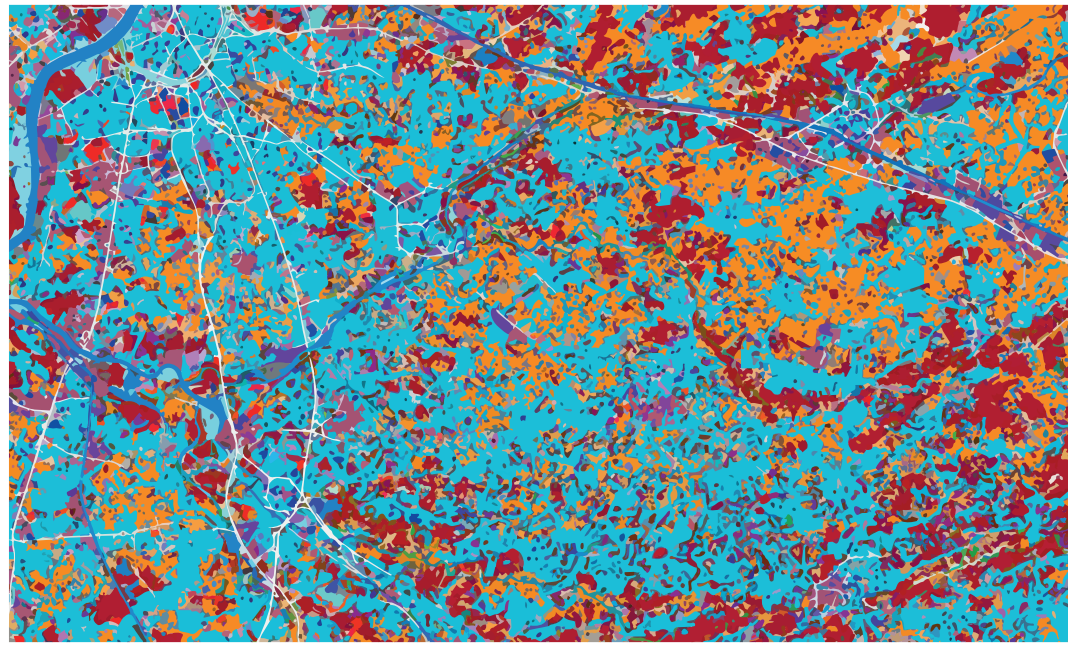
At the same time, this observation calls for further investigation. The apparent absence of open structures may be a consequence of the scale of representation, suggesting that smaller residual spaces and finer-grained open networks only become visible through subsequent zooming into the urban fabric.

URBAN SPRAWL ANTWERP TRIANGLE 2013



source: Vermeiren et al., 2021, adjusted by author

URBAN SPRAWL ANTWERP TRIANGLE 2050



source: Vermeiren et al., 2021, adjusted by author

The map on the left illustrates the land-use pattern of Flanders in 2013, highlighting the dispersed spatial structure that characterises its contemporary sprawl condition. The map on the right presents a 2050 growth-as-usual (GAU) scenario, based on the assumption that the annual rate of urban land consumption remains unchanged. Blue represents the built environment and infrastructure, red the ecological structures, and yellow the productive landscapes.

As the built footprint continues to expand, the residual open spaces that structure the Flemish landscape become increasingly fragmented and disconnected. Instead of treating this scenario as an inevitable future, this research interprets it as a critical warning. It raises the question of how the remaining open and residual spaces can be understood not as land awaiting development, but as a spatial resource capable of redirecting the future of the Flemish territory.

RESEARCH QUESTION

EVERYTHING HAS A FUNCTION. HOUSING. INDUSTRY. AGRICULTURE. INFRASTRUCTURE. LOGISTICS. ENERGY. RECREATION. EVERY FUNCTION CLAIMS SPACE. EVERY CLAIM PRODUCES A BORDER. EVERY BORDER PRODUCES A REMAINDER. WHAT REMAINS? THE SPACE BETWEEN BUILDINGS. THE SPACE ALONG INFRASTRUCTURE. THE SPACE LEFT OVER AFTER DEVELOPMENT. THE SPACE NO ONE ASKED FOR. THE SPACE NO ONE PLANNED. IS IT EMPTY? IS IT USELESS? IS IT WAITING FOR A FUNCTION? OR IS IT ALREADY PERFORMING ONE? WHEN DOES OPEN SPACE BECOME RESIDUAL SPACE? WHEN IT IS TOO SMALL? TOO NARROW? TOO FRAGMENTED? TOO DIFFICULT TO DEVELOP? TOO UNPRODUCTIVE? OR SIMPLY WHEN ITS VALUE NO LONGER FITS WITH THE SYSTEM THAT SURROUNDS IT? CAN A PLACE WITHOUT A CLEAR DESTINATION STILL HAVE MEANING? CAN A PLACE WITHOUT OWNERSHIP STILL HAVE VALUE? CAN A PLACE WITHOUT PROGRAMME STILL PERFORM? CAN ECOLOGY SURVIVE THERE? CAN WATER FIND ITS WAY THERE? CAN COMMUNITY EMERGE THERE? CAN DIFFERENT FUNCTIONS OVERLAP THERE? CAN DIFFERENT SCALES MEET THERE? IF EVERYTHING IS PLANNED, WHY DO THESE SPACES KEEP APPEARING? IF EVERYTHING IS OCCUPIED, WHY DO THESE SPACES KEEP REMAINING? IF EVERYTHING HAS A PURPOSE, WHY DO THESE SPACES ESCAPE DEFINITION? **WHAT IS THE MEANING OF RESIDUAL SPACE WITHIN A CONTINUOUSLY TRANSFORMING LANDSCAPE? WHAT ROLE CAN IT PLAY IN CONNECTING ECOLOGICAL, SOCIAL AND SPATIAL SYSTEMS? CAN THE RESIDUAL SPACES BE USED FOR NEGOTIATING THE AFTER-SPRAWL CONDITION?**



Illustration showing how residual space is identified, used, and connected within the village of Berlaar.

RESIDUAL SPACE
ANALYSING THE CONCEPT

RESEARCH FLANDERS

The concept is primarily investigated within the Flemish context, while continuously being reflected against the Japanese condition. Although "residual space" shares common ground with several existing concepts, these often approach it from a single disciplinary perspective (spatial, ecological, social...), resulting in only a partial understanding of its broader significance. Bringing these perspectives together enables a more comprehensive and focused investigation of residual space as a layered spatial condition. While the research takes open space as its point of departure, it is understood as an active component that continuously interacts with and shapes the surrounding built environment.

RESIDUAL SPACE

NOLLI PLAN | **JUNKSPACE** | **SPACES OF UNCERTAINTY**

THIRD LANDSCAPE | **ZWERFRUIMTE** | **KANSENKAVELS**

BUILT SPACE	INFRASTRUCTURE	NATURE & ECOLOGY	COMMUNITY
functionality	connectivity	naturalness	human scale
impact	speed	coverage	collaboration
history	scale	water presence	local identity
dispersion	accessibility	productivity	encounter
density	visibility	fragmentation	ownership
adaptability	capacity	resilience	diversity
typology	permeability	biodiversity	inclusivity

THE MEANING OF RESIDUAL SPACE

Residual space is understood as the unintended remainder of the Accidental City. Rather than referring to a fixed type of space, it describes a spatial condition that emerges through the gradual accumulation of independent decisions, changing programmes and territorial transformations. Its manifestation varies across contexts and scales, from small leftover plots to larger landscape fragments, making each case inherently site-specific.

Within this research, residual space is primarily approached through open space, not as land that is simply vacant or unused, but as space whose role and potential remain unresolved. It is understood as a layered spatial resource whose value lies not only in what it is today, but in its capacity to support future ecological, social and spatial transformations.

NOLLI PLAN

A reading of the territory through its negative space. Rather than foregrounding buildings as individual objects, it reveals the continuous spatial field that remains between them.

JUNKSPACE

"If space-junk is the human debris that litters the universe, junk-space is the residue mankind leaves on the planet. The built ... product of modernization is not modern architecture but Junkspace. Junkspace is what remains after modernization has run its course or, more precisely, what coagulates while modernization is in progress, its fallout."

source: Koolhaas, 2006

SPACES OF UNCERTAINTY

Spaces of uncertainty are fragmented, vacant urban terrains, shaped as much by neglect and destruction as by planning, that remain open and freely appropriable, offering a present-focused resource for freedom and collective urban life in contrast to fixed, controlled "places".

source: Cupers & Miessen, 2002

THIRD LANDSCAPE

"The 'third landscape,' formulated by Gilles Clément, refers to neglected, marginal, or unmanaged spaces - roadside edges, fallow lands, infrastructural fringes - where biodiversity thrives. Unlike parks or reserves, these spaces are not curated but emerge as residues of abandonment or indifference. Clément frames the third landscape as a democratic reservoir of life, outside of planning and control. In landscape discourse, it challenges dominant aesthetics by valuing the spontaneous, the overlooked, and the residual. The third landscape embodies the ecological and political potential of the un-designed."

source: LANDEZINE, n.d.

ZWERFRUIMTE

" 'Zwerfruimte' consists of built and unbuilt spaces that we have collectively produced but underutilise on a daily basis."

source: RE-ST, 2020

" 'Zwerfruimte' is spatial waste that is underused. It hides behind a designation that is insufficient to fully utilise the space, for example because the original spatial need has changed. There is a lack of use; the space drifts between 'designation' and 'non-designation'."

source: RE-ST, 2018

KANSENKAVELS

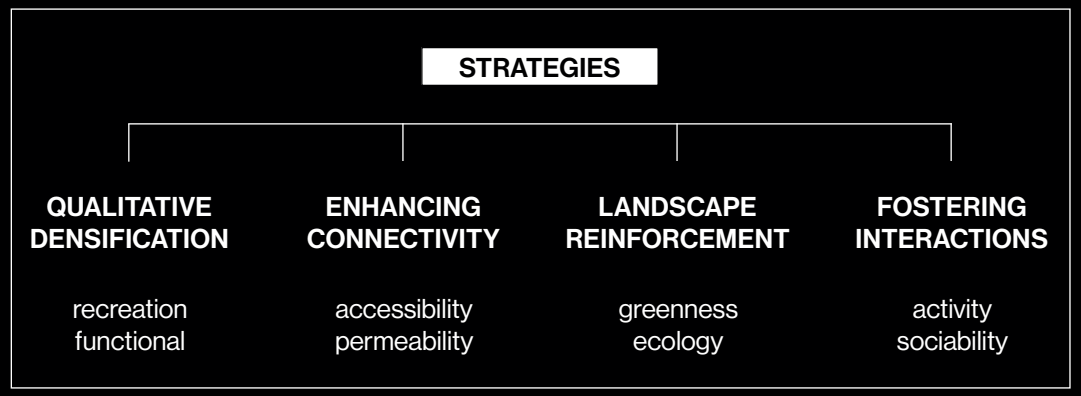
" 'Kansenkavels' are plots that can function as connections between ecological core areas. By introducing small landscape elements such as hedgerows, ponds, tree lines, and flower-rich grasslands, they provide resting and sheltering places for wildlife moving between these areas. In this way, they help strengthen biodiversity."

source: Stad Hasselt, n.d.

STRATEGIES FROM JAPAN

RESEARCH JAPAN

The four themes discussed above each introduce a distinct strategy for understanding and engaging with residual space. Each strategy is investigated through both theoretical concepts (booklet 1) and reference projects (booklet 2), revealing different ways in which residual space can be interpreted, activated and transformed.



QUALITATIVE DENSIFICATION

Qualitative Densification strengthens villages by carefully introducing new programmes and spatial intensity while reinforcing existing qualities.

ENHANCING CONNECTIVITY

Enhancing Connectivity creates fine-grained networks that improve accessibility and encourage movement while strengthening systems beyond mobility alone.

LANDSCAPE REINFORCEMENT

Landscape Reinforcement reconnects fragmented ecological systems and strengthens the relationship between settlement and landscape.

FOSTERING INTERACTIONS

Fostering Interactions contributes to vibrant collective life by relating social to spatial structures through shared places.

QUANTIFICATION

Each strategy can be further subdivided into two categories. Together, these categories provide a framework for systematically representing and comparing the projects encountered during the fieldwork. Rather than serving as an objective evaluation tool, the diagrams identify recurring qualities and spatial strategies, resulting in a project catalogue that forms a source of inspiration for the subsequent design research. This catalogue can be found in booklet 2 of the thesis.

Beyond analysing reference projects, the same framework can also be used as a design tool. By mapping the qualities of a place before intervention, the ambitions of the project, and the realised outcome, it becomes possible to identify existing strengths, missing qualities and the extent to which the proposed ambitions have been translated into the final design. This method is applied to the case study presented in booklet 3 of the thesis.

RECREATION

The capacity of a site to invite leisure and unplanned use, offering room to pause or play without being tied to a single prescribed purpose.

ACCESSIBILITY

How easily a site can be reached from its surroundings, shaped by proximity and the legibility of the routes leading toward it.

GREENNESS

The visible presence of vegetation and other natural elements within a site, giving it a sense of softness and seasonal change against the surrounding built fabric.

ACTIVITY

The intensity of use a site generates over time, ranging from organised events to spontaneous, everyday encounters.

FUNCTIONAL

The presence of concrete uses that give a site practical value in daily life, reflected in how often it is actually drawn upon rather than left idle.

PERMEABILITY

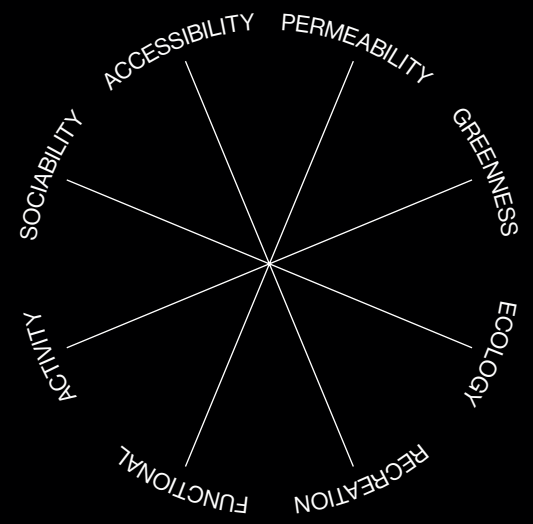
The degree to which movement can pass through a site instead of around it, visible in how open its edges and thresholds are to adjacent spaces.

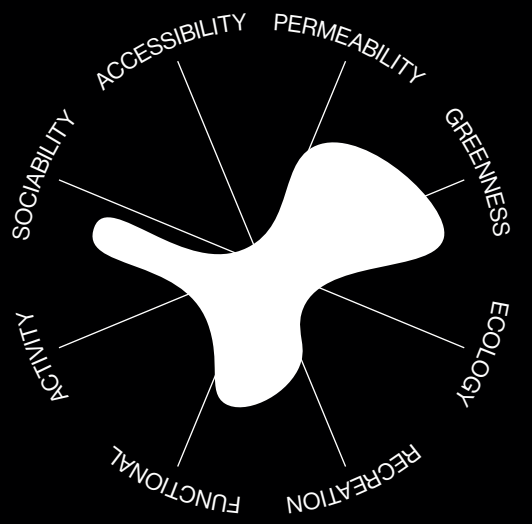
ECOLOGY

The extent to which a site supports living processes over time, going beyond visible greenery to include soil, water, and habitat conditions.

SOCIABILITY

The extent to which a site encourages contact between strangers, supported by shared functions, elements or spaces that bring different users together at once.





REFLECTION AND SYNTHESIS

AMBITIONS

The investigation of residual spaces in Flanders, combined with a critical reflection that considers Japan as a future-oriented reference, results in a series of conceptual ambitions. Operating across multiple spatial scales, these ambitions synthesise the key insights of the comparative research into a design framework.

Presented as ambition tiles, they serve as the conceptual point of departure for the research-by-design process developed throughout this thesis. Introduced at the end of each chapter, they gradually build the framework that guides the final design proposal.

Throughout the remainder of this thesis, the white frames, as illustrated above, refer to the ambition tiles introduced within each respective theme.

DESIGN TOOLS

The study of Japanese strategies demonstrates how residual spaces can actively contribute to the identified ambitions. By examining how these spaces are appropriated, transformed, and integrated into everyday life, a series of practical design tools can be formulated.

These tools translate the broader conceptual ambitions into specific spatial interventions that can be actively applied within the design process. They are subsequently tested through a case study to assess their effectiveness within the selected context, while also examining their relevance and adaptability across other spatial conditions.

Throughout the remainder of this thesis, the black-filled frames, as illustrated above, refer to the design tools introduced within each respective theme.

BUILT SPACE
OVERVIEW

BUILT SPACE

Within the Flemish Diamond, the built fabric has progressively expanded across the landscape. Development spreads in all directions, forming an organic pattern at this scale of observation. In certain areas, such as the Antwerp Triangle, this process has resulted in the emergence of almost continuous urbanised territory. While lacking the density and concentration typically associated with a city, it nevertheless occupies a comparable territorial footprint, creating a dispersed urban condition at the scale of an entire region.

The map of the Keihanshin region reveals a completely continuous urbanised territory, expanded along the coastline and within the natural basin in which the metropolis is situated. Unlike the Flemish Diamond, the built fabric displays a clear edge, with little evidence of further outward expansion. Where development occurs, it tends to be dense and concentrated, resulting in a compact urban condition rather than a dispersed one.

URBAN GROWTH

The dense Japanese urban condition can be understood as a possible future scenario for Flanders if current patterns of dispersed development continue. Rather than serving as a model to replicate, Japan functions as a critical mirror, revealing both the challenges and opportunities of an increasingly dense built environment

QUALITATIVE DENSIFICATION

This layer investigates how the smallest fragments of space are activated within the dense urban fabric. It focuses on the relationship between the built and the unbuilt, and on the ways people create identity, orientation and a sense of place within a city where density is unavoidable.



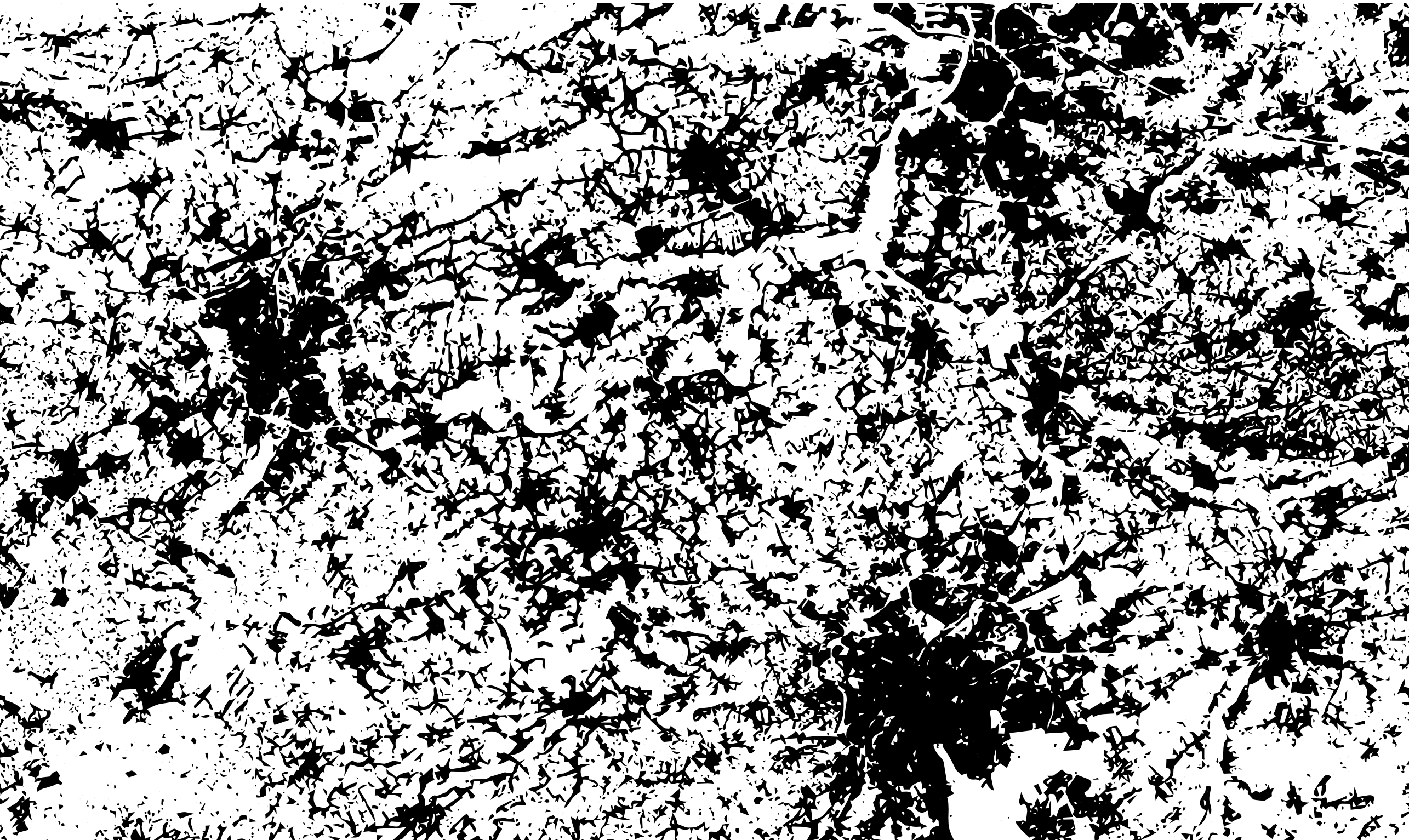
LIGHT AS A POINT OF GATHERING *OSAKA, JAPAN*

BUILT SPACE FLEMISH DIAMOND

1:500.000

built space

unbuilt space

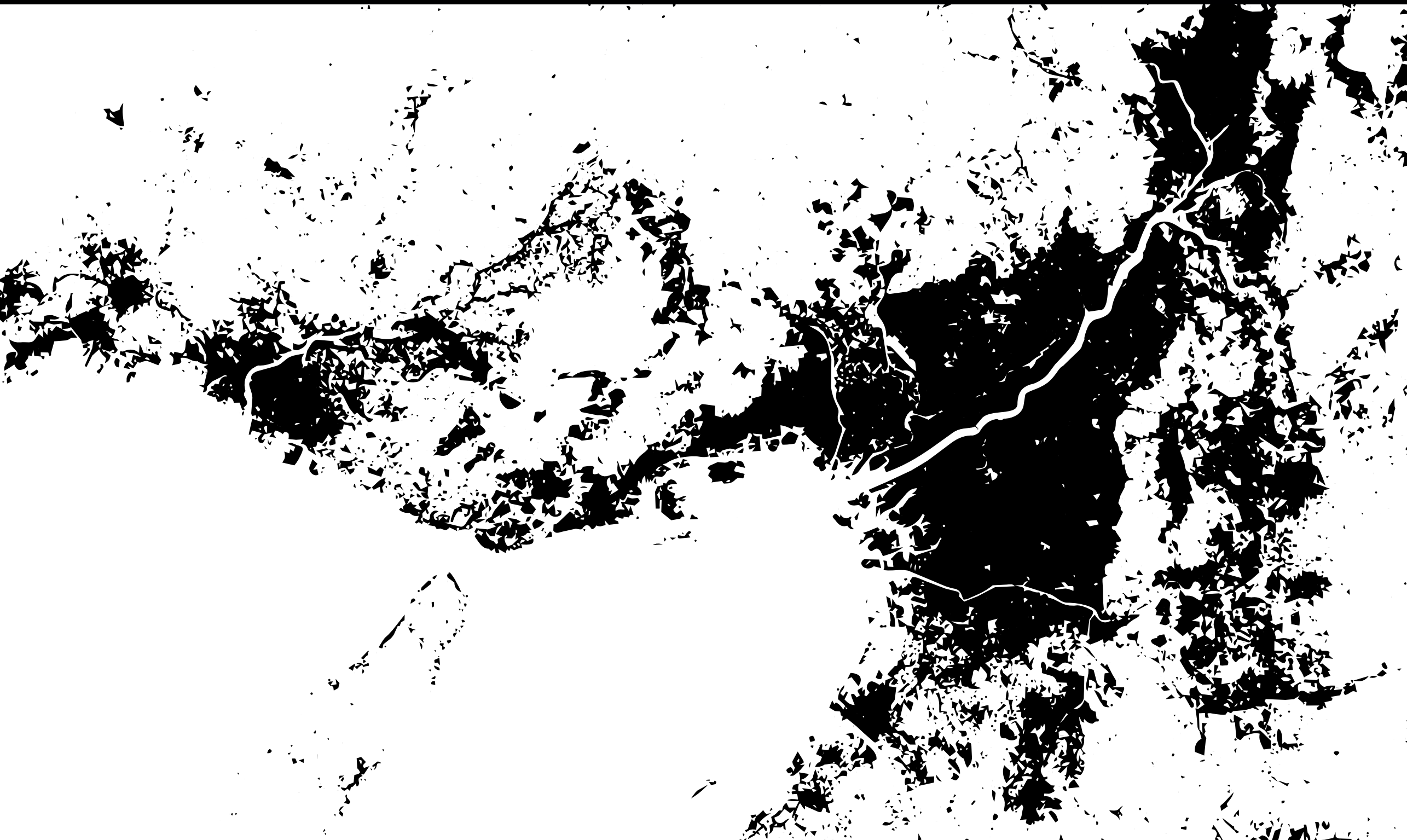


BUILT SPACE KEIHANSIN

1:500.000

built space

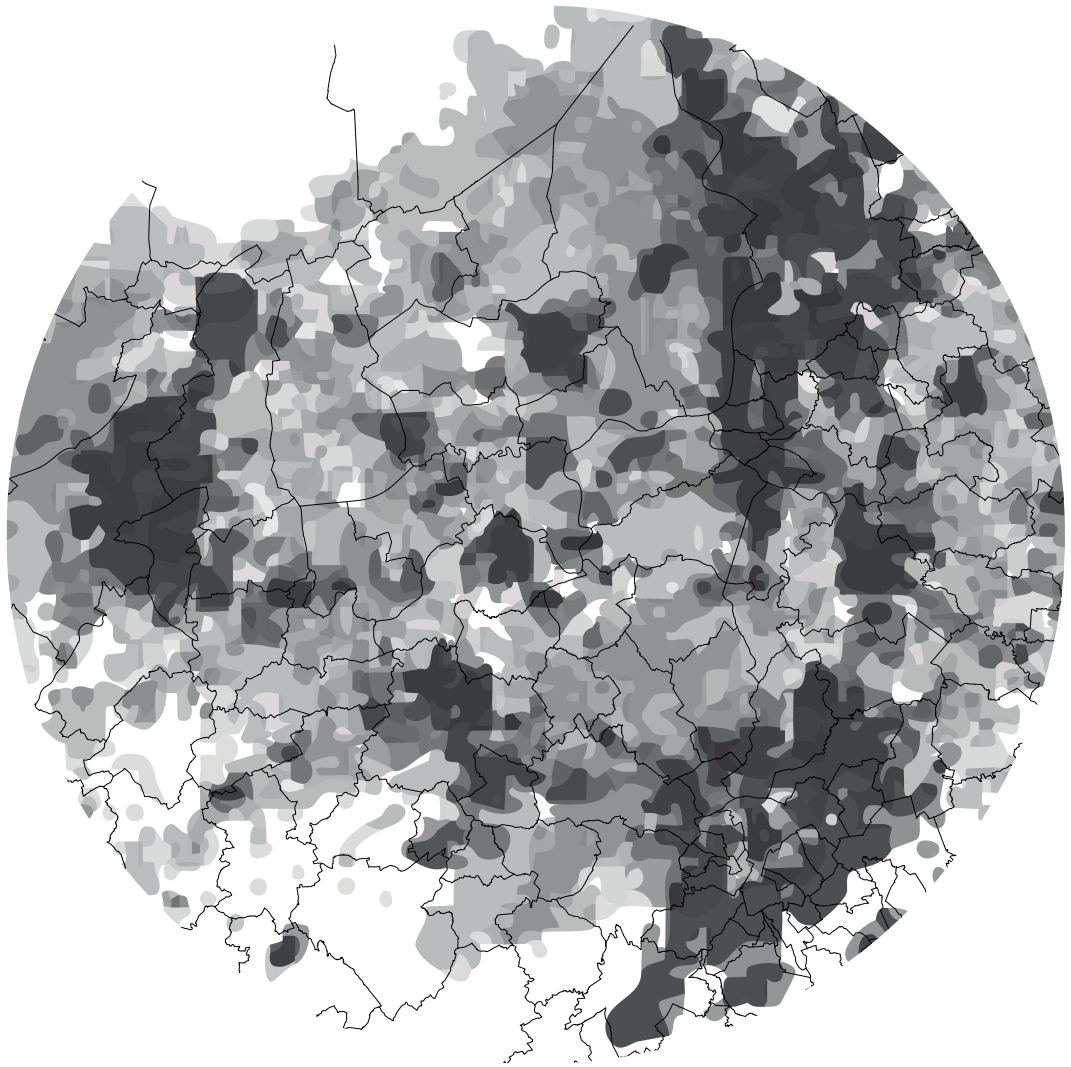
unbuilt space



66

URBAN GROWTH FLEMISH DIAMOND

1:1.000.000



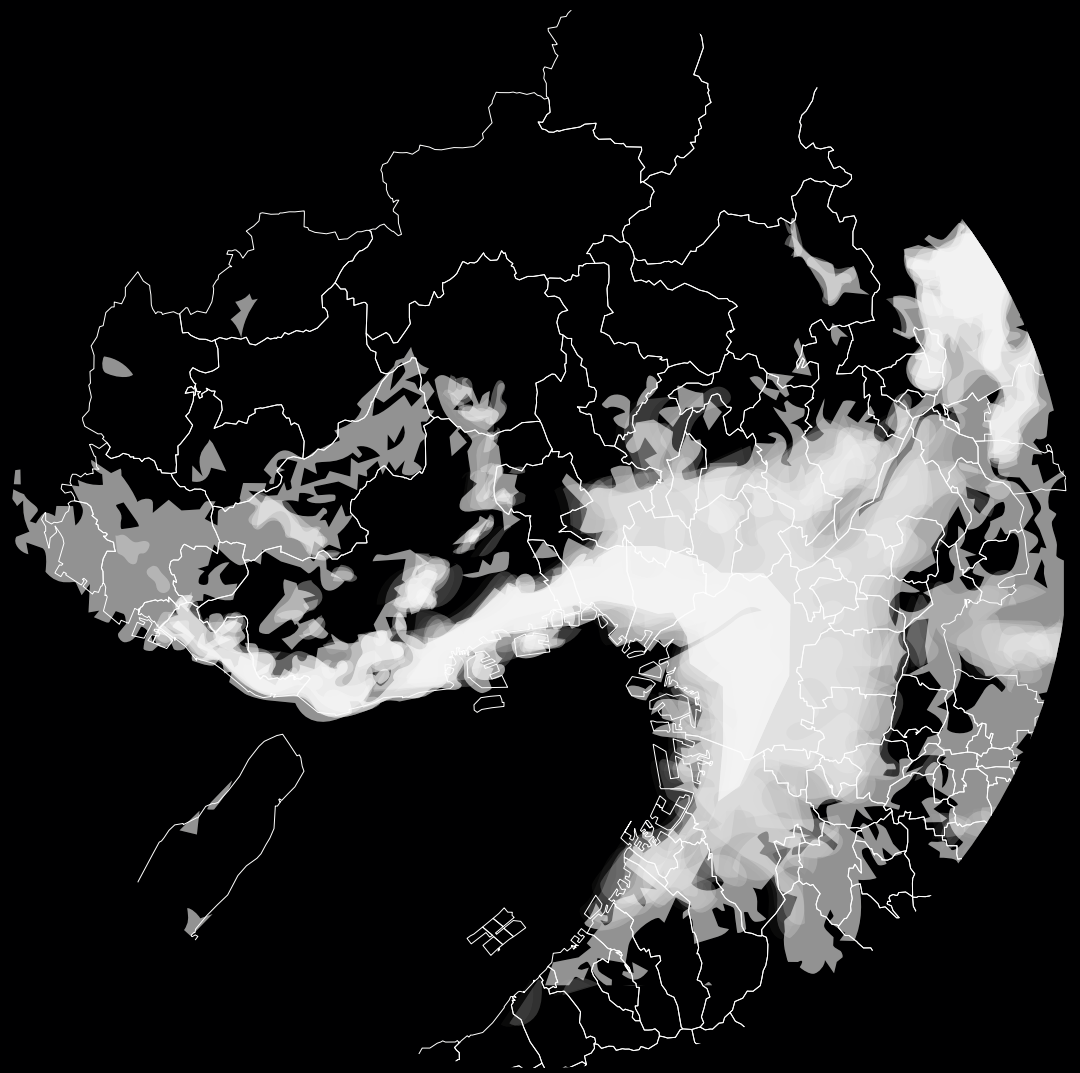
The map illustrates the original urban cores and their gradual expansion over time. The strong contrasts between successive periods reveal a relatively slow process of growth. Nevertheless, if this trajectory continues, the resulting urban condition appears to point towards a future increasingly comparable to that of the Keihanshin region. Map is made by using the Weighted Urban Proliferation (WUP) methodology.

source: Vermeiren et al., 2018, adjusted by author

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URBAN GROWTH KEIHANSIN

1:1.000.000



The Keihanshin region illustrates a further stage in the process of urban expansion observed in Flanders. Compared to the Flemish case, the limited contrast between the different periods points to a faster pace of growth. Map is made by using the Densely Inhabited Districts (DID) dataset.

source: Perihele, 2014., adjusted by author












VENDING MACHINES

Vending machines appear everywhere, in all shapes and sizes. Every narrow strip of land, every corner and every leftover piece of pavement becomes occupied. Sometimes they stand alone, while in other cases they cluster together to form entire vending walls. Their widespread presence provides convenience, visibility and a sense of safety through continuous lighting, while contributing to everyday life both day and night.








PET ARCHITECTURE

Small, irregular buildings occupy constrained plots that would often be considered unsuitable for development. Squeezed into awkward corners, narrow gaps and residual sites, they demonstrate how even the most challenging conditions can accommodate a function. Their presence introduces diversity, human scale and curiosity into the dense urban fabric.















NARROW GAPS

Narrow gaps between buildings are frequently used as storage spaces, parking areas or access routes to surrounding plots. They create passages and visual connections that contribute to a dynamic and permeable urban fabric. Their limited width slows movement and introduces moments of pause within the fast-paced city.













CLAIMING THE PUBLIC

Although the physical boundary between public and private space is often clearly defined, the atmosphere between the two remains remarkably blurred. Shops extend their displays onto the street, sidewalks become café terraces through the placement of a few crates or chairs, and residents treat the space in front of their homes as an extension of their private domain. As a result, the threshold between public and private is not fixed, but constantly negotiated through everyday use.













SIGNAGE

The narrow streets and compact building fabric make it difficult for individual buildings to stand out within the urban landscape. Small signs, oversized neon advertisements, small canopies, flags and banners extend into the public realm, allowing businesses to claim visibility and identity within otherwise repetitive and often blind façades.









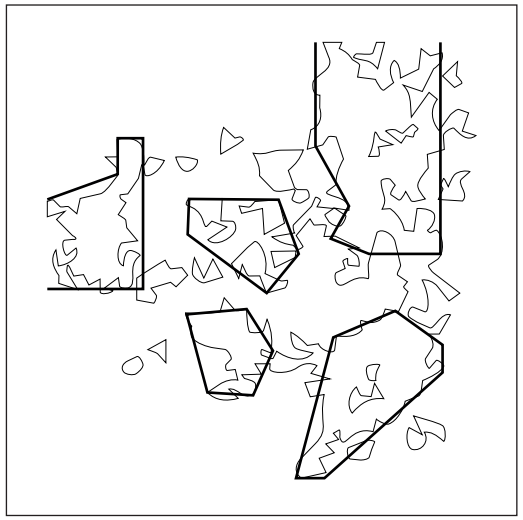


PLASTIC CURTAIN

To create a sense of enclosure within the public realm, transparent plastic curtains are frequently used. They provide shelter from rain and wind while maintaining a strong visual connection to the surrounding street

AMBITIONS

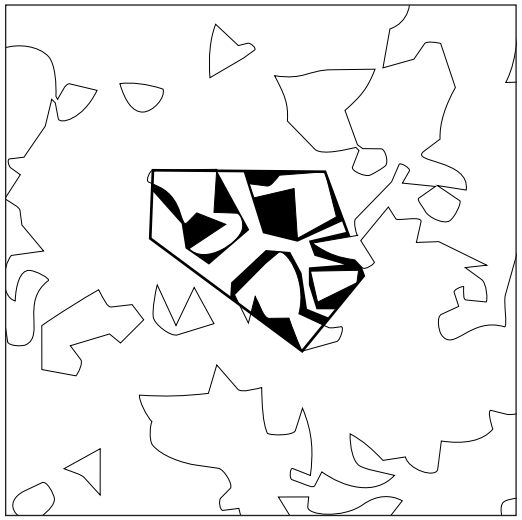
CONTAINING SPRAWL



To prevent the continuous expansion of the built environment into the surrounding landscape and safeguard larger open-space networks, the boundaries of existing villages and cities must be reinforced. Growth should first be accommodated within the existing urban footprint before extending into new territory.

Instead of consuming additional open space, the focus shifts towards transformation, densification and the reuse of what is already present. In this way, development becomes a process of working with the existing landscape rather than expanding at its expense.

STRENGTHENING OPEN SPACE

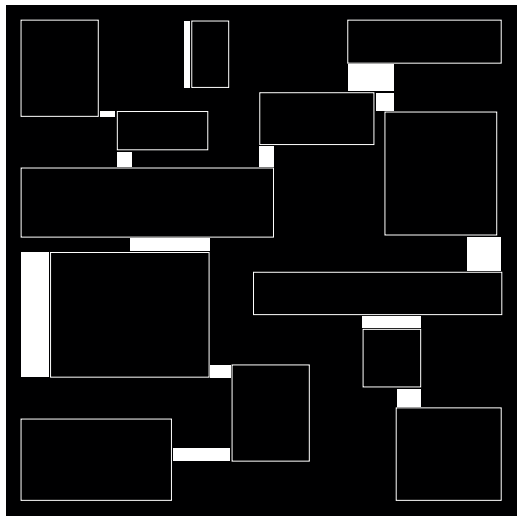


Strengthening urban boundaries does not mean filling every remaining void. Qualitative densification requires the preservation and activation of smaller open spaces within the built fabric. In relation to the surrounding buildings, these spaces provide breathing room and improve environmental quality.

They also create opportunities for informal social interaction, recreation and temporary activities that can respond to changing needs over time. Their value lies not only in what they accommodate, but also in their openness and flexibility. Rather than being assigned a fixed programme, these spaces can support a variety of uses and interpretations, making them an essential component of a resilient and livable urban environment.

DESIGN TOOLS

PROGRAMMATIC ACUPUNCTURE

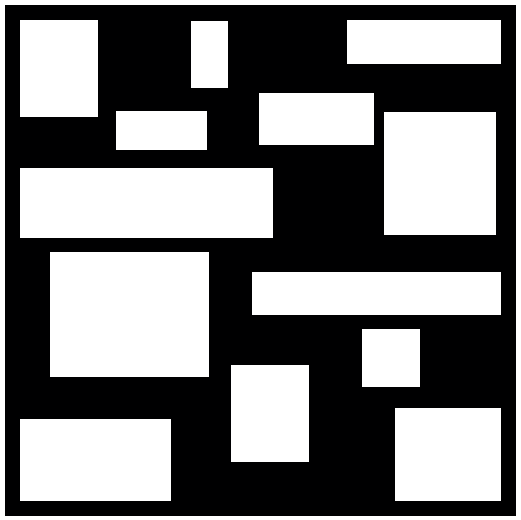


Programmatic acupuncture makes small, targeted injections into the existing fabric, letting transformation happen incrementally and responsively, without a full masterplan.

This resonates with Junya Ishigami's understanding of architecture as a cloud, where even a single drop can shift the atmosphere of the whole. Working from the unbuilt (ex-nihilo), he treats architecture not as an isolated object but as an ongoing negotiation between individual elements and the larger environmental and social systems around them. Like a cloud, its edges look sharp from afar but blur up close, dissolving the usual boundaries between inside and outside, public and private, architecture and landscape.

source: Ishigami, 2019

POROUS URBAN FABRIC



Creating a pleasant spatial experience does not require buildings to be placed directly against one another, nor does it imply the detached villa model commonly associated with the Flemish landscape. When carefully organised, the space between buildings can become a quality in itself. It creates unexpected views, inviting passages and opportunities for informal use, while allowing architecture to extend into its surroundings. These intermediate spaces support gradual transitions between inside and outside, public and private, avoiding the creation of a hard boundary.

INFRASTRUCTURE
OVERVIEW

INFRASTRUCTURE

The mobility network of the Flemish Diamond reveals strong rail connections between the major urban centres, while the areas in between remain less prominently served by public transport (train). At the same time, a dense web of roads connects almost every settlement, regardless of its size. The resulting system appears to address mobility primarily through extensive coverage, favouring quantity of connections over efficiency.

The mobility network of the Keihanshin region also reveals a fine-grained web of roads, contributing to an almost continuously urbanised and infrastructural landscape. At this scale, one might question what remains beyond the built fabric and its supporting networks. At the same time, the map shows a far denser network of rail and tram connections, extending deep into metropolitan territory. Even relatively peripheral areas appear to be strongly connected to the urban core, suggesting a mobility system that prioritises integration and accessibility through public transport.

TRAVEL PATTERNS

Fieldwork in Japan revealed the efficiency and accessibility of its public transport network. Even smaller towns and villages are well connected. In contrast, public transport in Flemish villages is generally less developed and often fails to compete with the convenience of the private car. As a result, travelling by car is frequently just as fast, or even faster, than using public transport, reinforcing car dependency and limiting the potential for more sustainable mobility patterns.

ENHANCING CONNECTIVITY

Just as the phenomenon of "mixed-use" can be observed within buildings, infrastructure in the urban fabric often performs more than a purely mobility-related function. Streets, railway corridors and transport hubs frequently accommodate social activities, commerce, public space and ecological functions alongside movement. Rather than acting solely as channels for transport, they become active layers within the urban fabric that contribute to the everyday life and identity of a place.



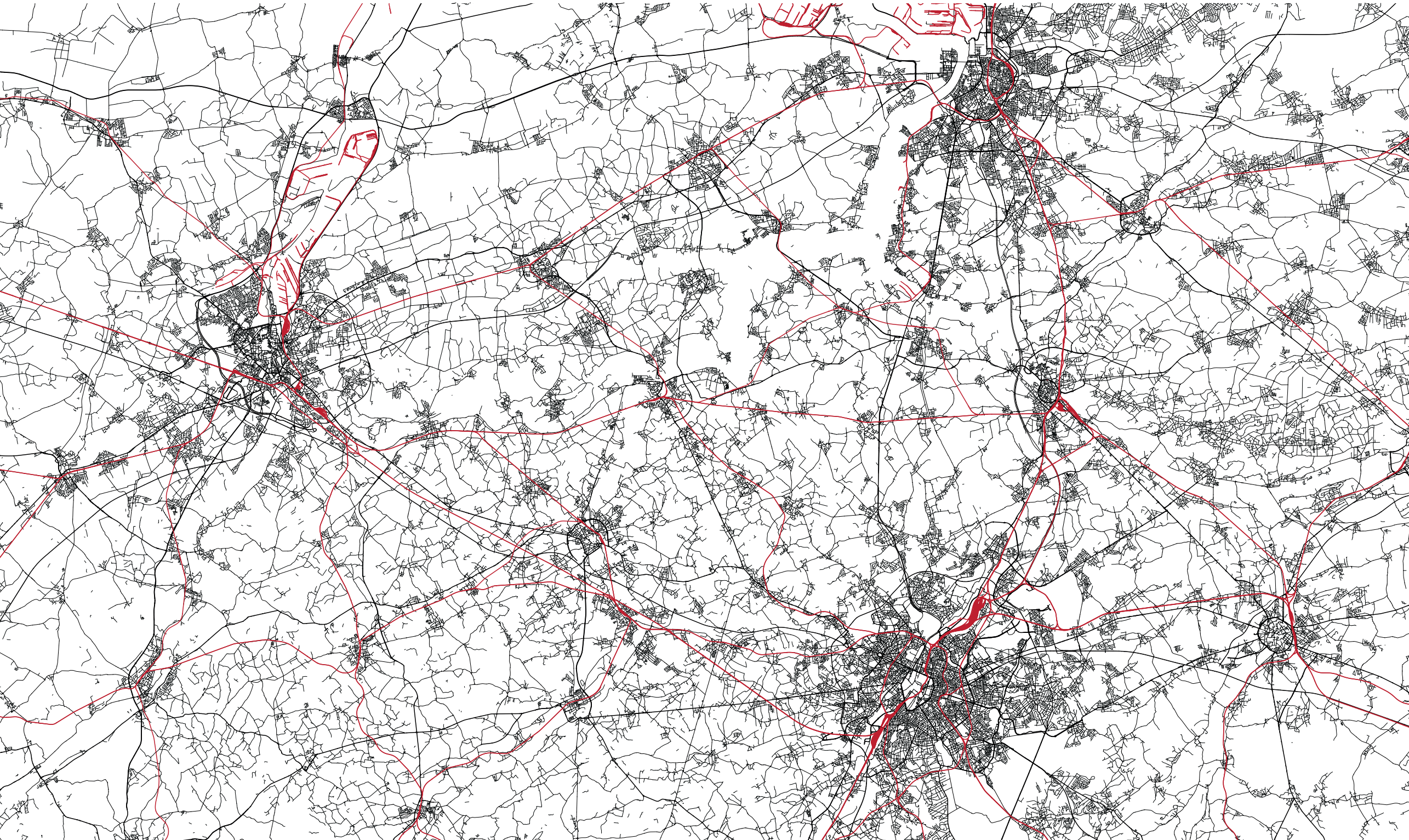
DOMINANT SERPENTINE INFRASTRUCTURE *TOKYO, JAPAN*

INFRASTRUCTURE FLEMISH DIAMOND

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car traffic network

public transport traffic network

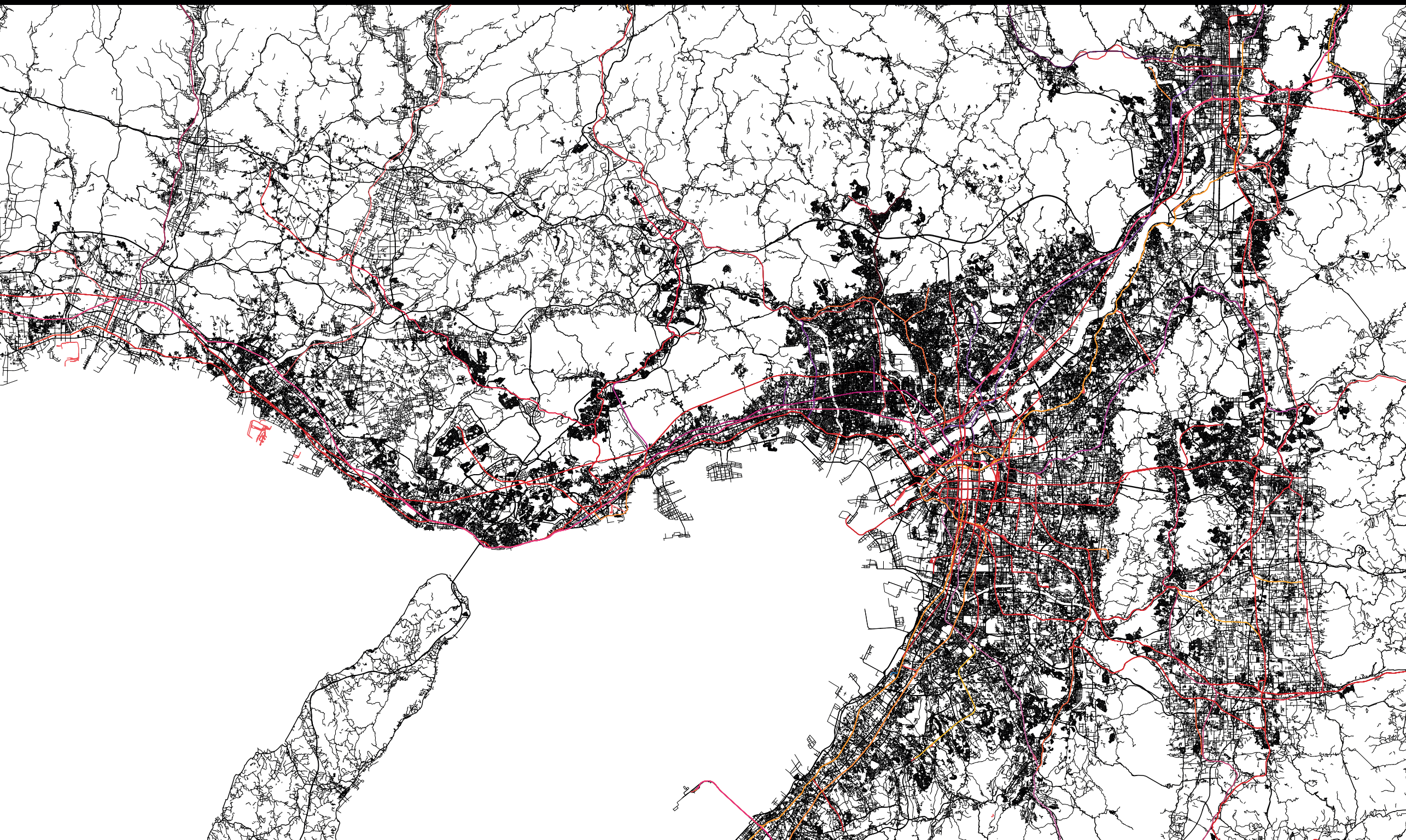


INFRASTRUCTURE KEIHANSIN

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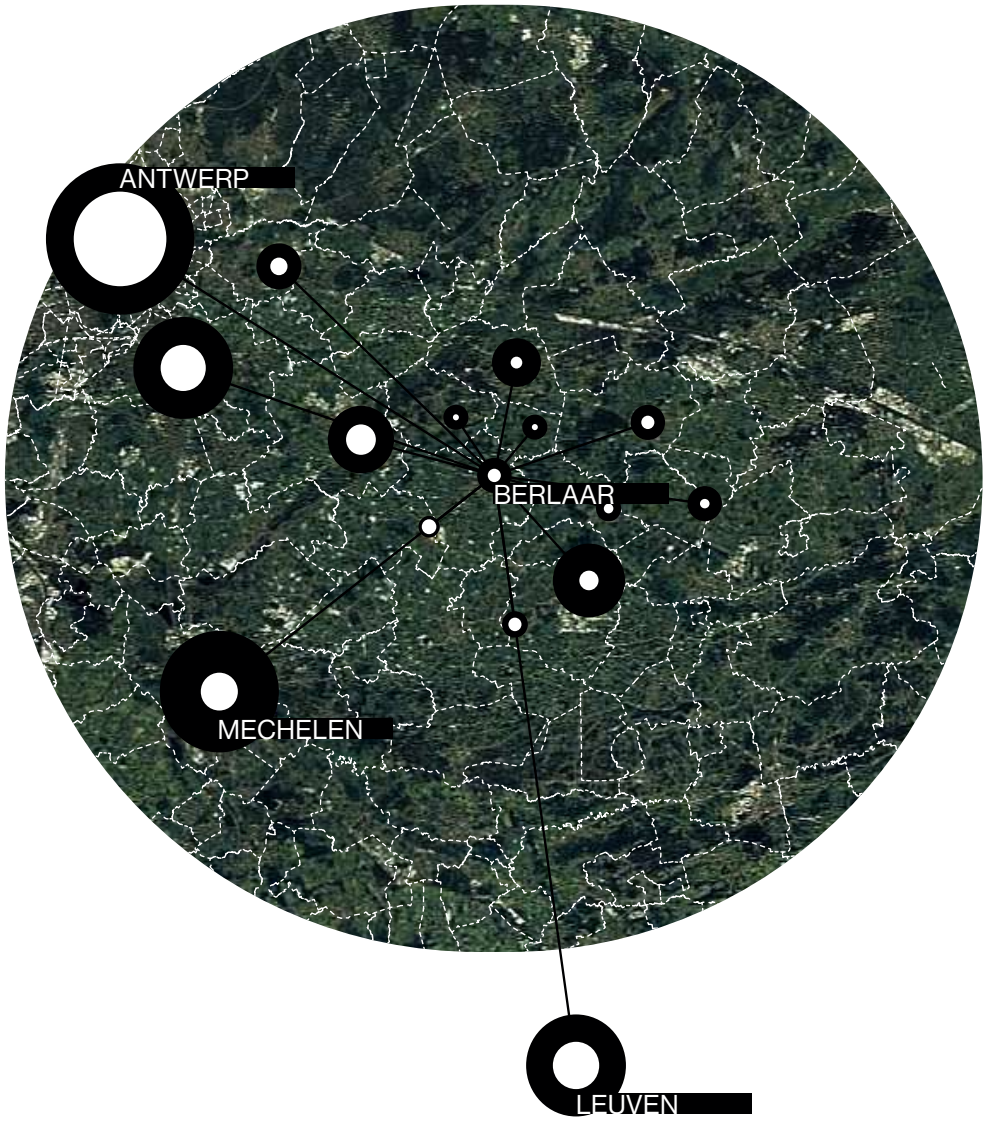
car traffic network

public transport traffic network (different colours represent different companies)



TRAVEL PATTERNS ANTWERP TRIANGLE

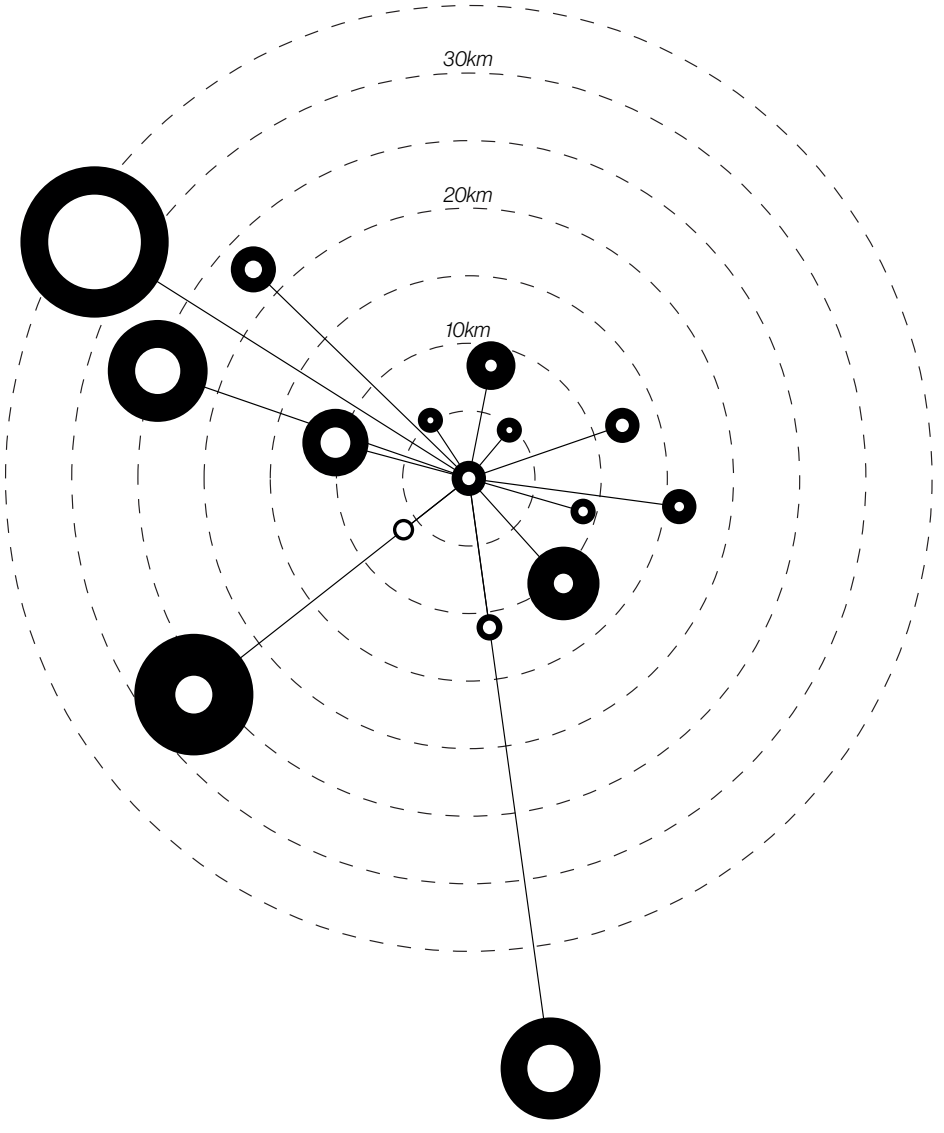
1:300.000



To investigate the mobility conditions of the Flemish territory, the village of Berlaar was selected as the central point of analysis, as it also serves as the case study for this thesis. A more detailed rationale for this selection is provided in the third booklet.

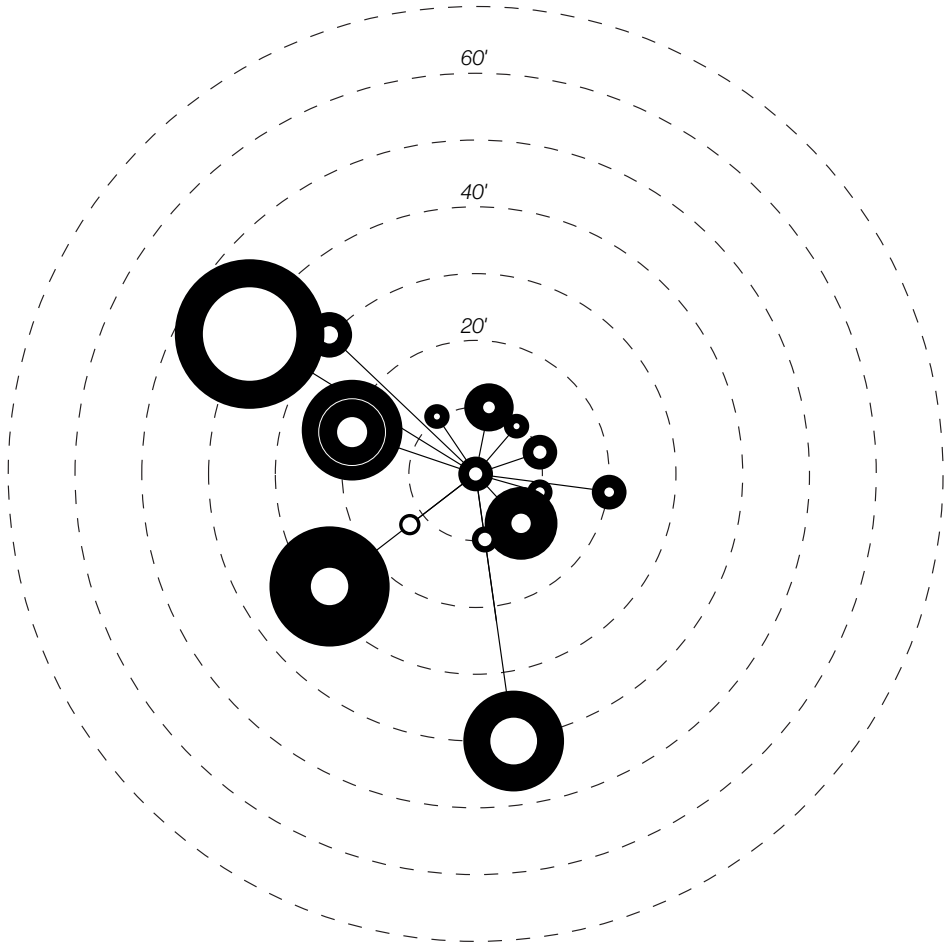
source: Google Earth, 2026, adjusted by author

TRAVEL DISTANCE



Distances and travel times are based on data obtained from Google Maps and are used to compare the accessibility of different destinations within the wider network. Public transport includes the use of buses, trains, and trams, depending on which would provide the fastest route.

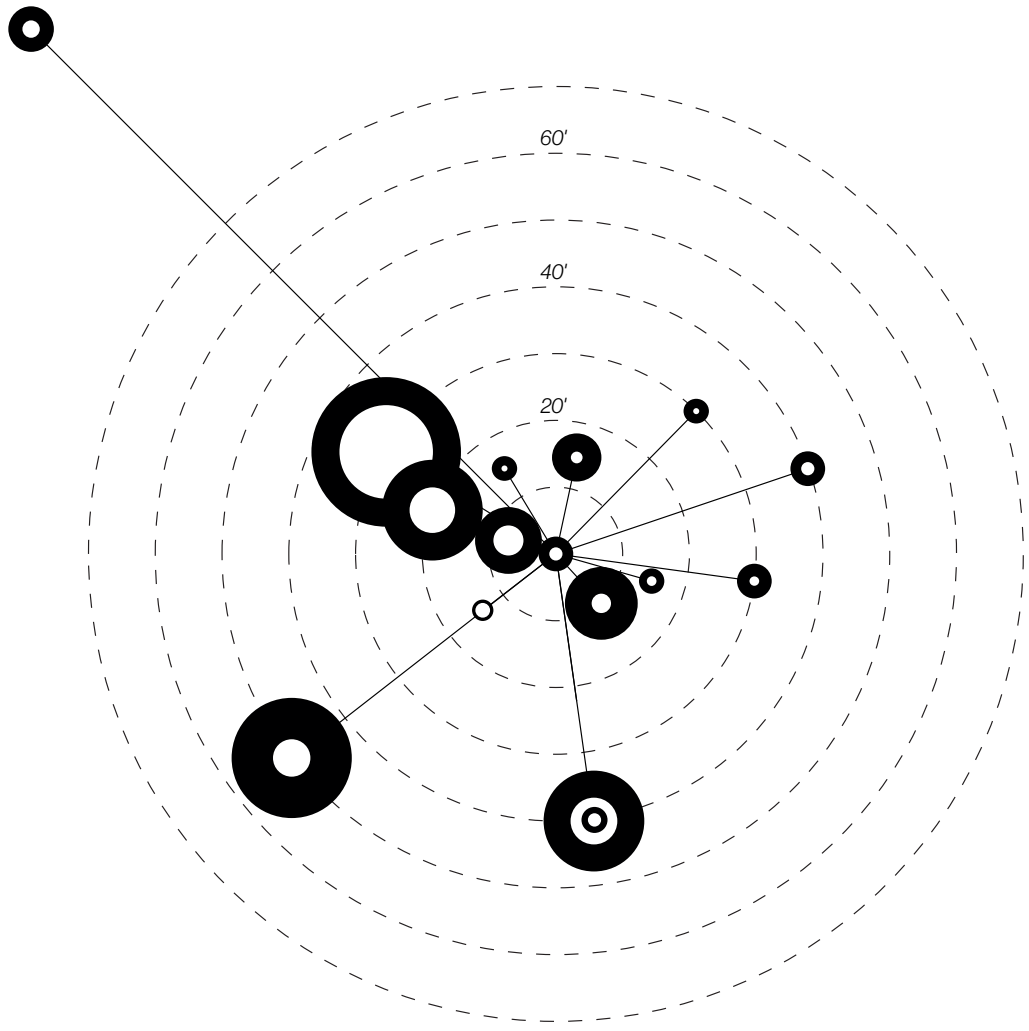
source: data from Google Maps, 2026



PRIVATE VEHICLE (CAR)

In many cases, travel times by car are comparable to those by public transport and can occasionally even be shorter. This highlights the efficiency and extensive reach of the Flemish road network. At the same time, it reveals the dominant presence of road infrastructure within the landscape, where accessibility has largely been achieved through the continuous expansion of the layered road system.

source: data from Google Maps, 2026



PUBLIC TRANSPORT (BUS, TRAIN, METRO)

Although many cities are located only a short distance from one another, public transport connections between them are often surprisingly inefficient. Transport corridors that should act as the main arteries of the territory can require lengthy detours or transfers, reducing the effectiveness of the wider mobility network.

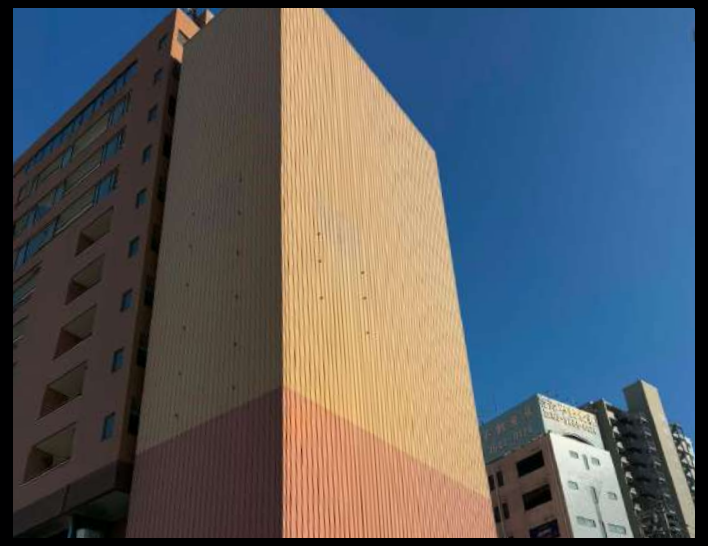
source: data from Google Maps, 2026



















COVERED CANALS

Wide canals and waterways rarely serve a single purpose. Elevated roads often run above them, combining different forms of movement within the same corridor. Their banks are activated with public programmes, transforming technical infrastructure into places of everyday urban life. In some cases, this occupation becomes remarkably ambitious, with permanent structures such as hostels built directly on top of the water.

PARKING SYSTEMS

As open space within the urban fabric has become increasingly scarce, mobility infrastructure is stacked and compressed wherever possible. High-rise parking towers, multi-level bicycle parking and automated vehicle storage systems maximise capacity while occupying a minimal footprint.









SOCIAL STREET

The street takes on a role beyond the mere organisation of movement. People meet, linger and interact within spaces that are simultaneously used by pedestrians, cyclists and cars. Rather than separating flows, the street brings them together, transforming mobility infrastructure into a shared social space. In the absence of large public spaces, these streets become the primary setting for everyday urban life.













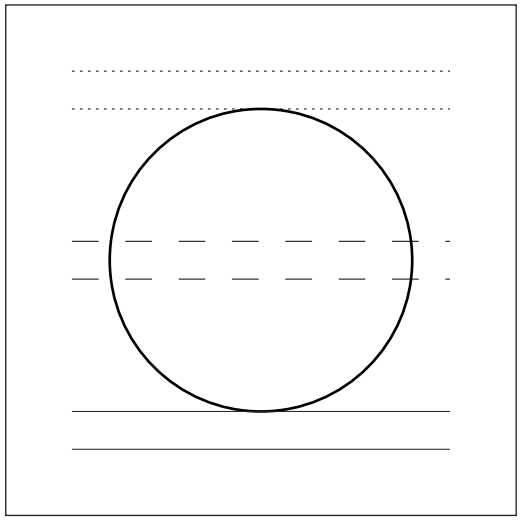
CITY GALLERY

People put both themselves and their work on display, directly onto the street or behind large windows that blur the boundary between inside and outside. This creates a dynamic interaction between passer-by and activity, encouraging curiosity and spontaneous encounters. In some cases, the boundary becomes so thin that elements typically found in a living room appear directly within the streetscape.

AMBITIONS & DESIGN TOOLS

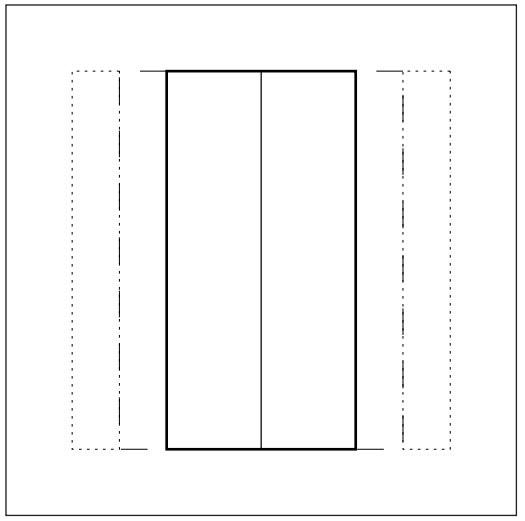
AMBITIONS

STRONG NODES



Car traffic, railways, cycling routes and pedestrian networks often operate too independently from one another. As a result, relatively short distances can require surprisingly long travel times. Despite the fine-grained street network of the Antwerp Triangle, moving efficiently from A to B remains challenging. In Japan, different modes of transport are frequently concentrated within mobility hubs, allowing seamless transfers between systems. By bringing flows together rather than separating them, these hubs increase accessibility and make the wider territory feel significantly more connected.

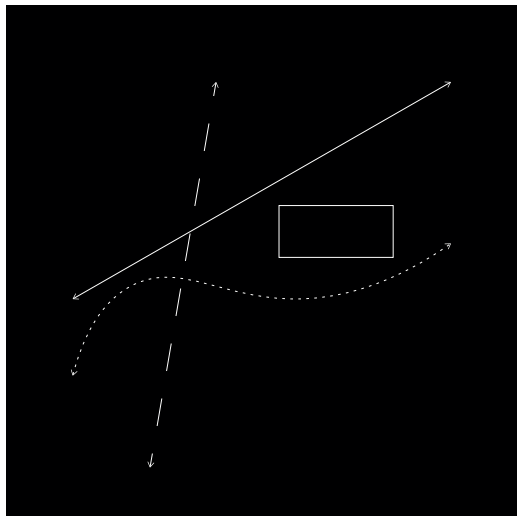
REDUNDANT INFRASTRUCTURE



In many Flemish villages, walking, cycling and driving each occupy their own designated strip of space. As traffic volumes increase, additional land is often taken from adjacent properties to further separate these flows. This stands in strong contrast to the streets of Osaka, where even within a dense metropolis, movement remains intuitive and safe. Different modes of transport coexist within the same space, reducing the amount of infrastructure required and freeing up room for other uses. The result is a more compact streetscape and a more pleasant experience of moving through the urban fabric.

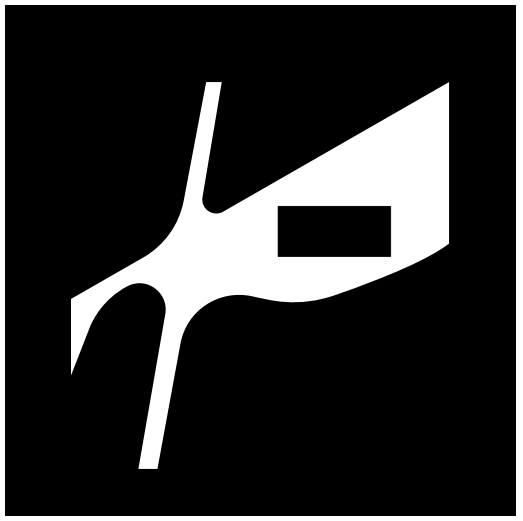
DESIGN TOOLS

MERGING MOBILITY



Infrastructure is not treated as an isolated layer, but as part of the wider urban fabric. Streets, railways and public spaces interact with the built and unbuilt environment around them, creating connections rather than barriers. As a result, mobility infrastructure contributes not only to movement, but also to the spatial coherence of the territory.

LIFE IN THE STREET



The street becomes a place for everyday social life, accommodating encounters and spontaneous interactions. Rather than functioning solely as a corridor for circulation, it provides a setting where people can meet, observe, linger, and engage with their surroundings. As urban environments become denser and open space increasingly scarce, the street takes on an even greater significance. It becomes the new "square"; the primary form of public space and the principal setting for everyday collective life. This transforms public space into a shared design task, creating places where the different dimensions of everyday life intersect.

source: Boie et al., 2026

NATURE & ECOLOGY
OVERVIEW

ECOLOGICAL LANDSCAPE

Both the Flemish and Japanese landscapes reveal how natural systems have gradually been pushed beyond the urban cores. However, a notable difference lies in the degree of fragmentation. In Flanders, ecological structures are dispersed and fragmented by the continuous spread of development, whereas in Japan they remain concentrated within larger and more coherent landscape networks. This was not always the case but gradually emerged over time as the built fabric expanded and increasingly occupied the territory.

This contrast is partly related to topography. While Flanders is characterised by a relatively flat terrain that offers little resistance to urban expansion, the Keihanshin region is situated within a basin surrounded by mountainous landscapes, allowing extensive natural areas to remain largely untouched by development.

PRODUCTIVE LANDSCAPE

Regarding productive landscapes, a notable difference can be observed between Flanders and the Keihanshin region. In Flanders, agricultural land occupies a significant portion of the open space and often dominates the landscape in comparison to ecological networks. As a result, productive and ecological systems are closely intertwined, forming a fragmented mosaic across the territory. In Japan, these landscapes tend to be more clearly separated, with productive and ecological areas each occupying their own distinct position within the broader landscape structure.

WATER LANDSCAPE

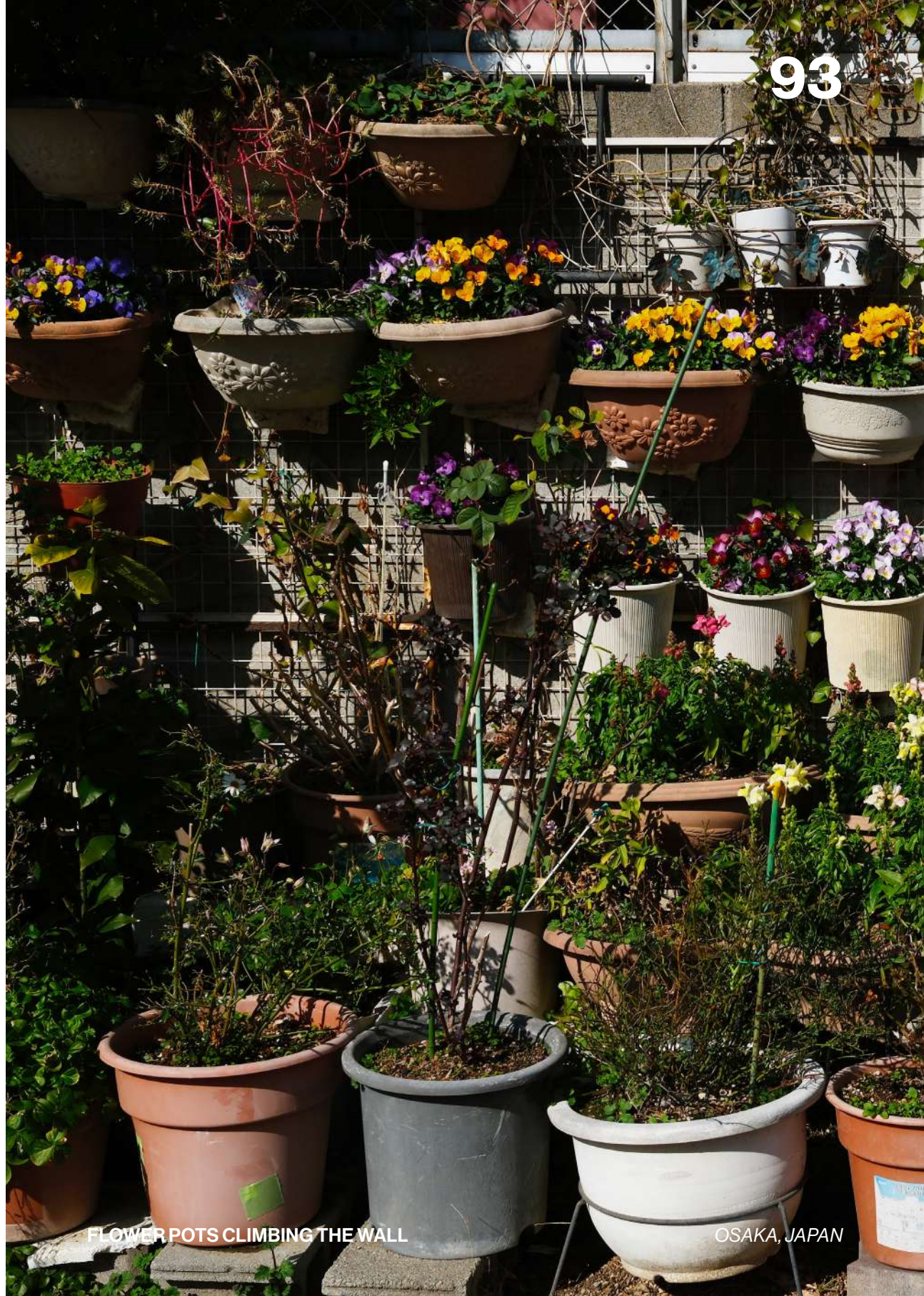
Water networks show greater similarities between the two territories. Both landscapes are structured around one or several dominant rivers, complemented by an extensive network of smaller waterways and canals. A key difference lies in their geographical position. While the Keihanshin region developed along a coastal edge and remains strongly connected to the sea, the Flemish Diamond is situated entirely inland. Despite this contrast, water continues to play a significant role in shaping the spatial structure of both territories.

ECOLOGICAL TRANSFORMATION FLANDERS

The Flemish landscape initially offered little resistance to spatial transformation, contributing to a condition in which drought and water scarcity are becoming increasingly dominant. Restoring the landscape's capacity to retain water therefore requires renewed attention to the integration of vegetation, permeable surfaces, and water-storage systems.

LANDSCAPE REINFORCEMENT

Through photographic research, this chapter investigates how nature manifests itself within the streetscape and the everyday experience of the metropolis. It explore the ways in which ecological systems continue to find a place within an almost entirely built environment, operating across different scales and distances.

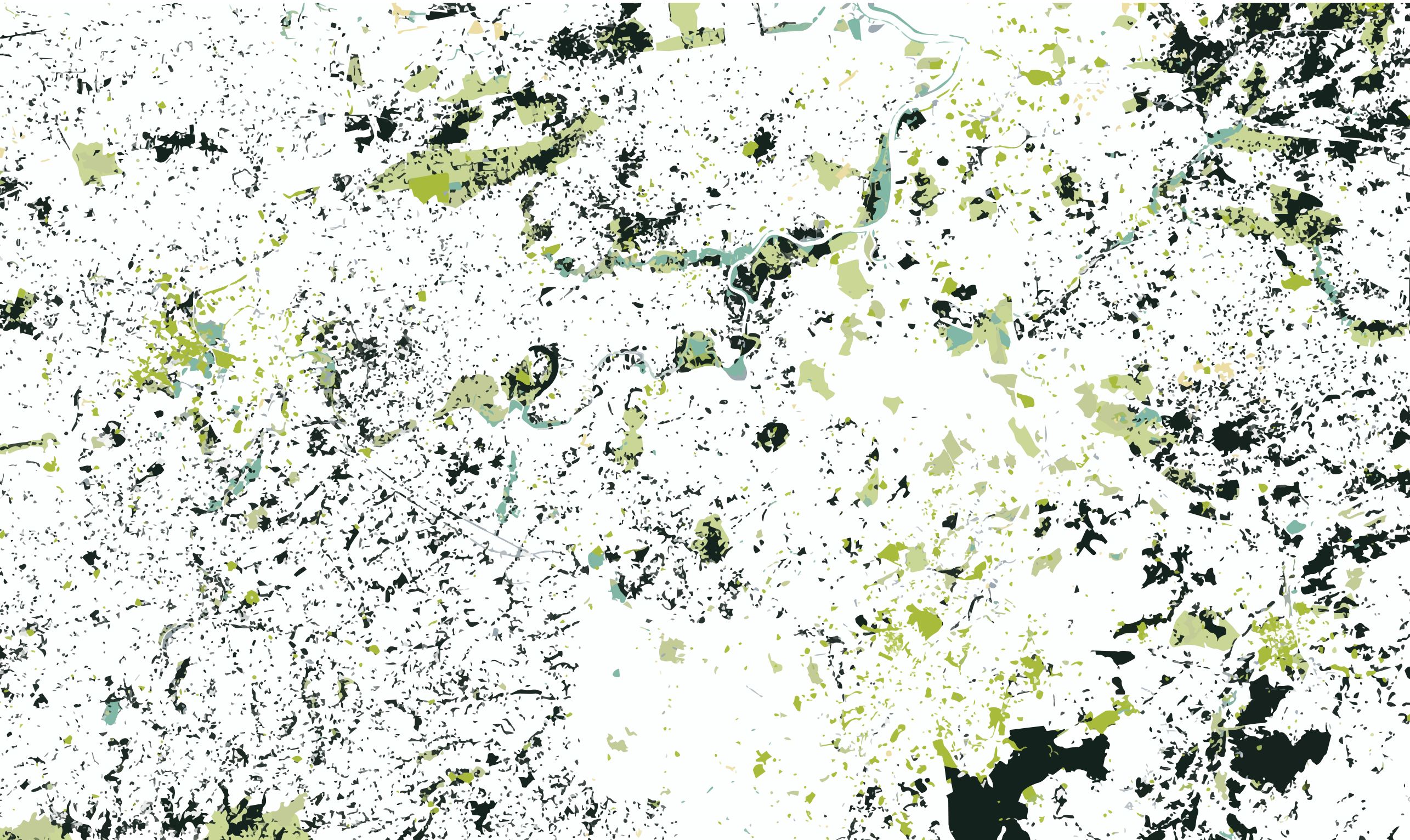


FLOWER POTS CLIMBING THE WALL *OSAKA, JAPAN*

ECOLOGICAL LANDSCAPE FLEMISH DIAMOND

1:500.000

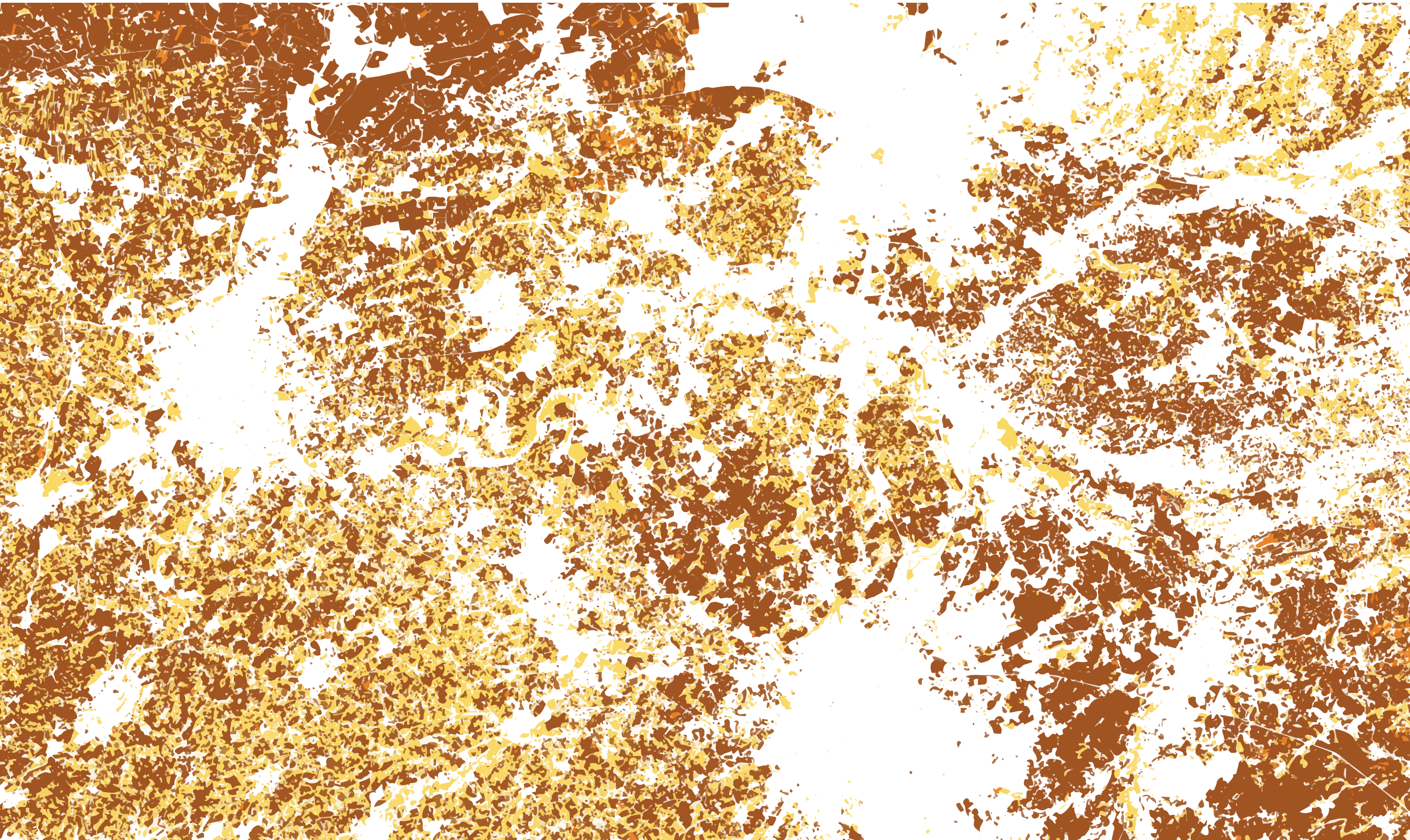
park & garden
nature
scrub
heath
wetland
grassland
forest
wood



PRODUCTIVE LANDSCAPE FLEMISH DIAMOND

1:500.000

orchard
meadow
farmland
vineyard



WATER LANDSCAPE FLEMISH DIAMOND

1:500.000

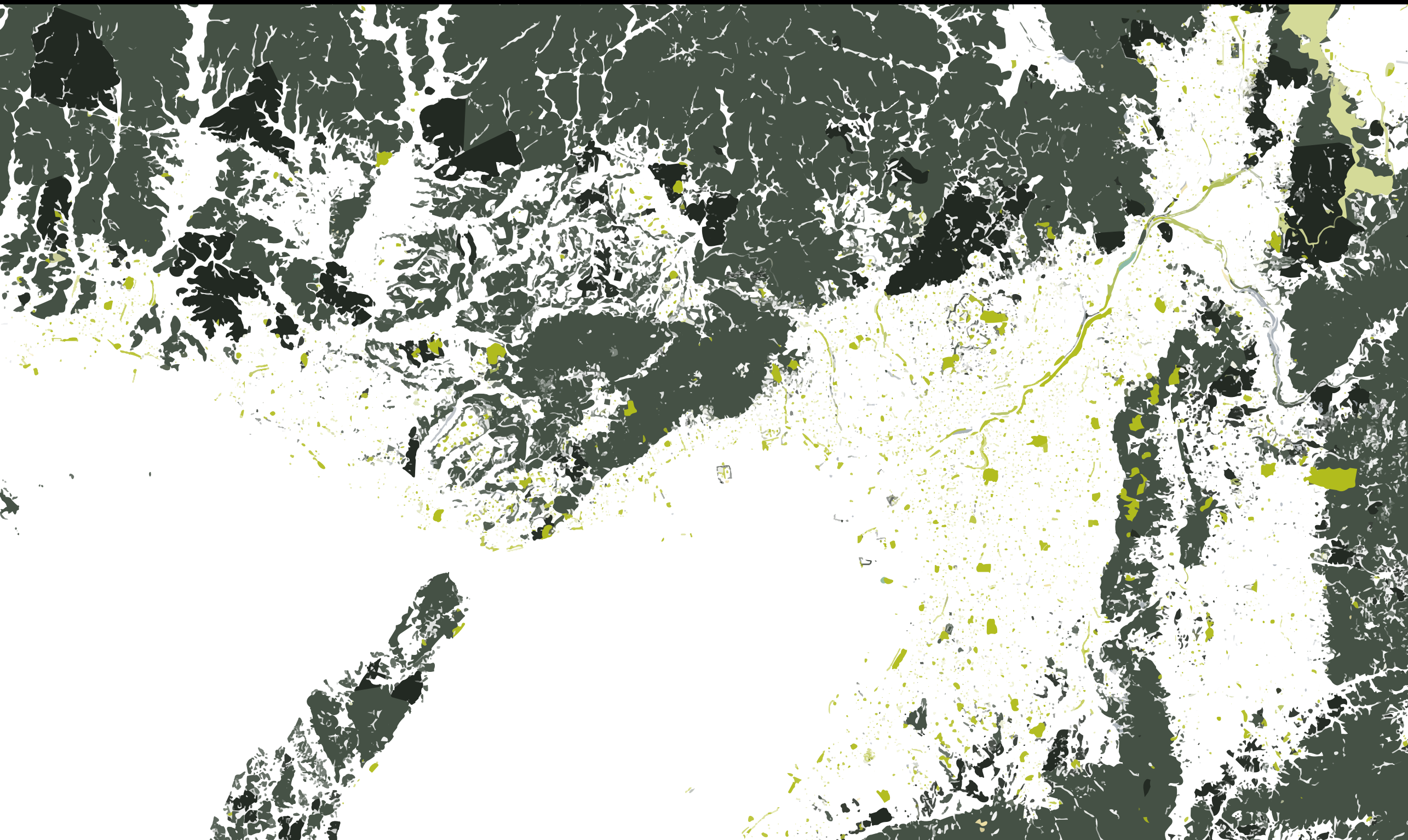
canals
stream
natural water



ECOLOGICAL LANDSCAPE KEIHANSIN

1:500.000

park & garden
nature reserve
scrub
heath
wetland
grassland
forest
wood



PRODUCTIVE LANDSCAPE KEIHANSIN

1:500.000

orchard
meadow
farmland
vineyard



WATER LANDSCAPE KEIHANSIN

1:500.000

canals

stream

natural water

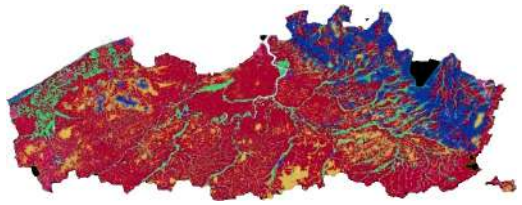


ECOLOGICAL TRANSFORMATION FLANDERS

BARREN HEATHLAND

1778

Until the 18th century, a large part of the Kempen consisted of vast heathland landscapes. Due to the poor sandy soils, agriculture was only limited, and the landscape remained largely open and extensively used. Heathlands, drifting sands, and small forest fragments defined the territory. Human presence was relatively limited and concentrated around small settlements and agricultural lands. This landscape formed the foundational layer upon which later interventions and transformations would take place.



De Keersmaeker et al., 2024, adjusted by author

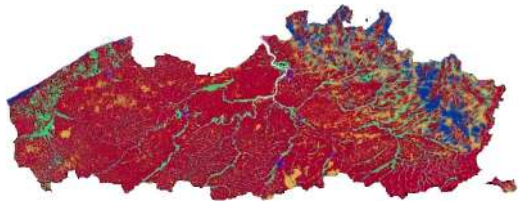


source: Bedevaart in De Kempen, n.d., adjusted by author

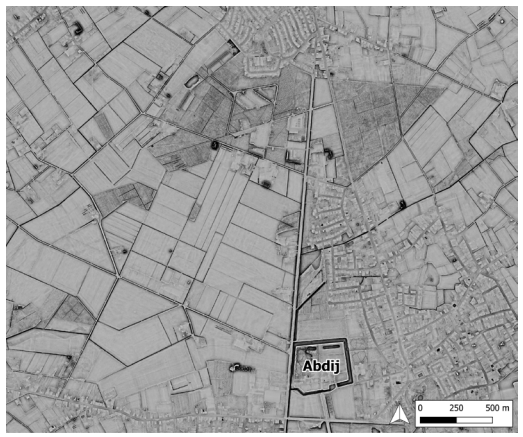
FERTILE TOPSOIL & DRAINAGE SYSTEMS

1873

From the 19th century onward, the landscape was systematically modified to enable agricultural production. Through the addition of fertile soils, land reclamation, and the construction of drainage systems, the original heathland was gradually transformed into a productive agricultural landscape. These interventions not only altered the soil structure, but also the hydrology of the area. Water was drained rather than retained, resulting in a newly rationally organised landscape.



De Keersmaeker et al., 2024, adjusted by author

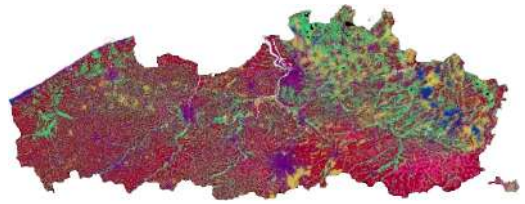


source: Duiveman, 2024

RECONSTRUCTION WW2 & DE TAEYE ACT

1969

After the Second World War, the Belgian landscape was strongly shaped by reconstruction and housing policy. The De Taeye Act (1948) encouraged individual homeownership and made it financially attractive to build detached houses outside the city. As a result, development gradually spread across the landscape. New infrastructures and ribbon developments connected villages, but at the same time led to an increasingly fragmented spatial structure.



De Keersmaeker et al., 2024, adjusted by author

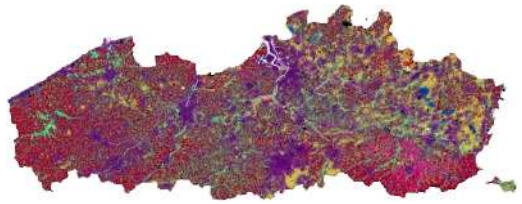


source: Canon van Vlaanderen, n.d.

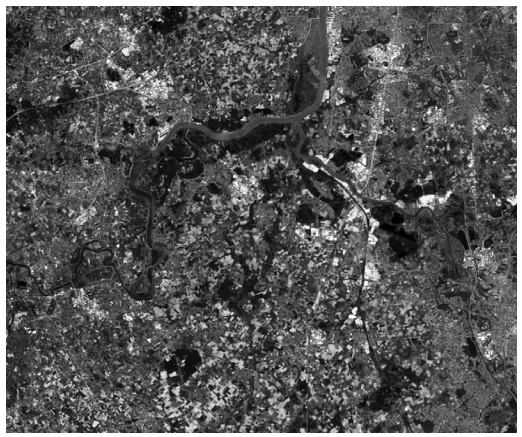
DESERTIFICATION & FLAT METROPOLIS

2022

Today, this dispersed development manifests itself in a highly fragmented landscape in which buildings, infrastructure, and open space are continuously intertwined. Due to intensive drainage and land use, the water system is under pressure, leading to soil desiccation.
At the same time, a “flat metropolis” emerges, in which urban and rural structures blend into one another. In this context, the landscape is no longer defined by clear boundaries, but by a complex network of fragments and residual spaces.



De Keersmaeker et al., 2024, adjusted by author



source: Google Earth, 2026, adjusted by author























FLOWERPOT LANDSCAPE

Due to the density of the urban fabric, green spaces often struggle to find a place within the city. To maintain a connection with nature, even the smallest corners of a plot are occupied by carefully maintained plants and flowerpots. These small-scale green interventions soften the streetscape, provide shade and help mitigate overheating around façades and windows. At the same time, they introduce a social dimension, as the daily care of plants creates opportunities for spontaneous encounters and conversation between neighbours.





METROPOLITAN PARKS

At the opposite end of the "green spectrum" are the large metropolitan parks. While relatively scarce due to their scale, they play an important role within the dense urban fabric. Supported by a highly connected transport network, these parks attract visitors from across the metropolis and function as collective green spaces for a much wider territory than their immediate surroundings.















DOMESTIC FOREST

Somewhere between the scale of the flowerpot and the metropolitan park, even the smallest housing developments can have a significant impact on the experience of greenery within the street. Vegetation manifests itself primarily in a vertical manner, as horizontal green surfaces would often make way for development. Climbing plants, trees and densely planted façades soften the urban environment, introduce seasonal change and create the impression of a much greener landscape than the available ground space would suggest.



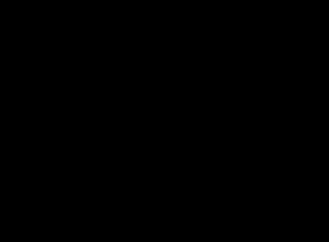










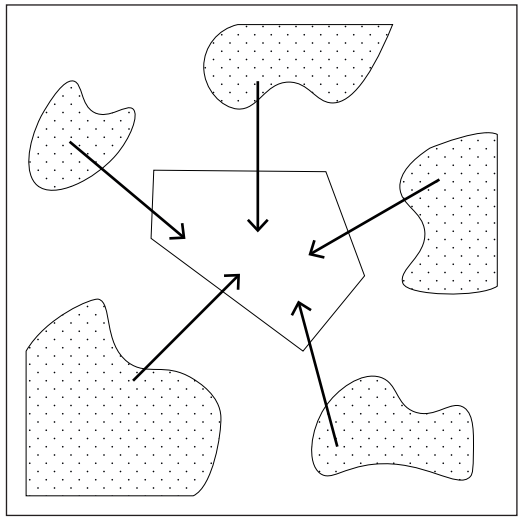


COLLECTIVE GARDEN

In the absence of private gardens, collective gardens provide space for both food production and social interaction. Maintained by local residents, they function as productive landscapes that bring people together through shared care and cultivation.

AMBITIONS

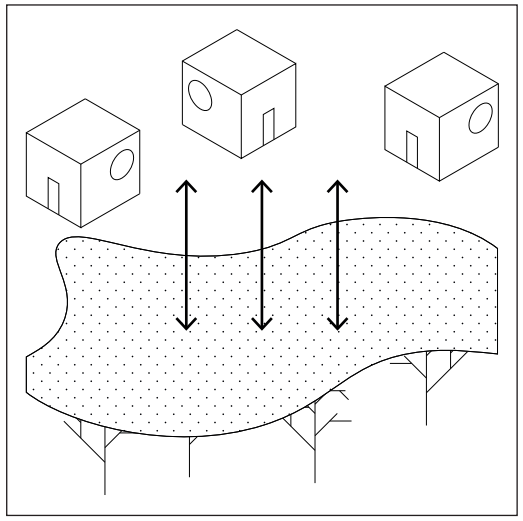
GREEN PENETRATION



Open space supports ecological networks, enables the production of food and materials, and provides space for water storage. Yet these qualities can also reveal tensions, with intensive land use contributing to concerns about desertification in parts of Flanders. Its value therefore depends on how it is organised and managed.

Rather than being pushed to the edges of cities and villages, these functions should be integrated into the built fabric. The popularity of urban parks and the attraction of village life demonstrate the importance of maintaining a close relationship between people and nature.

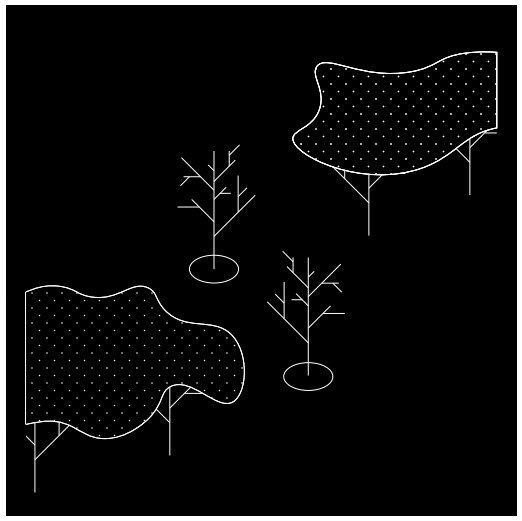
LIVING WITH NATURE



Once these natural systems are brought into the urban core, it is important that they do not simply coexist alongside the built environment. The real challenge lies in creating meaningful interaction between both landscapes. Rather than existing as separate entities, the natural and built environments should continuously influence one another, allowing both to benefit from their proximity and creating a richer and more resilient living environment.

DESIGN TOOLS

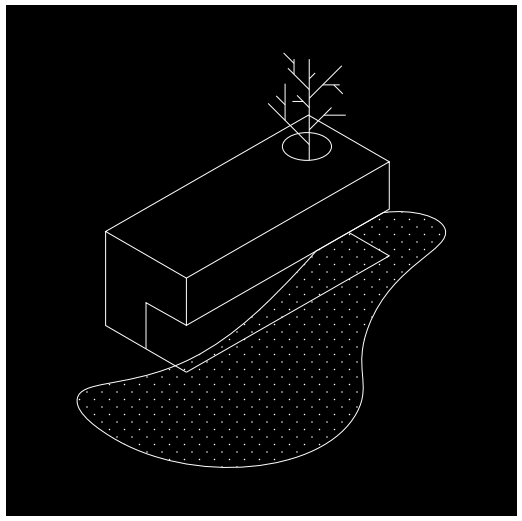
GREEN STEPPING STONES



Large ecological networks can be drawn deep into the built fabric through the introduction of ecological steppingstones. These often small and scattered spaces act as intermediate links within a larger network, allowing ecological systems to gradually move through the urban landscape. In this way, nature no longer must circumvent the built footprint but can weave itself through the fabric as an integral part of it.

At first sight, this may seem contradictory. While fragmentation was previously identified as a key challenge of the Flemish landscape, its fine-grained structure also offers opportunities. The problem may not lie in the proximity between built and unbuilt space, but in the way this relationship has been organised.

PARKNIZE



Similar to the way Junya Ishigami dissolves the distinction between architecture and nature, PARKnize challenges the conventional relationship between city and park. Instead of inserting parks into the urban fabric, it imagines the urban fabric itself as part of a continuous park. This reversal of perspective redefines ordinary urban spaces as potential landscapes for ecological processes, social interaction and everyday appropriation, demonstrating how a conceptual shift alone can profoundly influence both spatial perception and human behaviour.

source: Open A, 2024

COMMUNITY
OVERVIEW

This chapter explores the social layer of the urban environment, drawing on interviews, observations and personal encounters gathered during fieldwork. The conversations presented here have been condensed to include only the aspects relevant to the research. Combined with photographic observations, these accounts shed light on how people actually experience their surroundings and how a sense of community takes shape.

INTERVIEW COMMUNITY MANAGER OF BETA HOMMACHIBASHI PROJECT

The project positions itself as a bridge, linking the waterfront, the city and its people, both physically and conceptually. Even the name reflects this ambition: "unfinished", a deliberate nod to staying open to change and ongoing transformation.

INTERVIEW LOCAL CUSTOMER OF SHOP BENEATH VIADUCT

A spontaneous conversation with a local resident provided the opportunity for an open and informal exchange. Without the framing of architectural terminology or research assumptions, the resident spoke freely, giving a more authentic, everyday view of the place and how it's actually used.

INTERVIEW SHOPKEEPER IN SHOTENGAI

Here the focus shifts: not the user's perspective, but the shopkeeper's. Placed alongside the previous interview, the two views start to complicate and complete each other, surfacing layers of meaning that a single perspective would have missed.

INTERVIEW MARKET VENDOR IN OLD SHOTENGAI

A young vendor, working in an area that's visibly struggling, and yet not without hope. The discussion offers insight into how the younger generation perceives both the challenges and the qualities of the area, revealing a perspective shaped by contemporary realities and future ambitions.

INTERVIEW RESIDENT OF ROJI RESIDENTIAL NEIGHBOURHOOD

Few know the roji neighbourhood better than someone who has lived there most of his life. His recollections trace how the area has shifted over the decades, a long view that only long residence can offer.

FOSTERING INTERACTIONS

In Japanese culture, everyday rituals and ordinary activities often extend into public space, creating informal moments of encounter and collective life. These interactions tend to emerge spontaneously through daily use, rather than being predetermined, formally organised or imposed.



ORDERED CHAOS ALONG THE SHOTENGAI *OSAKA, JAPAN*

LOCAL INSIGHTS

INTERVIEW COMMUNITY MANAGER

C: "... I noticed that many events seem to take place here. Has this been going on for a long time?"

X: *"This building opened in 2021, but we've actually been doing community-oriented activities here for around twenty years already."*

"... The river in front of us used to divide the eastern and western parts of the city. Through clean-up events, workshops, festivals, and markets, we try to reconnect people and create relationships between different generations."

C: "So community-building was already part of the idea from the beginning?"

X: *"Yes. Before, we organised everything outside and always had to bring tables and equipment ourselves while worrying about the weather. Now people can gather here more freely, even just to sit together and talk over tea."*

C: "Are these kinds of initiatives supported by a larger urban development strategy, or was this project developed more independently?"

X: *"Our activities were never based on a large masterplan. We built and operate this place ourselves as a private initiative."*

C: "That's interesting, because many of the projects I've seen in Japan also seem very small-scale and incremental rather than part of one big strategy."

X: *"Yes, exactly. For us, communication and human connection are more important than purely economic success. This neighbourhood is changing quickly, with many newcomers moving into new residential towers, so we try to create a place where people can naturally meet and speak with each other."*

C: "And how is a project like this financially supported?"

X: *"The upper floors are rented out, while the ground floor functions as a restaurant and marina. That helps support the project financially."*



BETA HONMACHI PROJECT *CHUO WARD, OSAKA, JAPAN*

INTERVIEW LOCAL CUSTOMER

C: "... I've noticed that there are many different projects taking place underneath the railway tracks around here. As someone from the area, do you see these developments as something positive or interesting? And are you ever bothered by the noise from the trains?"

X: *"I personally see it in a positive way. I don't think it really bothers people much during the day. And compared to before, the trains are much quieter now."*

C: "That's interesting. Why do you think the noise has decreased so much?"

X: *"I think it's mainly because of technology."*

C: "Right. And do you think there are any problems with placing shops and companies underneath the railway?"

X: *"No, not really. This shop and the one next to it are both private businesses. The buildings underneath the railway across the street are partly privately owned and partly public."*

"..."

"It also has to do with financing. The government encourages the effective use of spaces underneath railway lines."

C: "So the public sector is also involved?"

X: *"Yes. Koganei City, for example, provides support. Some of these projects exist thanks to that support. And in the future, a large piece of land here will be used for the construction of the new city hall."*

C: "I see. And regarding those private companies: is the land underneath the railway owned by the government and rented out, or is it owned by the businesses themselves?"

X: *"No, the land belongs to the railway company."*



CHUO LINE DEVELOPMENT PROJECT *KOGANEI, TOKYO, JAPAN*

INTERVIEW SHOPKEEPER

C: "... I had the impression that this is quite a social place, where people come not only to buy things but also to interact with others. In some neighbourhoods I visited, people told me that small local vendors are slowly disappearing because supermarkets and convenience stores are becoming more dominant. Do you feel the same thing is happening here?"

X: *"Of course things are changing, but in this neighbourhood it's still relatively stable. Many people continue coming to local shops because they value the personal relationship and the familiarity."*

C: "...I'm researching places where people still get to know one another through everyday routines rather than through organised events. It made me wonder whether places like this still function as informal meeting places within the neighbourhood."

X: *"Yes, I think they do. Many of our customers are regulars. We've known some of them for years, sometimes even generations of the same family. People often stop to talk for a moment, ask how someone is doing, or exchange small news about the neighbourhood."*

"... In supermarkets everything is anonymous and efficient, but here people recognise each other. That creates a different atmosphere."

C: "... I imagine that also changes the relationship with customers, because you are part of the same local environment."

X: *"Exactly. We meet people not only in the shop but also outside of it, in daily life. That creates trust and familiarity."*

C: "Do you think these kinds of everyday interactions are still important within the community?"

X: *"Yes, definitely. Especially for older people, these small daily conversations matter a lot. But even younger people appreciate having places where interactions feel more personal."*



LOCAL FISHMONGER *CHUO WARD, OSAKA, JAPAN*

INTERVIEW MARKET VENDOR

C: "... I noticed that many of the shops here are closed, but at the same time new food stalls and small stands seem to appear in between them. It gives the area a very different atmosphere. How did this happen exactly?"

X: *"Yes. This shopping street had already become quite inactive, so these stalls were introduced to bring some life back into the area."*

C: "So the street was already declining before these newer activities appeared?"

X: *"Yes. In the past there were many different shops here, but over time most of them closed."*

C: "And why do you think they disappeared without many new businesses replacing them?"

X: *"A lot of the shops simply became outdated. People's habits changed, and fewer customers came."*

C: "I see. But now it feels like these smaller stalls are creating a new kind of activity again."

X: *"Yes, because they are easier to start and more flexible than opening a full shop."*

C: "So in a way, the empty shopping street is slowly being reused through smaller and more temporary interventions?"

"... And what made you personally decide to start something here, inside this older setting?"

X: *"Yes, I think so. It's mainly my personal interest and hobby. But because the barrier is lower with a small stand, it's easier to try something new."*

C: "That makes sense. It feels less like a traditional shopping street now, and more like a place where people can casually gather and experiment with different activities."



TEMPORARY LEMONADE STAND *NANIWA WARD, OSAKA, JAPAN*

INTERVIEW RESIDENT

C: "... Compared to the larger and busier surrounding streets, these smaller alleys feel very different to me. Do you think they offer a particular quality as places to live?"

X: *"Yes. I've lived here for sixty years, and it's a fantastic place to live."*

C: "That's interesting, because in dense cities it's quite rare to still find entire low-rise neighbourhoods like this. Do younger people still choose to move here?"

X: *"Yes, I do see new people moving in, while the number of older residents is gradually decreasing."*

C: "So the neighbourhood is slowly changing over time? Do people here still know each other personally, or is that becoming less common?"

X: *"I know some of the long-time residents, but I don't know many of the newcomers."*

C: "And do you sometimes experience disturbances or other inconveniences from living so closely together, or does that not really happen here?"

X: *"There's nothing particularly negative about it."*

C: "So even if people don't interact very intensely anymore, this kind of dense neighbourhood still functions well socially?"

X: *"Yes, I think so. Although recently there has also been an increase in private accommodations."*

C: "So tourism is starting to influence the neighbourhood as well?"

X: *"Yes, but it doesn't really create problems here. In other places I hear it can cause more nuisance."*



RESIDENTIAL ROJI *CHUO WARD, OSAKA, JAPAN*













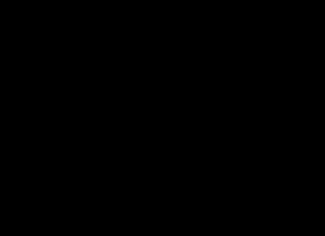


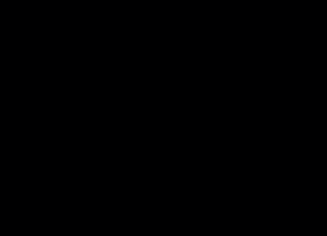
Source: Sasaraction, Junji Shigemi

CHAIRING

The term "chairing" was introduced by a local resident during a guided walk through the village of Shioyacho in Kobe. It describes the simple act of placing a chair outside, either temporarily or permanently, and using it as a place to sit, observe and enjoy everyday life. More than a piece of furniture, the chair becomes a catalyst for informal encounters, encouraging conversations with passers-by, increasing awareness of the surrounding environment and celebrating the value of simply being present without a specific purpose.









SHARING

The compact nature of everyday living in Japan, combined with a strong culture of spending time outdoors, gives rise to a wide variety of shared spaces embedded within the public realm. Community gardens that are shared with kindergartens, unattended roadside stalls operate on the basis of trust, allowing people to take products in exchange for a small voluntary payment, and even designated smoking areas become places for informal encounters.











PLAYING

Many spaces without a predetermined function are activated through the introduction of simple play elements. Rather than relying on fully designed playgrounds, a single swing, slide or climbing structure is often enough to transform an underused space into a place of activity. These interventions not only encourage children to gather and play, but also create opportunities for parents and other residents to meet, interact and engage in spontaneous conversations while sharing the space.









CREATING (CASE KAMIGYO WARD)

Historically, Kamigyo Ward has been home to a rich concentration of crafts, small-scale production, and creative activity, fostering a strong culture of making. Today, vacant "machiya" are increasingly reactivated as mixed-use spaces, combining creative work with cafés, shops, galleries, shared workspaces, and neighbourhood initiatives. These small-scale transformations demonstrate how existing buildings can accommodate new layers of activity, reinforcing both the local economy and everyday community life without large-scale redevelopment.



















source: Sasaraction, Junji Shigemi (all pictures on this page)

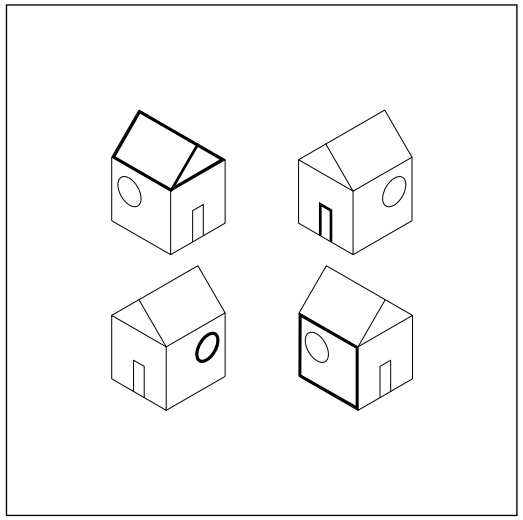
COOKING (CASE SASARACTION)

Cooking and eating occupy a central place in everyday Japanese life. Street vendors animate public space, neighbourhood shops and small eateries sustain daily routines, and compact food stalls bring together people who might otherwise never meet. Beyond nourishment, food acts as a catalyst for social interaction and community building. We learned about Sasaraction through a chance encounter with Junji Shigemi, who told us about the initiative.

Based in Sasara, a rural village in Yoshino (Nara Prefecture), Sasaraction invites visitors to experience "inakatsu" by reconnecting with rural life through farming, nature, and shared meals with the local community. Whether gathering around a barbecue with freshly harvested spring vegetables or sharing wild game after a day working in the fields, food becomes the moment where visitors and residents connect. These shared meals turn strangers into friends while reinforcing the social fabric that keeps rural communities alive.

AMBITIONS

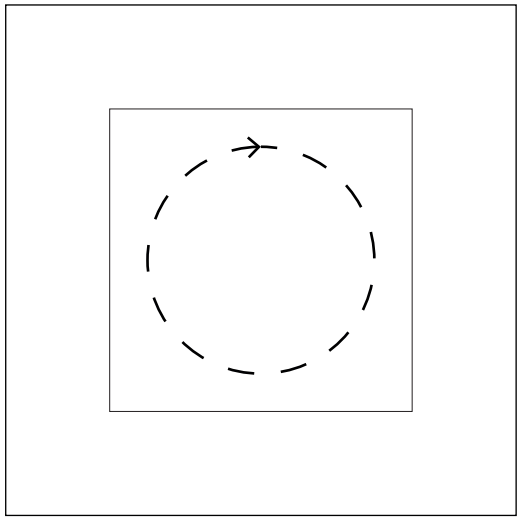
WHEN FUNCTIONS MEET, PEOPLE MEET



Whereas plots in Flanders are often assigned a single function through zoning regulations and planning frameworks, Japanese environments frequently combine multiple programmes within the same site. This does not only occur in large urban centres but can be found even within the smallest spatial fragments. The mixing of functions also brings together different groups of users, creating opportunities for interaction between people who might otherwise never meet.

Combining infrastructural, productive or commercial programmes with more social and recreational uses can transform ordinary spaces into dynamic places that support everyday life and encourage people to stay rather than simply pass through.

EVOLVING ARCHITECTURE



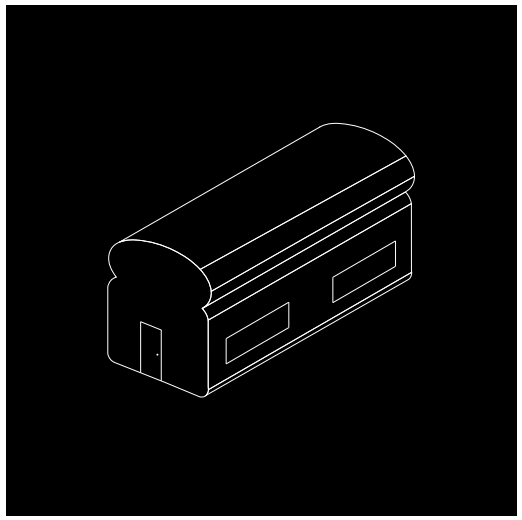
As the world around us continues to change, architecture should not be conceived as a fixed and permanent condition. Interventions must be able to adapt to evolving needs, allowing spaces to change over time rather than prescribing a single long-term outcome.

Density also has a human dimension. New programmes and volumes should emerge from the scale, character and needs of the village itself. The goal is not to maximise density, but to strengthen local life through interventions that feel rooted in their context and remain adaptable to future change.

source: Sim, 2014

DESIGN TOOLS

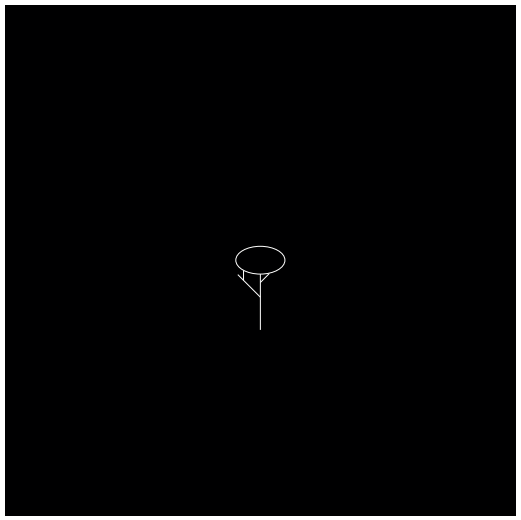
DESIGNING THE EVERYDAY



The value of a place does not necessarily lie in the architectural object itself, but in its ability to translate a spatial need. A space acquires meaning through the activities that take place within it and the ways in which it is used and experienced. Successful interventions therefore often build upon existing patterns of use rather than introducing entirely new programmes. By recognising, supporting and amplifying everyday practices already present on a site, architecture can strengthen the identity and value of a place in a natural and meaningful way. In this sense, architecture acts less as an autonomous object and more as a framework that enables activities and relationships to emerge.

source: Lang, 2003

QUICK ADDITIONS, QUICK WINS



Freedom of choice may be one of the most important factors in facilitating dynamic social interaction. A typical example is the concept of "chairing"; the use of loose chairs that allow people to decide where, how and with whom they sit.

Instead of dictating behaviour, such elements create opportunities for appropriation and personal interpretation. Because these interventions are lightweight and adaptable, they can easily respond to changing uses and needs throughout the day.

source: Whyte, 1980

REFLECTION
RESEARCH FRAMEWORK

WORKING BETWEEN SCALES

One of the central findings of this research is that residual space cannot be understood from a single spatial scale. What appears as continuous open landscape at the territorial level may dissolve into a fragmented network of residual conditions when observed more closely. Conversely, local interventions often derive their significance from larger ecological, infrastructural or social systems operating beyond the immediate site.

At the same time, moving between scales inevitably involves simplification. Each transition highlights certain relationships while obscuring others. The research therefore does not claim to provide an objective multiscalar reading, but proposes working between scales as a design attitude that continuously negotiates between territorial structures and local spatial experience.

FROM NEGATIVE TO RESIDUAL SPACE

One of the central shifts throughout this research is the transition from negative space towards residual space. The inverse of the built environment initially appears as a continuous field of unbuilt land, suggesting emptiness or absence. However, as the analysis moves between scales and themes, this apparent void reveals itself as a layered spatial system, accommodating ecological processes, water management, informal mobility, social interaction and future change.

The research therefore proposes residual space as a spatial condition whose meaning emerges through the interaction between built form, infrastructure, ecology and community. It is the unintended by-product of planning systems and territorial transformations.

Yet residual space should not become another universal category or predefined design problem. Not every leftover space requires intervention, nor should every fragment acquire a programme. Rather than a typology to be designed, residual space represents a context-dependent question whose value often lies precisely in remaining open and supporting multiple systems simultaneously.

FOUR OVERLAPPING STRATEGIES

Rather than functioning as isolated categories, the different strategies continuously overlap, reinforce and occasionally challenge one another. They should therefore be understood less as a fixed classification than as a way of structuring critical reflection throughout the design process.

It is equally important to acknowledge that these strategies represent only one possible reading of residual space. They are shaped by the comparative analysis, the fieldwork conducted in Japan and the author's own observations and design perspective. Alternative readings may reveal different qualities, priorities or strategies, depending on the context, the research question or the disciplinary lens through which residual space is approached. Their value lies not in completeness, but in providing a coherent framework for interpreting and discussing residual space.

EIGHT AMBITIONS & DESIGN TOOLS

The ambitions describe desired spatial qualities rather than predefined forms, while the design tools translate these ambitions into concrete spatial operations. Together, they establish a framework that supports design decisions without determining their outcome.

Rather than offering direct solutions, the framework stimulates critical reflection throughout the design process. Its application inevitably requires context-specific interpretation and adaptation, as every site demands its own reading of residual space. It therefore cannot replace the designer's judgement, but instead provides a structured way of supporting and challenging design decisions.

The reflections presented throughout this chapter explain why the outcomes of this research intentionally remain at a conceptual level. Rather than prescribing specific interventions, they establish a theoretical foundation that can be adapted to different contexts and scales. As such, this booklet should not be understood as the final outcome of the research, but as the conceptual framework upon which the subsequent design research is built.

The research by design presented in the third booklet consequently shifts from understanding residual space towards actively working with it. The ambitions and tools developed throughout this study become instruments for testing how residual space can operate as a catalyst for ecological, spatial and social transformation within the Flemish village.

Perhaps the question here is not how residual space should be designed, but whether architecture is capable of recognizing when intervention is necessary and when the greatest spatial quality lies in deliberately doing less. It is more about shaping functions and zones than designing programmes and places.

STUDIO JAPAN 4.0 IMMORTALIZED *KYOTO, JAPAN*

SOURCES

MAPS & FIGURES

All photographs, diagrams, drawings, schemes, visualisations, and maps were produced by the author, unless stated otherwise. Maps were created using QGIS and OpenStreetMap data accessed through the QuickOSM plugin, and subsequently refined using Adobe software. Where figures are based on external datasets or other sources, this is explicitly indicated in the figure caption.

INTERVIEWS

The interview transcripts included in this document were generated using Google Translate's transcription function, refined with AI for readability, and reviewed by the author. Besides informal conversations with local residents, interviews and meetings were conducted with architects and other professionals in Belgium and Japan.

BELGIUM: Edith Wouters (AR-TUR), Filip Buyse (MAAT ontwerpers), Karen Leyman (MAAT ontwerpers), Tim Vekemans (RE-ST architecten) and Ward Verbakel (KU Leuven / PLUSOFFICE). JAPAN: Ali Morimoto (Shioya project), Fuminori Nousaku (Fuminori Nousaku Architects), Joachim Nijs (Florian Busch Architects), Junji Shigemi (Sasaraction project), Kanji Wada (Lunch! architects), Mami Shiga (Nawate project), Mayu Mihiroi (B Honmachi project), Motoo Chiba (Tsubame architects), Sara Durt (Shioya project), Sebastian Gross (Studio Gross), Shigeaki Takeda (Osaka Metropolitan University), Wataru Doi (DOT architects), Yuri Takagi (Osaka Metropolitan University), Yuriko Takahashi and Yutaro Muraji (STUDIO CHAr)

REFERENCE LIST

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ACCIDENTAL? VILLAGE URBANISM

WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES



BOOKLET 2/3 **PROJECT** **CATALOGUE**

A C C I D E N T A L ?
VILLAGE URBANISM

WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES

CIEL DOCKX

THESIS SUBMITTED FOR THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURAL ENGINEERING

SUPERVISORS
GEERT DE NEUTER & DAVID DRIESEN

ASSESSORS
WARD VERBAKEL & ELINE HOEBEN

PART OF STUDIO JAPAN 4.0: “ACCIDENTAL CITY”

DESIGN-BASED RESEARCH ON RESIDUAL SPACE IN FLEMISH VILLAGES

EXAMINING THE SPATIAL, ECOLOGICAL AND SOCIAL STRUCTURES OF THE URBAN FABRIC: LESSONS FROM JAPAN

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PRACTICAL INFORMATION

THE PROJECTS ARE NOT INTENDED TO BE COPIED, BUT TO BE INTERPRETED (& COMBINED)

CONTENT

This catalogue brings together a curated selection of reference projects visited during the fieldwork in Japan. While many of the projects explore the activation and reinterpretation of residual space, others have been included for the distinctive spatial principles they demonstrate. Together, they illustrate and support the four design strategies introduced in the first booklet of this thesis.

PROJECT PROFILE

ARCHITECT — The architect or design practice responsible for the project.

LOCATION — The geographical location of the project, allowing it to be linked to the accompanying fieldwork atlas.

STRATEGY — The primary design strategy represented by the project. The four strategies were established in the first booklet of this thesis.

(qualitative densification, enhancing connectivity, landscape reinforcement, fostering interactions)

TOPIC — The broader societal theme addressed by the project. While closely related to the selected strategy, it provides additional context by highlighting the project's primary field of intervention.

PROGRAMME — The principal functions accommodated within the project.

SIZE — The spatial scale at which the project operates or has an impact.

S	building or small-scale intervention
M	building block or architectural ensemble
L	neighbourhood or district scale
XL	urban district or landscape intervention

TEXT

Each description is structured around three components: the architectural intervention, its spatial effect and the transferable design principle. This approach shifts the focus from describing the project itself towards identifying the spatial qualities that can be translated to other contexts.

DIAGRAM

The structure and methodology of the diagram were introduced in the first booklet. The quantification is based on field observations, conversations with local users, and critical reflection on the definitions of the different parameters.

01 SASAJIMA RAILWAY OFFICE

ARCHITECT MARU. architecture

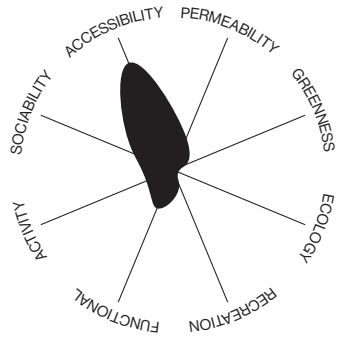
LOCATION Nagoya

STRATEGY enhancing connectivity

TOPIC infrastructure

PROGRAMME office building

SIZE M



A compact timber volume is carefully inserted between the railway columns, leaving the existing structure untouched. Its transparent façade and recessed entrance activate the space beneath the viaduct, illustrating how lightweight interventions can transform infrastructural voids into usable places.





02 KOGANECHO CENTER

ARCHITECT 7 different architects

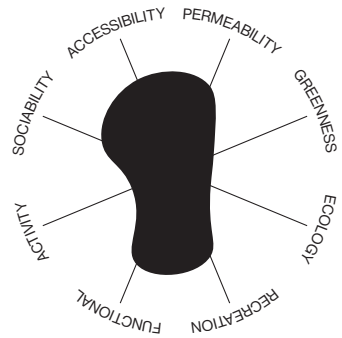
LOCATION Yokohama

STRATEGY fostering interactions

TOPIC culture

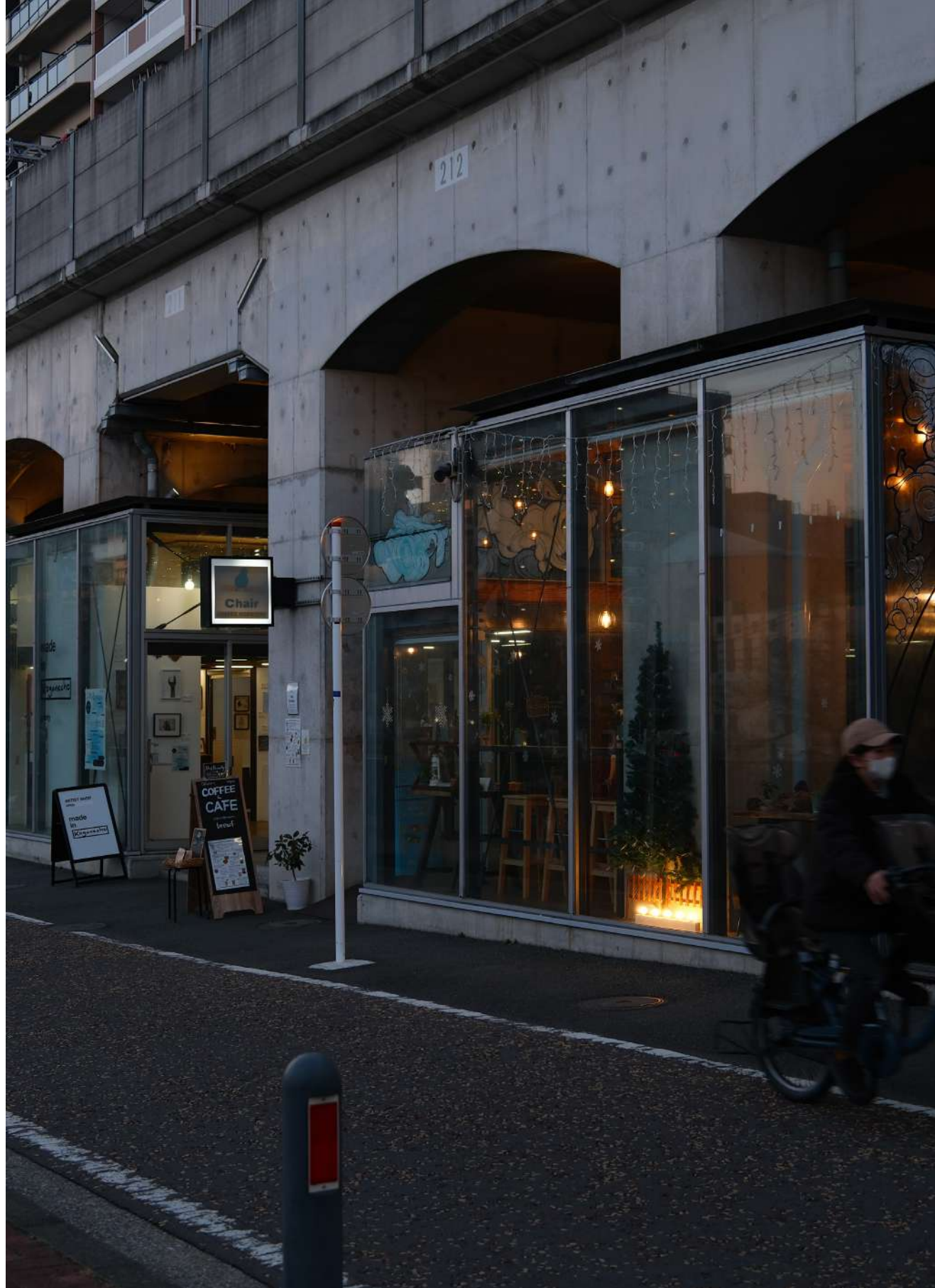
PROGRAMME shops, arts and community centre

SIZE L



Former railway arches and vacant buildings are converted into artist studios, exhibition spaces and small workshops, creating a continuous network of creative programmes throughout the neighbourhood. Rather than a single intervention, the project demonstrates how dispersed cultural spaces can gradually reactivate an entire district through everyday use and public engagement.





03 CHUO LINE DEVELOPMENT

ARCHITECT multiple architects

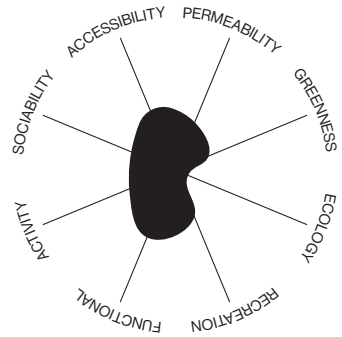
LOCATION Tokyo

STRATEGY qualitative densification

TOPIC community

PROGRAMME shops, housing, bakery, cafe...

SIZE XL



Former railway land and spaces beneath the elevated tracks are gradually infilled with cafés, workshops, retail units and public amenities, creating a fine-grained sequence of programmes along the railway corridor. Rather than separating infrastructure from everyday life, the development transforms the railway into a continuous mixed-use urban spine that supports local activity and neighbourhood identity.





04 BONUS TRACK

ARCHITECT Tsubame architects

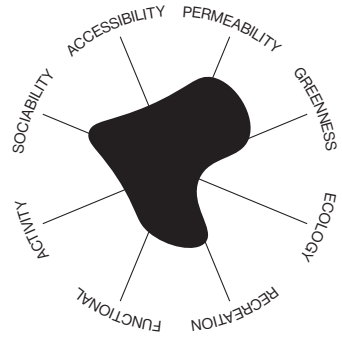
LOCATION Shimokitazawa, Tokyo

STRATEGY fostering interactions

TOPIC community

PROGRAMME shops, housing, cafe...

SIZE M



A series of small-scale buildings containing housing, cafés, shops and workspaces are arranged around shared courtyards and pedestrian lanes instead of a single large block. The fine-grained layout encourages movement, informal encounters and local entrepreneurship, creating a neighbourhood that feels open, accessible and socially connected.



05 BISHU-VILLAGE

ARCHITECT MARU. architects

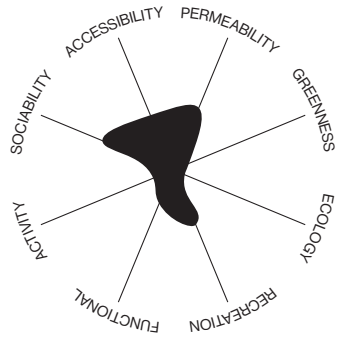
LOCATION Ichinomiya, Nagoya

STRATEGY enhancing connectivity

TOPIC recreation

PROGRAMME shops

SIZE M



Five small commercial buildings are rotated and positioned around shared gardens and pedestrian paths instead of forming a single continuous block. The spaces between the buildings become informal public rooms that encourage people to wander, gather and move through the site, extending activity beyond the individual shops.





06 SAKURAGOAKA CHILDCARE CENTRE

ARCHITECT Kengo Kuma & Associates

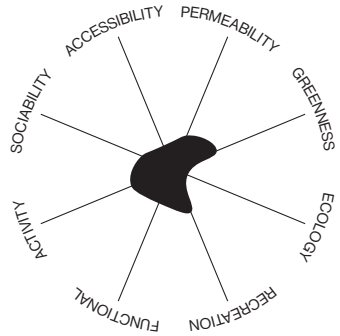
LOCATION Hiroshima

STRATEGY landscape reinforcement

TOPIC education

PROGRAMME childcare centre

SIZE M



The building is conceived as a low, open timber volume surrounding a generous courtyard. Continuous glazing and deep roof overhangs frame the landscape from every space, establishing an uninterrupted relationship between the interior, the courtyard and the surrounding nature.





07 BETA HOMMACHIBASHI

ARCHITECT Shigeaki Takeda

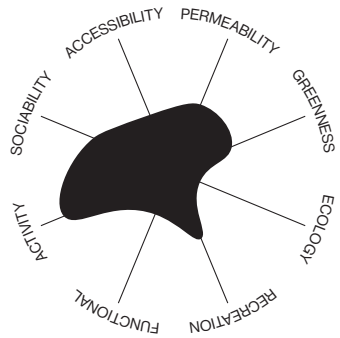
LOCATION Osaka

STRATEGY fostering interactions

TOPIC community, public space

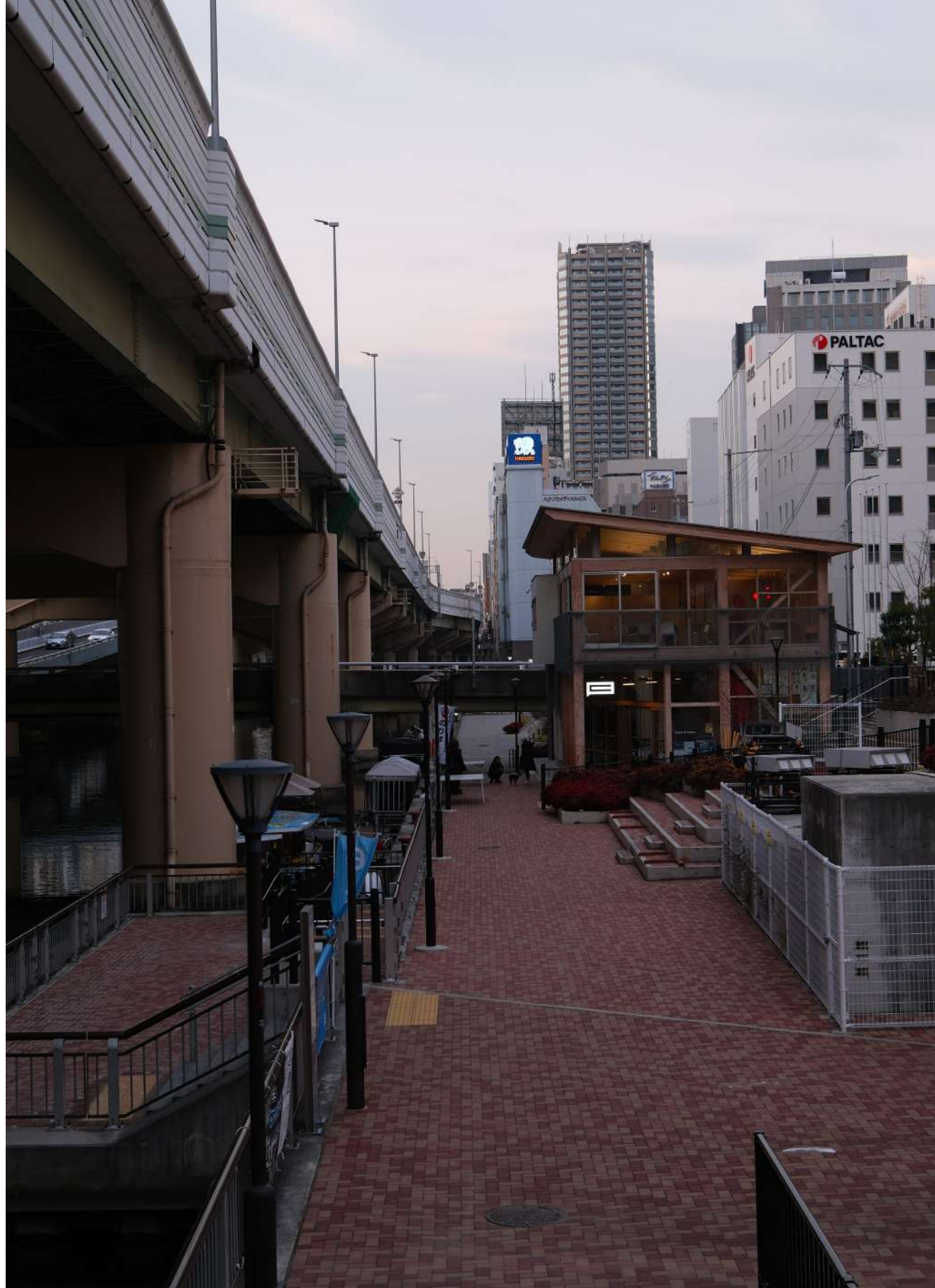
PROGRAMME community centre

SIZE S



A lightweight timber grid creates a transparent structure that seamlessly extends the adjacent riverside park into the building. Designed as a flexible framework for changing activities, the open pavilion naturally invites passers-by inside, embodying the idea of a continuously evolving experimental base along the waterfront.





08 COTON GARDEN

ARCHITECT Shigeaki Takeda

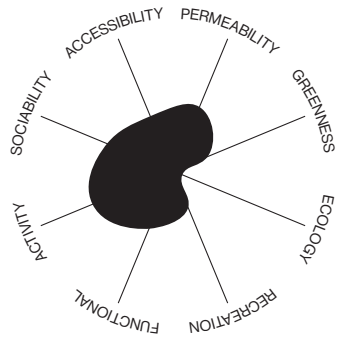
LOCATION Osaka

STRATEGY landscape reinforcement

TOPIC community

PROGRAMME vegetable garden

SIZE S



A collective vegetable garden transforms a small urban plot into a shared space for growing food and meeting neighbours. The collective garden introduces seasonal change and shared maintenance, demonstrating how productive landscapes can strengthen social interaction while introducing greenery into the urban fabric.





09 TSURUMI CHILDREN'S HOSPICE

ARCHITECT Taisai Design

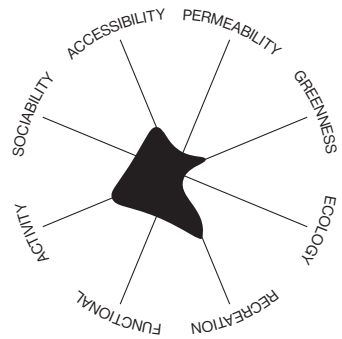
LOCATION Osaka

STRATEGY fostering interactions

TOPIC healthcare

PROGRAMME children's hospice

SIZE M



A series of small house-like volumes is connected by shared indoor and outdoor spaces instead of conventional corridors. The fragmented layout creates a domestic atmosphere where children, families and caregivers can meet, retreat or spend time together, offering a supportive environment beyond medical care.





10 PANNDRY

ARCHITECT Norio Yoshinaga

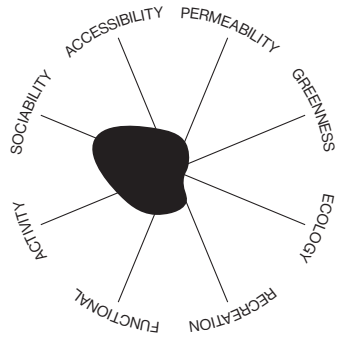
LOCATION Osaka

STRATEGY qualitative densification

TOPIC mixed-use

PROGRAMME bakery, laundromat

SIZE S



The combination of a bakery with a laundromat transforms an everyday routine into an opportunity for social interaction. While waiting for their laundry, visitors are encouraged to spend time in the bakery, turning idle time into a shared experience and creating a lively neighbourhood meeting place.





11 IKUNO PARK

ARCHITECT NPO IKUNO Tabunka Flat, Retown

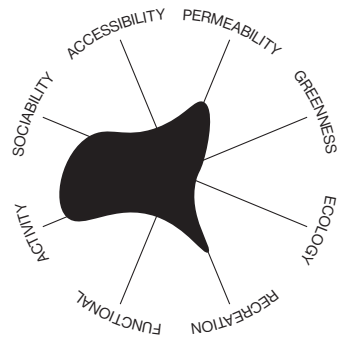
LOCATION Osaka

STRATEGY qualitative densification

TOPIC adaptive reuse, public space

PROGRAMME workshops, sportscenter, studios...

SIZE L



A former elementary school is reactivated through the gradual introduction of workshops, studios, community facilities and local businesses while retaining much of the existing building. Rather than assigning a single function, the flexible reuse allows the site to continuously evolve, transforming an obsolete public building into a vibrant neighbourhood resource.





12 SHARED HOUSE

ARCHITECT Space Space Architects

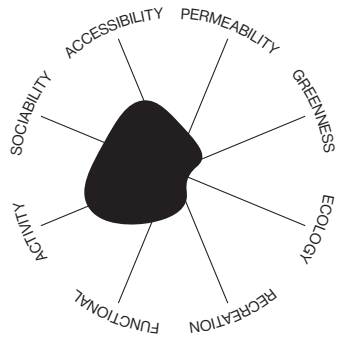
LOCATION Osaka

STRATEGY enhancing connectivity

TOPIC mixed-use

PROGRAMME student housing, workspace

SIZE S



The building bridges two streets at different elevations, using the change in level to organise student housing, workspaces and shared facilities. Multiple entrances and communal spaces connect both the building and its surroundings, allowing movement, living and working to merge into a single spatial experience.





13 TEN 6 ATTACK

ARCHITECT Space Space Architects

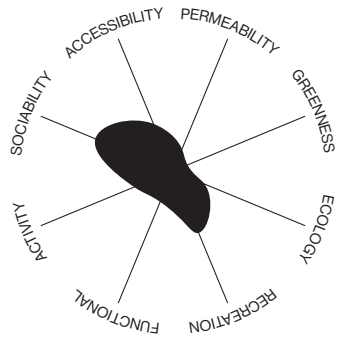
LOCATION Osaka

STRATEGY qualitative densification

TOPIC temporary reuse

PROGRAMME cafe

SIZE S



A vacant residual plot is transformed into a compact café through a lightweight and reversible structure. By introducing a new public programme within an otherwise unused gap in the urban fabric, the project demonstrates how even the smallest leftover spaces can generate activity and enrich everyday street life.





14 HOUSE S / SHOP B

ARCHITECT KimuraMatsumoto Architects

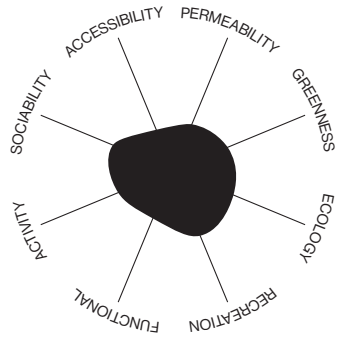
LOCATION Osaka

STRATEGY qualitative densification

TOPIC mixed-use

PROGRAMME housing, shop, bar

SIZE S



A compact house and shop activate the narrow plot by opening the ground floor towards the pavement. The subtly lowered interior establishes a gentle transition between public and private, maintaining visual continuity with the street while creating a comfortable distance that encourages people to linger rather than simply pass by.





15 CHIDORI BUNKA

ARCHITECT DOT Architects

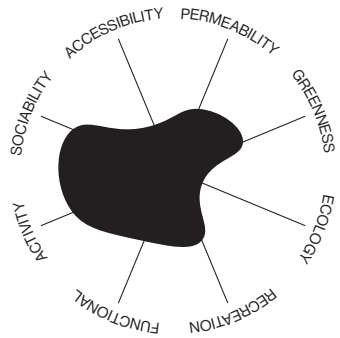
LOCATION Osaka

STRATEGY qualitative densification

TOPIC mixed-use, community, adaptive reuse

PROGRAMME cafe, exhibition & event space, studios...

SIZE M



Rather than replacing the existing structure, the renovation preserves its layered history while introducing flexible spaces for cafés, exhibitions and events. New interventions remain deliberately modest, allowing the building to continuously evolve and accommodate changing uses without losing its everyday character. The project demonstrates how an existing house can evolve into an active cultural meeting place.





16 HOUSE-04

ARCHITECT Studio GROSS

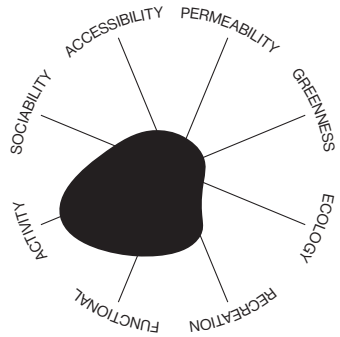
LOCATION Tokyo

STRATEGY fostering interactions

TOPIC adaptive reuse, community

PROGRAMME artist-in-residence

SIZE S



An existing house is transformed into an artist-in-residence where each temporary resident contributes to the ongoing adaptation of the building. Rather than treating renovation as a finished intervention, the project embraces continuous appropriation through exhibitions, workshops and everyday use, allowing the house to evolve collectively over time.





17 HOUSE F / SHOP S

ARCHITECT KimuraMatsumoto Architects

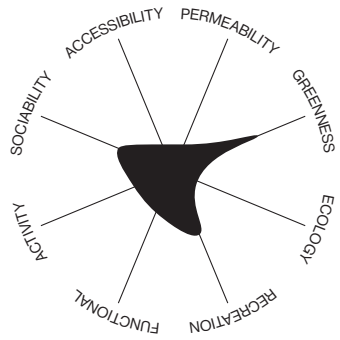
LOCATION Nagoya

STRATEGY landscape reinforcement

TOPIC mixed-use

PROGRAMME plantshop, housing

SIZE S



Rather than occupying the entire plot, the building is positioned perpendicular to its boundaries, creating dynamic outdoor spaces around it. Together with the transparent steel framework and planted façade, these spaces strengthen the relationship between architecture, landscape and the surrounding street.





18 HISAYA ODORI PARK

ARCHITECT AISEI Design

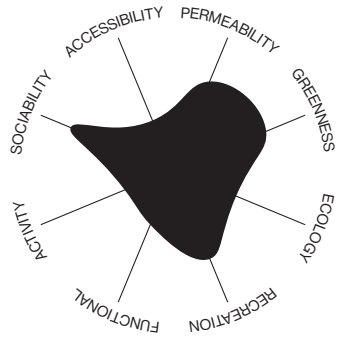
LOCATION Nagoya

STRATEGY landscape reinforcement

TOPIC public space

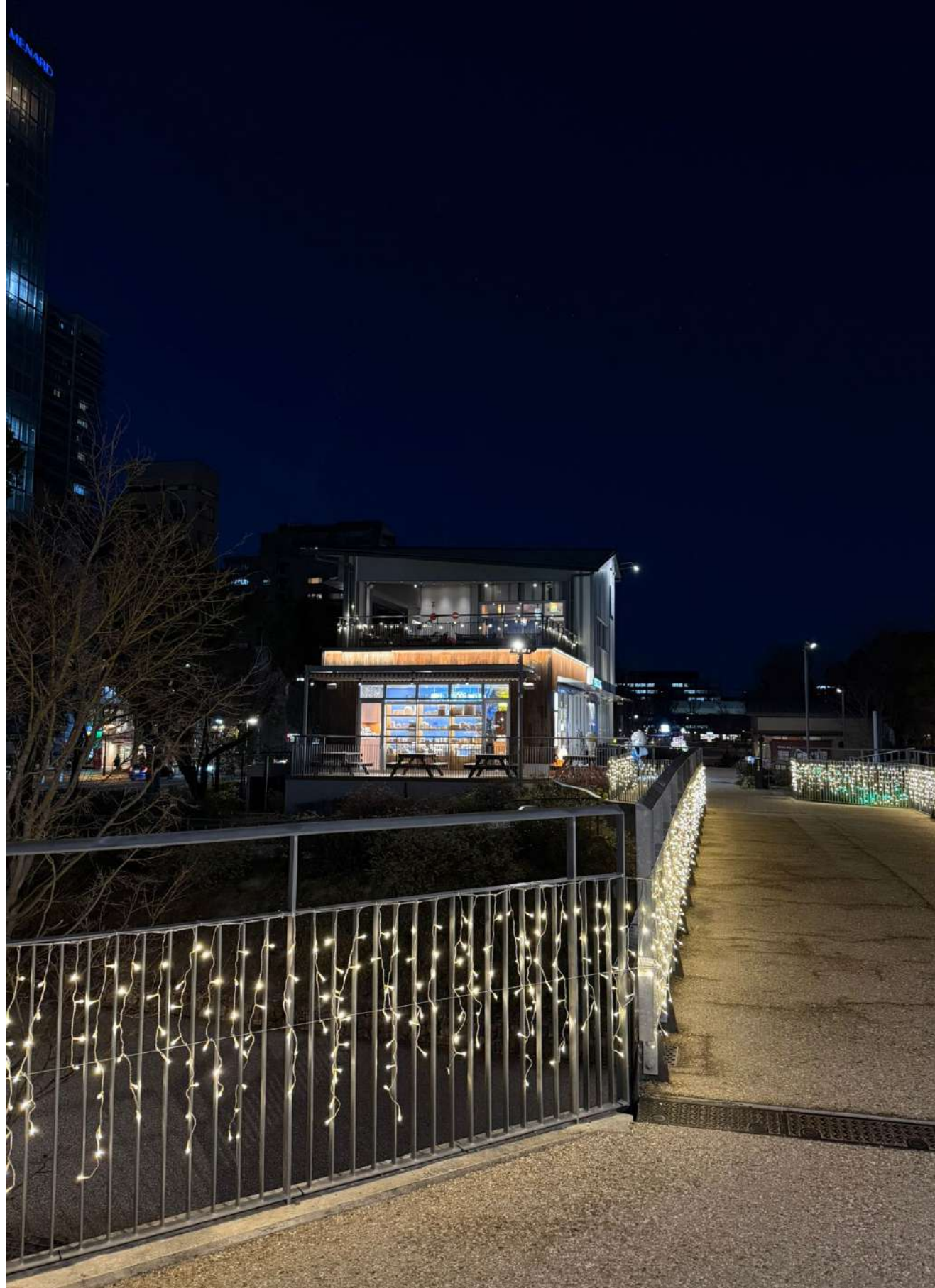
PROGRAMME urban park

SIZE XL



Instead of separating itself from the surrounding city, the park adopts the grain and rhythm of the adjacent streets and buildings. A sequence of smaller spaces, pathways and planted areas creates a distinct landscape while maintaining a human scale, demonstrating how urban parks can become an integral extension of everyday city life rather than isolated green islands.





19 SUPER STUDIO KITAGAYA

ARCHITECT DOT Architects

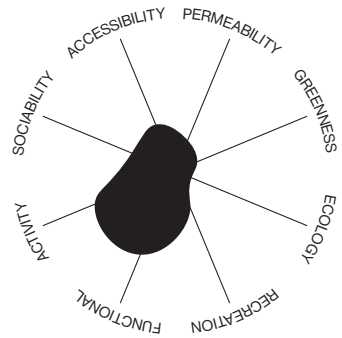
LOCATION Osaka

STRATEGY fostering interactions

TOPIC creative programmation

PROGRAMME shared artist studios

SIZE L



Housed within a former industrial warehouse, the shared studios provide artists with affordable spaces to create, collaborate and exchange ideas. The architectural form itself remains deliberately modest, shifting the focus towards the activities it enables. Through exhibitions, installations and neighbourhood initiatives that extend beyond the building, the project demonstrates how a carefully curated programme can transform an entire neighbourhood.





20 OSTR BUILDING OFFICE

ARCHITECT OSRT Architects

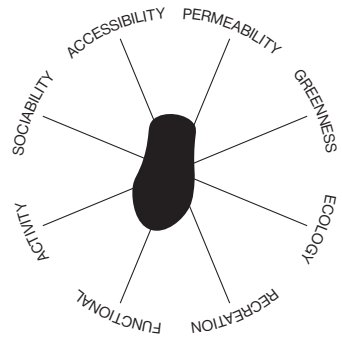
LOCATION Osaka

STRATEGY qualitative densification

TOPIC workspace

PROGRAMME office

SIZE S



Rather than treating the gap between two existing buildings as leftover space, the project uses it to unite both structures into a single workplace. The consistent use of materials across the roof, floor and exterior blurs the distinction between inside and outside, creating spaces that feel more like sheltered courtyards than conventional interiors. By turning inward rather than towards the street, the project demonstrates how in-between spaces can redefine the identity and spatial quality of an entire building ensemble.





21 HOUSE A / SHOP B

ARCHITECT KimuraMatsumoto Architects

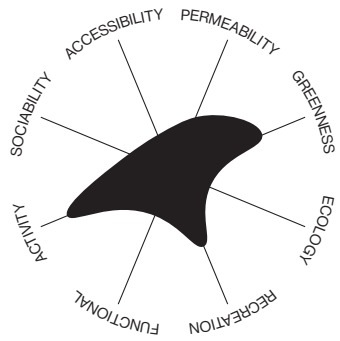
LOCATION Kyoto

STRATEGY enhancing connectivity

TOPIC adaptive reuse, mixed-use

PROGRAMME housing, shop

SIZE S



The intervention extends beyond the main building by transforming an existing garage into a workspace. By continuing the same material palette across both buildings, the project creates a coherent ensemble that reaches beyond its own footprint. It demonstrates how modest architectural interventions can activate neighbouring structures and enrich the surrounding urban environment.





22 MINNA GEEN

ARCHITECT DOT Architects

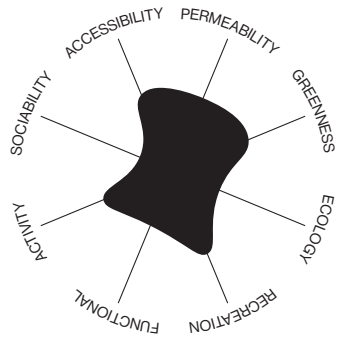
LOCATION Osaka

STRATEGY landscape reinforcement

TOPIC community

PROGRAMME vegetable garden

SIZE M



Rather than functioning as an isolated pavilion, the small community building gives structure and identity to a network of shared gardens. Positioned as a recognisable destination, it attracts everyday activities while supporting gardening, workshops and local gatherings. The project demonstrates how a modest architectural intervention can activate collective landscapes by providing orientation, purpose and a shared point of reference.





23 SUIMON HOTEL

ARCHITECT DOT Architects

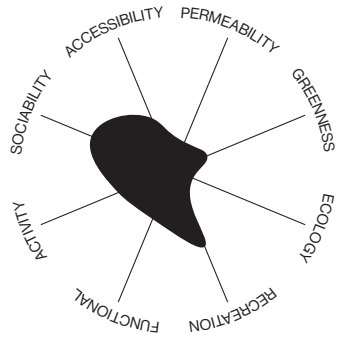
LOCATION Osaka

STRATEGY qualitative densification

TOPIC adaptive reuse

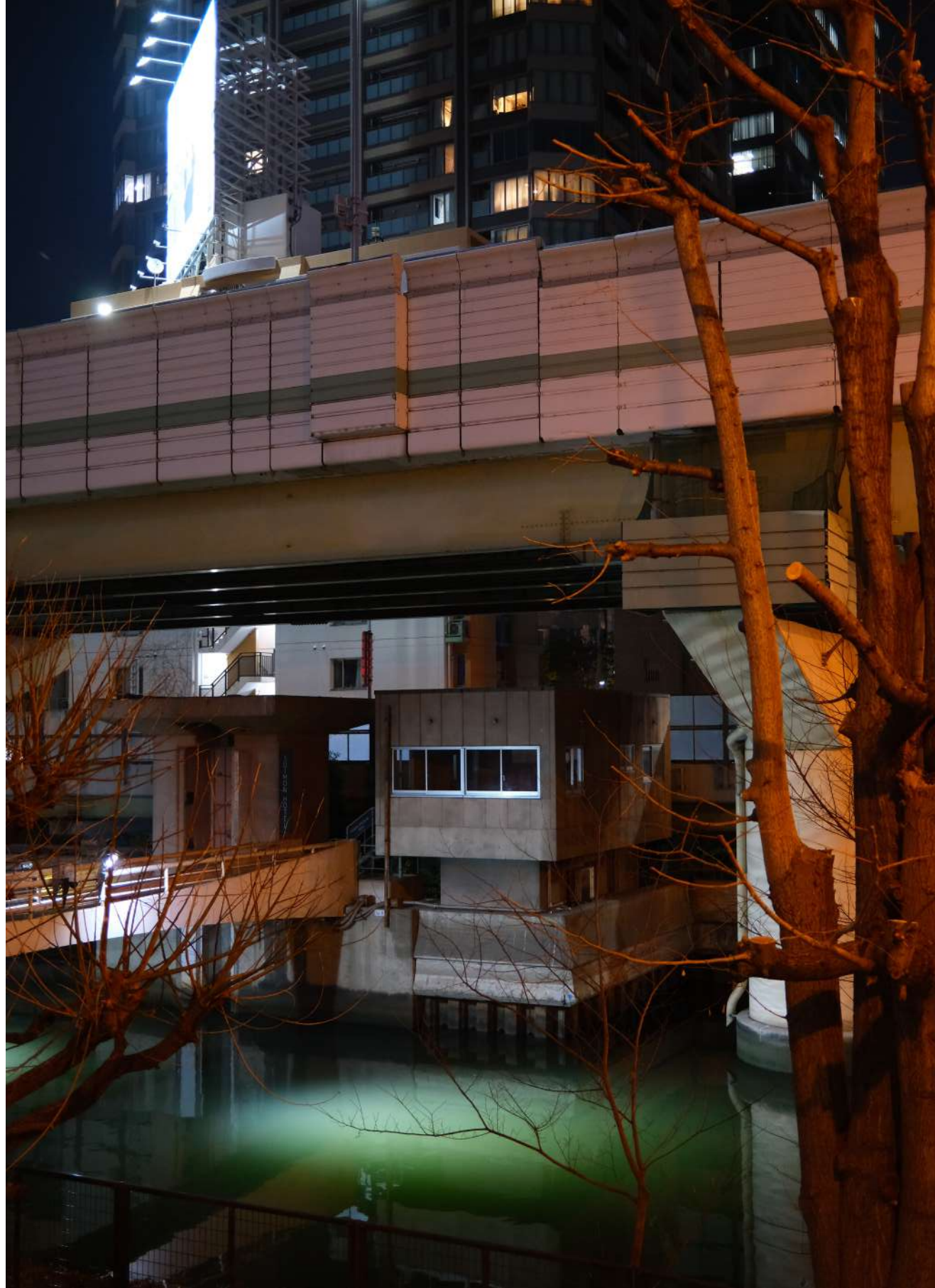
PROGRAMME hotel, community space

SIZE S



An abandoned floodgate control building is transformed into a small hotel through a participatory renovation process involving local residents from the very beginning. Rather than treating the building as an isolated destination, the project establishes a shared base for events and everyday activities along the canal, demonstrating how collective participation can reactivate forgotten waterfront infrastructure and strengthen local ownership.





24 LIGHT UP COFFEE

ARCHITECT Spicy Architects

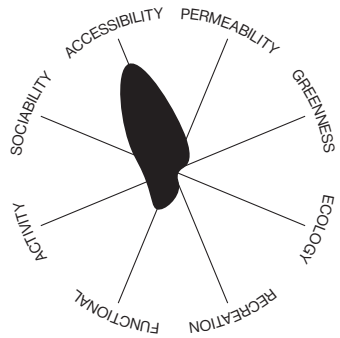
LOCATION Mitaka, Tokyo

STRATEGY fostering interactions

TOPIC infrastructure

PROGRAMME cafe

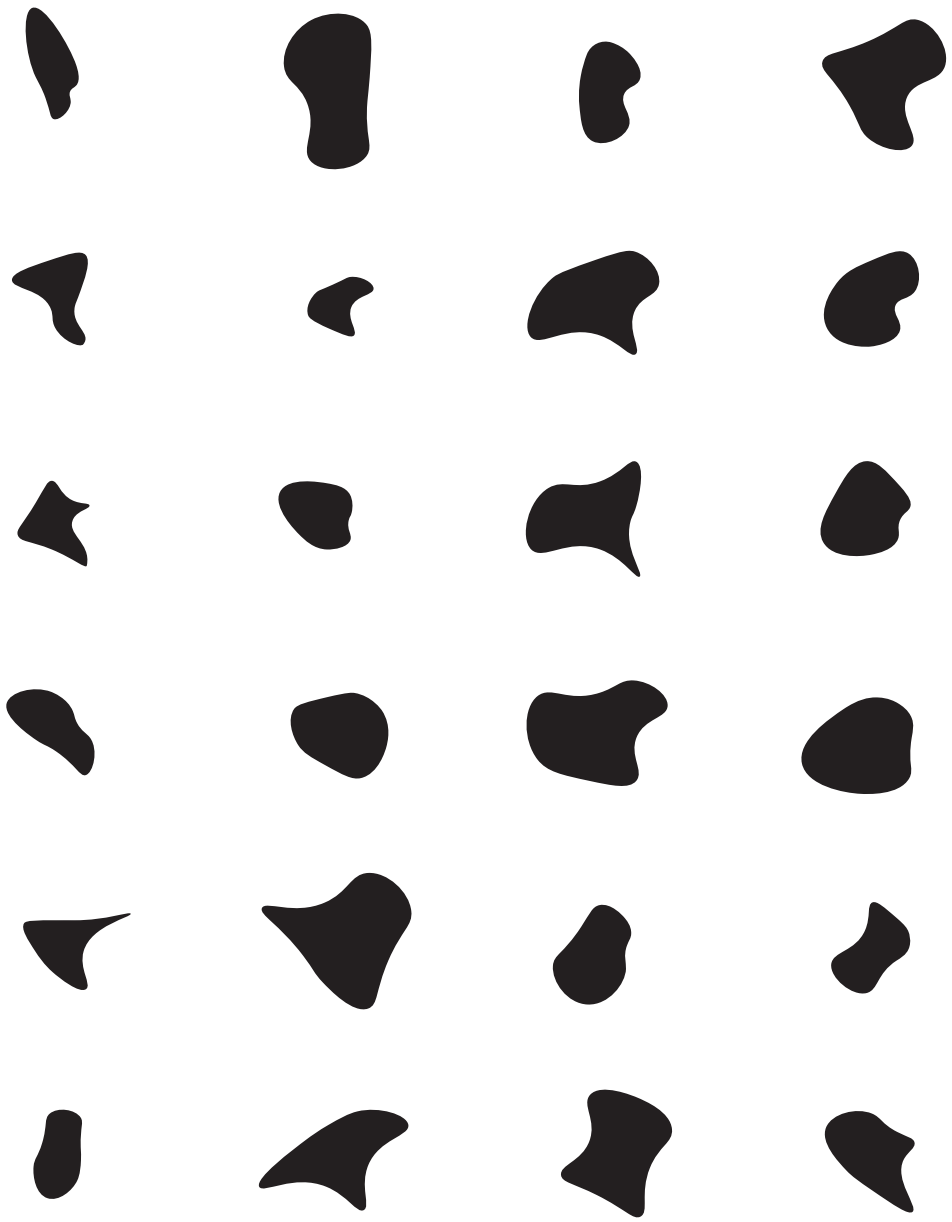
SIZE M



By fully opening the former garage doors, the cafe dissolves the boundary between the street and the interior, allowing the pavement to become an extension of the café during everyday use. Rather than functioning as a closed commercial space, the project embraces the idea of a 'street lounge', where the sounds, smells and social life of the neighbourhood naturally become part of the interior experience.







The spatial qualities and design principles derived from the different reference projects can be graphically combined, allowing specific ambitions to be intentionally reinforced within a new design proposal.



A C C I D E N T A L ?
VILLAGE URBANISM

WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES



A C C I D E N T A L ?
VILLAGE URBANISM

WORKING WITH RESIDUAL SPACE: LESSONS FROM JAPAN FOR FLEMISH VILLAGES

CIEL DOCKX

THESIS SUBMITTED FOR THE DEGREE OF MASTER OF SCIENCE IN ARCHITECTURAL ENGINEERING

SUPERVISORS
GEERT DE NEUTER & DAVID DRIESEN

ASSESSORS
WARD VERBAKEL & ELINE HOEBEN

PART OF STUDIO JAPAN 4.0: “ACCIDENTAL CITY”

DESIGN-BASED RESEARCH ON RESIDUAL SPACE IN FLEMISH VILLAGES

EXAMINING THE SPATIAL, ECOLOGICAL AND SOCIAL STRUCTURES OF THE URBAN FABRIC: LESSONS FROM JAPAN

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ABSTRACT

Building on the theoretical framework developed earlier in this research, this booklet investigates how residual spaces within the dispersed fabric of Flemish villages can become active spatial resources rather than remain unintended by products of urbanisation. As continued development places increasing pressure on open space, the research takes the position that transformation should not necessarily depend on further expansion, but can emerge through the careful reinterpretation of spaces already present within the existing fabric.

The village of Berlaar serves as a case study through which this position is tested by design. Moving between territorial analysis, fieldwork and direct spatial observation, residual spaces are identified and subsequently approached through a series of precise interventions at different scales. The previously developed framework of strategies, ambitions and tools guides this process, while the distinction between Sites, Objects and Elements allows these principles to be translated from larger spatial transformations to small interventions within everyday village life.

Rather than producing a singular masterplan, the resulting interventions collectively form a new layer within the existing village, strengthening spatial, ecological and social relationships while leaving room for appropriation and change. The design process demonstrates that the framework is most valuable not as a fixed recipe, but as a lens through which overlooked spatial potential can be recognised and explored. At the same time, its application remains inherently contextual and subjective.

Ultimately, the case study reframes the exchange between Japan and Flanders as a process of exhange rather than transfer. Japanese observations reveal the potential of proximity, overlap and modest everyday interventions, while the Flemish context demonstrates the value of openness and spatial restraint. "Accidental Village Urbanism" emerges between these conditions, revealing how residual spaces can become catalysts for a more connected, adaptable and contextually grounded village fabric.

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BERLAAR, BELGIUM

DOUBLE FRONT GARDEN

BERLAAR, BELGIUM



MEETING OVER THE HEDGE

BERLAAR, BELGIUM

NARROW VOID BETWEEN HOUSES

BERLAAR, BELGIUM

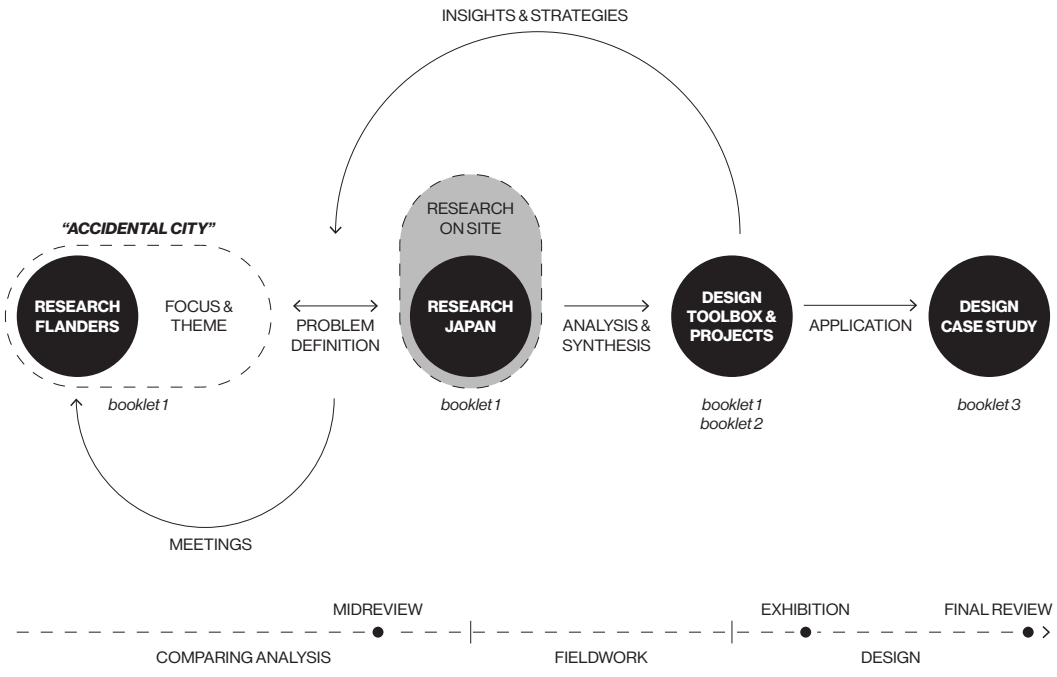


INFORMAL PASSAGEWAYS AT VILLAGE EDGE

BERLAAR, BELGIUM

FRAMEWORK

PROCESS OF RESEARCH AND DESIGN



FROM RESEARCH TO DESIGN

The first booklet explored the concept of residual space, defining its meaning and spatial significance. Drawing on research conducted in Flanders and Japan, a theoretical framework was developed through comparison and synthesis. This resulted in a set of strategies, ambitions and tools that form the basis of this booklet.

Rather than developing this framework further in abstraction, this booklet tests its applicability within a specific spatial context. By engaging with an actual site and its opportunities, constraints and complexities, the "research by design" examines how the toolbox can guide the design process, inform spatial decisions and, at the same time, reveal its own strengths and limitations.

The question therefore shifts from what residual space is to how the proposed framework performs when confronted with the realities of a specific design context.

CASE STUDY BERLAAR

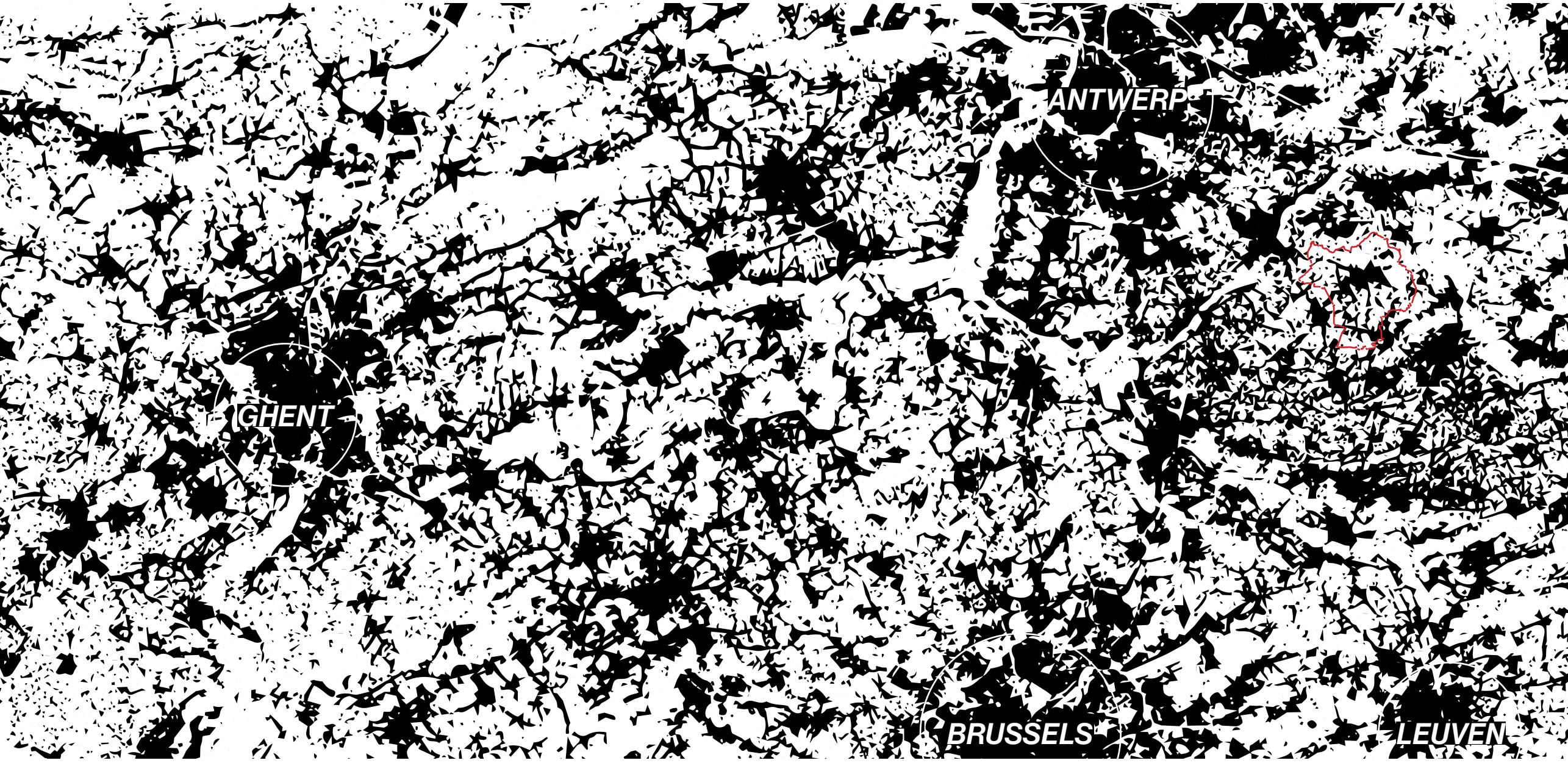
As discussed previously, the research focuses on "Accidental Village Urbanism", considering the village as the scale at which the accidental city can be explored through design. The village of Berlaar was selected both for its spatial characteristics and for the author's familiarity with its everyday use, allowing lived experience to complement the analytical research.

The case study, however, is not intended to be universal. It represents one possible application of the proposed framework within a specific spatial context. Another designer, approaching the research from a different perspective, could have selected another village and tested the same toolbox under different conditions. In this sense, the design proposals for Berlaar are not intended as models to be replicated, but rather as a means of testing the applicability and limitations of the framework.

LANDSCAPE DIAGNOSIS

FLEMISH DIAMOND

1:500.000



Using the "Working Between Scales" methodology developed in the first booklet, Berlaar can be understood in relation to the wider Flemish territory. Located just outside the Flemish Diamond, on the Aarschot-Antwerp connection, the village is embedded within the dispersed urban landscape that characterises much of Flanders. As the map illustrates, Berlaar is not an isolated settlement, but forms part of a fine-grained territorial network in which built fabric, infrastructure and open landscapes are closely intertwined.

Although Berlaar is characterised by a relatively compact built footprint, its administrative territory covers an area of 24.57 km² and extends far beyond the village centre, enclosing several dispersed hamlets. As a result, the village offers the opportunity to study the relationship between the built fabric and the extensive productive and residual landscapes present within the municipality itself.

ANTWERP TRIANGLE

1:100.000



At this territorial scale, Berlaar cannot be understood as an autonomous village, but rather as one node within a larger network of interconnected settlements. Its position between several urban centres reflects the polycentric structure of Flanders, where everyday mobility, ecological systems and productive landscapes operate across administrative boundaries. Understanding Berlaar therefore requires looking beyond the village itself and considering the wider territorial systems of which it forms part.

The mobility connections between these urban centres were previously analysed in Booklet 1 as part of the chapter on infrastructure. Rather than repeating this territorial analysis, the following pages gradually shift the focus towards Berlaar itself. Moving between scales allows the broader networks and landscape structures identified at the territorial scale to be traced into the spatial fabric of the village, revealing how these larger conditions shape its spatial structure and everyday life.

LANDSCAPE WITHIN THE VILLAGE

CITY? AS PART OF THE HORIZONTAL METROPOLIS

Berlaar is situated within an area of considerable urbanisation pressure, surrounded by a network of medium-sized and smaller towns and villages, as illustrated in the figure on the right. This positioning means that Berlaar cannot be considered an isolated village, but rather forms part of the Flemish horizontal metropolis and its dispersed pattern of settlements. At the same time, Berlaar is located within the gaps of the higher-level road network such as the E313, connecting Antwerp and Liège, and the E19, connecting Antwerp and Brussels.

BERLAAR AS TYPICAL FLEMISH VILLAGE

Characterised as a predominantly residential and commuter village, the municipality counted 12.115 inhabitants in 2025, while previous mobility data indicate that approximately one third of this population works elsewhere. This strong outward commuting pattern reflects its close relationship with the surrounding urban centres. At the same time, both population and address density are considerably higher than the Belgian average, illustrating how its village character coincides with a relatively high degree of urbanisation.

source: Gemeente Berlaar & Coop-DH, 2017 ; source: AlleCijfers.be, 2026

SHAPED BY NATURAL BOUNDARIES

The Grote Nete forms an important ecological backbone within the territory and is part of the wider Nete Valley, which is characterised by significant ecological value and various forms of landscape and heritage protection. As such, the valley constitutes a continuous landscape structure that extends beyond the municipal boundaries.

source: Team Vlaams Bouwmeester & BUUR, 2018

ACCIDENTAL? PRODUCTIVE LANDSCAPE

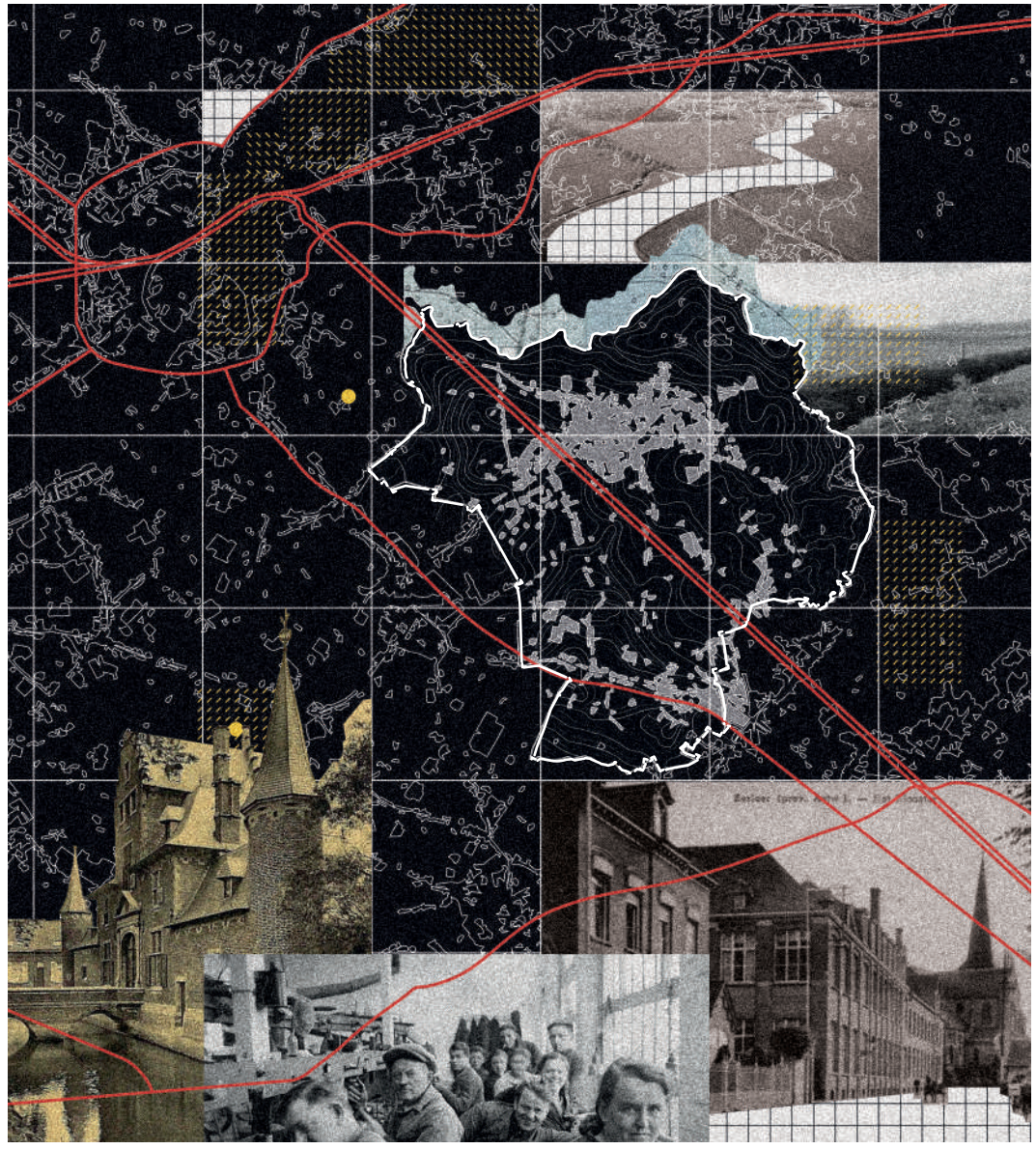
Historically, the village developed as an agricultural settlement, forming part of the lordships of Mechelen and Grimbergen during the 12th century. The establishment of the Romanesque church in the 13th century, together with the later development of religious institutions, introduced a religious layer that remains visible in the village today, particularly through the continued presence of several convents and their associated buildings. Over time, Berlaar gradually transformed from an agricultural village into a predominantly residential municipality. The diamond industry played an important role in this transition and became a major driver of the local economy, eventually establishing Berlaar as the principal diamond centre of the Kempen region.

source: Team Vlaams Bouwmeester & BUUR, 2018 ; source: Inventaris Onroerend Erfgoed, 2026

ACCIDENTAL ECOLOGICAL LANDSCAPE

Cultivation and urbanisation have reduced the former woodland to small, often private and disconnected fragments, leaving few continuous forest areas. Today, hedgerows, tree lines, roadside vegetation and streams provide important ecological connections between these remnants. Strengthening this fragmented network is therefore a key ambition within Berlaar's Green Vision.

source: Dienst Duurzaam Milieu- en Natuurbeleid & Van de Noort, 2023



ACCIDENTAL? VILLAGE URBANISM

Berlaar is not an exceptional case, but rather reflects many of the conditions found across Flemish villages. Its combination of open landscapes, dispersed development, mobility networks, ecological structures and different patterns of everyday use brings together a broad range of themes within a relatively compact territory. This layered condition makes Berlaar a relevant testing ground for exploring how the proposed toolbox performs within the complexity of an existing village.

VILLAGE DIAGNOSIS

DEVELOPMENT

1:100.000



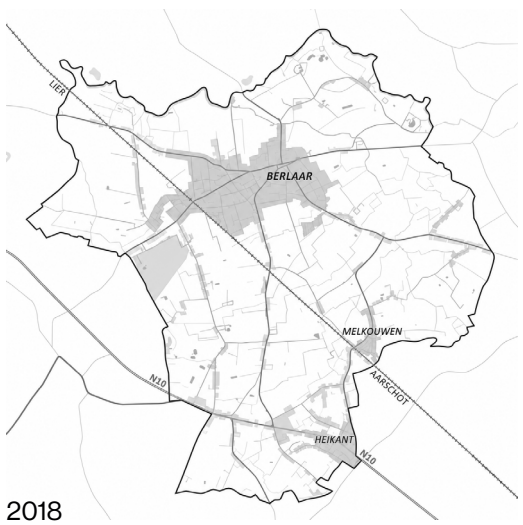
1777



1873



1969



2018

source: Team Vlaams Bouwmeester & BUUR, 2018

Each addition of a major infrastructural axis generated new development, as illustrated by the arrival of the railway and the later national road. At the same time, the main settlement of Berlaar is largely the result of the gradual infilling of its historical road structure. Beyond the centre, ribbon development emerged along both major connections and smaller local roads, extending the built fabric into the surrounding landscape. This process resulted in three dispersed hamlets within the municipality: Berlaar in the centre, Heikant to the south and the smaller Gestel to the north.

INFRASTRUCTURE

1:50.000

train
car
bike
parking
station
bus stop

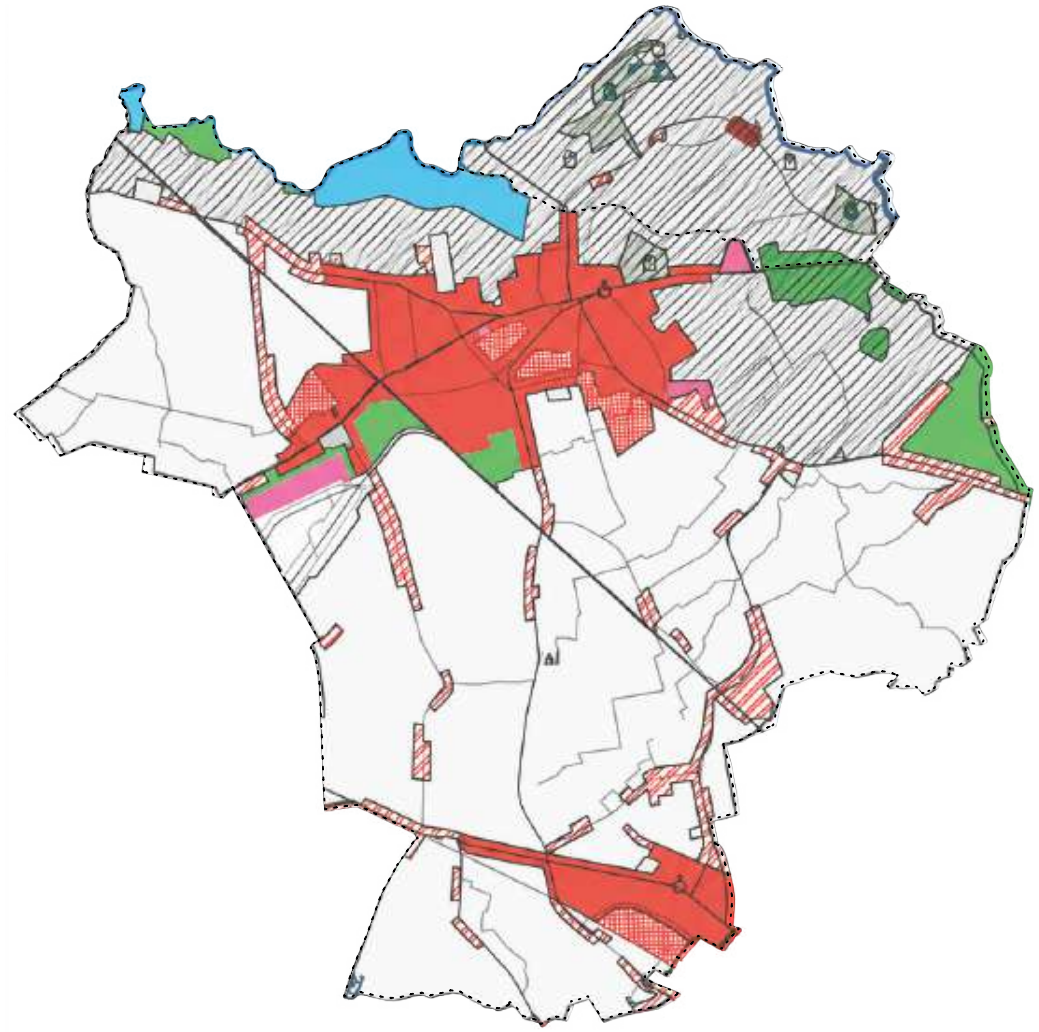


Mobility in Berlaar remains strongly car-oriented, with several heavily trafficked roads crossing the village and the N10 providing an important regional connection between Aarschot and Antwerp. Despite the railway connection, car dependency remains high. At the same time, residents cycle more than average and frequently travel on foot, although the infrastructure supporting active mobility remains limited within the built fabric. This creates a clear contrast between mobility behaviour and the networks available to support it.

source: Team Vlaams Bouwmeester & BUUR, 2018

SPATIAL STRUCTURE PLAN

1:50.000



source: Ruimtelijk Structuurplan Berlaar, 2009

The spatial reserves available to accommodate future growth are not unlimited. Comparing the two maps reveals that much of the designated expansion area has already been occupied, while the existing settlements remain relatively low-density, with building densities reaching a maximum of only 20 buildings per hectare. This contrast suggests that future development should increasingly be sought within the existing fabric rather than through further outward expansion.

source: Team Vlaams Bouwmeester & BUUR, 2018

BUILT SPACE

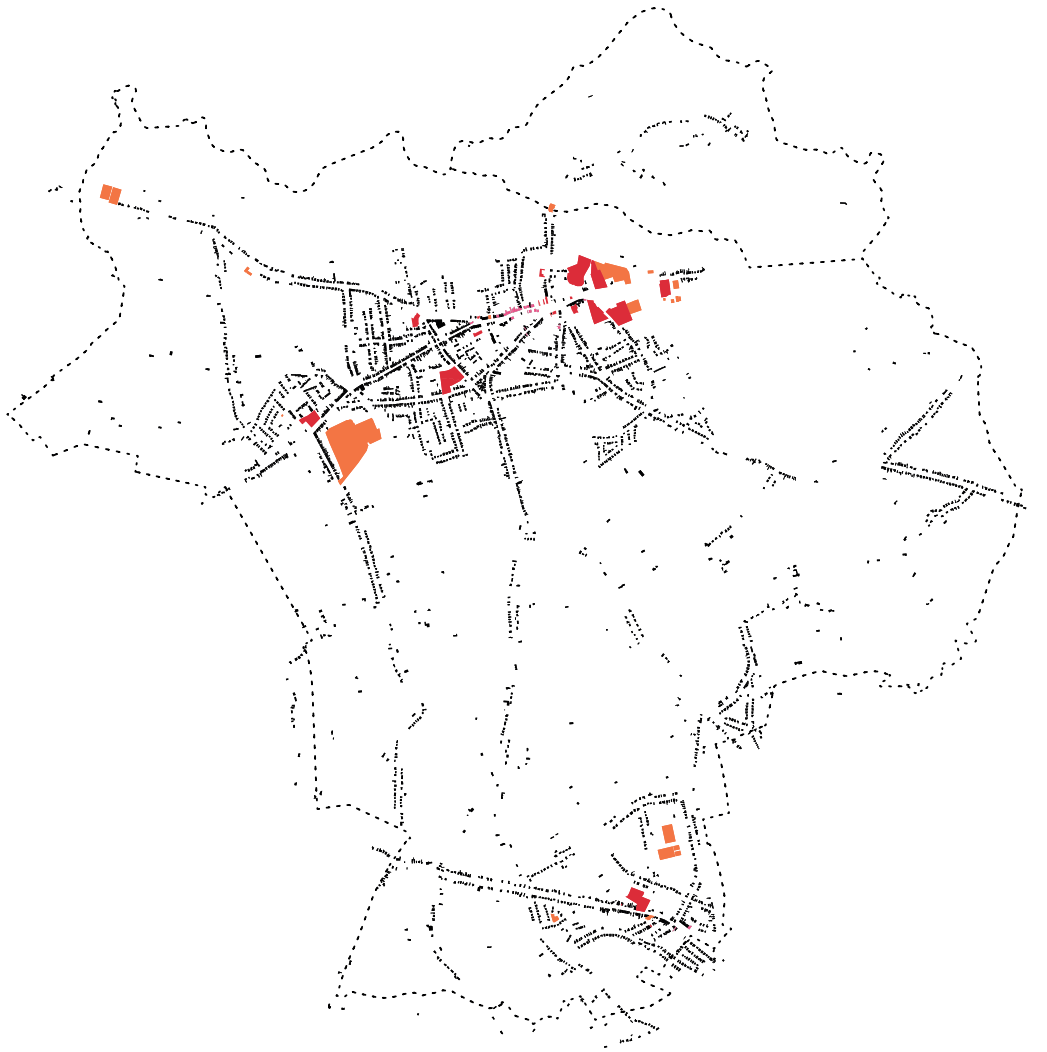
1:50.000

educational & administrative facilities

recreational facilities

shops

housing

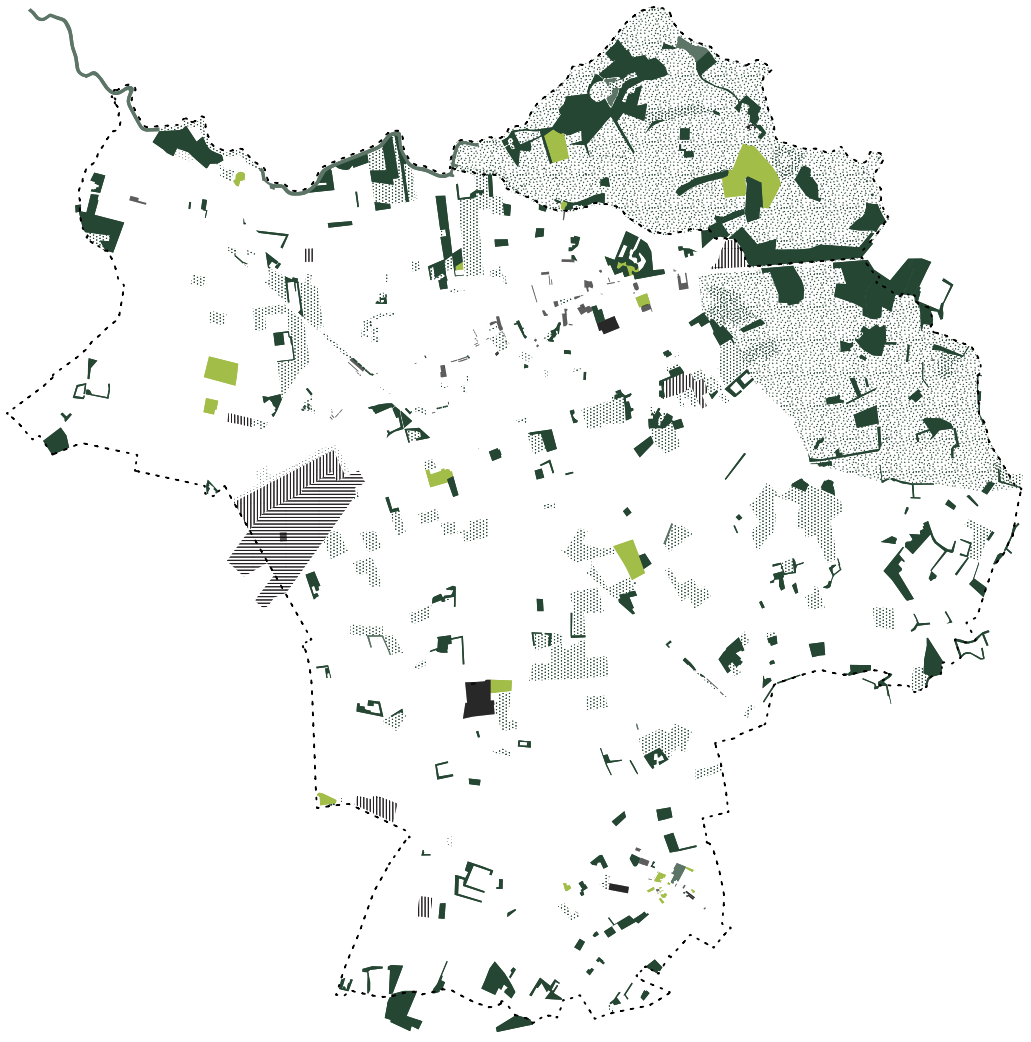


The village centre is structured around the old market square, with a cluster of amenities gradually extending towards the railway station. Large building blocks with deep gardens follow the historical roads and paths, while beyond the centre the landscape becomes increasingly fragmented by agriculture and ribbon development. A notable feature is the presence of six primary schools and one secondary school, serving not only Berlaar but also surrounding villages. These everyday connections extend beyond municipal boundaries, suggesting that Berlaar should be understood as part of a wider functional territory rather than as an isolated municipality.

ECOLOGICAL LANDSCAPE

1:50.000

natural vegetation
planted vegetation
grassland
park
military grounds
industrial areas
paved surfaces



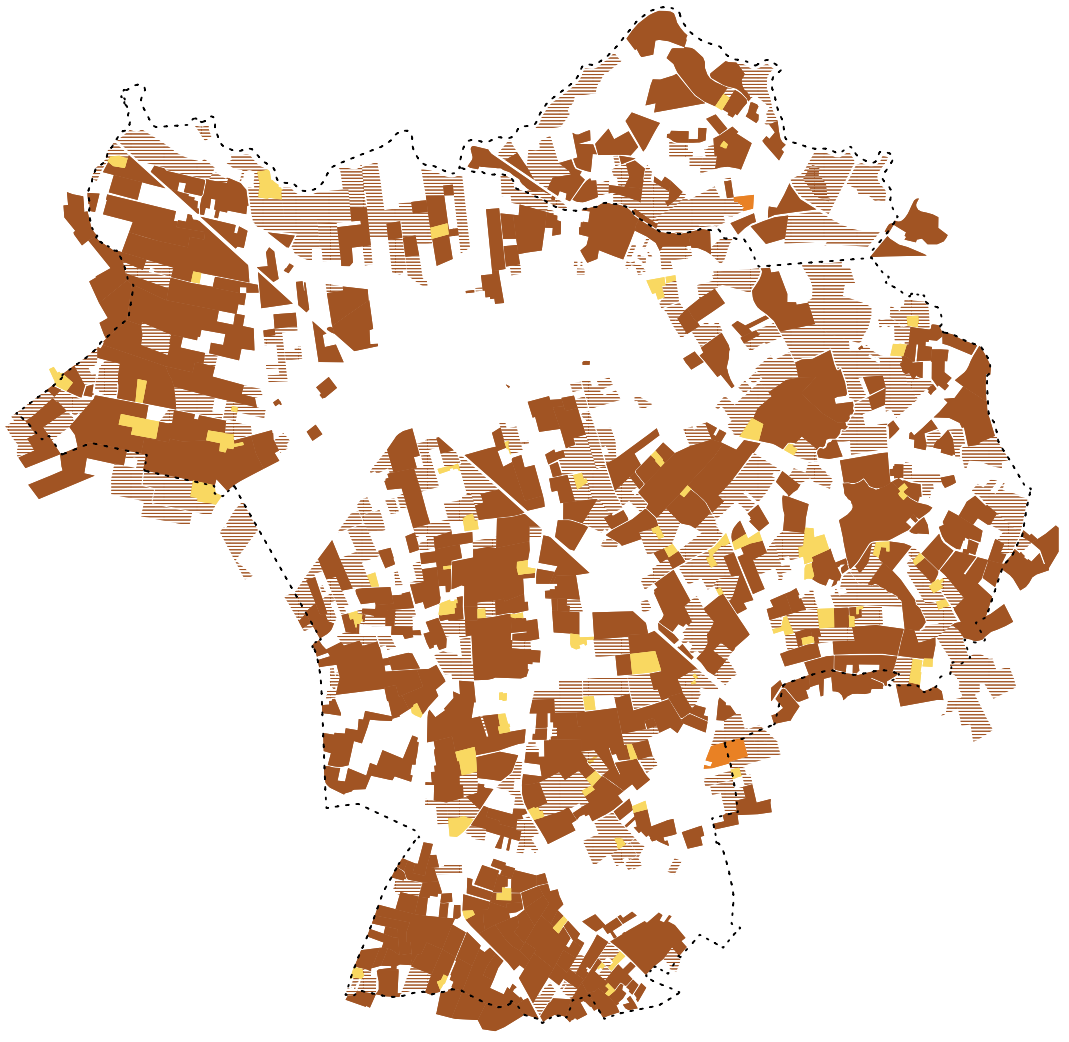
The Nete Valley and Gestelbeek Valley form the two main ecological structures, preserving larger areas of valuable landscape outside the built-up areas. As the map illustrates, this landscape structure becomes much weaker towards the village centre, where biologically valuable green space is scarce. Berlaar scores particularly poorly in terms of ecological value within its built fabric. Accessible neighbourhood green space is also limited, revealing a strong contrast between the surrounding landscape and the lack of green within the village itself.

source: Team Vlaams Bouwmeester & BUUR, 2018

PRODUCTIVE LANDSCAPE

1:50.000

orchard
farmyard
pasture
arable land

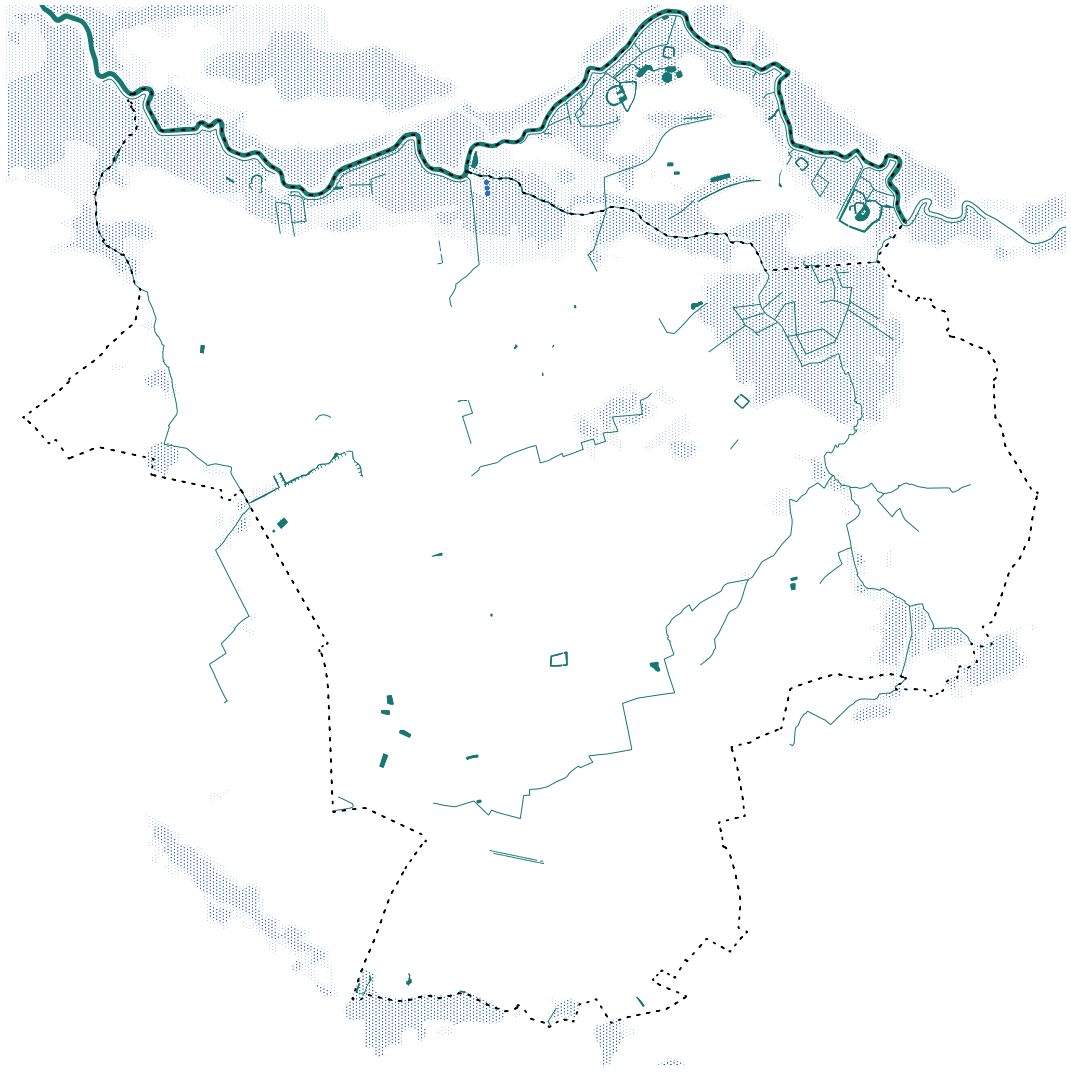


The surrounding landscape is strongly shaped by agriculture, forming a fragmented mosaic of arable land, pasture and other agricultural uses. Despite this fragmentation, a large part of the territory remains privately owned and used for agricultural production. Smaller-scale forms of productive landscape are largely absent within the village itself. As observed in Japan, such forms of production could operate at a smaller scale while simultaneously creating opportunities for community interaction and shared use.

FLUVIAL FLOOD

1:50.000

high risk low risk watercourses

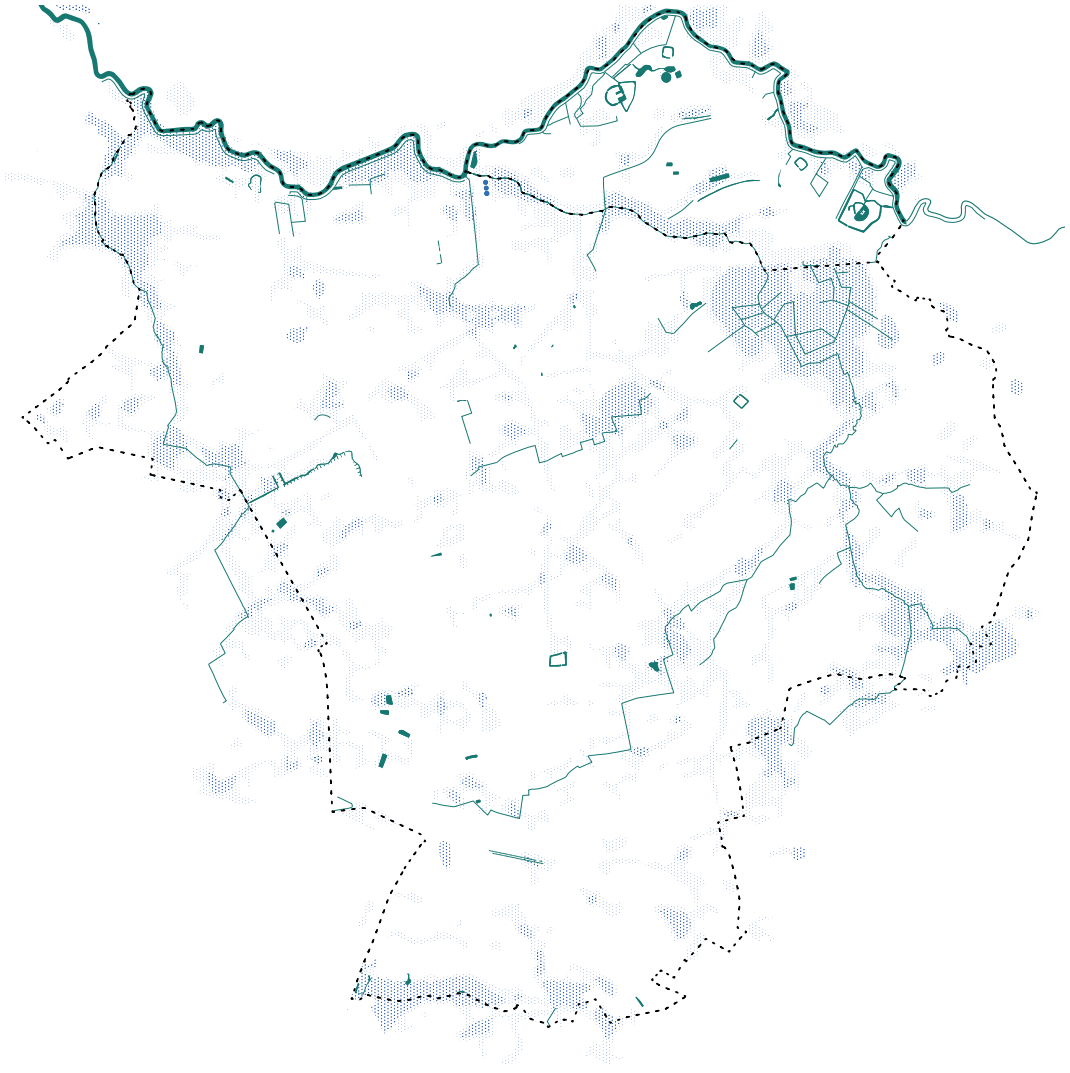


Fluvial flood risk is strongly concentrated along the main watercourses and their valleys. The Grote Nete forms the dominant structure along the northern edge of the municipality, while the Gestelbeek Valley creates a second flood-prone landscape to the north-east. These valleys therefore function not only as important ecological structures, but also as natural systems for water retention and flood management. While the Nete Valley is already widely recognised, the Gestelbeek Valley receives considerably less attention and its potential as an ecological and hydrological structure remains largely underestimated.

PLUVIAL FLOOD

1:50.000

high risk low risk watercourses

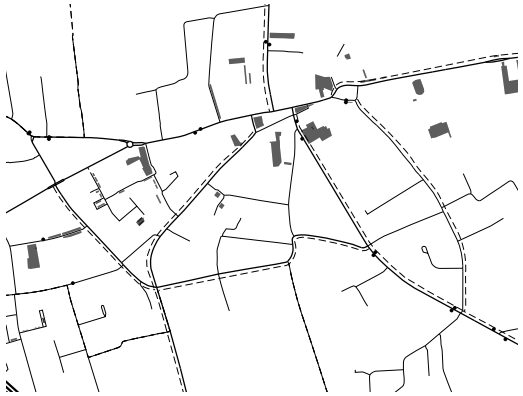


Pluvial flood risk is much more dispersed across the territory and increasingly follows the street pattern within the built fabric. A fine-grained network of smaller streams and ditches facilitates drainage, but also rapidly directs water away from the landscape. As discussed in the broader analysis of this thesis, this creates a growing tension between managing excess rainfall and retaining water during periods of drought.

CROSS-ANALYSIS

1:25.000

Reading the previous layers together provides a first understanding of where different spatial systems overlap, disconnect or leave gaps within the village fabric. These conditions help identify residual spaces with different potentials and form the basis for defining the programme, ambitions and design strategies explored in the following chapters.



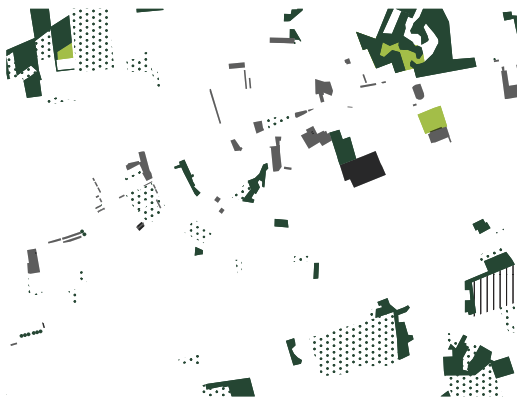
INFRASTRUCTURE + BUILT SPACE

Both historically and today, infrastructure strongly structures the built fabric. New development has consistently followed existing and newly introduced routes. This raises the question of what could emerge by reversing this relationship, allowing future development to guide new infrastructure instead.



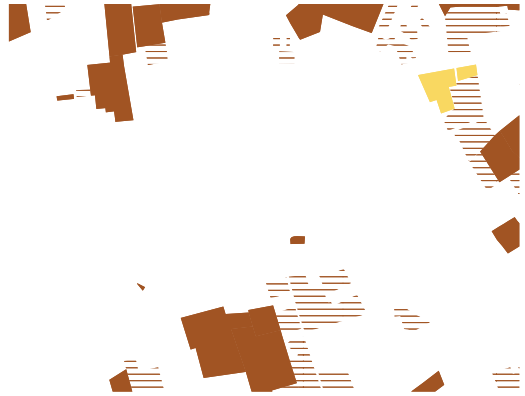
BUILT SPACE + INFRASTRUCTURE

Most public functions are concentrated within the village centre and primarily connected through the main roads. This creates a mismatch between the larger scale at which these amenities operate and are spatially enclosed, and the finer scale of everyday village life. This raises the question of whether both their spatial and programmatic scale are appropriately adapted to their surroundings.



ECOLOGICAL + BUILT SPACE

The few larger green structures within the centre are mostly enclosed within large building blocks and therefore contribute little to the everyday experience of the village. Green space is highly fragmented, predominantly private and poorly connected. Smaller residual spaces could become important stepping stones between these isolated landscape fragments.



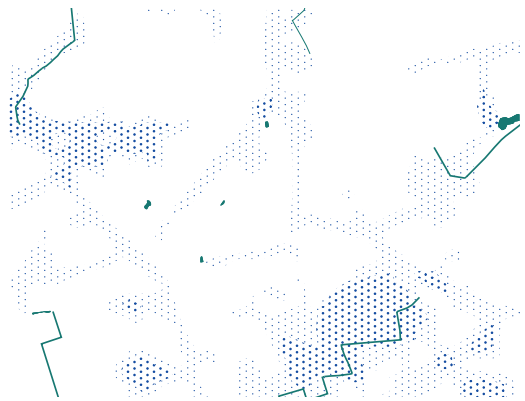
PRODUCTIVE + BUILT SPACE

Productive landscapes extend close to the built-up area, but become completely disconnected towards the village centre. The historical relationship between agriculture and everyday village life has largely disappeared from the centre. Smaller productive spaces could reintroduce this relationship, embedding production within the everyday fabric of the village.



FLUVIAL + BUILT SPACE

Within the village centre, water structures are almost entirely absent from the everyday experience of the built fabric. This creates a strong disconnect between the centre and the hydrological landscapes of the wider territory. While larger structures such as the Grote Nete strongly contribute to the identity of the village, smaller water systems remain largely neglected.



PLUVIAL + BUILT SPACE + ECOLOGICAL

Pluvial flood risk extends deep into the built fabric and overlaps with both green and developed areas. Yet these vulnerable spaces are often spatially disconnected and barely recognisable as part of a larger water system. Residual spaces within these zones could therefore become strategic points where water management and ecological reinforcement are combined.

RESIDUAL SPACES

1:50.000



The previous cross-analysis was complemented by a walk through the village, allowing the identified overlaps, gaps and discontinuities to be examined in their physical context. Moving between the analytical maps and direct observation reveals how these conditions manifest themselves within the everyday fabric of the village. Together, these readings allow a number of potential residual spaces to be identified. Rather than predefined design sites, they form points of interest that invite further investigation.

RESIDUAL SPACES

1:10.000



Zooming in provides a more precise overview of the residual spaces that hold potential within the village fabric. The maps above show only the sites selected for further exploration, although a broader range was initially identified. Some proved too large to be considered residual and would require standalone design projects. In other cases, the analysis suggested that leaving the space open and undefined was more valuable than intervening. The diagram on the following page provides an abstract positioning of the selected spaces.

SURGICAL APPROACH

ISOLATING THE SPACES

This paved site at the centre of the village square formerly hosted a snack bar. Today, it remains mostly empty and accommodates temporary toilets during events.



Likely intended for recreation, this small grass area is now used for parking due to insufficient capacity around the surrounding residential blocks.



This small verge plot lies between a residential block and detached houses. Grass-covered along the street, it transitions into garage boxes towards the rear.





This triangular plot lies between a busy and a dead-end street. Partially enclosed, it resembles a private garden, yet functions as an oversized roadside verge.

Close to the village centre, the site combines low-quality green space with the former post office. Despite significant pedestrian flow, movement mainly occurs around it.



This narrow strip along the road is used by students waiting to be picked up. Currently lacking spatial quality, it is bordered by a blank wall.

This small green space is appropriated by the house behind it, while its public or private status remains unclear. Opposite lies another grass area bordered by a blank façade.







This former residential plot has remained vacant due to its limited dimensions and corner location. Despite its strategic position, these constraints make new development challenging.

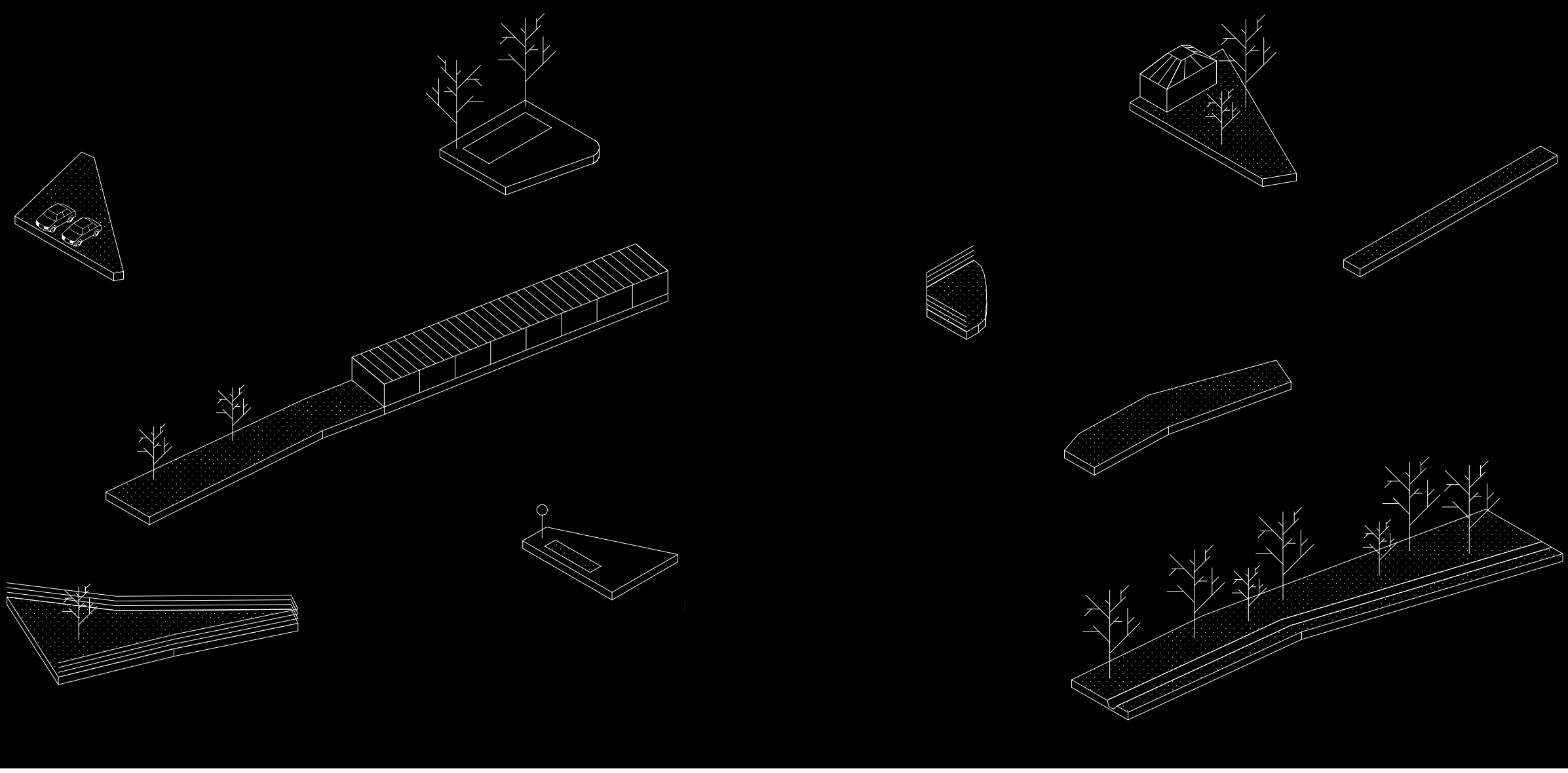
A narrow, deep gap between two houses connects the street to the landscape behind. Its proportions and watercourse make activation challenging.



The selected sites are temporarily isolated from the wider fabric and analysed as individual spatial conditions, allowing the specific needs, challenges and potentials of each location to emerge. Rather than defining one overarching masterplan, the village is reconsidered through a series of precise local interventions. Each site can therefore respond differently to the systems, programmes and everyday uses that intersect there, while their cumulative effect operates at the scale of the village.

This approach corresponds to the scale and character of the village. Its residual spaces are often small, dispersed and highly context-dependent, requiring programmes and interventions that operate at a similarly local scale. The aim is therefore not to impose a new structure on Berlaar, but to gradually strengthen the existing fabric from within.

URBAN ACUPUNCTURE



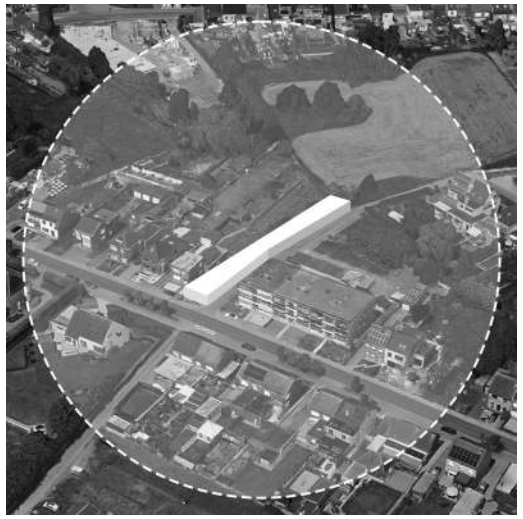
The interventions act as micro-injections into the scars of the existing fabric. Their spatial and programmatic intensity can vary considerably. Their intensity is deliberately uneven. Some sites require permanent structures and clearly defined programmes, while others benefit from minimal interventions that leave room for appropriation, change and unexpected use. Spatial impact is therefore not necessarily proportional to architectural presence.

Rather than introducing idealised programmes, the interventions respond to ordinary activities, missing functions and everyday needs. Architecture becomes an enabling framework rather than a means of designing spatial volume, creating conditions in which different forms of village life can emerge. The design of space takes precedence over the design of volume.

SCAR ARCHITECTURE

The selected sites are approached as scars within the village fabric and divided into three categories, ranging from broader permanent interventions to minimal adjustments acting locally.

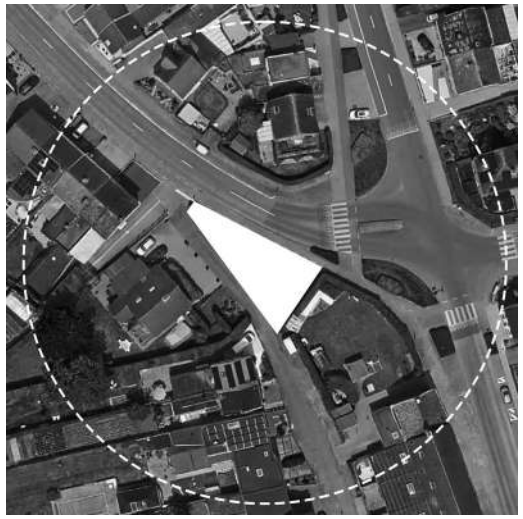
SITES (3)



"Sites" represent the most comprehensive form of intervention, where an entire residual plot is reconsidered as a spatial condition. Rather than making a local adjustment, the intervention restructures the site through a permanent architectural and programmatic transformation. Importantly, this does not simply mean fixing an existing scar in the fabric.

The intervention reconsiders the position and meaning of the site within the village, questioning how it can establish new relationships with its surroundings and contribute to everyday village life. Its scale allows new uses, connections and spatial relationships to emerge that extend beyond the boundaries of the plot itself and influence the surrounding fabric. Three sites are explored within this category.

OBJECTS (6)



"Objects" operate as a functional counterpart to the architectural "Folly". Rather than being playful, irrational or deliberately purposeless, these interventions give spatial form to a specific everyday need. Their architectural expression emerges directly from the action they supports, making use the primary driver of the intervention.

Their spatial impact is more limited and their presence is not necessarily permanent, allowing them to adapt as needs and uses change over time. Conceived as freestanding elements, they could potentially be relocated or reproduced elsewhere. The six objects explored within this category are each designed in response to a specific local condition.

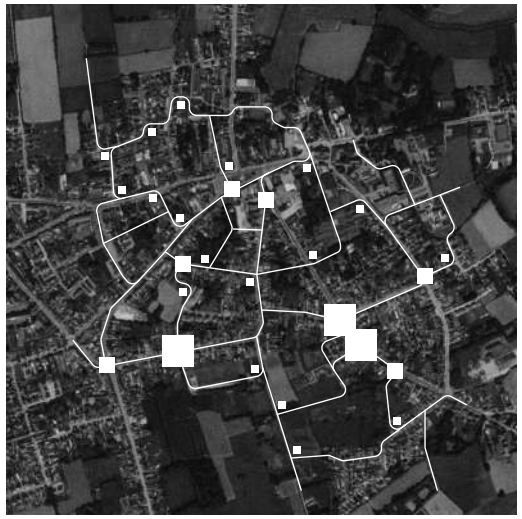
ELEMENTS



"Elements" form the smallest and most dispersed category of intervention. Unlike Sites and Objects, they are not necessarily positioned within residual spaces, as their physical scale is often too limited to activate a site on their own. Instead, they operate in support of the interventions and everyday spaces around them.

Through small additions to the existing fabric, Elements can improve accessibility, orientation, comfort or connectivity between different places. Their value therefore lies less in their individual spatial impact than in their ability to establish continuity across the village. Repeated across different locations, they help connect otherwise isolated interventions and weave the new layer into the existing village fabric.

NEW VILLAGE LAYER



The intention is not to replace or fundamentally restructure the existing village, but to introduce a new layer that works with what is already there. Rather than disrupting existing structures, this layer seeks to reinforce them by revealing new connections, uses and relationships within the existing fabric. Through the combination of Sites, Objects and Elements, it creates new possibilities for moving through, using and inhabiting the village. Existing structures remain largely intact, while previously disconnected or overlooked spaces become part of an additional spatial network. The new village layer therefore does not propose an alternative village, but strengthens and expands the ways in which the existing one can function, be experienced and evolve over time.


1
2
3

SITE 1

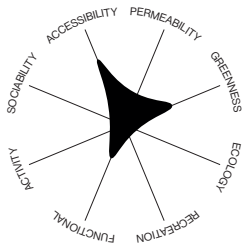
CONTEXT

1:500

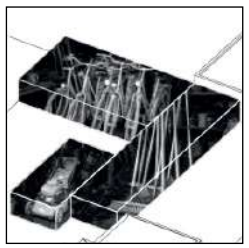
POSITIONING

The site is located alongside a residential road that can be accessed from both ends. To the south, the road is primarily used to access parking spaces at the rear of the plots. As a result, motorised traffic remains limited, while the road is frequently used by pedestrians and cyclists.

SURROUNDINGS



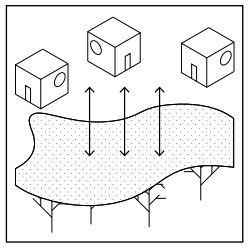
Although much of the site is green, its spatial and ecological quality remains limited, and it currently functions primarily as an unmanaged roadside verge. Together with the small grassed area opposite, the space remains poorly maintained and contributes little to the surrounding public realm.



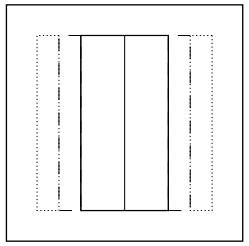
Despite the presence of several garage boxes, the verge is predominantly used for parking. The surrounding sheds and storage structures fragment the green landscape and create residual spaces within the gardens. The axonometry reveals how these structures accumulate rarely used objects, questioning the need for extensive private storage and its potential to be shared.

CONCEPT

AMBITIONS

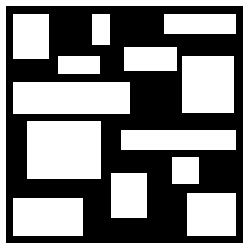


The site has the potential to act as a link between the larger open spaces to the north and south. By drawing the surrounding landscape deeper into the village, it can restore the close relationship between living and landscape as a defining quality of rural life. This resonates with the Japanese concept of "Satoyama", where settlement and surrounding landscapes form an interconnected environment shaped through everyday use and interaction.

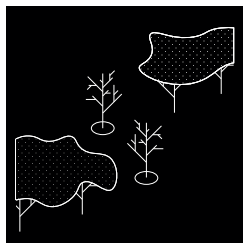


The road is reimagined as more than infrastructure for movement, becoming an integral part of the site where movement and staying can coexist. Cars remain possible, but become secondary to everyday use and encounter.

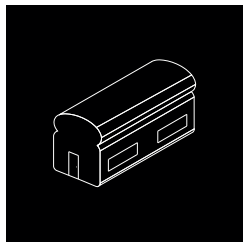
TOOLS



By distributing the programme across several volumes, the space in between becomes a collective garden that encourages informal encounters while creating varied views through and across the site. This reflects the Japanese concept of "Ma", where the interval between elements is understood not as empty space, but as an active spatial condition that gives meaning to their relationships.



Hard surfaces are selectively removed to reclaim space for nature and strengthen the site's ecological quality. This operates across different scales, from depaving parts of the street to introducing smaller elements such as planted pots.

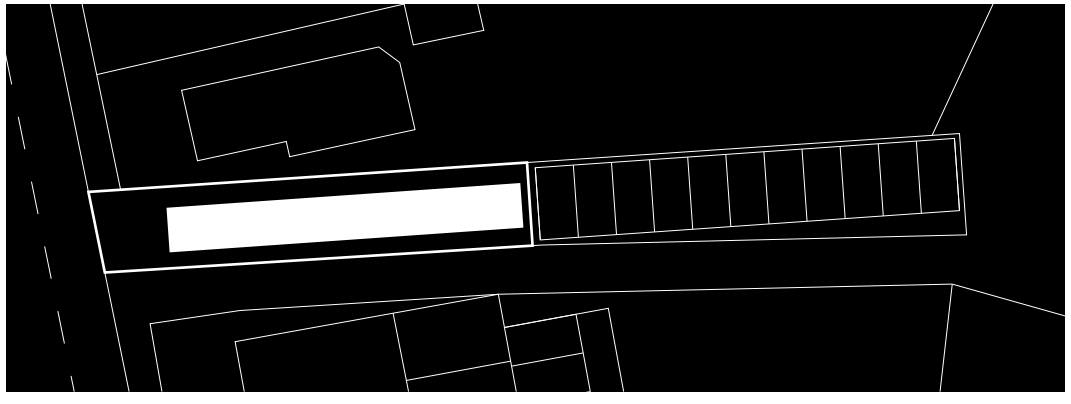


The programme responds to everyday activities and functions already present in the surrounding area. As many objects, such as lawnmowers, remain unused for most of the time, they are brought together and shared rather than individually stored.

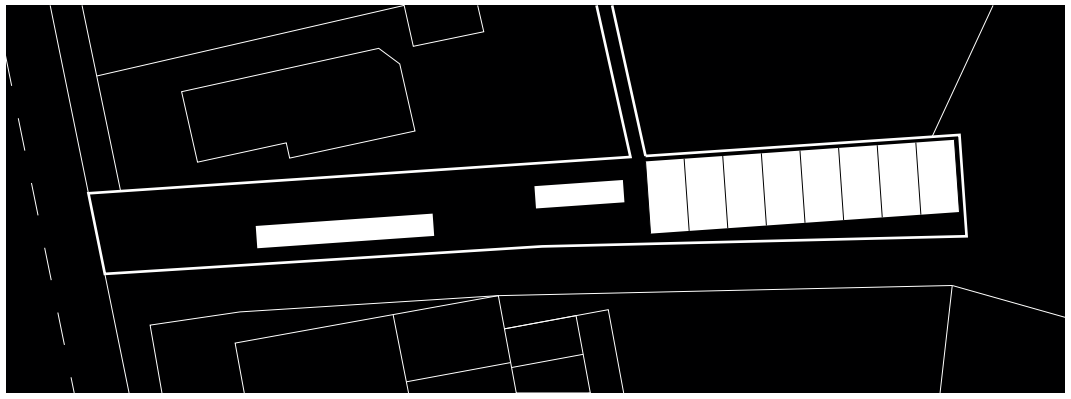


STREETSCAPE OF THE SITE *BERLAAR, BELGIUM*

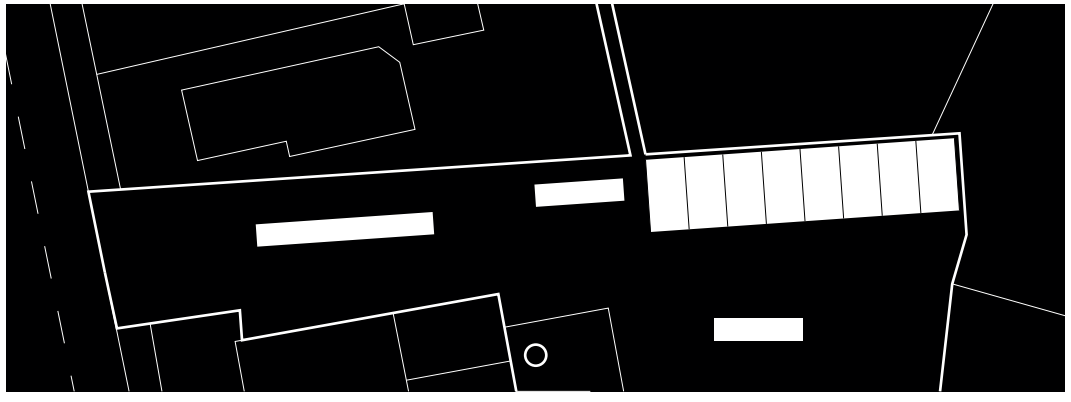
STEP-BY-STEP TRANSFORMATION OF THE DESIGN



The design began with a modest intervention, adding a single volume to the remaining unbuilt part of the site. All required functions were concentrated within this structure, resulting in a volume that proved disproportionate to the scale of both the programme and its surroundings.



The programme was subsequently divided into smaller volumes that respond to the fine grain of the surrounding fabric. Their roofs follow the lines of adjacent plots, allowing the intervention to settle into its context. At the rear, the existing garage boxes are replaced by a more compact Japanese parking system, reducing the spatial presence of cars. A new hedge introduces a more intimate entrance to the site while creating opportunities for informal encounters.



In the final step, the intervention expands beyond the boundaries of the plot to incorporate the street and the residual green space opposite. What began as a response to a small leftover site develops into a larger neighbourhood landscape. Enclosed by the surrounding buildings, it combines the intimacy of a shared garden with the openness of a small park, inviting passers-by to enter, move through and stay.

REFERENCES



BETA HONMACHI
project 07



SHARED HOUSE
project 12

The projects demonstrate how combining everyday programmes can foster a sense of community beyond the scale of the individual building, extending into the wider neighbourhood. These connections can also integrate ecological functions, as shown in the BETA HONMACHI project, where social and ecological qualities reinforce one another. For a more detailed discussion of the individual projects, reference is made to the Project Catalogue.



HOUSE S / SHOP B
project 14

The project demonstrates how even the narrowest roadside verge, a space that would otherwise remain unused, can be activated and contribute to social life. As the intervention sits almost directly on the pavement, the conventional boundary between public and private largely disappears, while the distinction between inside and outside is still strongly maintained.

IMPLANTATION

1:250

1. bicycle repair & wash station
2. sanitary facilities
3. shared workspace
4. shared garden shed
5. paved collective garden
6. green collective garden
7. shared kitchen
8. transparant Japanese parking system
9. new hedge
10. existing green structures

SITE PLAN

1:250

1 repairing
2 staying
3 sharing
4 meeting
5 playing
6 gardening
7 parking
8 passing

COLLAGE EXTERIOR

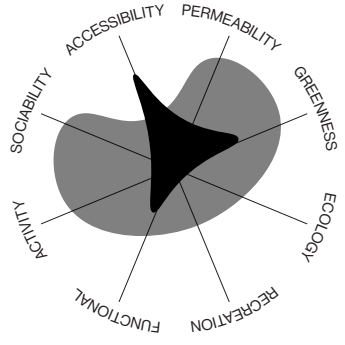


QUALITATIVE DENSIFICATION

The design demonstrates how "Qualitative Densification" can strengthen a village without relying on conventional ideas of density. New programmes are introduced without maximising built volume, using the existing qualities and relationships of the site as the foundation for transformation. What initially appears as a long strip of residual space, a typical roadside verge of the kind found in many places, is revealed as a strategic part of the village, capable of connecting landscape, public space and everyday life.

Densification can therefore be understood as an intensification of relationships. By distributing the programme across smaller volumes, reducing the spatial dominance of parking and extending the intervention beyond the plot, previously disconnected elements begin to work together.

The project ultimately shows that density is not defined by the amount of space that is built, but by the intensity of relationships that space can support. Through a careful balance between built and unbuilt space, a modest residual site gains a wider social, ecological and spatial role within the village. Qualitative Densification is therefore not about occupying more space, but about making existing space matter more.



SITE 2

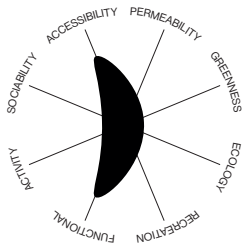
CONTEXT

1:500

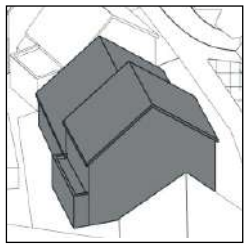
POSITIONING

The site consists of two residual plots located at the intersection of two roads. The north to south road carries relatively heavy traffic, while the narrower residential street to the west is frequently used as a shortcut, despite not being designed for this intensity of traffic.

SURROUNDINGS



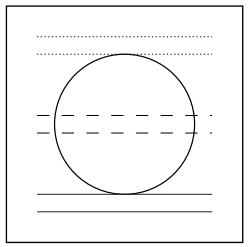
The site brings together multiple forms of movement and staying. Cyclists pass through or wait for friends, pedestrians navigate a difficult crossing, cars move through or stop briefly at a nearby vending machine, while a bus stop adds another layer of everyday activity. Rather than functioning purely as an intersection, the site already acts as an informal point of pause and encounter.



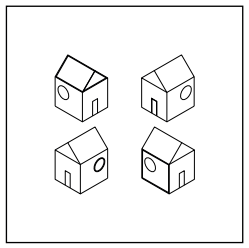
The northern plot is bordered by a blank façade currently used for advertising, offering potential for a more active role within the site. The southern plot directly adjoins a house and therefore reads as a private front garden, despite being public space. A bakery and a snack bar nearby further contribute to the everyday activity surrounding the site.

CONCEPT

AMBITIONS

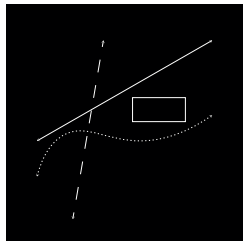


The different mobility flows should be reorganised to reduce conflicts between pedestrians, cyclists and cars. By allowing these movements to coexist more naturally, the intersection can become a safer and more pleasant place to move through and stay.

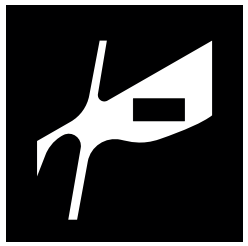


"Where functions meet, people meet." Although different flows and programmes already converge here, they currently exist alongside rather than interact with one another. Connecting these activities can transform the intersection into a more dynamic place where movement, staying and everyday encounters reinforce each other.

TOOLS



The organisation of flows follows the principle of "Jūdō", or "the gentle way", using subtle spatial cues rather than rigid boundaries. Changes in paving and planting naturally guide pedestrians, cyclists and cars through the space, allowing different forms of mobility to coexist safely without strict separation.



Activation through programme is achieved by introducing new functions while expanding those already present around the site. Together, they give the residual plots a more active role within everyday neighbourhood life.

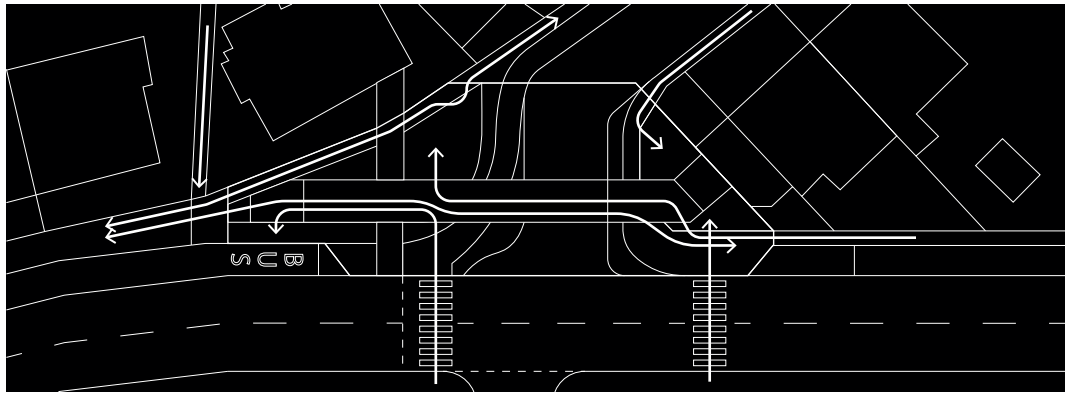


A new spatial identity emerges by connecting the fragmented residual spaces into a linear park along the road. Rather than treating traffic as something to exclude, the road becomes part of the landscape and contributes to the dynamic character of the place.

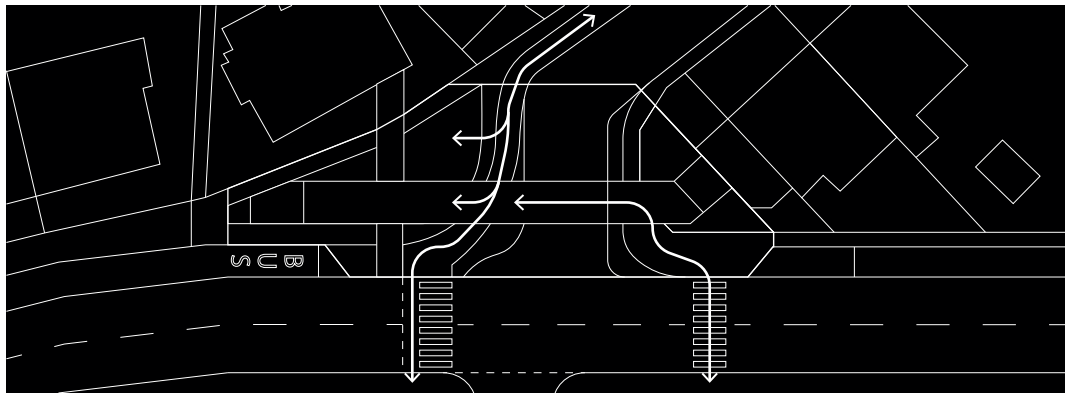


STREETSCAPE OF THE SITE *BERLAAR, BELGIUM*

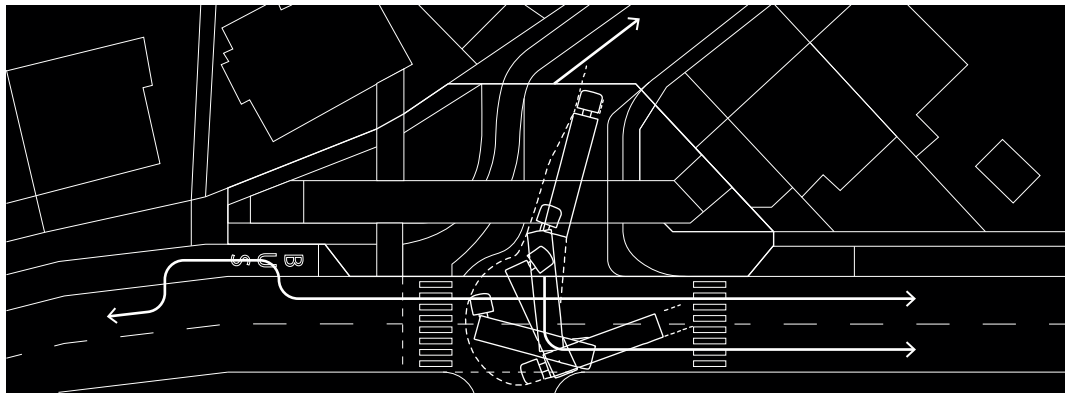
DIFFERENT (MOBILITY) LAYERS OF THE DESIGN



Everyday activities around the intersection are brought into the public space. A coffee from the vending machine, bread from the bakery or food from the snack bar can be consumed on site, turning existing neighbourhood functions into shared moments. A new informal path also connects the intersection with the village fabric behind it.



Bicycle parking gives cyclists a clear place within the intersection and supports its role as a local meeting point, particularly for students travelling together. The redesigned crossing responds to these existing cycling patterns and makes them more legible within the overall layout.



The layout uses spatial design to influence driving behaviour rather than restricting access. Cars are naturally slowed down and the shortcut towards the residential street becomes less self evident. Planting and paving are carefully positioned to retain the turning radius required for occasional larger vehicles without allowing these movements to dictate the overall design.



CHUO LINE DEVELOPMENT
PROJECT 03

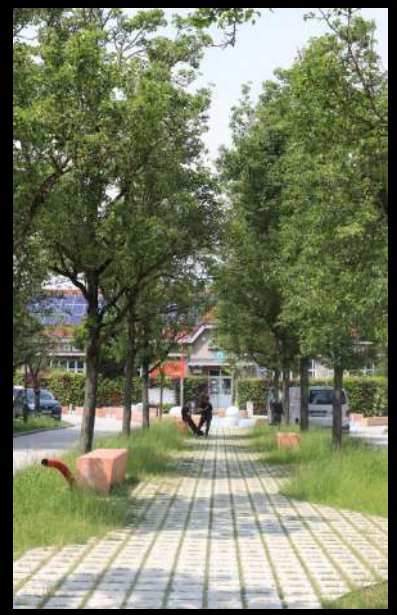


OKAYAMA UNIVERSITY CAFÉ
SANAA

The Chuo Line Development project demonstrates how spaces beside, above, or beneath infrastructure can accommodate everyday activities, turning the proximity of mobility flows into a spatial quality rather than a constraint. SANAA's canopy serves as a reference for the materiality and lightweight expression of the canopies introduced throughout the design.



source: Bon Air – L'Atelier DEV, n.d.;





BON AIR
L'atelier DEV

The project rethinks intersections and infrastructure by questioning the conventional role of roads within residential areas and responding to the specific conditions of each site. It also serves as a reference for the material treatment of the ground plane and the integration of landscape within infrastructural space.

IMPLANTATION

1:250

1 bus stop canopy
2 garage access
3 public park area
4 vending machines
5 outdoor cinema
6 shared mobility space
7 new pedestrian connection

SITE PLAN

1:250

1 connecting
2 waiting
3 staying
4 parking
5 crossing
6 consuming
7 entertaining

COLLAGE EXTERIOR

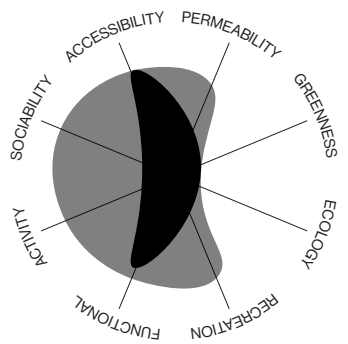


ENHANCING CONNECTIVITY

The design demonstrates how “Enhancing Connectivity” can strengthen a village by understanding connection as more than movement from one place to another. The intervention transforms an intersection dominated by passing traffic into a place where different routes, activities and people begin to overlap. Connectivity becomes both spatial and social.

Rather than separating pedestrians, cyclists, cars and surrounding programmes, the design allows them to coexist within a more continuous public landscape. Existing movements are redirected towards everyday activities already present around the site, turning moments of passage into opportunities for pause and encounter.

The residual plots become part of a finer network in which infrastructure takes on a broader social role. The street becomes more than a route through the village and begins to reclaim the role once held by the traditional village square. Rather than forming a single, formally defined centre, public life can emerge through an everyday network of streets, crossings and places to stay.



SITE 3

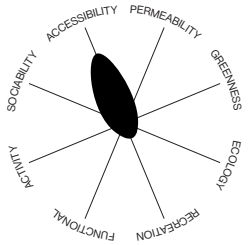
CONTEXT

1:500

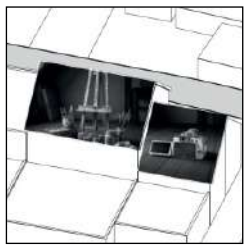
POSITIONING

Located close to Site 2, the site consists of an unusually narrow residential plot positioned on a corner. Its limited width and exposure to two streets make the positioning of a dwelling particularly challenging, especially in balancing orientation, access and privacy.

SURROUNDINGS



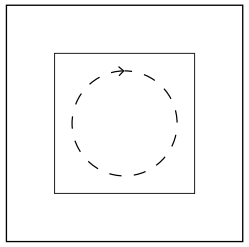
The site itself can be understood as a form of spatial residual space. Caught between a busy municipal road and a narrow dead-end street, its unusual proportions and exposed corner condition make conventional residential development difficult.



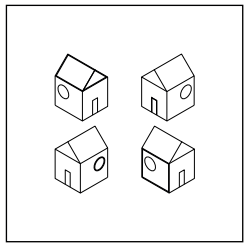
The surrounding homes reveal a second condition: programmatic residual space. Activities that only take place occasionally often claim a dedicated room or area that remains unused for much of the time. Residual space can therefore emerge not only spatially, but also through the inefficient occupation of space over time.

CONCEPT

AMBITIONS

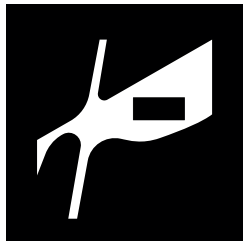


Rather than assigning each function a fixed space, the site is conceived as an evolving framework that can accommodate changing uses over time. Public and private, clean and messy, small-and large-scale activities can occupy the same spaces at different moments, allowing the dwelling to continuously adapt to its users. This flexibility is spatially embodied in the "Doma", a sunken indoor space finished with packed earth that acts as a multifunctional transition zone between different uses and degrees of domesticity.

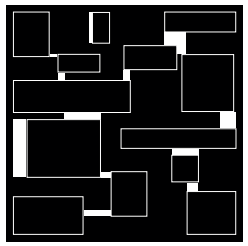


Combining different creative activities creates opportunities for exchange between people with shared interests. At the same time, the programme is deliberately made visible from the surrounding public space, allowing those who do not actively participate to observe, engage and become part of its wider social life.

TOOLS



Positioned directly along the street, the building turns its lack of setback into a productive relationship with the public realm. Openings and variations in floor level carefully negotiate exposure and privacy, making activities inside visible without simply opening the building entirely to the street. The boundary becomes a space of interaction rather than separation.

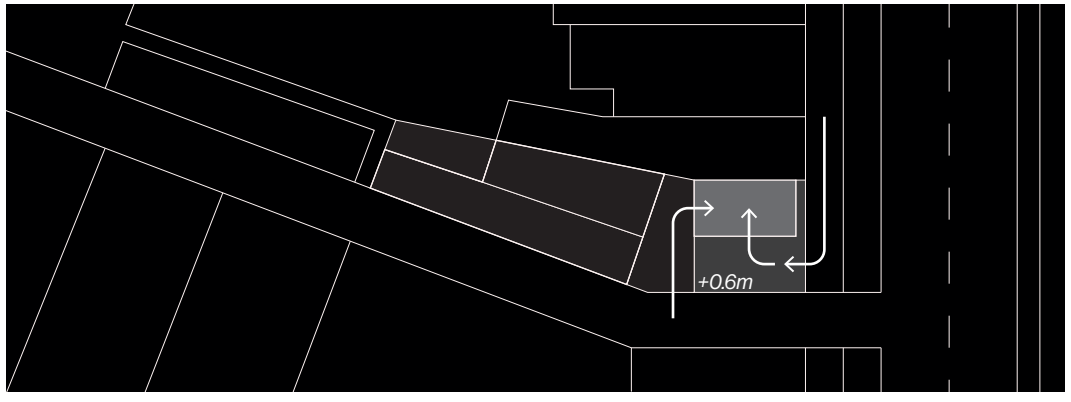


Rather than treating the narrow plot as an isolated intervention, the project acts as a precise injection into the existing residential fabric. New secondary entrances draw activity into previously overlooked spaces between buildings, allowing the intervention to reactivate residual spaces beyond its own boundaries.

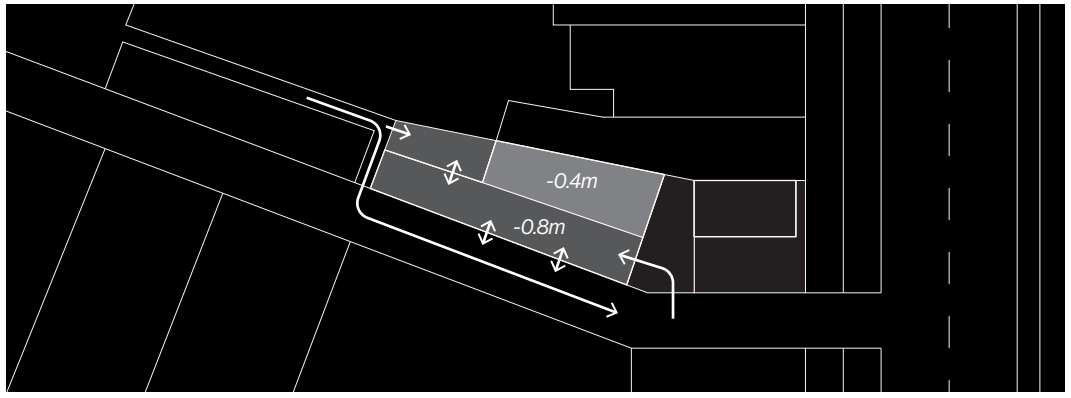


STREETSCAPE OF THE SITE *BERLAAR, BELGIUM*

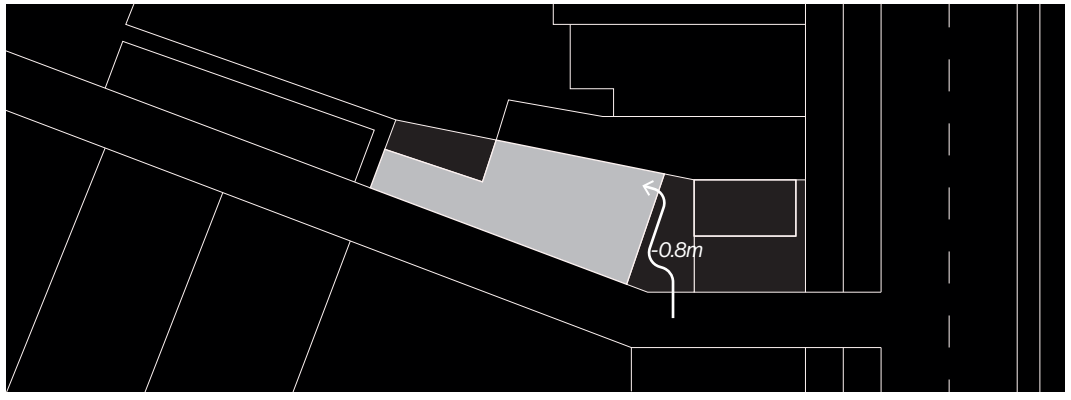
PRIVACY GRADIENT OF THE DESIGN



Along the main road, the floor is slightly raised to mimic an "Engawa", a subtle threshold that allows interior life to engage with the street without becoming fully public. Rather than forming a hard boundary, this transitional space becomes a village stage that deliberately exposes everyday activity to the public realm, creating a place for seeing and being seen. At the same time, the change in level introduces a subtle distance from passing traffic.



Towards the narrower street, the floor level is lowered to create a more intimate, semi-public space. Its transparent façade maintains visual contact with the surroundings, while the sunken position provides a sense of enclosure and removes the feeling of sitting directly on the street. Multiple entrances allow the space to operate independently and accommodate different patterns of use. At the rear, the volume can be entered via a "Tsuboniwa", a small enclosed courtyard garden that introduces light and vegetation.



Privacy on the site is entirely organised vertically, with the artist in residence occupying the upper floor. Rather than separating living, working, and exhibiting into isolated zones, the section allows their degree of privacy to shift over time. The central circulation space connects these different conditions, making the theatrical staircase the spatial hinge between public, semi-public and private life. In this way, the ground floor can be used as a private atelier when desired, while the volume facing the street can function as a personal gallery, allowing the building to continuously alternate between exposure and retreat.

REFERENCES



HOUSE-04
project 16



TSURUMI CHILDREN'S HOSPICE
project 09



TAKAYA HOUSE
Suppose Design Office



source: Griffiths, 2018

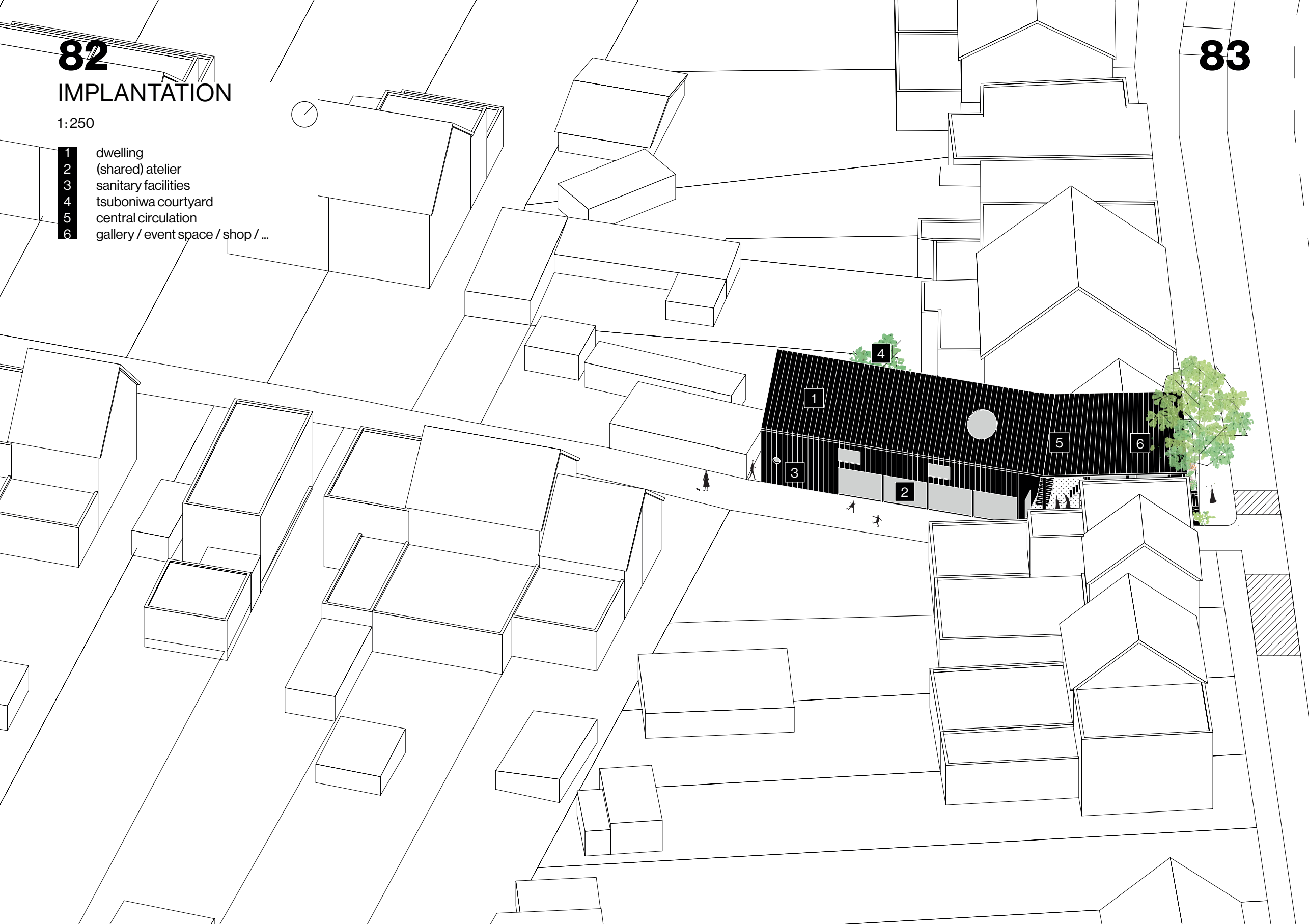
"Mixed-Use" is a recurring characteristic of the Japanese urban fabric, where living, working and social activities naturally overlap within the same building. Here, this principle takes the form of an artist in residence, where travelling artists temporarily inhabit the site and appropriate its indoor and outdoor spaces for living, working, exhibiting or engaging with the wider community as needs and circumstances change.

The two projects shown above serve as references for the material expression of both the interior and exterior spaces of the design.

IMPLANTATION

1:250

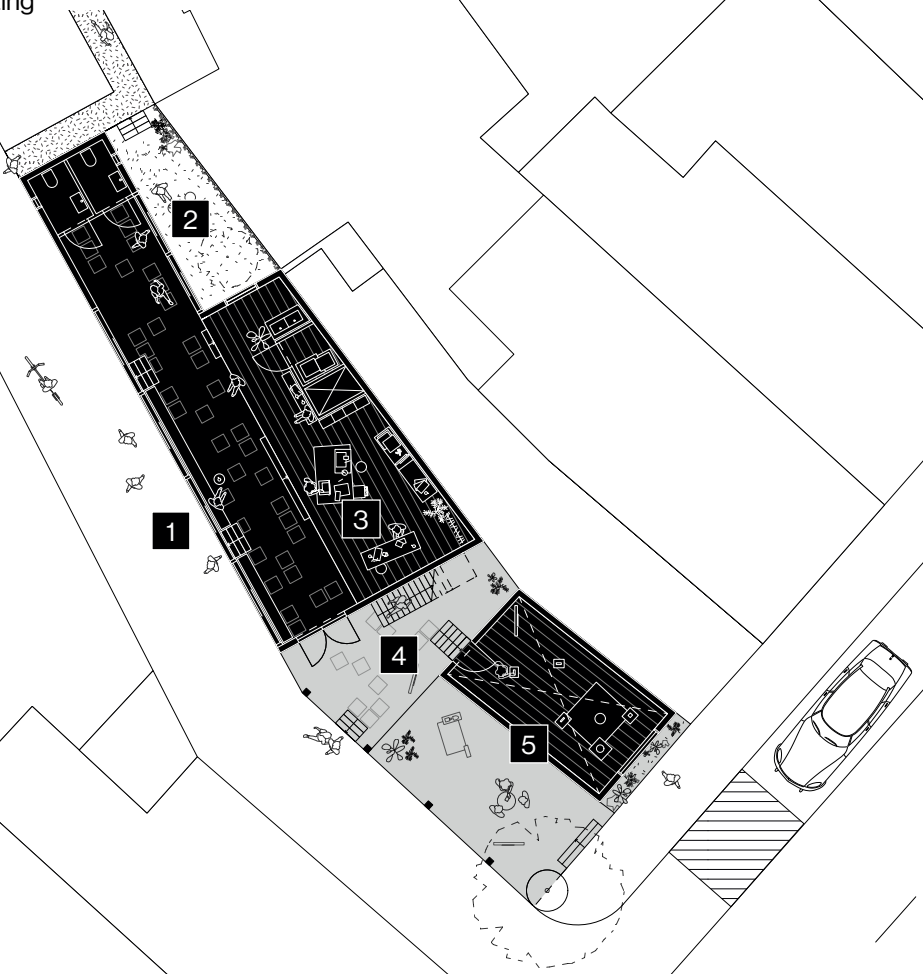
1 dwelling
2 (shared) atelier
3 sanitary facilities
4 tsuboniwa courtyard
5 central circulation
6 gallery / event space / shop / ...



SITE PLAN

1:250

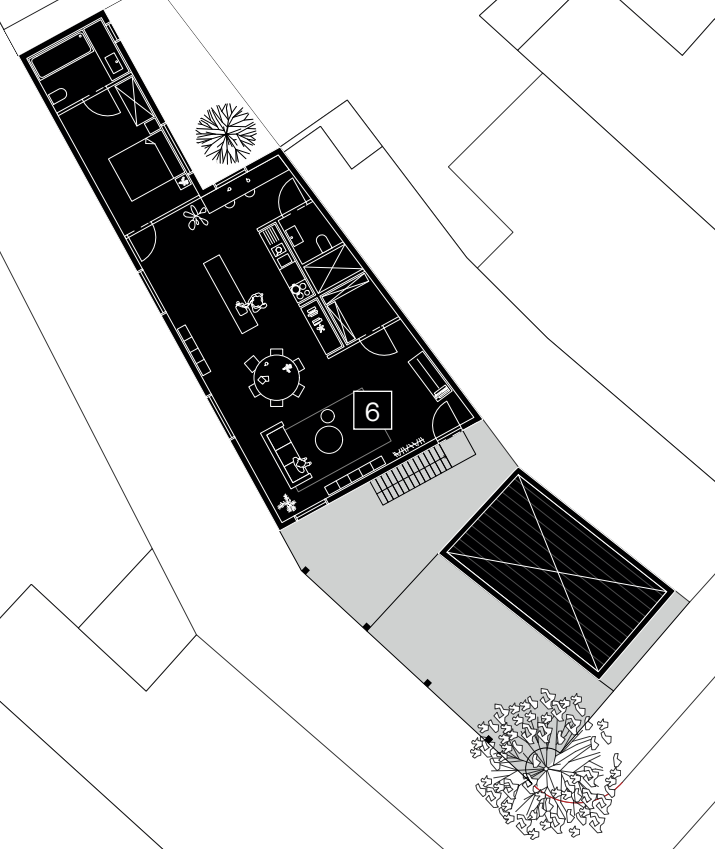
1 watching
2 relaxing
3 making
4 connecting
5 exhibiting



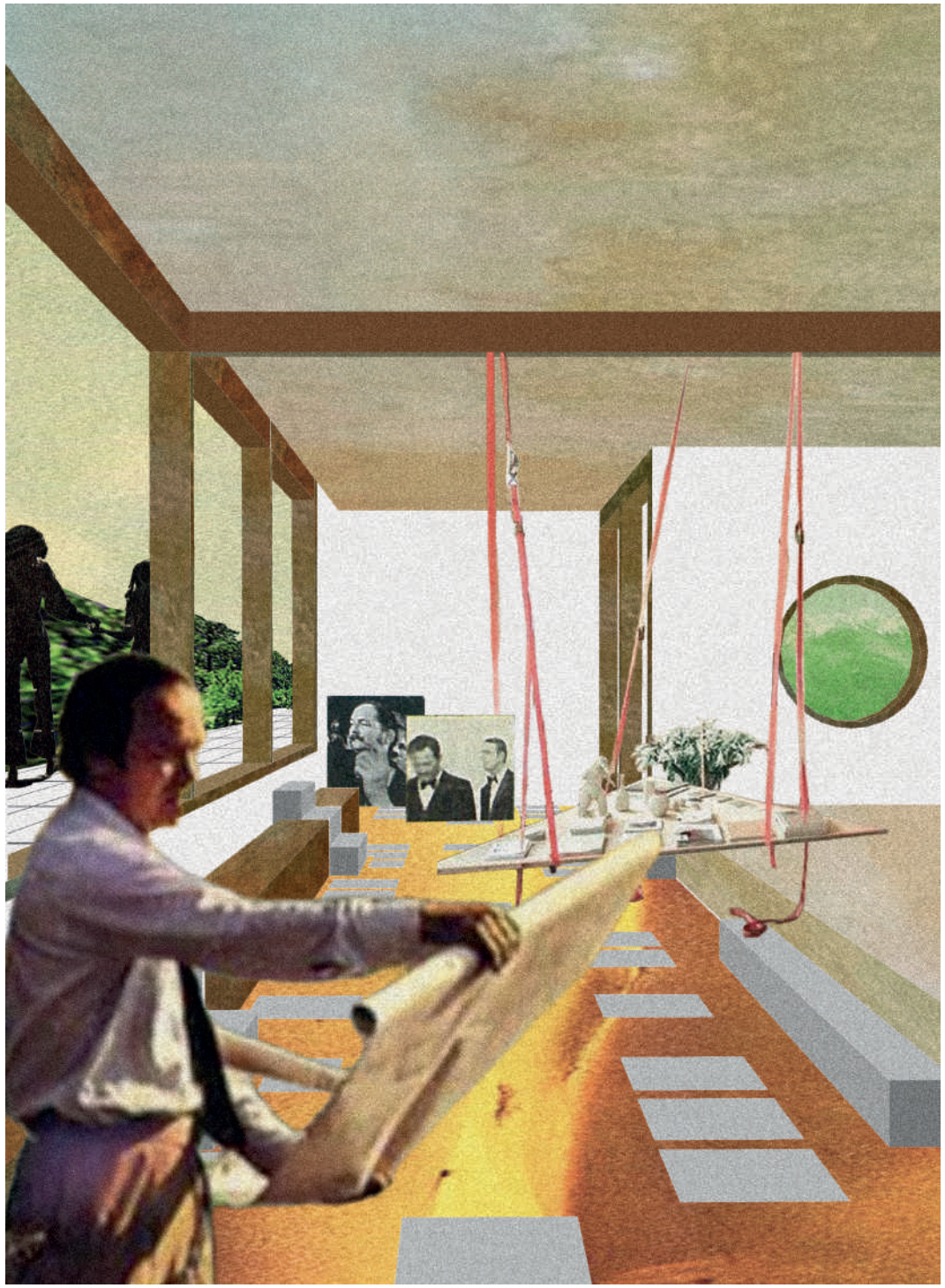
FIRST FLOOR PLAN

1:250

6 living



COLLAGE INTERIOR

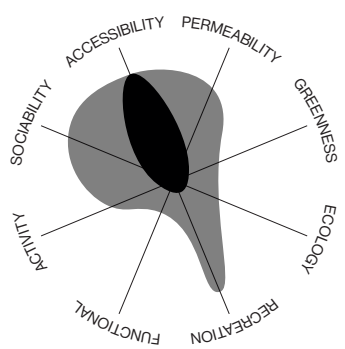


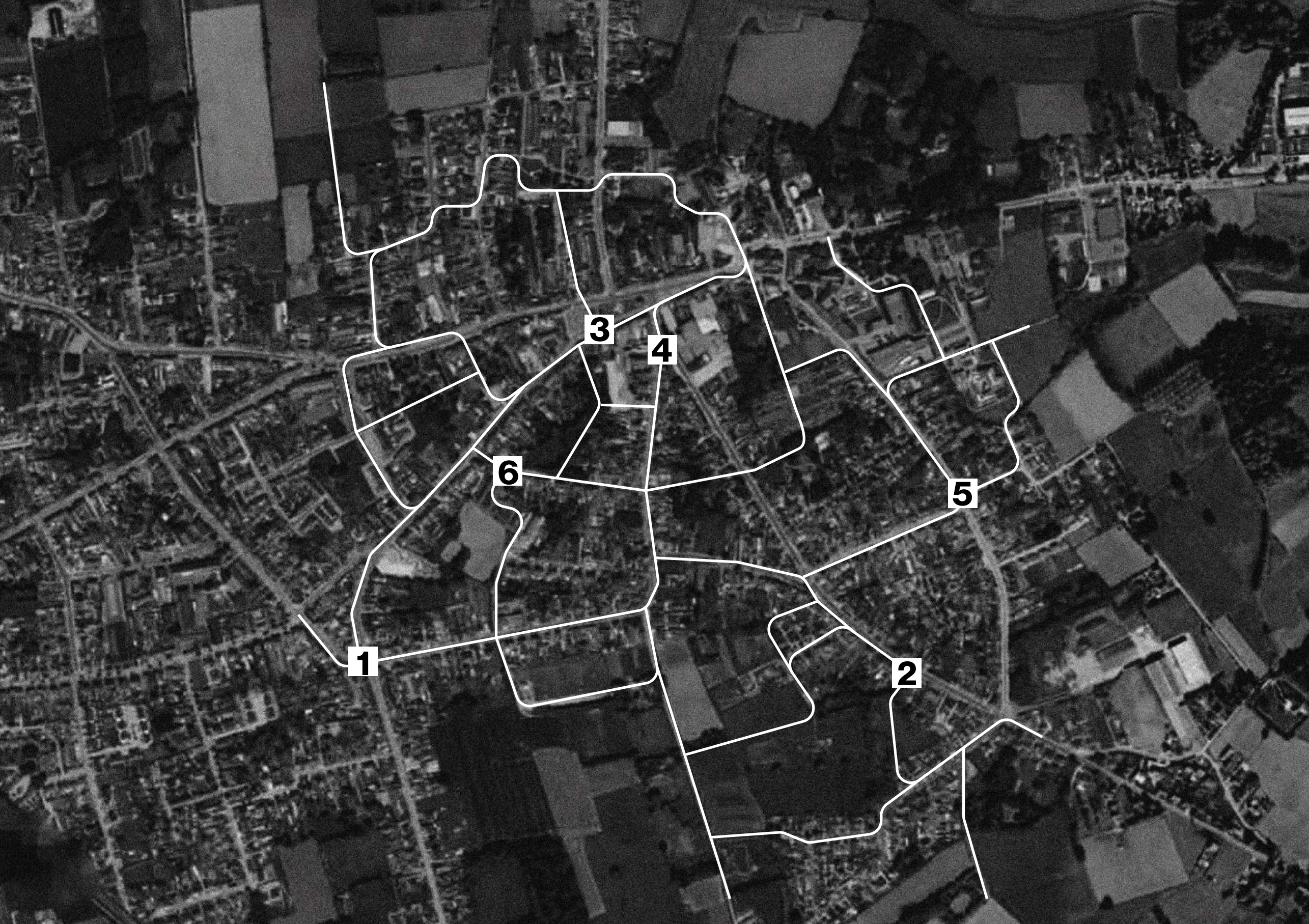
FOSTERING INTERACTIONS

The design demonstrates how "Fostering Interactions" can contribute to vibrant collective life by shifting the role of architecture from creating volumes to creating places. In doing so, the intervention connects private life with the wider social fabric and turns an otherwise difficult residual plot into a shared spatial resource.

The project responds to a condition already present within the surrounding homes, where occasional activities often occupy dedicated spaces that remain unused for much of the time. By bringing these activities together, the intervention proposes a different way of inhabiting a narrow residential plot that might otherwise remain undeveloped.

Privacy is not treated as a boundary, but as a spatial gradient. Changes in floor level create subtle transitions between public, semi-public and private conditions, allowing people to observe, participate or withdraw. This makes interaction possible without demanding it. At the same time, adaptable spaces allow different activities and users to occupy the same structure at different moments. In this sense, Fostering Interactions is not about prescribing where or how people should meet. It is about creating the conditions in which interaction can emerge.

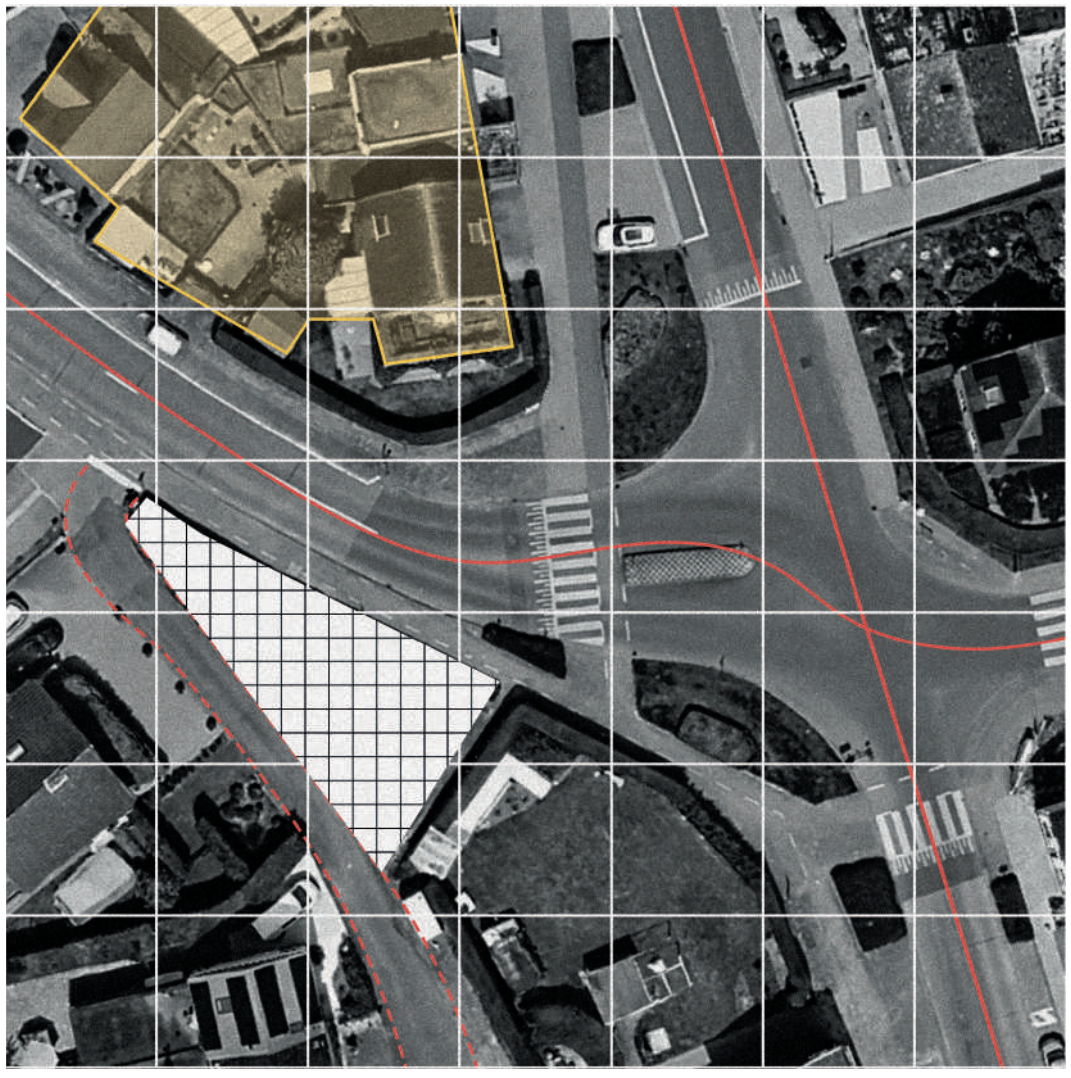



3
4
6
5
1
2

OBJECT 1

CONTEXT & CONCEPT

1:500



Across the street from densely built housing blocks, the triangular plot is a rare fragment of open space in a context where private gardens are scarce. Its difficult geometry and position along a dead-end street have left it overlooked, yet precisely this isolation creates the potential for a small collective retreat within the dense residential fabric.

DESIGN AXONOMETRY

1:100



A single multifunctional table transforms the residual plot into a shared extension of everyday life, inviting neighbours to cook, play, eat and meet. Rather than enclosing the site, one precise opening in the existing hedge connects garden and street while preserving a sense of intimacy. Through this minimal gesture, the object activates not only the plot but also the dead-end street, turning it into an informal playground and collective space.

OBJECT 2

CONTEXT & CONCEPT

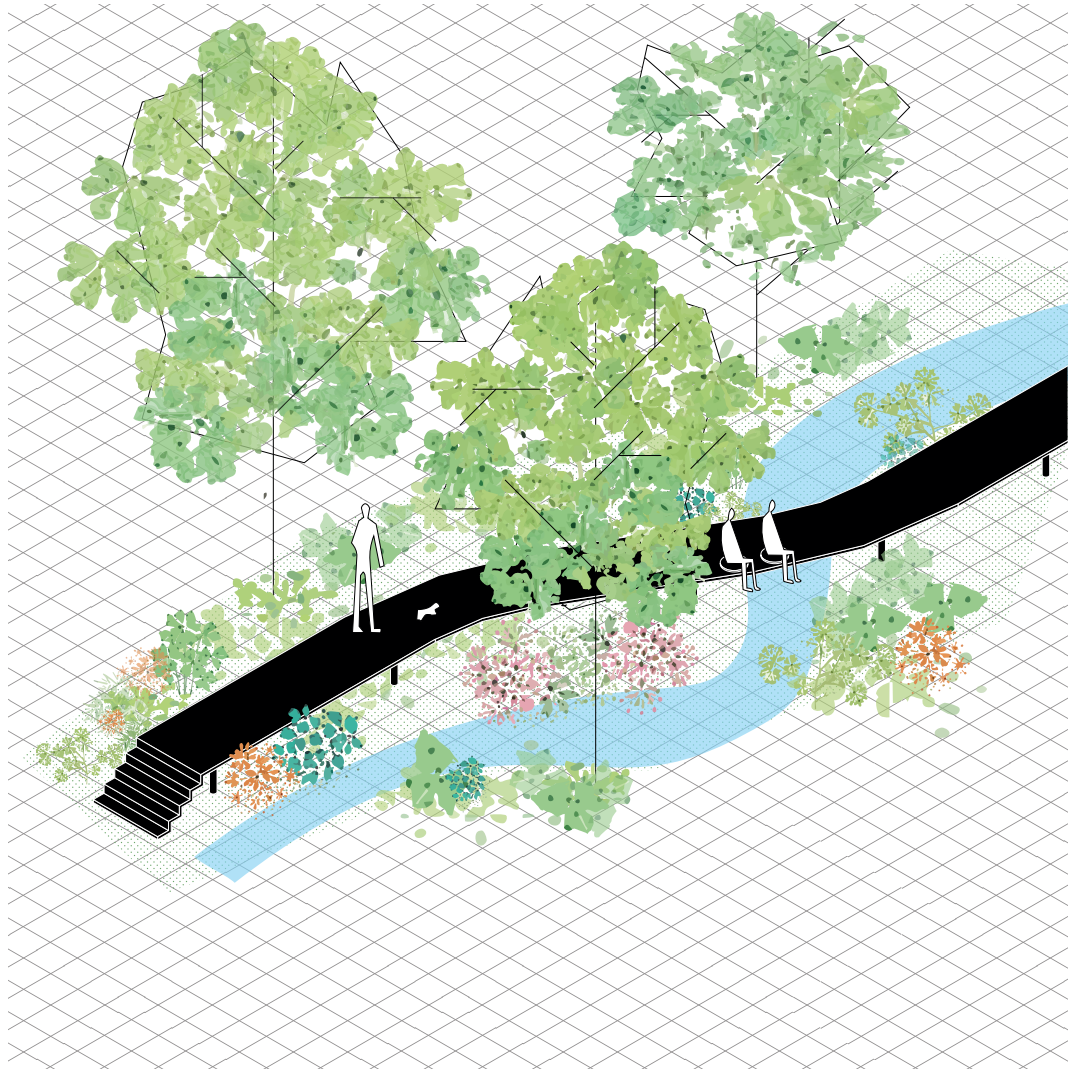
1:500



Overgrown and enclosed between two detached houses, the plot forms a rare visual opening from the street towards the green landscape beyond. Yet while the landscape is visible, it remains physically disconnected from the village. Its location within a flood-prone area reveals the presence of a wider system that currently remains largely hidden.

DESIGN AXONOMETRY

1:100

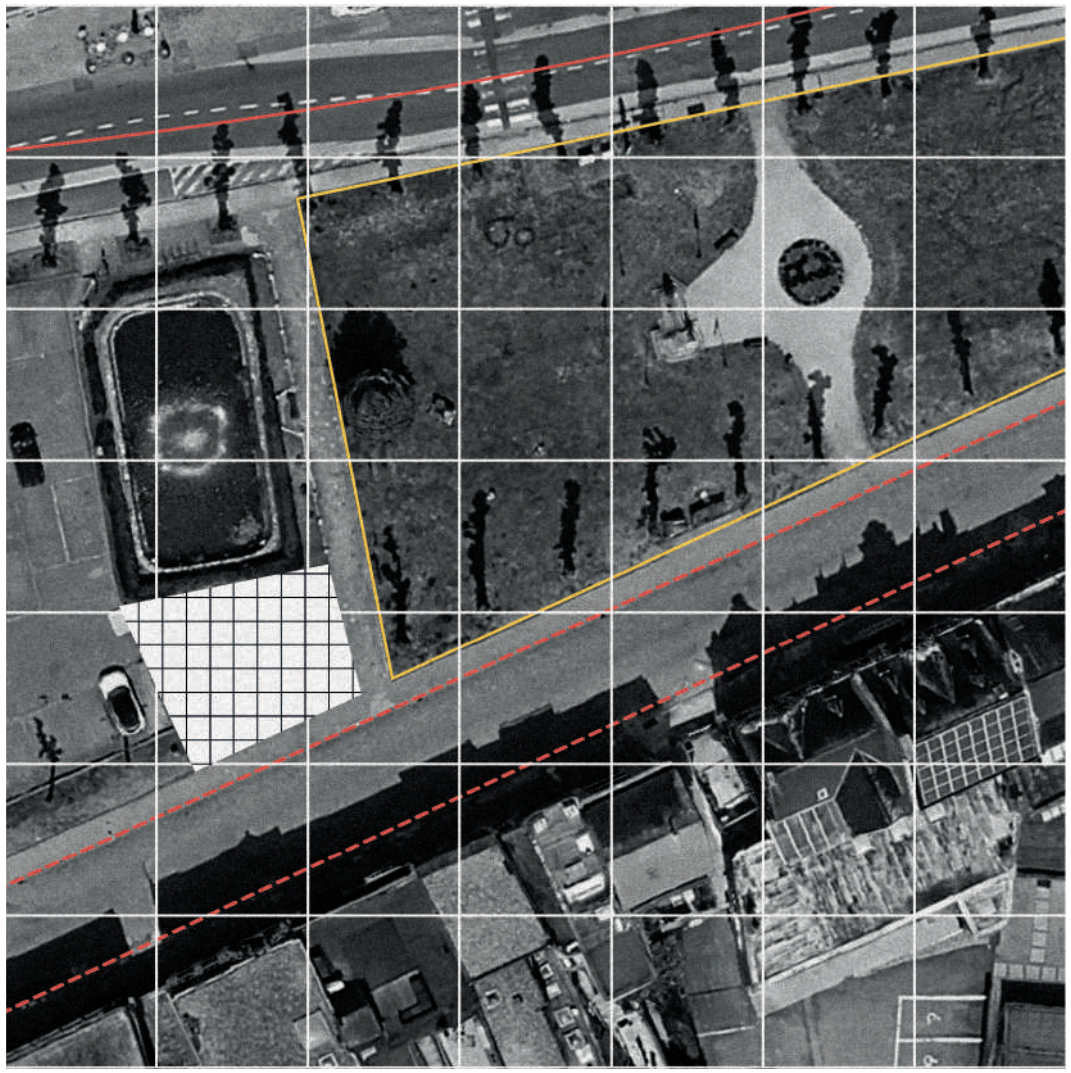


The bridge introduces the missing physical connection between village and landscape. Its generous width turns movement into an opportunity to pause, observe and experience the landscape. More than a crossing, it becomes a place where the village can engage with its natural surroundings and where local ecology, changing water levels and flood sensitivity become visible and tangible.

OBJECT 3

CONTEXT & CONCEPT

1:500



At the heart of the village, directly facing the main square, the recent removal of a small snack bar has left behind a paved void. Throughout the year, this public square and adjacent streets become part of the village's collective life, hosting a weekly market as well as recurring summer and winter events. These temporary programmes reveal a permanent need for supporting public infrastructure.

DESIGN AXONOMETRY

1:100

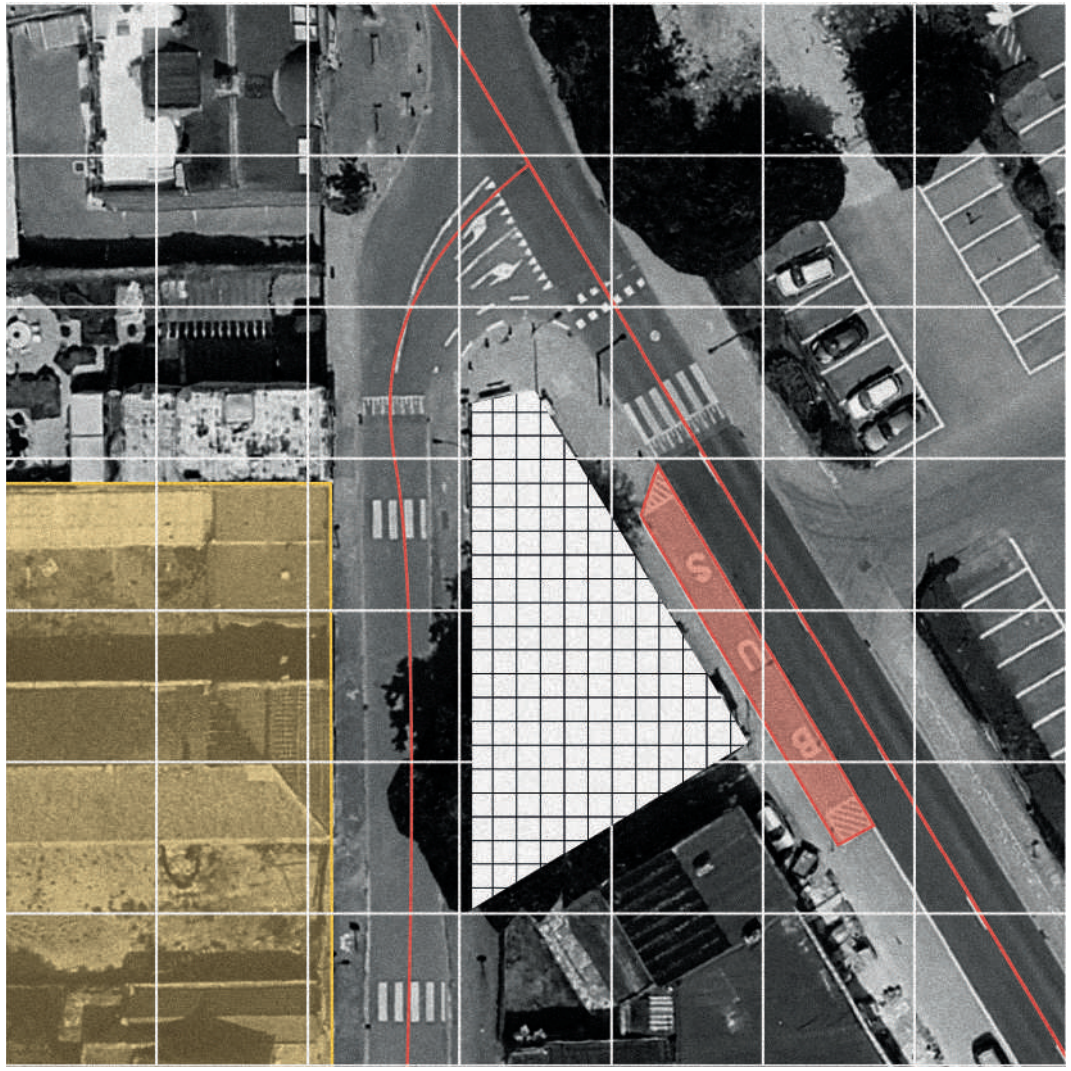


Inspired by the Tokyo Toilets, the design elevates an ordinary necessity into a recognisable piece of public architecture. Rather than repeatedly introducing temporary facilities, the toilet becomes a permanent presence that supports the changing rhythms of village life, from weekly markets to seasonal events and everyday use. By giving architectural value to such a basic function, it turns an overlooked necessity into a small civic landmark, contributing to both the functionality and identity of the village centre.

OBJECT 4

CONTEXT & CONCEPT

1:500



DESIGN AXONOMETRY

1:100



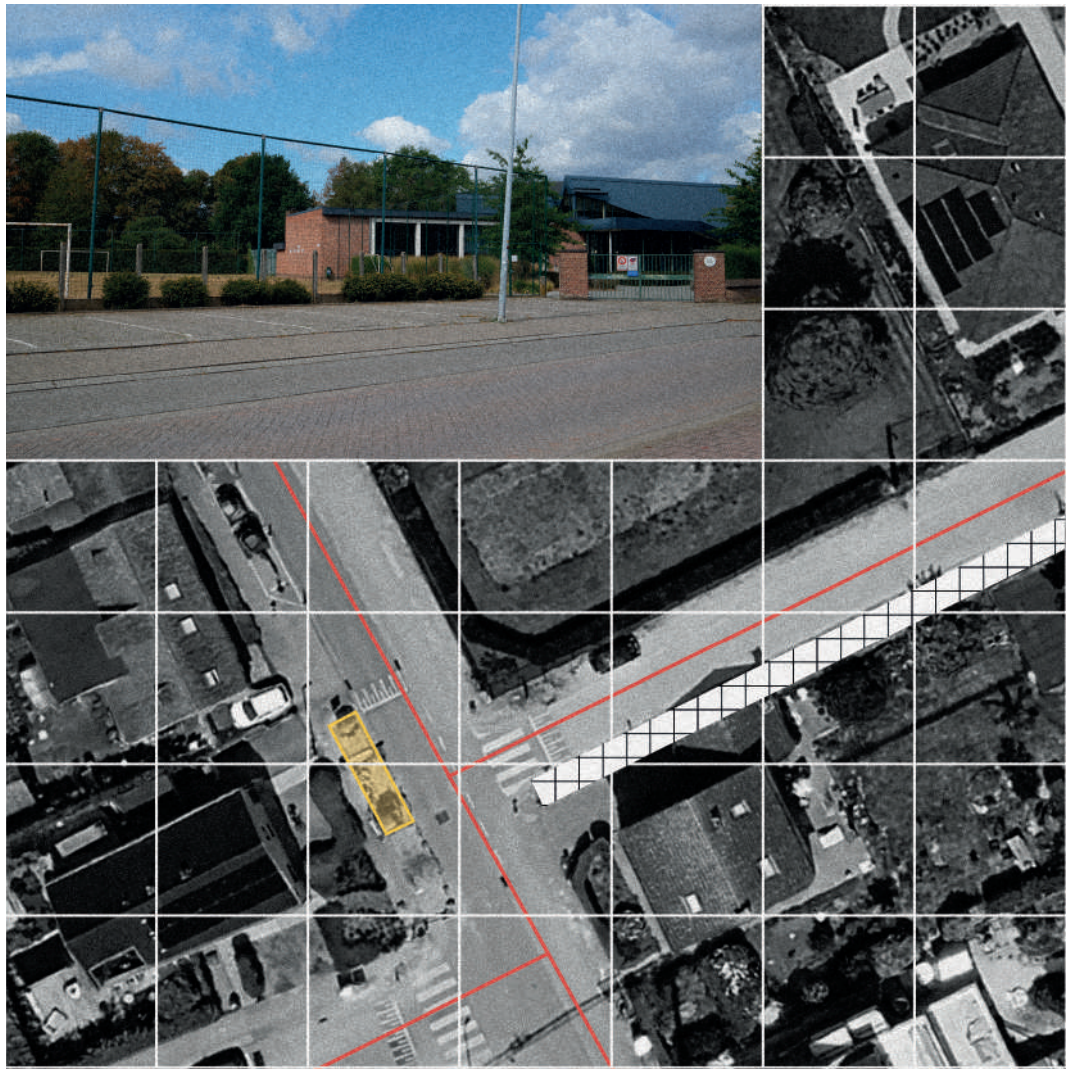
Once occupied by the local post office, this small green plot sits opposite the municipal centre, currently under construction and designed by a2o-architects and Studio Peter Jannes. While the plot remains unused, its edges are already informally occupied by schoolchildren waiting for the bus and residents gathering on warm evenings, revealing a collective use that the site itself does not yet accommodate.

Rather than introducing a new programme, the intervention gives space to activities already unfolding around the site. A family of circular elements offers different ways of waiting, meeting and playing, from swings for younger children to a generous bench that can accommodate an entire class and a small platform that becomes an informal stage. The intervention also connects its eastern and western edges, creating a safer and more inviting passage through this village node.

OBJECT 5

CONTEXT & CONCEPT

1:500



Located near a school, this residual strip already provides a place to wait away from the traffic of the street. A small roadside chapel adds another layer to the site. Once an important place of gathering within everyday village life, its social role has gradually faded, leaving behind the opportunity to reinterpret this function in a contemporary way.

DESIGN AXONOMETRY

1:100

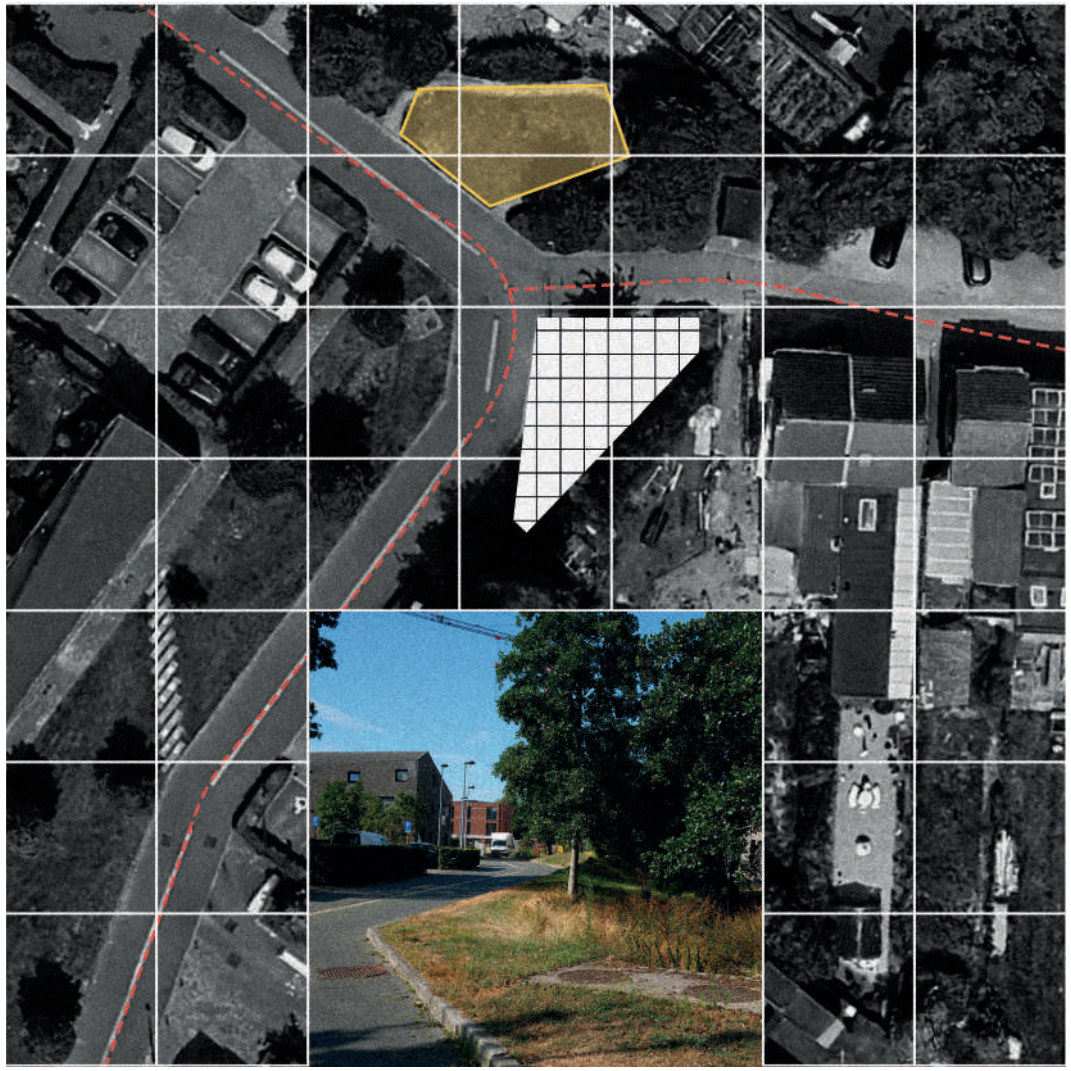


The intervention reinterprets the chapel's former social role through a family of small seating elements that can be scattered and connected throughout the site and the rest of the village. Each combines sitting with an additional everyday function, turning a bench into a place to read, share books, wait under shelter, or watch children play. Together, these modest objects create new reasons to pause and gather.

OBJECT 6

CONTEXT & CONCEPT

1:500



Although seemingly intended as recreational green space, the small scale of this grass verge prevents it from supporting any meaningful use on its own. Instead, it has gradually become an informal extension of the adjacent car park. Its position between a new apartment complex and another small green plot, however, creates the potential to rethink these fragmented spaces as a shared resource for residents.

DESIGN AXONOMETRY

1:100



The intervention brings the two residual green spaces together as a small productive landscape. One becomes a collective flower garden, while the other accommodates a shared object that collects and stores rainwater for neighbourhood use. Flowers can be gathered, plants grown and pots temporarily arranged around it, turning everyday acts of watering and gardening into moments of encounter. Inspired by the pottery landscapes found in Japanese streets, these small individual contributions collectively strengthen both social interaction and local ecology.











During the fieldwork, Teshima Art Island demonstrated how artworks scattered throughout the landscape can form a coherent layer despite appearing individually placed. Together, they create a sequence of destinations that encourages movement between different locations and subtly guides people through the landscape.

When introduced as temporary interventions, art installations can operate on a short timescale while strengthening a sense of community and giving renewed attention to overlooked places. Involving local artists further embeds these interventions within the village itself, providing a platform to exhibit their work while giving each installation a local identity.

GREEN STEPPING STONES





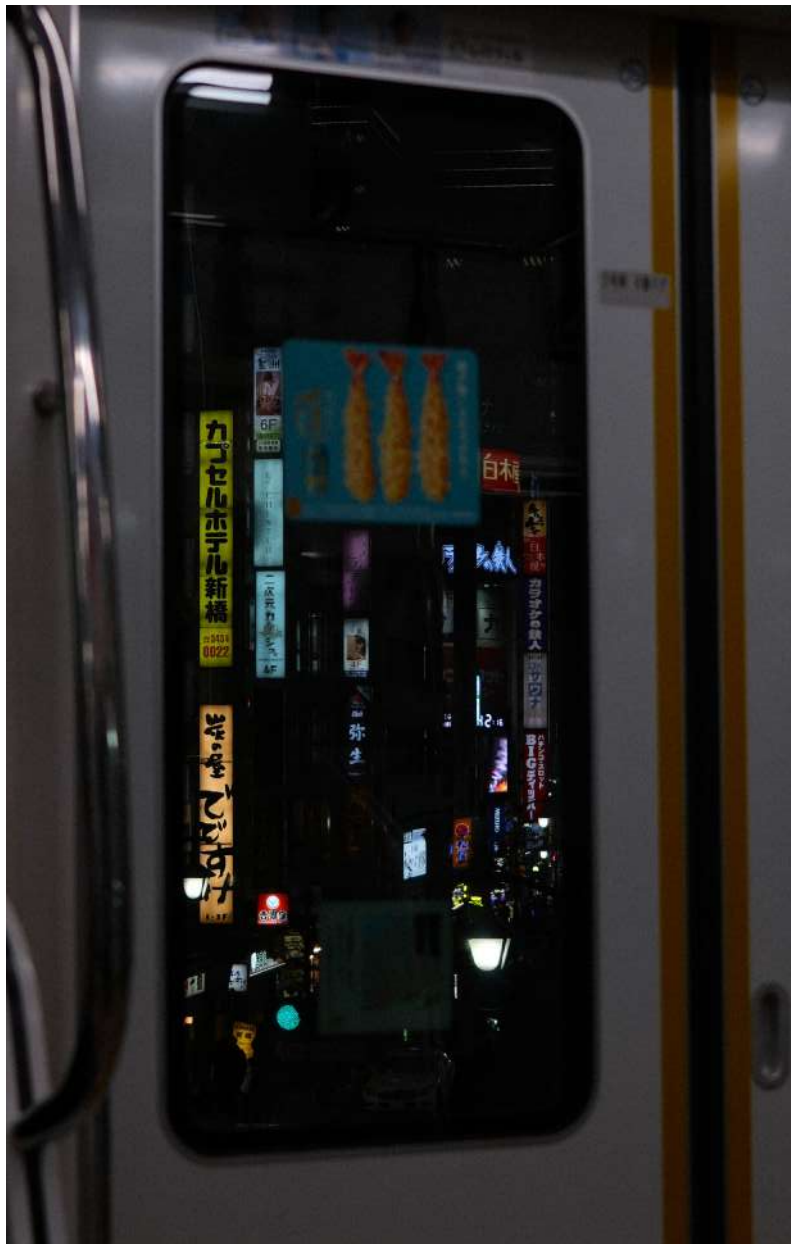




Based on fieldwork observations, small green elements such as trees, hedges, and even flowerpots can act as "green stepping stones" that allow nature to gradually penetrate the built fabric. Rather than relying on large-scale transformations, they enable an incremental approach to depaving, where small areas of hard surface are selectively replaced by vegetation.

These elements generally operate on a more permanent timescale, gradually strengthening and connecting the ecological layer of the village. Although this network may be less immediately perceptible than spatial or social connections, its cumulative impact is fundamental to the ecological quality and resilience of village life.

SIGNAGE



Signage can be understood as one of the purest forms of an Element. Its primary function is simple: to indicate a direction, identify a place or guide someone towards a destination. Yet through this very direct purpose, it becomes part of how people read and navigate their surroundings. When present in larger numbers, these individual elements can collectively shape an entire visual landscape, as can be observed throughout many Japanese streets and neighbourhoods.

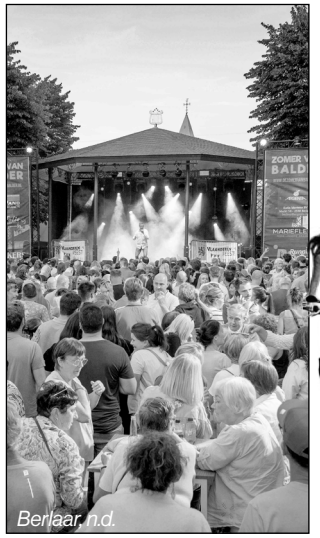




Beyond orientation, signage can also act as a carrier of information. It can reveal stories, explain local qualities or make ecological, cultural and historical layers of an area visible to those passing through. In this way, signage does not simply tell people where to go, but can also help them understand the place they are moving through.

ACCIDENTAL URBANISM

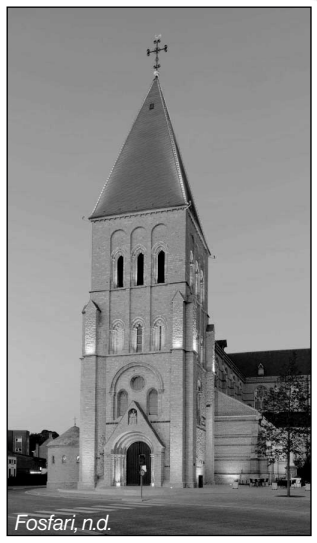
EXISTING LAYER


Berlaar, n.d.


DC Belgium, n.d.


Gemeentelijke Basisschool, n.d.

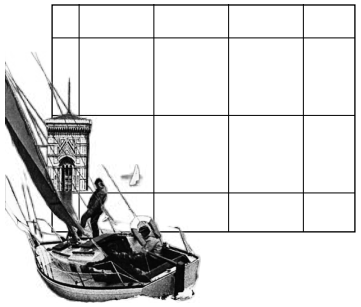



Fosfari, n.d.


Station Berlaar, n.d.


Berlaar, n.d.





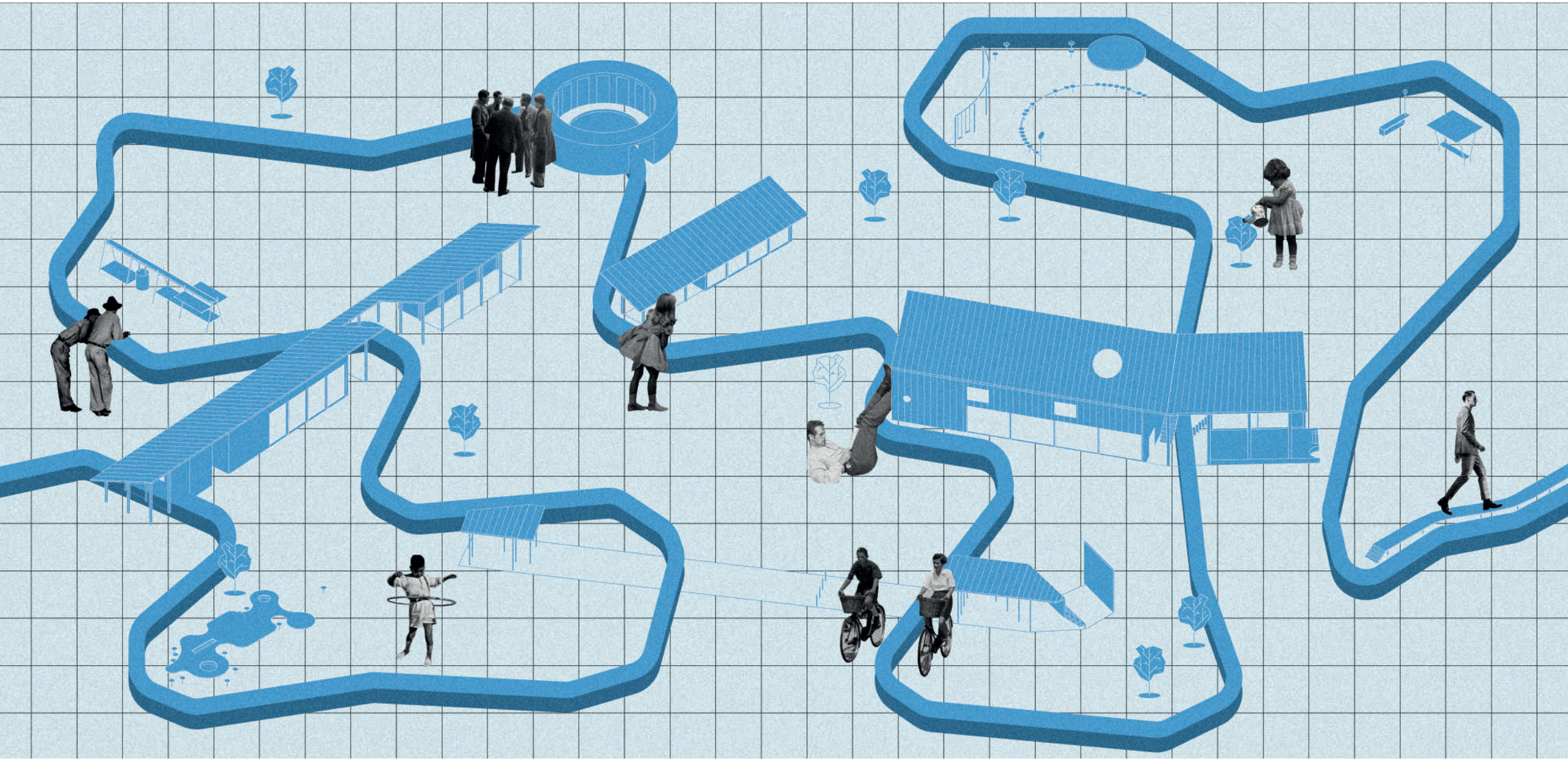






The previously discussed scar architecture shows how "Accidental Village Urbanism" can emerge from specific residual spaces within the existing fabric. Although designed in isolation, the intention is not for these interventions to operate completely autonomously, but rather to connect to existing structures and reinforce what is already present. The image above therefore offers a schematic overview of some of the structures that currently shape the village of Berlaar and already give it identity, meaning, and cohesion.

Operating across different scales, layers and themes, these structures collectively contribute to the village's identity. They range from the municipal centre by a2o-architects and the recently completed school by Bovenbouw, to the renovated church, the picturesque settlement and quiet landscape of Gestel, the green structures surrounding the village and the renewed monastery site. Together with many less prominent places, they form an existing network of spatial, social and ecological qualities upon which new interventions can build.



A new layer is superimposed onto the village through a series of micro-injections. A consistent materiality and architectural language, strongly influenced by observations made in Japan, makes these interventions immediately distinguishable within the streetscape. Together, they form a coherent additional layer through which the village can be used and experienced differently. This layer also generates an alternative network of movement.

Small shortcuts, passages, paths and framed views create a finer grain of circulation inspired by the Japanese "Roji". Their intimate scale brings movement and everyday life closer together, creating opportunities for spontaneous and informal encounters. Collective life is therefore no longer concentrated solely around traditional spaces such as the church square, but can emerge throughout the village as part of everyday routines.





The interaction between the existing and newly introduced layers creates a third condition that cannot, and does not need to, be fully designed. The role of the designer is not to prescribe its use, but to create conditions that invite inhabitants to interpret, appropriate and adapt space over time. In doing so, the interventions retain the openness of the residual spaces from which they originated.

This is where the accidental reappears. Just as the "Accidental City" reveals unexpected qualities within unintended spaces, "Accidental Village Urbanism" recognises the value of leaving parts of the village unresolved. By balancing intention with openness, space remains for spontaneity, appropriation and unexpected encounters, or what could be understood as social accidents.

REFLECTION

DESIGN FRAMEWORK & CASE

What can be learned when a design framework moves from theory into practice? Reflecting on both the framework and its application in Berlaar reveals not only what the methodology enabled, but also where its limitations lie and what emerged through the act of designing.

DESIGN FRAMEWORK

One of the main strengths revealed through the design process is the framework's sensitivity to scale. The principle of "Working Between Scales", introduced in the theoretical part of this thesis, proved equally relevant when translated into spatial interventions. Sites, Objects and Elements allowed the same underlying ambitions to operate at radically different scales and intensities, from transformations of the village fabric to small and precise interventions.

At the same time, the design process demonstrated that the framework cannot function as a recipe. The four strategies, together with their ambitions and design tools, had to be reconsidered within each specific context rather than simply applied. Their value therefore lies in providing an alternative lens through which residual spaces can be read and spatial possibilities revealed, while leaving room for interpretation through design.

This openness is both a strength and a limitation. It allows the framework to respond to the specificity of each place, but inevitably introduces a degree of subjectivity and context dependency. Rather than determining an outcome, the framework should therefore be understood as a tool for guiding and questioning design decisions.

DESIGN CASE

The design case translated, not transferred, phenomena and ways of engaging with the built environment observed in Japan into a Flemish context. While the comparability of both contexts in terms of scale was established earlier in this thesis (see first booklet), fundamental differences in ownership culture, traditions, planning regulations and property structures were deliberately abstracted. Within a research by design process, this abstraction created room to think beyond conventional constraints and explore spatial possibilities that might otherwise remain overlooked.

Applying the framework in Berlaar also revealed something that could not be fully anticipated beforehand. Individual interventions began to form a coherent new layer across the village, yet its potential does not lie in producing a controlled final image. Instead, the design case suggests that Accidental Village Urbanism gains value precisely by establishing spatial conditions while leaving room for appropriation, adaptation and unexpected relationships to emerge over time.

LESSONS BETWEEN JAPAN & BELGIUM

What happens when two seemingly different spatial cultures are placed in dialogue? Rather than transferring Japanese solutions directly to Belgium, the comparison offers a way of looking at familiar environments through unfamiliar eyes.

FROM JAPAN TO BELGIUM

The most important lesson from Japan lies perhaps not in a specific architectural principle, but in a different way of recognising spatial value. Fieldwork repeatedly revealed how seemingly modest spaces, objects and everyday appropriations contribute to the quality of the wider urban fabric. A narrow passage, a planted edge, a chair placed outside or the overlap of different functions can establish relationships that extend far beyond their physical scale.

This shifted the understanding of the Flemish village. Density became less about quantity and more about proximity, residual space less about what is missing and more about what it can enable, and boundaries less about separation and more about interaction.

FROM BELGIUM TO JAPAN

Looking back from Belgium towards Japan reveals a different set of qualities. The Japanese urban fabric can feel almost excessive in its intensity. Buildings, functions, infrastructure, signs and everyday activities continuously overlap, leaving seemingly little space unused. Experiencing this intensity also created a renewed appreciation for the space that remains available within the Flemish context.

The comparison therefore became a reminder that density and proximity are not necessarily always desirable. Spatial regulations that initially appear inefficient can also produce unexpected qualities. The front garden, for instance, was initially approached in this research as a form of residual space resulting from planning regulations. Yet its apparent inefficiency also creates openness, distance and greenery, qualities that gained renewed appreciation through the comparison with Japan.

From this perspective, Belgium offers a lesson of its own. Spatial quality can also emerge through openness and restraint. The dialogue between both contexts therefore suggests that value lies somewhere between these conditions, combining the fine-grained relationships observed in Japan with the spatial openness still present in the Flemish village.

SOURCES

MAPS & FIGURES

All photographs, diagrams, drawings, schemes, visualisations, and maps were produced by the author, unless stated otherwise. Maps were created using QGIS and OpenStreetMap data accessed through the QuickOSM plugin, and subsequently refined using Adobe software. Where figures are based on external datasets or other sources, this is explicitly indicated in the figure caption.

GENAI CODE OF CONDUCT

Generative AI was used as a supporting language tool. Original texts written by the author were translated from Dutch into English and, where necessary, refined for clarity and readability using ChatGPT and Claude.

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