



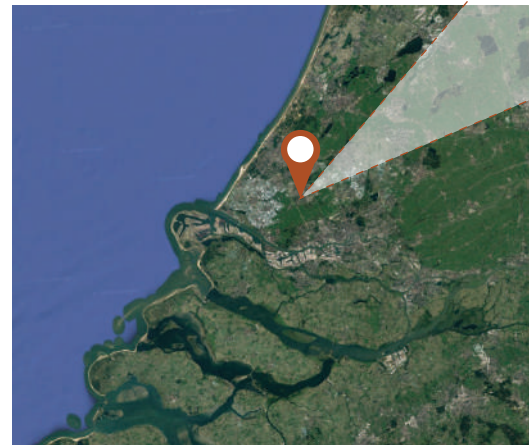
MVRDV

HAGEN ISLAND

MVRDV

HAGEN ISLAND

The Hagen Island in Ypenburg designed by MVRDV, as an architectural response to the VINEX development policy which took effect from the end of the 20th century, is the only affordable housing project within that site boundary. Its aim to reduce car mobility through regulating roads and parking in the site plan resonances with the goal of the national policy. The colorful image of the Netherlandish country is also embedded in the design to emphasize the communal identity. In a broader sense, the approach towards a resilient landscape and urban development implies the Netherlandish concept of landscape and histories with which it is bonded, together reflecting a strong national identity.





Strong Identity
Cultural Context



VINEX
Political Context



Ypenburg's Site History



Near Existing Urban Area

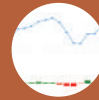


Only VINEX Affordable Housing Project in Ypenburg

Why this site?



Changing Demographics
Social Context



Drop in Demand for \$\$\$ Houses
Economic Context

COMPLETION



Car Usage
Post Occupancy



Public Private Threshold



Family Structure & Income



House Value



Maintenance

Urban Theory and Design
Moral Modernism



1988 1990 1997

PROJECT STARTED

Client's Agenda
Amvest Vastgoed



Public Private Partnership



Market Driven

Urbanist's Agenda
MVRDV



Main Urban Issue to Tackle



Housing Density & Spatial Quality



Car Usage



Negative & Monotony Image of Social Housing

Design



2001 2002 2011 2014 2015 2020

Influence & Dissemination

The Funari Project



CEBRA Children's Home



CULTURAL CONTEXT

The form and color qualities of the housing project meet the imaginative reiteration of the basic house, creating a strong identity for the landscape and for those who live there.



URBAN THEORY AND DESIGN



FROM AGRICULTURE

1900

Modernization
Rationalization
Intensification

Preservation
Maintenance and creation
of nature

Rural Re-allotment
Polders
Intensive Agriculture and Farming

New Forests
Ecological Main Structure
and Casco Landscape

'New Nature'

2000

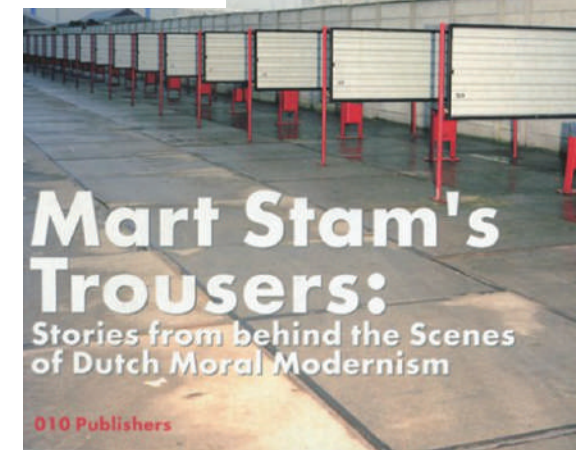
TO RECREATION

DUTCH MODERNISM

- Because of the absence of postmodernist relativism, the modernist movement in the Netherlands remains pure modernism, leaving the richest historical heritages and references.

MODERNIST LANDSCAPE <--> NEW NATURE

- Construction of landscape in the 20th century as the national plan.
- The landscape and the national identity of the Netherlands
- Polder landscape construction, as the intense and radical method for re-organizing landscape.



POLITICAL CONTEXT

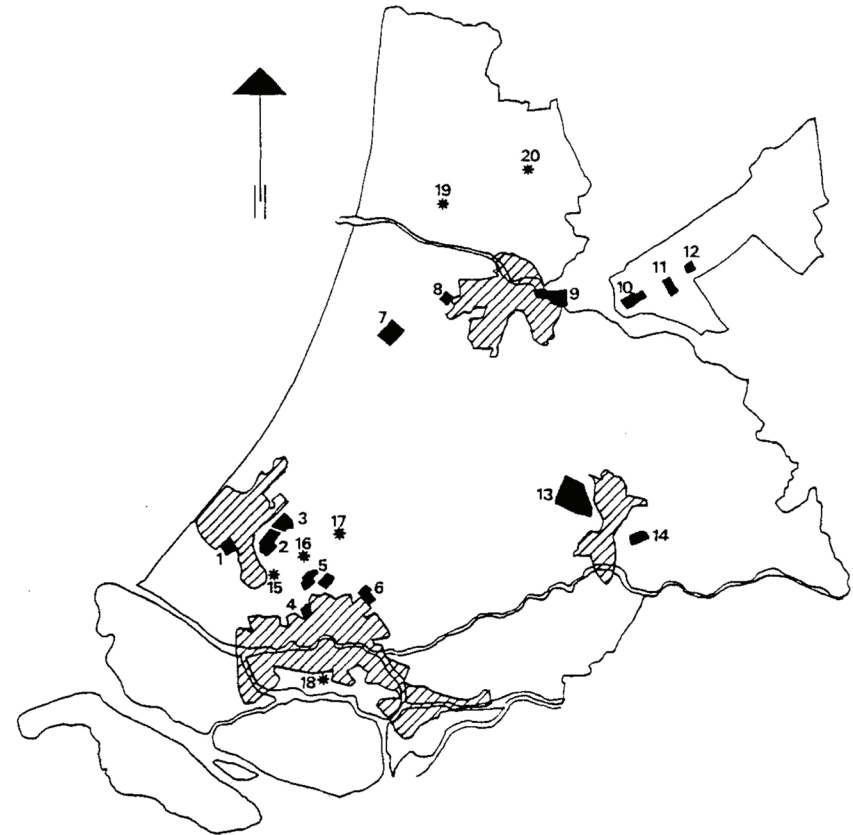
The Fourth National Policy Document on Spatial Planning (1988) concludes that there was still a substantial need for new houses - approximately 1 million.

VINEX

The Fourth National Policy Document on Spatial Planning Extra (1990)

New districts for development had been identified and had to be placed near existing town centers with the aims:

- Endorsement of existing malls (Increasing the potential number of customers)
- Limit the removals of unsatisfied inhabitants in medium-large cities
- Protection of open areas by concentrating the agglomerations around existing medium-large cities
- Limit traffic between residencies, work, and stores (short distances offer more possibilities for public transport, bicycles, and walking)



The Hague city region

1. Wateringen
2. Ypenburg
3. Leidschendam Zuidoost
15. Emerald
16. Pijnacker-Zuid
17. Zoetermeer-Oost

Rotterdam city region

4. Noordrand 1
5. Noordrand 2 en 3
6. Achtkamp
18. Carnisselanden

Amsterdam city region

7. Haarlemmermeer-West
8. Amsterdam-West
9. IJburg
10. Almere Poort
11. Almere Stad
12. Almere Buiten
19. Zaanstad Assendelft-Noord
20. Purmerend-West

Utrecht city region

13. Leidsche Rijn
14. Houten

WHY THIS SITE AS THE PLANNING TARGET?



1. FORMER SITE WELL-MATCHED THE LAYERS APPROACH

The Layers Approach assumes that the characteristics of the substratum establish the conditions for the infrastructure networks and that these networks then establish the conditions for the occupational patterns, including the locations for housing, business activities, and related services.

Hagen Island's site as a former airport has been well-planned according to this principle: the airport road system runs perpendicular to the watercourse and directs the infrastructural systems, while the human occupational patterns are also directed by the former two factors. This planning, although before 2001, well-matches with the new Layers Approach and provides a precondition for new development.



WHY THIS SITE AS THE PLANNING TARGET?

2. NEAR EXISTING URBAN AREAS

According to the VINEX requirement, the site has to shore up the urban economic base and to protect the open space between metropolitan areas against further incursions of urban land use. This leads to the "In-on-near" Construction that preferably takes place in areas that are directly adjacent to built-up areas followed by sites at a short distance from existing urban agglomerations.



WHY THIS SITE FOR OUR CASE STUDY?

THE ONLY VINEX AFFORDABLE HOUSING PROJECT IN YPENBURG

The Vinex neighborhoods had to reduce the so-called "cheap skew" in the housing market. This means that certain households live in a house that is "too cheap", as a result of which these houses are no longer available to households with a lower income. Efforts were made to solve the shortage of cheap housing by attracting wealthier households to the more expensive houses in the Vinex neighborhoods.

As a result, the national government has indicated in implementation contracts with regional authorities that a maximum of 30% social housing could be built in the Vinex districts.

With limited numbers of projects targeting lower-income households, how to reduce the building cost to balance affordable housing's market price becomes a challenge. This makes the Hagen Island that is an affordable housing project worth studying.



CLIENT: AMVEST VASTGOED (DEVELOPER)

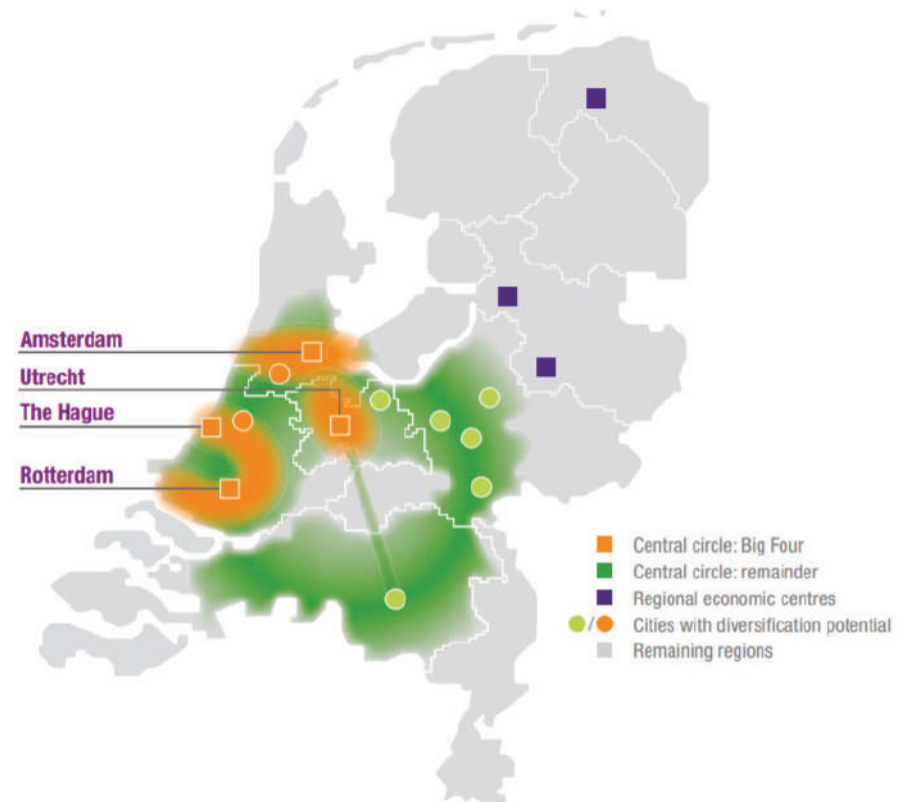
CLIENT'S AGENDA

PUBLIC PRIVATE PARTNERSHIP

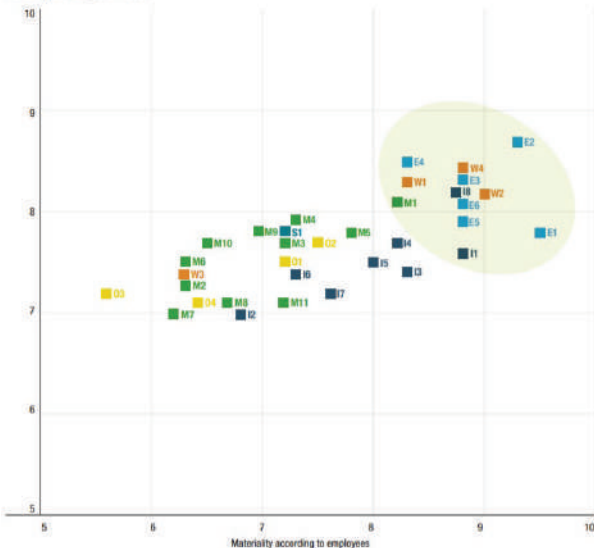
- PPP is common in VINEX development.
- The developers were granted more right to determine during design processes.

TO CREATE HOMES THAT ARE -

- Attractive
- Lasting Market Value
- In economically strong areas



Materiality according to stakeholders



ECONOMIC ASPECTS	HOME COMFORT	SOCIAL ASPECTS	INTERNAL OPERATIONS	ENVIRONMENTAL ASPECTS	LIVING ENVIRONMENT
E1 Generated economic value	W1 Health and safety for inhabitants	S1 Health and safety	I1 Training and education of staff	M1 Energy consumption and energy saving	O1 Engagement and dialogue with local stakeholders
E2 Integrity and anti-corruption	W2 Tenant satisfaction		I2 Diversity	M2 Energy consumption and energy saving of the Amvest office	O2 Liveability and living environment
E3 Prevention of vacancy and occupancy rate	W3 Flexibility during building and living		I3 Primary and secondary tenms of employment	M3 Materials and circularity	O3 Biodiversity and nature
E4 Compliance to legislation	W4 Fire safety		I4 Health of employees	M4 Carbon emissions and climate change	O4 Climate adaptation
E5 Supply of sufficient high quality and affordable private sector rental homes			I5 Membership of industry associations and knowledge sharing	M5 Generation of renewable energy	
E6 Shareholder rights			I6 Innovation and knowledge sharing	M6 Water	
			I7 Employee satisfaction	M7 Environmental certificates for residences	
			I8 Fair marketing and communication	M8 Supplier environmental assessment	
				M9 Sustainable renovations	
				M10 Waste	
				M11 Clean air	

“Developers and investors who have acquired land at designated VINEX locations are showing market-oriented behavior. In line with the desires motivating consumer behavior, they are mainly concerned with accessibility by car and availability of parking space, both in residential and employment areas.”
 (Kruythoff and Teule 1997, 113-133)

MVRDV - HAGEN ISLAND

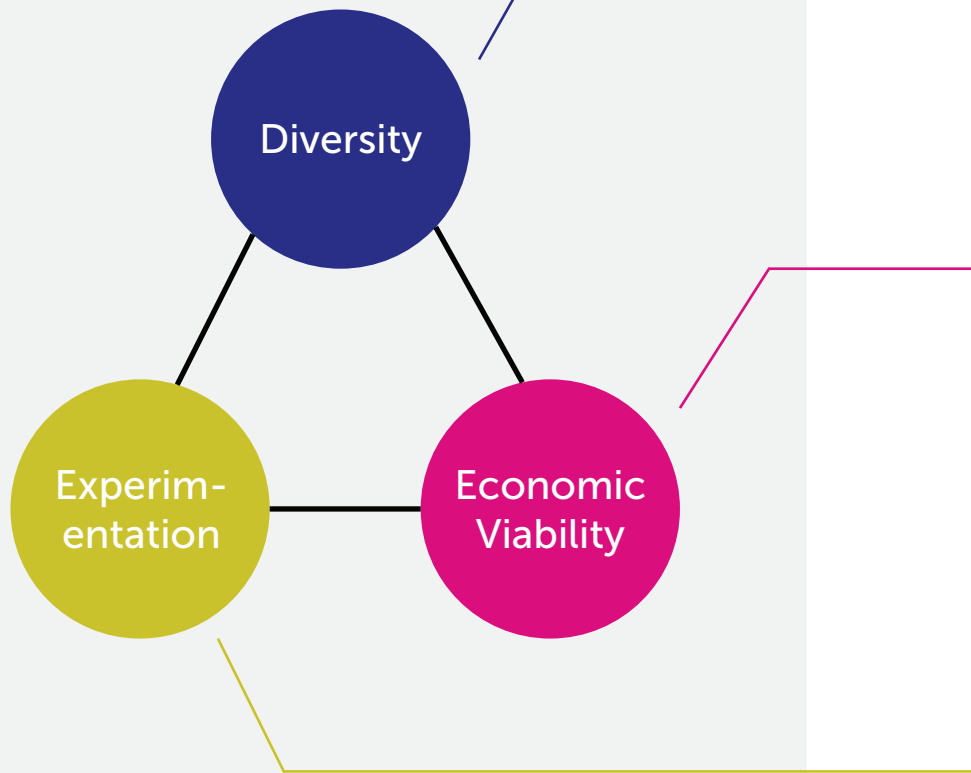
URBANIST: MVRDV

URBANIST'S AGENDA

"In projects such as ... the Waterwijk neighbourhood of Ypenburg, DIVERSITY was paramount; our masterplans introduced rules that ensured the liveability and ECONOMIC VIABILITY of these developments, while encouraging EXPERIMENTATION by the architects involved in realizing buildings on the sites. The result is neighbourhoods that are cohesive, yet lively."
MVRDV



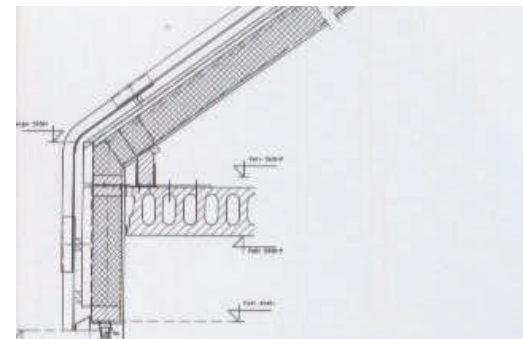
URBANIST'S AGENDA



DIVERSITY WITHIN NEIGHBORHOOD WITH ECONOMIC STRATEGY



ECONOMIC VIABILITY AND EXPERIMENTATION IN CONSTRUCTION



DIVERSITY BETWEEN NEIGHBORHOODS ENCOURAGES EXPERIMENTATION

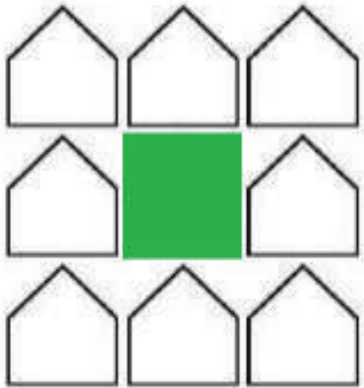
SOCIAL & ECONOMIC CONTEXT

The demographic and household composition changes took place during the beginning of the 21st century in the Netherlands. As a response, the rethinking of unit designs was called to accommodate the market.

The economic downturn results in a drop in demand for expensive houses. Aiming to provide something new and affordable with a low budget under the situation where "highly refined building methods and house process are set by the state."



MAIN URBAN ISSUE TO TACKLE



ACHIEVE HOUSING DENSITY AND SPATIAL QUALITY

To tackle the problems, new residential areas had to be developed compactly. The policy was aimed explicitly at realizing a more sustainable spatial quality.



CAR USAGE

To relieve congestion on major roads, reduce energy consumption, and create a sustainable future, car usage management is an ideal of suburban housing development and also one of the VINEX policy aims.



NEGATIVE AND MONOTONY IMAGE OF SOCIAL HOUSING

Typically, social housing projects in the Netherlands have a particular development plan of row houses with repetitive units (Figueiredo 2011)

MVRDV - HAGEN ISLAND

1997 - 2001

PROJECT DESIGN

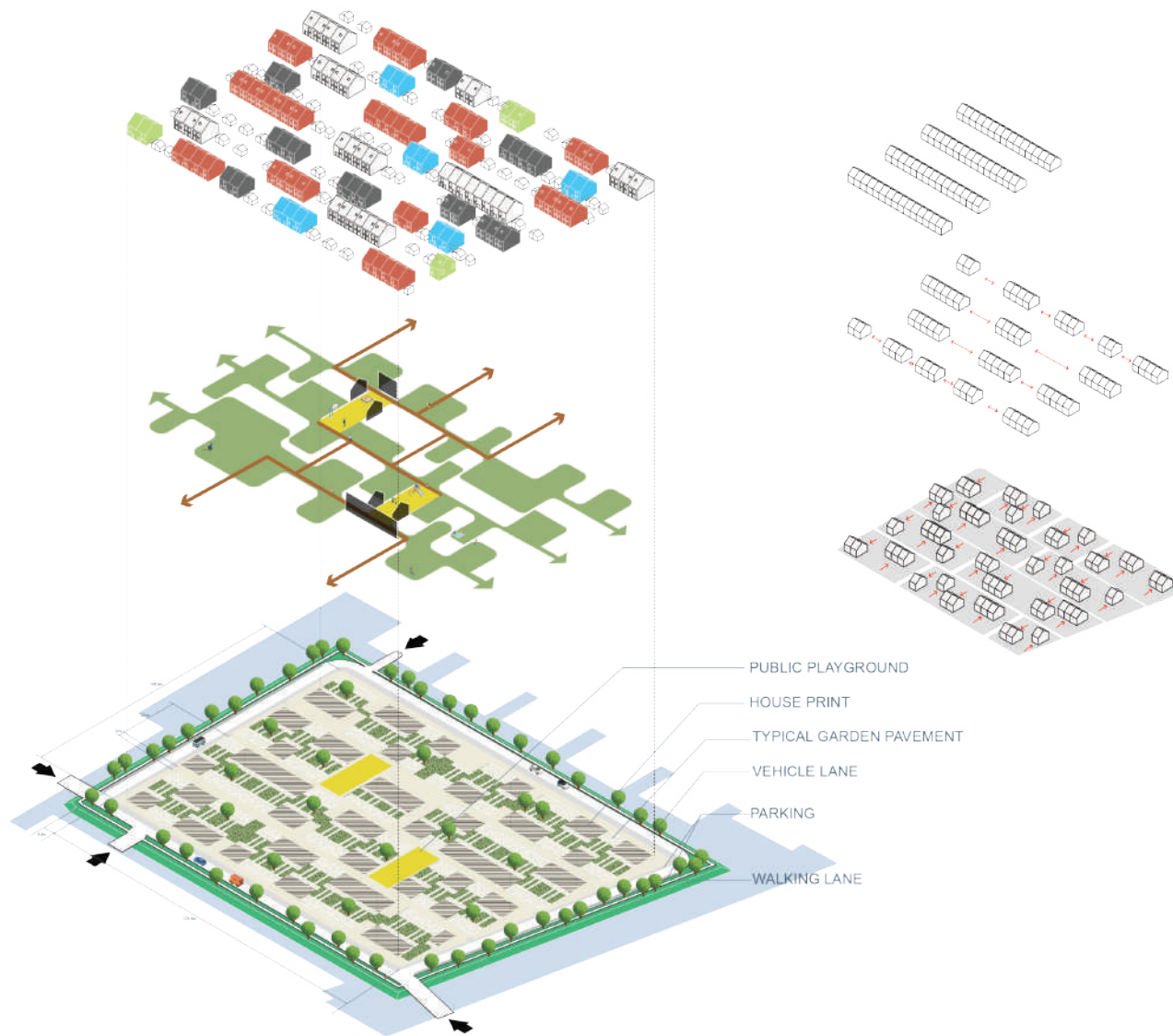




The Hagen Island Housing

MVRDV | Ypenburg, The Hague | 2001

This urban scale drawing aims to explore the vehicle and pedestrian accessibility to the site. The project is designed with a clear goal of reducing car mobility by placing the ring road at the peripheral of the site, compared with other islands with the typical drive-in roads. There are a bus stop and a tram stop near the site and various services and businesses, providing a walkable experience for daily activities. However, the island form has inconvenience regarding getting to the nearby places - in this case there are only four.



The Hagen Island Housing

MVRDV | Ypenburg, The Hague | 2001

The drawing shows the characters and patterns of the site through a porous design approach. The zig-zag pattern of private gardens is the result of the manipulation of the individual units along three major axes, where it is also perpendicularly by paths and two public playgrounds. The layers are ought to show the interconnectedness and visual complexity that is achieved by simple unit aggregation and arrangements.

MVRDV - HAGEN ISLAND



2001

**PROJECT
COMPLETED**

POST OCCUPANCY

1. PUBLIC PRIVATE THRESHOLD

- Each house has a translucent corrugated fiberglass garden/ storage shed ... "You can see exactly how messy or organized somebody is, which increases the sense of community," (Betsky, 2002)
- The ever present hedge growth has created a more defined barrier between public and private space but now the intimate threshold spaces seem far too intimate in this context. (Peter, 2011)

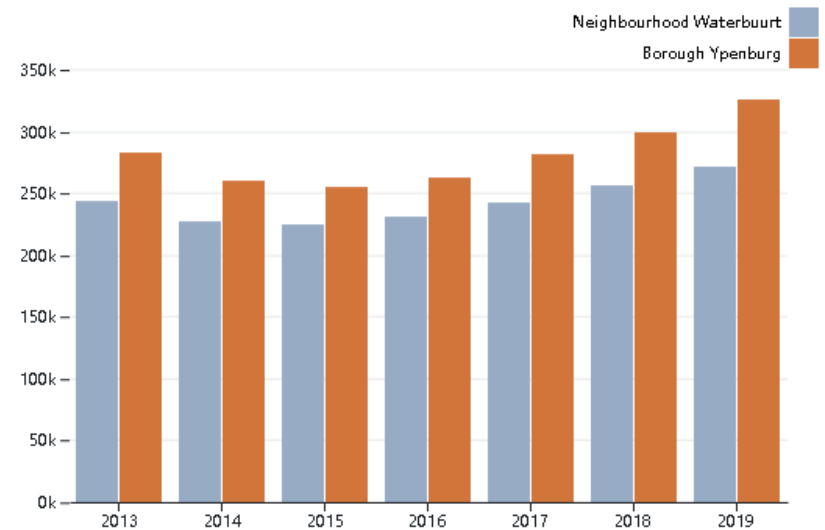


2. HOUSE VALUE

- Houses have resold at a 50 percent premium since they were first occupied in December 2001.(Betsky, 2002)
- Built for about \$70,000 each, they were originally offered at around \$180,000.
- Average value of dwellings does not change radically since 2013. The Listing price is around €300k now.

Average value of dwellings [↗](#)

The average of the house values in neighbourhood Waterbuurt in The Hague in the Netherlands



Average dwelling value for the years 2013 thru 2019.

The house value is based on the average WOZ value for all dwellings in neighbourhood Waterbuurt in The Hague in the Netherlands. WOZ is the abbreviation for the Act of Immovable Property valuation. This value is determined yearly by the local government and used for several legal and taxation purposes.

POST OCCUPANCY

3. CAR USAGE

- Ypenburg is only accessible by inconvenient local rail and the tram. Shortchanging transit leads to greater car usage. (Lux, 2007)



4. MAINTENANCE

- Some units are maintained well and some are not, which may have something to do with the residents investment. (Photos from 2020 Listing)



Public Space

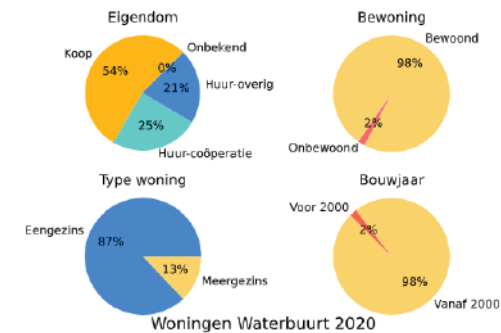
Private Yard

Interior

5. FAMILY STRUCTURE AND INCOME

- Half of the houses are subsidized rentals, and the other half were sold at some of the lowest prices in the area.
- The average gross annual income in Waterbuurt is one of the lowest among neighborhood in Ypenburg. (Data of 2020)

Characteristics of the 1,683 homes in Waterbuurt

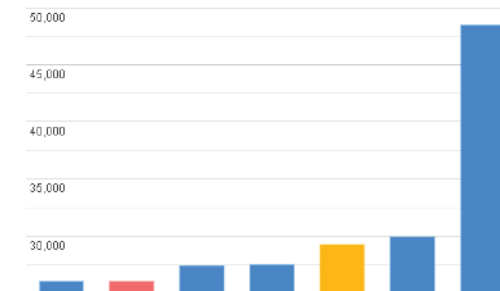


Percentages of home ownership, occupation, type and construction period.

Average income per inhabitant (€ 26,000)



Average gross annual income in Waterbuurt.



Average income per year for each neighborhood in the Wijk Ypenburg district (Waterbuurt is red, other neighborhoods are blue and Wijk Ypenburg district is yellow.)

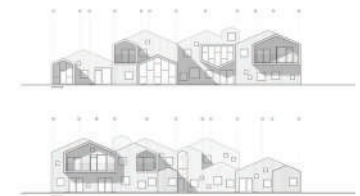
INFLUENCE & DISSEMINATION

The Hagen Island project creates a new way of re-imagining the “village life” under the increasing urban density. There are two major aspects which largely influence later projects: the first one is about its spatial arrangement for a more communal-driven lifestyle, while the second one lays more emphasis on the building forms for a homely environment.



The Funari project, a MVRDV project proposed in 2016, follows the Hagen Island attempt with its fully pedestrianized “village”. Similar to the Hagen Island, it keeps the presence of cars at the peripheral with a subterranean parking facility and adjacent tram services. Like the Hagen Island, row houses are broken down into small sections and rearranged, creating more communal spaces in-between and allows diverse residential programming for young couples, families, elders, etc. Despite the fact that this program is designed for a German neighborhood, MVRDV continues with this heterogeneity in the hope that this approach experimented in the Hagen Island project will upend traditional perceptions of village life as territorial and segregated, but rather, lively and diverse.

Hagen Island influences CEBRA’s Childrens Home more on the individual building level. With the simplicity of forms that eliminate typical architectural element like the rood trims, and combined with the traditional pitched roof in Europe, an strong and recognisable exterior appearance is established and well-integrated into the surrounding residential area, creating a sense of familiarity and homely like the Hagen Island.



GENERAL ASSESSMENT

The realization of the project is the result of the interactions among structural forces, including the national-wide policy, developers and urbanists. And it has achieved relative success based on the following criteria:

ACHIEVEMENT

SUSTAINABILITY

The specific site choices took advantage of the water feature and the archipelago form and thus created an ecological identity of community. The parking and charging station layout limited car usage within the island and encourage electric car. The project achieved the goal of sustainable spatial quality.

ECONOMIC VIABILITY

The experiment on material and detail design successfully reduce the construction cost while maintaining high aesthetic quality and spatial diversity.

GENTRIFICATION

Based on the neighborhood income data over recent years, it shows no substantial gentrification issues during the post-occupancy period.

CRITICISM

Due to the conflicts between the policy and the market, and the failure of introducing more urban services, transit infrastructure etc., the neighborhood is still characterized by mono-functionality and uniformity. Also because of its location, suburban problems such as car usage are still prominent.

REFERENCES

- Adeyeye, Kemi, and Stephen Emmitt. "Multi-Scale, Integrated Strategies for Urban Flood Resilience." *International Journal of Disaster Resilience in the Built Environment* 43, no.1 (2017):494-520.
- Amvest Vastgoed. "Amvest Residential Core Fund Annual Report 2019." Accessed Oct 12, 2020. <https://www.amvest.nl/wp-content/uploads/2020/05/Amvest-Residential-Core-Fund-Annual-Report-2019.pdf>.
- Betsky, Aaron. "Double Dutch: MVRDV Subverts Conventional Housing Typologies with Two Projects in the Netherlands." *Architecture* (November, 2002): 68–75.
- Diversare. CEBRA Children's Home. Accessed Oct 12, 2020. <https://divisare.com/projects/324910-cebra-mikkel-frost-cebra-childrens-home>.
- Doevendans, Kees, Han Lörzing, and Anne Schram. "From Modernist Landscapes to New Nature: Planning of Rural Utopias in the Netherlands." *Landscape Research* 32, no. 3 (June 1, 2007): 333–54. doi:10.1080/01426390701318270.
- Figueiredo, Sérgio Miguel. "Imaging Buildings and Building Images: From De Kiefhoek to Hageneiland and Beyond." *Architectural Research Quarterly* 15, no. 1 (May 13, 2011): 35–46. doi:10.1017/S1359135511000340.
- Hadder, Gerard and Michael Speaks. *Mart Stam's Trousers*. Rotterdam: 010 Publisher, 1999.
- Kruythoff, Helen and René Teule. "Vinex Policy Moves into the Implementation Phase." *Netherlands Journal of Housing and the Built Environment* 12, no. 1 (1997): 113-133. doi:10.1007/BF02502626.
- MVRDV, Hagen Island. Accessed Oct 12, 2020. <https://www.mvrdv.nl/projects/155/hagen-island>.
- MVRDV, Traumhaus Funari. Accessed Oct 12, 2020. <https://www.mvrdv.nl/projects/239/traumhaus-funari>.
- "Lots of Information about Neighbourhood Waterbuurt." Accessed Oct 12, 2020. <https://allcharts.info/the-netherlands/neighbourhood-waterbuurt-the-hague/>.
- Lux, Annie Forbes. "Towards A Sustainable Suburb Lessons From the Netherlands." 2007.
- Peter. "Ypenburg, Island and Street." The Hackney Coot Foot. 2011. <https://thehackneycootfoot.wordpress.com/2011/06/23/ypenburg-island-and-street/>.
- Priemus, Hugo. "The Network Approach: Dutch Spatial Planning between Substratum and Infrastructure Networks." *European Planning Studies* 15, no.5 (June 2007): 667-684.
- Snellen, Danielle, and Hans Hilbers. "Mobility and Congestion Impacts of Dutch VINEX Policy." *Tijdschrift Voor Economische en Sociale Geografie* 98 , no.3 (2007): 398 - 406. doi: <https://doi-org.myaccess.library.utoronto.ca/10.1111/j.1467-9663.2007.00410.x>.
- Van der Hof, John. "Public Private Partnership in the Dutch Polders." (2006).
- Wikipedia. Vinex-Location. Accessed Oct 12, 2020. <https://en.wikipedia.org/wiki/Vinex-location>.
- [Image]
<https://www.metmuseum.org/about-the-met/curatorial-departments/the-american-wing/period-rooms/dutch-room>
- [Image]
https://www.wikiwand.com/en/Dutch_people
- [Image]
https://www.researchgate.net/profile/Arnold_Bregt/publication/281063972/figure/fig2/AS:287002604916739@1445438162043/Case-study-area-Haaglanden-region-The-Haaglanden-region-is-located-in-the-south-western.png

MVRDV - HAGEN ISLAND

REFERENCES

[Image]

<https://www.mil-airfields.de/nl-nederland/ypenburg-vliegbasis/1977-0110-ypenburg-vliegveld.jpg>

[Image]

<https://www.funda.nl>