

AT HOME IN THE HAGUE

**Everyday Life in Den
Haag Zuidwest
and Ypenburg**

THUIS IN DEN HAAG

**Het dagelijkse leven in
Den Haag Zuidwest
en Ypenburg**

**Volume 2:
Moerwijk
Zuid & West**

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Research Reports

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MWZ1

Moerwijk Zuid Case Study Area 1

OVERLAPS

Overlappingsen

ARIS ARAGNO, SEPEHR ASADI, LAURENS COSTER, ROOS SCHOLTEN

Housing and Health in the Hague

The 2022/23 edition of the MSc2 elective course "Architectural Ethnography" explores the interface between the disciplines of architecture, anthropology, microbiology and public health, to investigate how spatial configurations and social practices influence and are influenced by the interactions between humans, non-humans and the diversity of environmental microbiota. Working in collaboration with students, teachers and researchers of Leiden University Medical Centre (LUMC) and Hogeschool Leiden, this report examines a case study areas located in MWS1, one of the neighbourhoods of Moerwijk, in the Dutch municipality of The Hague. Using a pioneering combination of environmental microbiome research with ethnographic research and spatial analysis this research aims at answering the following research question:

How can urban and housing design influences interactions between humans, non-humans and the diversity of environmental microbiota and promotes lung-friendly behaviour?

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Introduction

In this research we aimed at gaining an understanding on how architecture may influence our behaviour, and to what extent it can contribute to the well being of its users by answering the following research question:

How can urban and housing design influences interactions between humans, non-humans and the diversity of environmental microbiota, and promotes lung-friendly behaviour?





The study area is located on the edge of the Moervijk district, described to the east by the busy S106 and to the south by Park Overvoorde. It consists mainly of two- and three-story row houses, as well as two apartment buildings

ARCHITECTURAL ETHNOGRAPHY

In a multidisciplinary approach we tried to study architecture through the lenses of other disciplines; ethnography, anthropology and microbiology. The goal is to read the spatial arrangement of a building on a small scale and as part of a neighbourhood on a broader scale; in order to study how people interact with architecture and how architecture enhances the quality of health or alternatively deteriorates it. Thus, with help of participants we engaged in a diverse set of practices such as discussions, mapping, video diaries, and air sampling, in order to gain a general understanding of the habits of the users and their actions and surroundings that consciously, or unconsciously affect their well-being.

Timeline Activities

February 21:

Location visit, explaining the project to the residents and getting contact with participants

February 25:

On site observations: How is the feeling of wealth shaped?

Cars - Quietness - Clothes - Ethnicity

What is it displayed on the windows?

Privacy - Intimacy - Flowers - Toys - Books

How does the quality of life relate to the quality of construction?

March 6:

Discussions with passers-by at the playground

Leaflets distribution

March 9:

On site meeting with residents

April 4:

Meeting and activities with apartment blocks' community



ARCHITECTURAL ETHNOGRAPHY

By studying and analysing collected data we tried to find a relation between architectural arrangements and health in the built environment.

Finally, we hope that these studies may create a dialectic and discussion with present practices leading to a synthesis that enhances the design methodologies in order to make a healthier environment.

Observing the street, the cars parked in front of the houses, as much as the clothes worn by passers-by can in this context reveal significant insights, immediately bringing to light the wealth, or at least perceived wealth, of the neighbourhood, particularly when compared to the rest of the Moerwijk area.

All it takes is a sunny day for the neighborhood, its streets, and its atmosphere to change. So the sidewalk, while on the street the cars proceed slowly, becomes a playground



Our study therefore, to investigate the relationship between spatial characteristics and health, developed from the careful observation of the site, which we documented through notes, texts, as drawings, diagrams and photographs. What in particular we tried to capture was the atmosphere of the place, the characteristics of public spaces, the habits of the residents, and their emotional connection with the space that emerges as the stage of their lives.

To this end, the support of our research by a photographic documentation was

particularly fruitful.

Indeed, the apparatus of images we have developed, attempts to bring out features of the neighbourhood that would otherwise be imperceptible, or subtly present, allowing us to advance considerations about the material memory of the place and buildings, as well as the influence of green spaces, public and private - whether these be the park or a single tree. The images allow us to observe from a different perspective how space is perceived and used, composing an overlay of features that added up to each other, creating the atmosphere of the neighbourhood made up of bricks, benches, windows, streetlights, shades of red, orange and green; finally bringing us back to the initial question: how does this affect the well-being of residents?

The neighborhood from this perspective can be read through details such as the liveliness of the street, the noises or absence of them, the tendency to keep the curtains closed - highlighting the specific inclinations of families, or individuals, with respect to their relationship with the outdoors, the sidewalk or the playground.

Trying to understand the neighborhood, therefore, means dwelling on the inhabitants and their relationship to space, focusing on factors such as variety, or lack thereof, from ethnic, age and gender perspectives, as much as on the perceived quality of life.



What can
the windows
tell about the
intimate life of the
neighborhood?









Socio-economic Characterization

Socioeconomic as well as demographic characteristics share many aspects, and with ease they tend to overlap.

If our preliminary observations of the neighborhood in fact had turned out to be particularly influenced by perceived economic well-being, investigating this aspect more precisely allows us to understand the precise reasons for it.

Walking these streets in fact, once we recognized such a feeling, our question was to try to determine what this might

be determined by; in other words, why do we notice that we are in a wealthy neighbourhoods?

The answer to this question is certainly multifaceted, consisting of aspects such as parked cars, sense of safety, smells, order and cleanliness, and the state of public facilities such as children's games, benches and streetlights. But also aspects such as the amount and variety of greenery and social welfare facilities such as schools, kindergartens, and hospitals.

One might also wonder what kind of stores are located nearby, or lack of them - the bistro and sport facilities in the adjacent park already express the economic state of the area.

Walking these streets in fact, once we recognized such a feeling of wealth, our question was:

Why do we notice that we are in a wealthy neighborhoods? Which factors contribute to it?

Within this reflection we considered:

- Income
- Education
- Social status
- Age
- Marital status
- Family composition

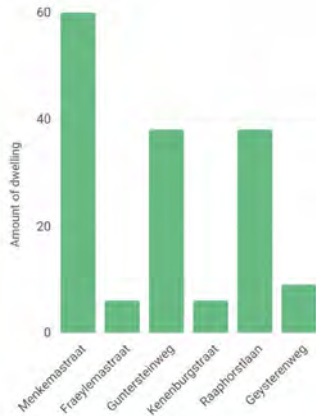
The informations found about these aspects are overlapping with those from Moerwijk South 2. However, they do show important insights about the neighbourhood.

In the first part of the socio economic research we strived to understand everything about the dwellings from the price range to the income of the residents. The amount of housing in this neighbourhood quite differs on a street level.

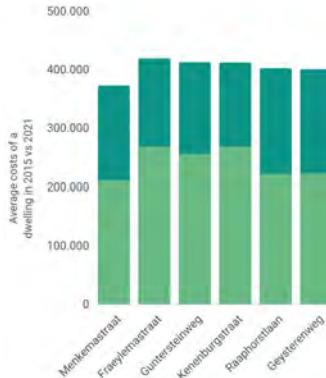
From row houses to standalone houses to tower apartments. The diagram on in next pace shows the amount of dwellings per street, noticeable the Menkemastraat containing the most allocations of the neighbourhood.

CASE STUDY AREA: MWS1

Left: Diagram of the amount of dwellings of the neighbourhood. (allecijfers.nl)



Right: Diagram of value of the house (WOZ-waarde) shown in 2015 (green) and 2021 (dark green) (allecijfers.nl)



In the second diagram (on the right) we compared the house price (WOZ-waarde) used by governments from 2015 and 2021 using the source woz-waarde.nl. The average value of the house in 2015 was € 229.267,- . The average value of the house at the end of 2021, at the height of the housing crisis was €394.458,-.

We additionally found the value of those houses that have been sold via the private market website Funda.nl. The average house price, among the 10 on the website, for this neighbourhood is: € 493.400,-.

The average house price is

€ 493.400,-

Due to a lack of housing we find ourselves in the midst of a housing crisis, with houses costing more relative to households' gross income, which is associated with the amount of mortgage one can request.

A simple calculation is 4,5 times the amount of gross income. For instance, if you earn 40,000 euros gross per year, then you can borrow a maximum of about $4.5 \times 40,000 = 180,000$ euros. Using this formula we can now calculate what the average income would be based on these houses.

In 2015, the average household gross income needed for the average houseprice (woz-waarde) of this neighbourhood indexed at december 2021 (CBS) would have been:

$$€ 287.508,- / 4,5 = € 63.890,64$$

In 2021, the average household gross income needed for the average houseprice (woz-waarde) of this neighbourhood indexed at december 2021 (CBS) would have been:

$$€ 456.969,- / 4,5 = € 101.548,57$$

In 6 years the average house price increased by 58,9%.

In 2022, the average household gross income needed for the average houseprice (funda) of this neighbourhood would have been:

$$€ 493.400,- / 4,5 = € 109.644,44$$

Based on the required gross income, a household needs to have an average gross income of € 105.596,51. This household would then be categorized as a high-income household.

The family composition is based on the size of the house and the number of bedrooms listed on Funda. The average amount of bedrooms in this neighbourhood is 4 bedrooms, meaning that a family with around 3 children could live here.

The conditions for being categorized as low-, middle, or high-income in 2022 are listed here:

Low-income

One persons household: < 41.000 euros

Multi persons household: < 45.000 euros

Middle-income

One persons household: 41.000 - 56.500 euros

Multi persons household: 45.000 - 75.000 euros

High-income

One persons household: > 56.500 euros

Multi persons household: > 75.000 euros

In the second part of this socio economic research we focused on the inhabitants, specifically their age, education level and marital status.

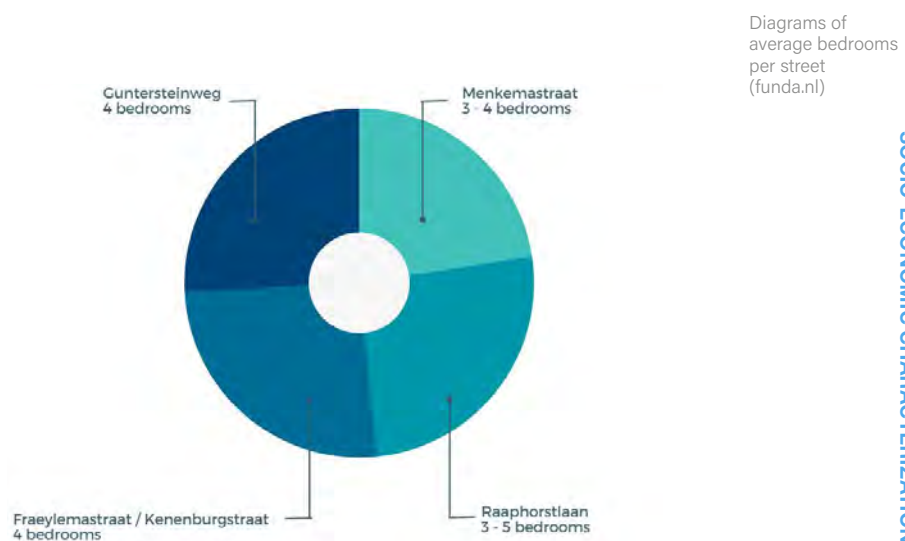
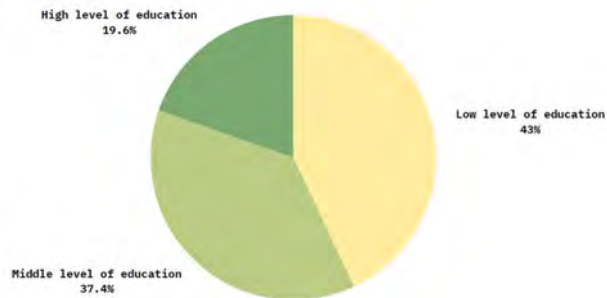


Diagram of level of education in this neighbourhood (allecijfers.nl)



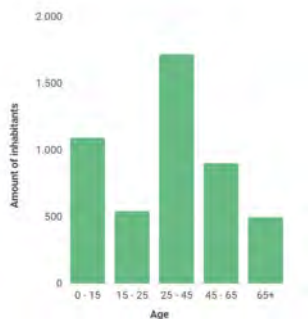
The diagram above shows the level of education of this neighbourhood. The majority of this neighbourhood has either done a low level or a middle level education, while a small group of the people has done a high level form education.

In the next diagram (next page) is shown how the majority of the people of this neighbourhood is not married - considering that the majority of the residents is younger than 25 years.

A correlation could be found between the amount of married people and the gross income needed to be able to afford a house in this neighbourhood in 2022.

These data we have collected allowed us to shed more light on what was initially defined by us solely as a feeling of economic wealth. Compared to the surrounding households that make up the Moerwijk neighborhood, in fact, simply walking through these streets provides a different feeling.

Diagram of amount of people per age (allecijfers.nl)



The diagram on the left shows us the age demographic of the area. We see that the amount of people between the age of 25-45 is the highest.

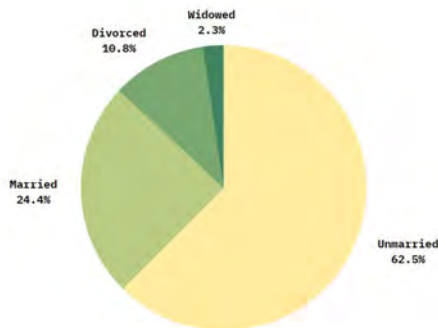


Diagram of the marital status of this neighbourhood (allecijfers.nl)

In addition, one of the most relevant factors to consider, is the gentrification process undergone by this area. The current complex, defined by buildings for sale on the private market, replaces the previous social buildings of the 1950s.

Initial prospects for the possible construction of additional private residential buildings, in addition to a share of social housing, have been interrupted by the growing economic crisis that has radically changed the economy and the housing market since 2008 - this recession has in fact interrupted the project that would have seen the transformation of a larger part of the neighbourhood, leading this area to take on the appearance of an isolated reality compared to the conditions of the rest of Moerwijk.

One factor we therefore attempted to investigate, through discussions with residents, was how they themselves perceive this sharp difference from the rest of the neighbourhood, and how they interpret the gentrification process that has seen this private development take center stage.

In fact, opinions are varied on this subject, although generally a sense of appreciation, a positive outlook, shines through with respect to the transformation undergone by the neighbourhood, as the improvement has made it more liveably, safer, as well



as making significant improvements in the quality of the built environment-and thus of healthfulness.

Thus, this process does not seem to be problematized by residents, who highlight only its positive aspects, and indeed show themselves at times dissatisfied that the transformation and privatization has not affected wider areas of the surroundings.

However, looking critically at the current state of Moerwijk south 1, it's not as easy as we might have thought to draw definitive conclusions, but rather once again what is showing is the complexity of an overlaid reality made up of multiple interpretations.

The out take of the researcher sees the forms of gentrification reflected in each detail of the site, associating them with an expression of separation, discrimination and isolation.

Nevertheless, the new constructions seem to attract not merely wealthier households, but also elderly people looking for a healthier environment in which to have facilities nearby.

A single conclusion cannot therefore be given, but still our interest lies in shedding light on the possible factors that nonetheless influence the experience of the place and the life happening within it.



Spatial Analysis

Spatial design is an important aspect for understanding how a neighbourhood works on the level of geography and on a physical level. It also raises many questions.

On a design level, we noticed the lack of green in the street, only when we walk outside the neighbourhood is when we do see plenty of green.

In understanding the spatial design of this neighbourhood we might see connections relating to the health of the people.

**SPATIAL
ANALYSIS
AND HEALTH
INDICATORS**

0,04

Leefbaarometer¹
Total Score
Scale: Grid

47

Residential Density
Dwellings / Hectare

21,1%

Intake of more than 5+
types of medication²
Scale: Ypenburg, 2017

31,8%

Ground Space Index
Groundfloor Surface
Occupation / Hectare

72%

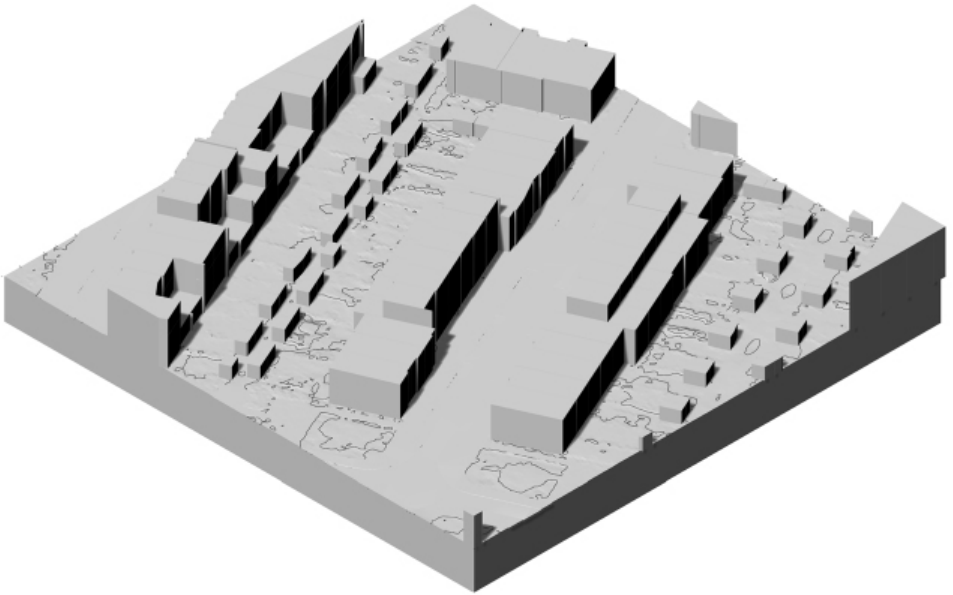
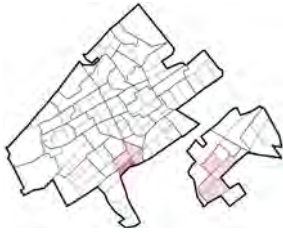
Perceived Good Health
Moerwijk-Noord,
aged 18-65³

67,66m²

Average Household
Footprint
10,000 x GSI / Households

51%

Perceived Good Health
Moerwijk-Noord,
aged 65+³



ARCHITECTURAL ETHNOGRAPHY

natural system



sun cycle



mobility



In this analysis we focused on multiple aspects: surrounding areas, neighbourhood structure, road hierarchy and pollution, public transport, housing history and typologies and green infrastructure related to health.

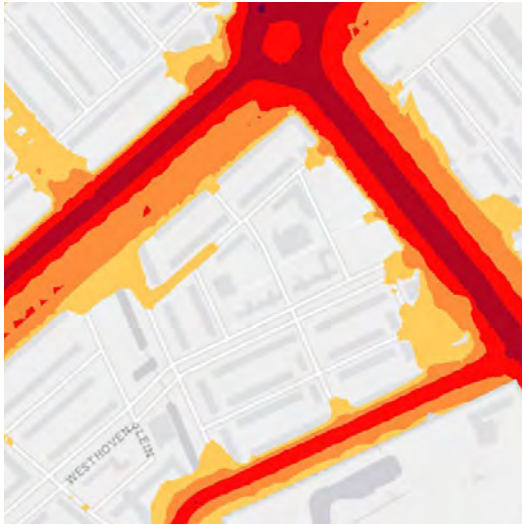
The neighbourhood of Moerwijk South 1 is surrounded by a diverse typology of buildings and green. Directly on the northside sharing the Raaphorstlaan is a new neighbourhood built in 2013, called the Kloosterburen (Monastery-neighbours) referencing the 'Our Lady of the Most Blessed Sacrament' church. These dwellings were built in order to fight the insecurities of the housing market. Before then, flats from the fifties were situated here.

On the west and east side of this neighbour, you'll find apartment blocks built in the fifties. These neighbourhoods are occupied by multiple family sizes due to the size of the apartments. In addition, here you'll find a lot of communal green.

On the southside is a public park called the 'Overvoorde' park. It houses a tennis court, a café, an elementary school and a museum. It is noteworthy that due to the multiple typologies of buildings in this park, cars are allowed to enter it.

The neighbourhood structure is divided into four blocks due by the roads crossing it, resembling a cross. In addition the part where the two roads (the Menkemastraat and the Fraeylemastraat) meet accommodates a small green area with two playgrounds for children.

Furthermore, the Menkemastraat looks rather grey, due to the absence of green and the abundance of cars parked in the street. However, the neighbourhood is surrounded by the park, as well as smaller green areas of the other streets connecting to the Menkemastraat.



Sound pollution
diagram legend:

55-59 dB	■
60-64 dB	■
65-69 dB	■
70-74 dB	■
75 ≥ dB	■

This area has on the east side the entrance road into the Hague.

This road has two lanes and due to it being the entrance road means that this has many cars during the day.

This also means that a lot of air and sound pollution is contributed by this road (S106) in the neighbourhood. The S106 produces between the 70 - 74 decibels.

Directly adjacent on the south side is the road separating the park and this neighbourhood. This road is connected to the entrance road changing from two lanes to one lane. This means that this road is relatively busy as well as being dangerous. The inhabitants experience this street as rather dangerous, due to the fact that many people drive too fast as there are no speed bumps.

This neighbourhood has two types of public transports.

On the north side adjacent to the main road, the Erasmusweg, is tramline 16, running between The Hague's central train station to Wateringen. Adjacent to the neighbourhood on the east side is bus line 51, running between Rijswijk station and the Big Market of The Hague.

Talking to the inhabitants it became clear that, although there are only two lines, the tram and the bus are enough to get everywhere in the Hague to get a connecting train.

The public transport is directly associated with health.

As the health organisation of the UK states:

“A transport system that is easily accessible, reliable and affordable contributes to life satisfaction and wellbeing in multiple ways. It enables access to work, friends and family, as well as health-supporting facilities such as schools, colleges, parks, libraries and health care centres.”

(The Health Foundation, n.d.)

The Health Foundation. (n.d.). How transport offers a route to better health - The Health Foundation. The Health Foundation. <https://www.health.org.uk/publications/long-reads/how-transport-offers-a-route-to-better-health>

This neighbourhood has underwent quite a change in the last decade. Before the change, this neighbourhood was filled with only flat apartments built in the fifties.

The change came in 2008, where the plan was to gentrify this entire neighbourhood and making it more attractive to live in. However, due to the financial crisis in 2008 only small block of houses were actually built, the Menkemastraat, the Fraeylemastraat, the Guntersteinweg and the Raaphorstlaan. The rest was not finished.

Then in 2013, a second part was built on the north side called the Kloosterbuuren. Yet the rest of Moerwijk South remains filled with apartment blocks of the fifties.

Throughout the neighborhood, similar looks have been used for the houses. There are some types that have a lot of

The neighbourhood we are researching presents five housing typologies

resemblances. On Menkema Street, a typology occurs mostly where the living room and kitchen are on the ground floor, and there are three bedrooms on the first floor.

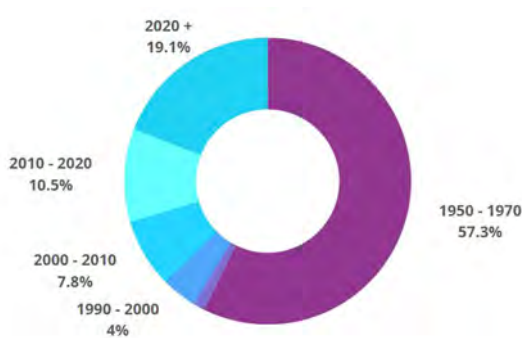
A few houses on the street have an extra floor with one extra bedroom.

Houses on Raaphorstlaan are mostly similar to Menkemastraat, but they all have three floors or four, some with roof terraces.

Houses on Guntersteinweg all have three floors with the living room on the ground floor again and two bedrooms on both

ARCHITECTURAL ETHNOGRAPHY

Diagram of
the year of
construction



the first and second floor. They all have a small terrace on the sunny street side.

Some of the houses on Fraeylemastraat and Kenenburgstraat obviously have a slightly different typology. These are square houses with more floor space. They have just two stories but each one contains a lot of space, so the top one holds four bedrooms.

Walking through the neighbourhood, it became quite clear that the streets are quite dull. Specifically, the Menkemastraat. The design of this street didn't allow for many trees to be located in the street. Only where the houses are pulled back, are used for a mere 3 trees per side.

Only when you leave the block, is when you will find more life, with the Raaphorstlaan providing a lane of trees and on the south side the park, providing a exquisite view for the people living on that side of the block.

In this neighbourhood there are 113 trees. The Menkemastraat and the Fraeylemastraat together have only 23 trees, which are on the small side. That means that 90 trees are surrounding this neighbourhood. Only one tree is a strong causer of allergies, the Spaeth's Els, which resides on the Greysterenweg (west side).

The diagram on the following page shows the distribution of the tree species you will find in this neighbourhood.

CASE STUDY AREA: MWS1



Typology of the
Fraeylemastraat
(funda.nl)



Typology of the
Guntersteinweg
(funda.nl)



Typology of the
Menkemastraat
and the
Raaphorstlaan
(funda.nl)



Picture showing
the absence of
trees in the street



In this neighbourhood only 1 tree is a strong causer of allergic reaction and hay fever, the Spaeth's Alder tree, located on the west stide (Greysterenweg).

The majority of the trees in this neighbourhood do not cause any allergic reactions. Trees that could potentially cause a mild allergic reaction are the 'hornbeam' and the 'beech' tree with a combined total of 18 trees throughout this neighbourhood.

The microbiomes in our guts and body are directly linked to the microbiomes we breath in, which are again directly linked to the area we live in. The less green an area has the less divers the microbiome will be, but vicec versa as well. The more green an area posess, the more divers the microbiome will be.

In the airsampling done on february the 21st, a correlation can be found between the bacteria biome and the amount of green. The higher the number, the more divers the microbiome is.

With these satellite photos of the sampled areas you can clearly see that the presence of green increases the Shannon index (the richness and evenness of the microbiome) of the bacteria, with an exception being Moerwijk East 2 (MWO2). There is not much green within this neighbourhood, but it is fully surrounded by trees, which could have had impact on the outcome. The sample we did in Moerwijk South 1 was done in the middle of the neighbourhood next to the playground. This could have caused the low index number as it was pointed towards the Menkemastraat full with cars.

For the Shannon of the fungi we couldn't find any correlation between the amount of green and the index as, although ressearch does suggest that it a correlation could be found between the species of trees, plants, and grass and the microbiome of fungies.

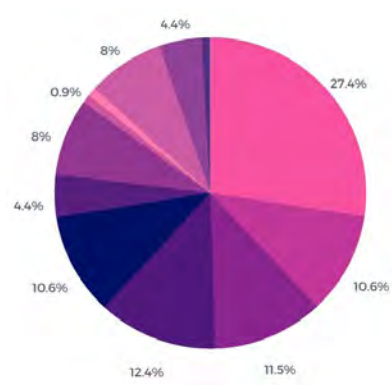


Diagram of the distribution of the trees of this neighbourhood

- 27.4% Common Linden
- 12.4% Chinese Pear
- 11.5% Hornbeam
- 10.6% Japanese Cherry
- 8% Chinese Swamp Cyprus
- 8% False Acacia
- 4.4% Beech
- 4.4% Maple
- 0.9% Spaeth's Alder

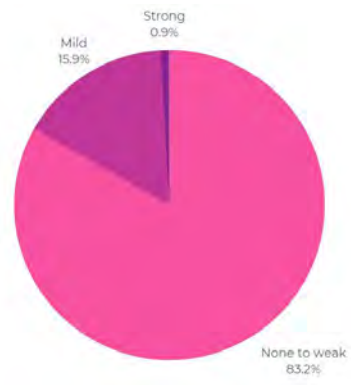


Diagram of the distribution allergy causing trees.

- Strong cause
- Mild cause
- None to weak cause

		Shannon Bacteria	Shannon Fungi
MWN1		3.925	1.929
MWN2		4.29	2.832
MWO1		4.352	2.615
MWO2		4.452	2.663
MWS1		2.638	2.578
MWS2		4.005	2.26

		Shannon Bacteria	Shannon Fungi
MWW1		4.007	2.177
MWW2		3.83	2.396
YPB1		3.588	2.395
YPM1		3.865	2.512
YPS1		3.001	2.307
YPW1		1.906	2.329



Synthesis Participatory Action Research

We think that space preserves sensations, memories; consequently, what we will try to propose through the mapping activity will concern an interpretation of the house as an overlay of traces and remembrances. We will then finally like to understand whether there may be a relationship between physical and mental well-being and spatial configuration. To this end, we will propose to indicate on the floor plans which rooms, corners, places, make the inhabitant happier, or sadder, or tired, or more motivated-where he has argued and where

he has laughed, or simply where he prefers to read or have breakfast in the morning, as much as where he uses his cell phone the most. We will also want to understand how and whether these habits have changed over time or on specific occasions and recurrences, such as holidays or seasonal changes.

To uncover the intimacy of the home we would like to capture those unexpected moments and patterns of behavior, during which space is used in unexpected ways, or not thought of for that-whether it's drinking coffee in the morning moving around the house and leaving the cup in another room or reading while sitting on a stair step.

Under the advice of one of the residents with whom we began to discuss, we organized the meeting with the neighborhood residents in the nearby Brasserie Bijna Thuis. Here we were in the process of completing preparations to distribute flyers

Overlaying this we are interested in asking whether these "divergent" habits are influenced by the presence of other family members or guests. In this context, to address the issue of sanitation, we would like to ask and explore in the interview whether, and if so how, a partially "dirty" or "messy"

room actually represents a more inviting and welcoming environment, to understand what the threshold of pleasantness might be between hygienic well-being and cold feelings of distance and sterility. Many of these nuances we hope can be brought out through the use of video-diary.

After setting up the research with R*, a resident since 2019 whom we met during the first



context survey, for personal reasons it was not possible to continue the relationships. Because of this, and the desire to extend the research not only to a single person and his family, but to multiple neighborhood residents, children, youth, adults, and the elderly, we decided to frame the research to get in contact with as many different people as possible. This would allow us to define a multiple and varied

This would allow us to define a multiple and varied understanding of what it might mean to live there

understanding of what it might mean to live there, looking at the neighborhood and its life from different perspectives.

We thus pursue and further research on the area, interacting with new passersby, and organizing a meeting during which guests, while having coffee with us, could talk to us about their experience, and interact in a series of activities aimed at reading public space and domestic space in the encounter between emotional/psychological well-being and physical health. To this end, in addition to inviting residents in person whenever possible, we have designed and distributed a flyer telling about our intentions and expressing our desire to get to know the neighborhood as much as possible.

During our meeting with residents at the brasserie, we had the opportunity to discuss at length with Alexander, Ellis, and Jannie. They were extremely helpful and allowed us to establish a broader perspective on what it might mean to live in this neighborhood

Alexander and Ellis live in one of the two apartment towers in MWS1. They have been living there for 2,5 years now. Before moving they used to live in the Archipel neighborhood in Den Hague; which is considered to be a wealthy, being defined by elegant houses from the late 1800s.

On the following page we have reproduced the flyer that, once folded into quatto, we distributed in the neighborhood, with the intention of getting as much contact as possible with the residents. In addition to a general greeting, our contact information, and a brief description of our intent, the address and time for the meeting at the Brasserie was later added.

HELLO!

Dear Neighbours,

*Hope this letter finds you well.
We are a group of four enthusiastic
TU Delft architecture master students,
doing a research on health and the
role of the built environment on users'
well-being in your neighbourhood!*

We ask a bit of your time to participate in a playful method to engage you to show us how you feel about health and well-being in your household and neighbourhood. In particular, how do you experience your house and neighborhood, and how it makes you feel more healthy or what do you wish to change?

We will have a short 1-2 hour meeting where you show us your paths in the neighbourhood during the week[en]day. We will bring some cookies !! :)

You can find more information by contacting us. If you are willing to contribute to our research and you have information for us in English or Dutch don't hesitate.

Best wishes,
Roos Scholten, Laurens Coster, Aris Aragno,
Sepehr Asadi

HELLO!

Beste buren,

*Ik hoop dat u deze brief goed
ontvangt.
Wij zijn een groep van vier
enthousiaste TU Delft architectuur
master studenten, die een onderzoek
doen naar gezondheid en de rol van
de gebouwde omgeving op het welzijn
van gebruikers in uw buurt!*

We vragen een beetje van uw tijd om deel te nemen aan een speelse methode om ons te laten zien hoe u denkt over gezondheid en welzijn in uw huishouden en buurt. In het bijzonder, hoe ervaart u uw huis en buurt, en hoe voelt u zich er gezonder door of wat wilt u veranderen?

We houden een korte bijeenkomst van 1-2 uur waarin u ons uw routes in de buurt gedurende een week(einde)dag laat zien. We zullen koekjes meenemen!!! :)

U kunt meer informatie vinden door contact met ons op te nemen. Als je bereid bent om bij te dragen aan ons onderzoek en je hebt informatie voor ons in het Engels of Nederlands aarzel dan niet.

Best wishes,
Roos Scholten, Laurens Coster, Aris Aragno,
Sepehr Asadi

TU Delft

aris.aragno@student.tudelft.nl
rscholten@student.tudelft.nl

31 6 31332746
31 6 23322041

OUR CONTACTS

Aris Aragno
Sepehr Asadi
Laurens Coster
Roos Scholten

WE ARE

We look forward to meeting
you and hearing about your
experience!

HELLO!

Beste buren,
Ik hoop dat u deze brief goed
ontvangt.
Wij zijn een groep van vier
enthousiaste TU Delft architectuur
master studenten, die een
onderzoek doen naar gezondheid
en de rol van de gebouwde
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gebruikers in uw buurt!



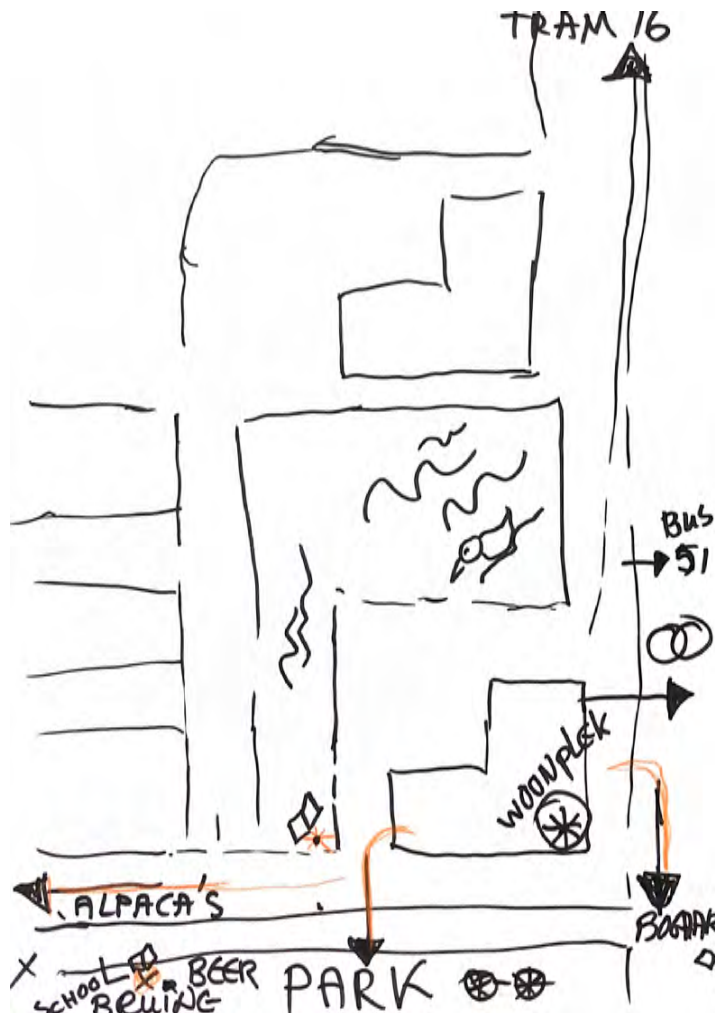
TU Delft

WE ARE

Aris Aragno
Sepehr Asadi
Laurens Coster
Roos Scholten

ARCHITECTURAL ETHNOGRAPHY

In this drawing of the neighbourhood, the resident thought of space in relation to her house, showing movements, and how she interacts with the rest of MWS1 as much as the whole city - walking, cycling, taking the bus or the tram. We may even notice the spot where birdwatchers stand



However, maintenance and the garden became too much work for them, as they began to age and considering Alexander's illness.

Their account expresses how much the archipelbuurt, nearby Scheveningen, used to be an incredibly creative and artistic neighborhood, but recently became increasingly more expensive, while many expats moved there.

Alexander and Ellis say that they are more happy now that they've moved to Moerwijk, because they feel people are more sociable and up for a chat then in their old neighborhood. Also the flat they live in now, is highly insulated, nicely finished and all on one floor.

The apartment building itself has a many elderly residents, creating a strong sense of community, whilst being incredibly dynamic. The inhabitants manage to organize and do plenty of activities together.

Ellis frequently visits Park Overvoorde, just a few steps from her apartment, where she loves to walk with her grandchildren. Furthermore, they get a lot of visits from friends and family.

Alexander and Ellis enjoy the newbuilt private houses around the Menkemastraat; they feel like it is good for the neighborhood, and that it uplifted the whole area to an extent.

Jannie has been living, in the very same apartment block and Alexander and Ellis, with her husband, for over 11 years. She moved there because of family close by.

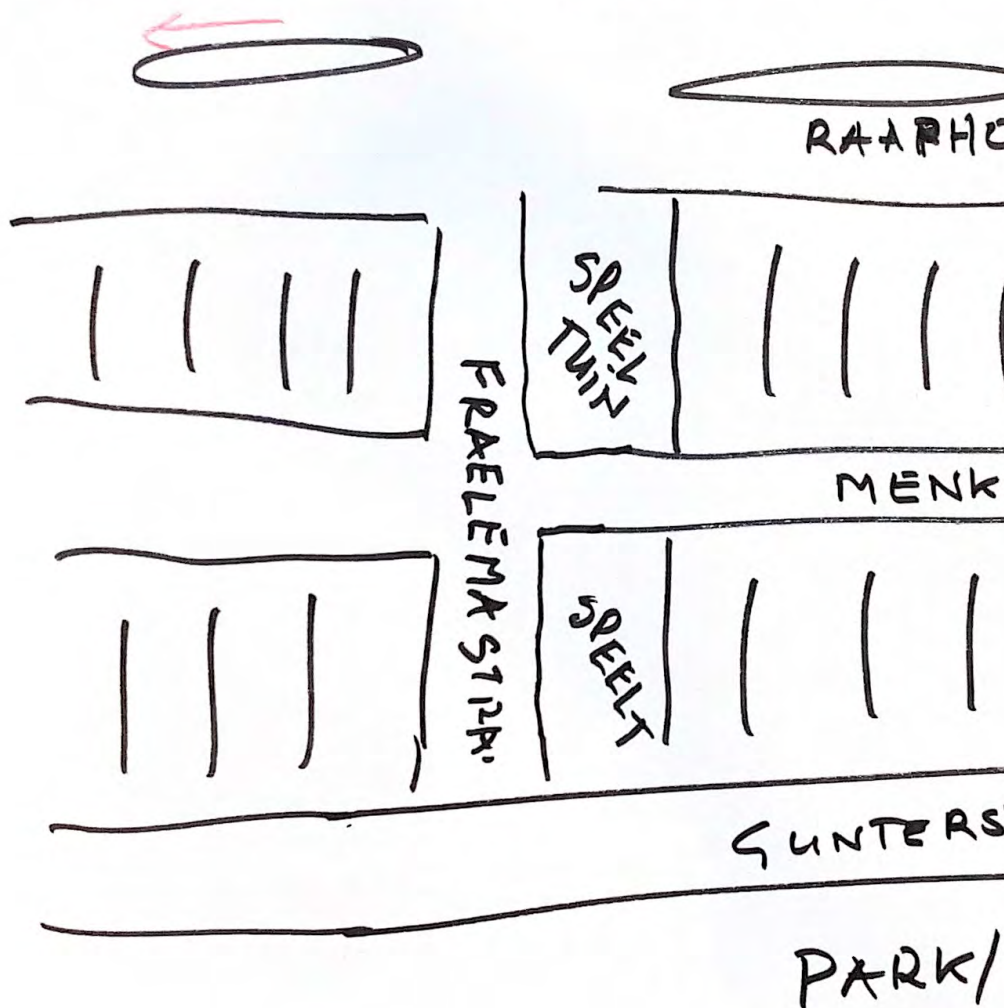
She told us that Moerwijk changed a lot since 2010. Many apartments have been refurbished and changed.

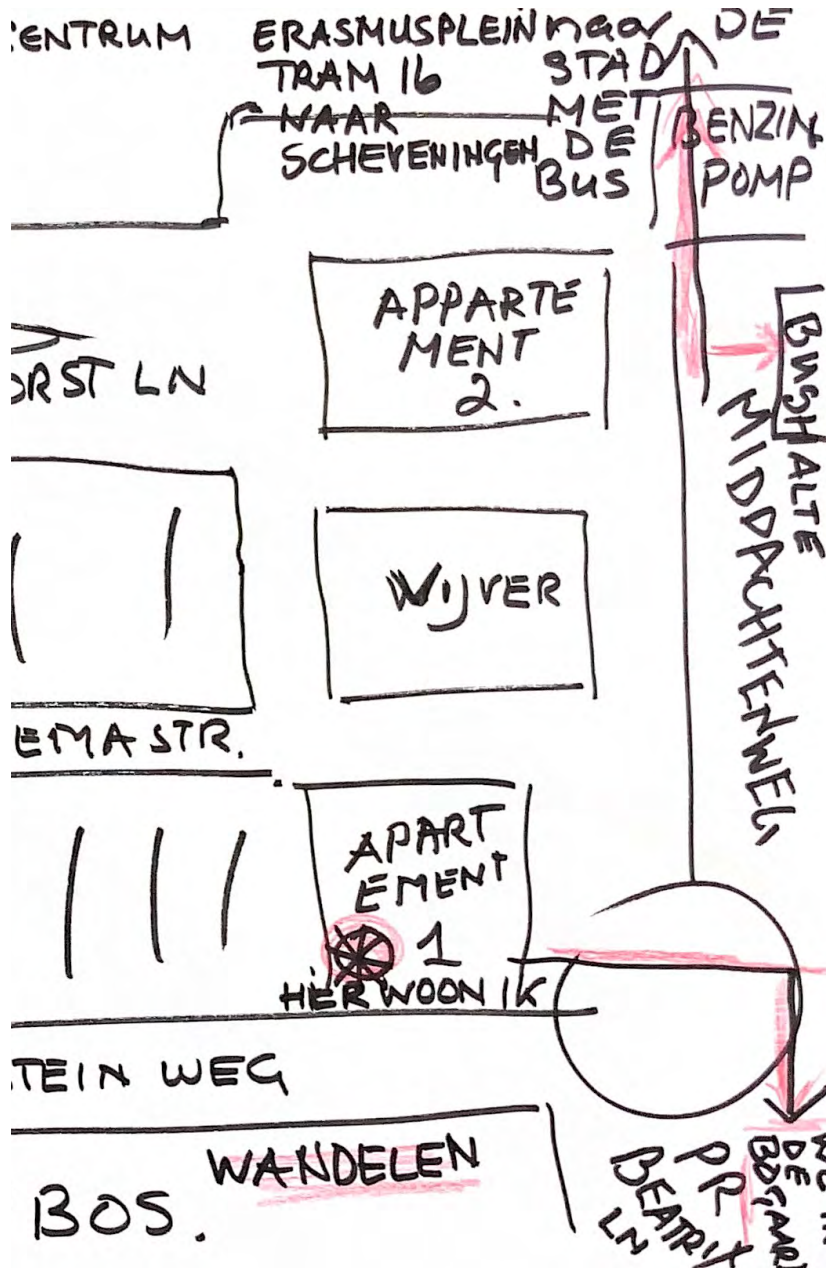
Both of them walk and bike around the area, and use public transport, the tram especially, to get to the center of Den Hague which is easily accessible.

They feel that it's a quiet place to live and where you can easily access nature. In the house you can close the windows to shut out any noise, there is a WTW-system and it is highly insulated.

WANDEL/FIETS NAAR DE BOGAARD WC
Fysio -

WESTHOVEN PL. = FYSIO





Drawing developed by residents during the participatory drawing activity, of the neighborhood and their apartment

The elderly people in the neighborhood are like the watchers of the life happening all around, aware of what is happening on the street as they observe it and chat from their balconies; we can therefore take their word when they say that it is a place where to feel safe.

They even got a platina-klinker for all the work they do for the neighborhood!

A day in the life of Ellis

Ellis shows us videos of her life and her living environment.

The Günter apartment building on Guntersteinweg has an active community. One of the residents has created a book library. They manage it themselves. It was gone for a while due to vandalism; local residents reported that they are glad it is back, and that they can use it again.

Five women from the apartment have a craft night together. They make collages. They find this very enjoyable and good for bonding.

Every Tuesday someone helps Ellis and her husband with the household. It is a big house, so help is needed. The help has slowly become a friend of them. The cats are afraid of the vacuum cleaner. Their house is full of objects, paintings and other art objects. Purchased abroad, from friends or homemade.

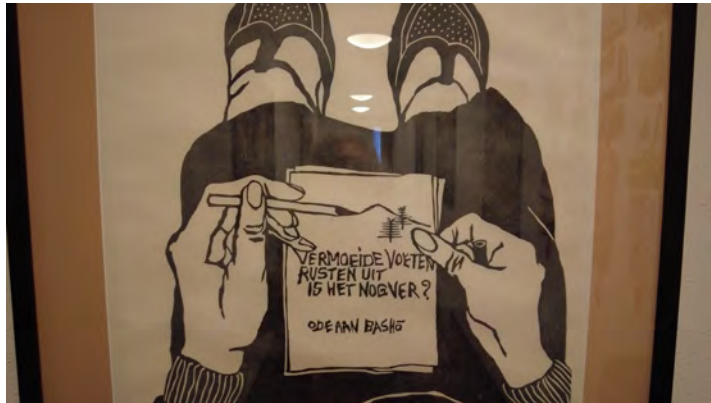
Ellis and her husband live on the 6th and top floor of the apartment. They have a view over a big part of Moerwijk. Ellis explains that there has been a lot of new built in recent years in Moerwijk. Bus stop 51 towards Rijswijk station and Den Haag Centrum stops right in front of their home. She feels that the area has good accessibility. The main road next to their house is busy, but there is still an original old coffee house, "Route 99",

In the drawing for her apartment's floorplan, the participants highlighted with numbers her activities throughout the day, emphasizing sizes and proportions often related to the importance of the room



ARCHITECTURAL ETHNOGRAPHY

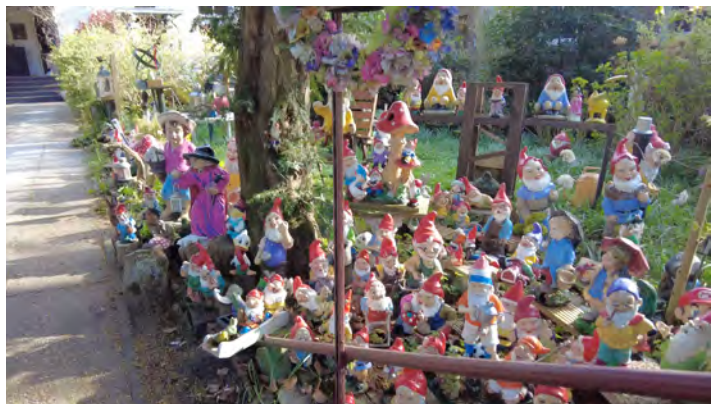
A poster in the house of Ellis



A textile poster showing Indian culture



The hundreds of gnome



one of the last in The Hague. Behind this coffee house are now rich villas but it used to be a trailer park. They are surrounded by many old estates spreading toward Overvoorde. The park feels like their 'front yard'. In the small pond in front of the flat is a small island where many different species of birds nest, live and mate.

Heeswijkplein is the closest shopping spot. This is a large square, with many children playing, Turkish- Moroccan- and Javanese stores, a Coop and a Kringloop.

There is a work and participation space in the park Overvoorde where Ellis feeds alpacas every weekend. There is a workshop where they make their own paper from old sheets, a compost pile where clients learn to compost, a greenhouse to grow vegetables, a small store to sell goodies, and there will be another teahouse as a restaurant opportunity. There are three alpacas here named Inge, Kanjer and Miep. There are many activities for both adults and children.

In the park there is also a museum about war defense, you can go inside and get guided tours. In addition, there is a dog field where dogs are allowed to run free, this is very much used. There is a sheep paddock where a herd lives. There is a beautiful country house De Voorde, which unfortunately is not being renovated and is slowly rotting away. This makes Ellis very sad, as this is an amazing property.

In the park there is also a house with a hundred kinds of gnomes, all with their own special characteristic appearance. In the park is the Brasserie "Bijna Thuis," which used to be an inn. There is also a tennis club where you can also have something to eat and drink. Ellis absolutely loves the park, and in May, in honor of their 50th wedding anniversary, she and her husband plan to throw a big party with a treasure hunt in the park.



Alpaca farm





Conclusion

Through this research we used four ways that would contribute to the understanding of the site: our own observations, socio economics, spatial analysis and the experience of the residents.

In the many visits we did to this neighbourhood, we noticed a few things. We found the area lacking in many aspects, firstly the very lack of people. As the neighbourhood is predominantly young families, with the parents working, almost creating a feeling of abandonment.

Nevertheless we had the opportunity to encounter elder residents living in apartment tower blocks further down the road, children coming from school taking their break on the playground as they went home, and passersby, coming from other parts of Moerwijk to spend time here.

However, for the majority of the residents of this neighbourhood a communal feeling doesn't seem to be strongly present. The streets are filled by cars and with a few trees standing bare from the winter season, as background noise from the main road nearby defines the pace of the place.

Researching the spatial design gave us more insights about the history, the surroundings and the green infrastructure. Through conversations and the analysis of the development of the area, we gradually traced the process of gentrification undergone by the neighbourhood in the last fifteen years. Until 2008, this place stood with apartment flats from the 50's, of which a few are still further visible in adjacent part of Moerwijk South.

This information, compared with the socio-economic data regarding the neighbourhood, would seem to be further highlighting the discrepancy between this site and the surroundings, clarifying our initial feeling that, for as much as we were trying to observe MSW1 from an objective perspective, we couldn't but recognize a pervasive feeling of wealth which, subsequently, throughout the previous chapters, we tried to understand and define.

The question that arose from such analysis then, tried to address the place by comparing it to MWS2, which on the other hand did not go through a process of gentrification, or at least not of the same extent.

The communal quality of Moerwijk South 2, visible in the green spaces, creates perhaps a more inviting, comfortable area, reflecting at the same time social beliefs through interaction and sharing, which appear to be mostly missing in what might be read as the pervasive investment driven design of MWS1.

This difference of social equity, furthermore, shows to be evident even in the air sampling, as much as in the microbes diversity, and therefore improved health. Privatized grounds leave little space for green areas, reducing vegetation as much as having an impact on the emotional perception of the neighbourhood. Furthermore, being located next to a main road, could have an impact on lungs issues.

Nevertheless, the diverse conversations we had with the inhabitants, and the beautiful relationships we established with them, shown other perspectives, perhaps revealing the multiple and subjective understandings of the very same place, as much as a rediscovered feeling of community within the neighbourhood. Most of all, entering into dialogue with the residents allowed us to have a glance at the reality of the life there, balancing between an overall stigmatized impression of the Moerwijk area, and simultaneously on the contrary, of the parenthesis of gentrification so far described.

The observable as well as hidden layers of this neighbourhood, both highly contribute to the health of its residents; the many differences and multiple realities coexisting in the area create a complex image, defined by the overlapping of the multiple narratives that describe it.

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Databases and Digital Platforms

Leefbaarometer

(Database with indicators on quality of life)

www.leefbaarometer.nl

Development of The Hague SouthWest

(Municipality of The Hague)

<https://www.denhaag.nl/nl/in-de-stad/wonen-en-bouwen/ontwikkelingen-in-de-stad/ontwikkelingen-den-haag-zuidwest.htm>

AllCharts.info

(Statistical data about neighbourhood in The Netherlands)

allcharts.info



Translations

VERTALINGEN

ÇEVIRILERI

مچارت

Samenvatting in het Nederlands

De Buurt

In dit onderzoeksproject hebben we de locatie vanuit vier verschillende invalshoeken benaderd: onze eigen observaties als onderzoekers, een sociaal-economische analyse, ruimtelijk onderzoek en de ervaringen van de bewoners. Tijdens de vele bezoeken aan de buurt hebben we opgemerkt dat het gemeenschapsgevoel gebrekkig was. De straten werden gedomineerd door auto's en de groene ruimtes waren schaars. Door gesprekken met bewoners en gedetailleerde analyses van de wijk hebben we het gentrificatieproces bestudeerd dat zich in de afgelopen vijftien jaar in de buurt heeft voltrokken. Deze verandering leek bij te dragen aan een overheersend gevoel van welvaart. Dit riep vragen op over de ongelijkheden tussen dit gebied (MWS1) en Moerwijk Zuid 2 (MWS2), dat geen vergelijkbare vernieuwingen heeft ondergaan. MWS2 onderscheidde zich door groene ruimtes en een sterk gevoel van gemeenschap, terwijl MWS1 meer gericht was op investeringen en ontwikkeling. Daarnaast toonden de luchtmonster testen verschillen tussen de twee gebieden, wat van invloed was op de gezondheid van de bewoners. De gesprekken met bewoners brachten verschillende perspectieven aan het licht en onthulden een gevoel van gemeenschap. Dit weerlegde de bestaande negatieve indrukken van Moerwijk en benadrukte tegelijkertijd de impact van gentrificatie. De complexiteit van de buurt, met zijn overlappende verhalen en realiteiten, speelt een cruciale rol in het welzijn van de bewoners. Dit onderzoek laat zien dat het meenemen van meerdere perspectieven belangrijk is om de complexe aard van een gemeenschap te begrijpen.

Het proces

Dit project onderzoekt de diepgaande relatie tussen ruimte, sensaties en herinneringen in woningen om te begrijpen hoe dit het fysieke en mentale welzijn beïnvloedt. De onderzoekers maken gebruik van kaarttechnieken om woningen te interpreteren als een soort plattegrond van sporen en herinneringen. Ze proberen de intieme aspecten van het dagelijks leven in huis te ontrafelen door onverwachte momenten en gedragspatronen vast te leggen. Daarbij onderzoeken ze hoe ruimtes in een huis op onnatuurlijke manieren worden gebruikt, zoals het drinken van koffie in meerdere kamers of lezen op de trap. Bovendien kijken ze of deze „afwijkende“ gewoonten worden beïnvloed door de aanwezigheid van familieleden of gasten.

Een andere vraag die zij onderzoeken is of een gedeeltelijk „vieze“ of „rommelige“ kamer meer uitnodigend en gastvrij kan worden. Hiermee wordt de kloof tussen hygiëne en onpersoonlijkheid overbrugd. Om zo veel mogelijk inzichten te verzamelen, betrekken de onderzoekers verschillende bewoners, waaronder kinderen, jongeren, volwassenen en ouderen. Ze verspreiden flyers om zo veel mogelijk bewoners te betrekken. Ze worden aangemoedigd om hun ervaringen te delen tijdens bijeenkomsten en activiteiten die gericht zijn op emotioneel welzijn en fysieke gezondheid in publieke en huishoudelijke ruimtes. Door verschillende perspectieven te verwerken, geeft dit onderzoek weer hoe de complexiteit van het leven in de buurt een fundamentele impact heeft op het welzijn van de bewoners. Dit draagt uiteindelijk bij aan een allesomvattend begrip van de complexe relatie tussen ruimtelijke indeling en welzijn.

Türkçe Özet

Mahalle

Bu araştırma projesinde, bölgenin anlaşılması dört ayrı şekilde ele alındı: araştırmacıların kendi gözlemleri, sosyo-ekonomik analiz, mekansal inceleme ve sakinlerin deneyimleri. Mahalleye yapılan sayısız ziyaret sırasında araştırmacılar, sokakların araçlar tarafından domine edildiği ve yeşil alanların sınırlı olduğu ve bir ortak toplum hissinin oluşmadığı gözlemlendi. Konuşmalar ve analizler aracılığıyla, mahallede son on beş yıl içinde gerçekleşen kentleşme sürecini izlendi. Bu dönüşüm, mahallenin genel bir zenginlik hissine katkıda bulunduğu gibi, bu bölge (MWS1) ile benzer kentleşme geçirmemiş Moerwijk South 2 (MWS2) arasındaki farklılıklar hakkında sorular ortaya çıkardı. Yeşil alanları ve sosyal etkileşimiyle karakterize edilen MWS2'nin topluluk kalitesi, yatırım odaklı tasarımıyla MWS1'in karşısında belirgin bir şekilde farklılık gösterdi. Hava örnekleme verileri ayrıca iki bölge arasındaki farkları ortaya koydu ve bu hava kalitesi farklılığının mahalle sakinlerinin sağlığını da etkilediği görüldü. Sakinlerle yapılan konuşmalara katılım, çeşitli bakış açıları gösterdiği gibi topluluk olma duygusunu da ortaya çıkardı. Bu Moerwijk'teki olumsuzlukları gün yüzüne çıkarırken bu kentleşme duygusunun etki ve derinliğini de ortaya koydu. Mahallenin karmaşıklığı, örtüşen anlatıları ve gerçekleriyle, sakinlerinin refahında önemli bir rol oynar. Araştırma, bir topluluğun karmaşıklıklarını anlamak için birden fazla bakış açısını dikkate almanın önemini vurgular.

Süreç

Bu proje, evlerdeki mekan, duygu ve anılar arasındaki derin ilişkiyi keşfeder ve bu ilişkinin fiziksel ve zihinsel refah üzerinde nasıl etkisi olduğunu anlamayı amaçlar. Araştırmacılar, evi izler ve hatıraların bir örtüsü olarak yorumlamak için haritalama etkinliği kullanırken, ev yaşamının samimiyetini yakalamak için beklenmeyen anları ve davranış kalıplarını keşfetmeye çalışırlar. Ayrıca, alanların kahve içme gibi geleneksel olmayan yollarla nasıl kullanıldığını inceleyerek, bu "olağan dışı" alışkanlıkların aile üyeleri veya konukların varlığından nasıl etkilendiğini araştırdı. Araştırmacılar ayrıca, kısmen „kirli“ veya „dağınık“ bir odanın daha davetkâr ve hoşgörülü bir ortam yaratıp yaratmadığı ilginç sorusunu da incelediler, hijyenik refah ile çok kişisel olmama arasındaki boşluğu kapattılar. Çeşitli anlayışları toplamak için, proje çocuklar, gençler, yetişkinler ve yaşlıları içeren mahalle sakinlerini içermek üzere genişletildi. Farklı bakış açılarını içermek amacıyla, projenin, yerleşim yerinde yaşamının nüanslı karmaşıklıklarını ortaya çıkarmayı ve mekan konfigürasyonu ile refah arasındaki derin bağlantının bütünlüğüne katkıda bulunmayı amaçladı.

ملخص باللغة العربية

الحي

يفي مشروع البحث هذا، تم التقارب إلى فهم الموقع من خلال أربعة وسائل متميزة: الملاحظات الخاصة للباحثين، والتحليل الاقتصادي والاجتماعي، والفحص المكاني، وتجارب السكان. خلال الزيارات المتكررة إلى الحي، لاحظ الباحثون نقصاً في الشعور بالمجتمع، حيث كانت الشوارع مهيمنة بالسيارات وتحتوي على مساحات خضراء محدودة. من خلال المحادثات والتحليل، تتبعوا عملية التجميل التي حدثت في الحي على مدى الخمسة عشر عامًا الماضية. بدأ هذا التحول يسهم في الشعور السائد بالثراء، مما يؤثر تساؤلات حول الفوارق بين هذا المنطقة (MWS1) و Moerwijk South 2 (MWS2)، التي لم تخضع لتجميل مماثل. كما تناقضت الجودة الجماعية لـ MWS2، الميزة بمساحاتها الخضراء والتفاعل الاجتماعي، مع التصميم الذي يعتمد على الاستثمار في MWS1. كما كشفت بيانات فحص الهواء عن اختلافات بين المنطقتين، مما يؤثر على صحة السكان. تفاعل الباحثين مع سكان المنطقة من خلال المحادثات قدم وجهات نظر متنوعة وكشف عن شعور بالمجتمع، متحدين الانطباعات المشوهة حول Moerwijk وفي الوقت نفسه نبرز تأثير التجميل. تعقيد الحي، مع رواياته وواقعه المتداخلين، يلعب دوراً كبيراً في رفاهية سكانه. يبرز البحث أهمية النظر إلى وجهات النظر المتعددة عند فهم تعقيدات المجتمع.

العملية

يستكشف هذا المشروع العلاقة العميقة بين المكان والإحساس والذكريات داخل المنازل، بهدف فهم كيف يؤثر ذلك على الرفاهية الجسدية والعقلية. يستخدم الباحثون نشاط خريطة لتفسير المنزل كتراكب للآثار والذكريات، مع سعيهم لاكتشاف حميمية حياة المنزل من خلال التقاط لحظات غير متوقعة وأنماط السلوك. يبحثون في كيفية استخدام المساحات بطرق غير تقليدية، مثل شرب القهوة في غرف مختلفة أو القراءة على درج السلم. وعلاوة على ذلك، يدرس البحث ما إذا كانت هذه العادات «المنحرفة» تتأثر بوجود أفراد العائلة أو الضيوف. يستكشف الباحثون أيضًا السؤال المثير للإعجاب حول ما إذا كانت غرفة جزئيًا «قذرة» أو «متسخة» تخلق بيئة أكثر جاذبية وترحيبًا، مع تقديم جسر بين الرفاهية الصحية والبرودة النقية. من أجل فهم متنوع، يوسع المشروع ليشمل عدة سكان، بما في ذلك الأطفال والشباب والكبار وكبار السن. يتم توزيع نشرات لدعوة وجذب أكبر عدد من السكان ممكن، مشجعين إياهم على مشاركة تجاربهم خلال الاجتماعات والأنشطة التي تركز على الرفاهية العاطفية والصحية الجسدية في سياق الأماكن العامة والمنازل. من خلال شمول وجهات النظر المتنوعة، يهدف البحث إلى كشف التعقيدات المتنوعة للعيش في الحي وتأثيره العميق على حياة السكان، مما يساهم في فهم شامل للارتباط المعقد بين التكوين المكاني والرفاهية.

MWZ2

Moerwijk Zuid Case Study Area 2

FRAMES OF EVERYDAY LIFE

*Kaders van het
dagelijks leven*

Kalina Matova, Triljntje Verschuuren, Pearl Yeh, Bronwyn Bell

Housing and Health in the Hague

The 2023 edition of the MSc2 elective course "Architectural Ethnography" explores the interface between the disciplines of architecture, anthropology, microbiology and public health, to investigate how spatial configurations and social practices influence and are influenced by the interactions between humans, non-humans and the diversity of environmental microbiota. Working in collaboration with students, teachers and researchers of Leiden University Medical Centre (LUMC) and Hogeschool Leiden, this report examines a case study areas located in Moerwijk South, one of the neighbourhoods of Moerwijk, in the Dutch municipality of The Hague. Using a pioneering combination of environmental microbiome research with ethnographic research and spatial analysis this research aims at answering the following research question:

How is social cohesion displayed in different spatial aspects in Moerwijk South, and in turn what effect does the spatial expression have on the social cohesion and perception of safety?

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Introduction

The word 'ethnography' can be broken down into the act of describing (graphing) people (ethno). Ultimately, ethnography is a scientific method of observing and studying the behaviors and expressions of a particular culture or group of people. As a branch of anthropology, ethnography is an exploration of cultural phenomena in which the subject is observed, documented, and interpreted through the perspective of the researcher. While architecture is the design of our physical environment, the material structures that surround us not only exist to serve their basic use but also embody culture. As buildings directly impact and govern the way we live, work, interact, and play, architecture becomes an expression of the social, economic, and political dynamics of humanity. Essentially, architecture simultaneously reflects and influences

culture. The anthropology of architecture turns the ideas of their creators into material objects that are primed for analysis and interpretation by the observer.

Definition and purpose of architectural ethnography

When defining what architectural ethnography is, it's important to distinguish that it isn't the same as the ethnography of architecture. While ethnography of architecture observes space as an object, architectural ethnography uses space as a means to analyze the social and cultural relationship that occurs from its presence and interactions. By observing architecture and its external environments from a behavioral point of view we can understand not only the patterns and ways in which people live, but then begin to draw conclusions as to why. Collective and individual relationships between people, space, and movement creates inevitable participation in the design and functions of our urban space. Architectural ethnography establishes the opportunity to learn more about ourselves while impelling what our future may be and how we should respond.

1. Kramer, Michael W., and Tony E. Adams, eds. *The SAGE Encyclopedia of Communication Research Methods*. 4 vols. Thousand Oaks, CA: SAGE Publications, Inc, 2017. <https://doi.org/10.4135/9781483381411>.

2. Stender, Marie, Claus Bech Danielsen, and Aina Landsverk Hagen. *Architectural Anthropology: Exploring Lived Space* Routledge, 2022.

3. Hicks, Dan and Mary Carolyn Beaudry. *The Oxford Handbook of Material Culture Studies* Oxford University Press, 2010. doi:10.1093/oxfordhb/9780199218714.001.0001. doi:10.4324/9781003094142.org/10.4135/9781483381411.



Figure 1. A page from a graphic novel for analytical research tool for an architectural ethnographic research in Schiedamschen, South, Rotterdam by: Ludovico Cazzina, Cristian Ranzani and Wessel de Gaa (from ARCHITECTURAL ETHNOGRAPHY AND DWELLING IN ADDIS ABABA)

Located in the Hague's southern Enscamp district, Moerwijk neighborhood was developed post world war 2 and was designed by the planner Willem Dudok. While Moerwijk had begun construction in the 1930's, the significant loss and damages to dwellings in the Netherlands from the war had caused an extensive housing shortage. Thus, the neighborhood's construction was rapidly sped up after the war and residents moved into the area in the 1950s. Having its population peak in the late 1950's, the community filled with mainly young families, skilled workers, and officials began to decrease as the aging demographic became senior citizens into the 1970's. Today the neighborhood's demographics have dramatically changed as Moerwijk has become known for having a majority of migrant residents.

This report will focus on the Moerwijk South neighborhood, analyzing the area enclosed by the major streets of Erasmusweg,

The research area: Moerwijk South

Loevesteinlaan, Guntersteinweg, and Geysterenweg. The neighborhood consists of 7 major dwelling building typologies within its 14 blocks. ⁴

4. Janssen, K, B. van der Laag, and A. Moscoviter. *Aanpak Moerwijk : Vernieuwing Van Een Na Oorlogse Wijk. Integrale Stadsvernieuwing. Werkuitgaven, 3.* Delft: Delftse Universitaire Pers, 1989.

Figure 2, aerial photo of the research site with the main streets that constrain it, derived from <https://www.google.com/maps/place/Moerwijk+South,+The+Hague/@52.0441668,4.2933365,21.656z/?!4m6!3m5!1s0x47c5b6b5dd2ff6b9:0xc95a14dc3e740d18m2!3d52.0454814d4.2943174!16s%2Fg%2F1tg398jz>



First, to understand the neighborhood better we joined forces with the Participation Kitchen located in Moerwijk South. This is a community center where residents can cook dinner and interact with each other. The Participation Kitchen distributes free food and other supplies that people can get from the open kitchen outside. We got in contact with the manager and he supplied us with free food (tomato pasta sauce and mushroom soup) that we could distribute around the neighborhood to get in contact with residents. We got aprons to be recognizable for the residents. However, we noticed that people were reluctant to take food from 'strangers' and almost everyone declined the groceries. We managed to have short conversations with 8 residents, only one of them wanted to have the free food. This enabled us to get a better understanding of the perception of people of their neighborhood. Unfortunately, none of them wanted to participate in a more in-depth conversation and video reporting of their perception of health in the neighborhood. During these brief conversations we noticed that all residents felt that the neighborhood got unsafe over the past couple

Research methods

of years. Two incidents that were mentioned multiple times were two stabbings in the neighborhood. Next to this collaboration with the Participation Kitchen we made flyers to distribute around the neighborhood. The flyers visible in figures 3 and 4 are displayed in the community center and are given to residents. We made them both in Dutch and English, in order to reach a wider audience. Another purpose of these flyers was to create clarity amongst residents about the research.

Het onderzoek loopt:
van 27/02/2023 tot 27/03/2023

Architectuurstudenten van de TU Delft zijn dringend op zoek naar bewoners uit Moerwijk Zuid die ons zouden kunnen helpen met een onderzoek over de gezondheid in de wijk.

VRIJWILLIGERS GEZOCHT!

+ Wie zijn we?

We doen een onderzoek naar de leefomstandigheden binnen- en buitenshuis en de gevolgen op de gezondheid van de bewoners in de wijk. We onderzoeken de relatie tussen ruimte, mensen en gezondheid in een stedelijk gebied.

Mocht u ons willen helpen, neem dan contact op met Trijntje
+31 6 51776570.

Alle persoonlijke informatie wordt geanonimiseerd.

We zijn op zoek naar een huishouden dat:

- Open staat voor een gesprek over hun dagelijkse activiteiten in en rondom hun huis;
- Een overzicht zouden willen creëren van hun dagelijkse activiteiten in en rondom hun huis;
- Korte videos van plekken in de buurt en in huis die van positieve en negatieve invloed op hun gezondheid zouden kunnen zijn.

CONTACT

 Delft University of Technology
Faculty of Architecture
and the Built Environment

Figures 3&4,
Flyers for
volunteers in
dutch (left) and
english (right),
made by the
authors.



+ Who are we?

We are students in a course called Architectural Ethnography and we strive to understand the indoor and outdoor environments and their implications on people's health. In this course, we will employ research methods to analyze how space, people and health are related in an urban community.

If you think you can help us, please contact Trijntje at +31 6 51776570.

Due to ethical reasons, the privacy and anonymity of all participants will be preserved. The participant is in charge of the spaces they want to record.

We are looking for a household that can:

- Give Interviews
- Record short video clips of spaces in your home and in your neighborhood that you think contribute to make you healthier or less healthy.
- Create a participatory floor plan and timeline with the researchers about daily routines and perceived health

TU Delft Delft University of Technology
Faculty of Architecture
and the Built Environment

CONTACT

ARCHITECTURAL ETHNOGRAPHY

By creating a better understanding of the neighborhood we could narrow our research question:

How is social cohesion displayed in spatial aspects in Moerwijk South, and what effect does the spatial expression have on the perception of safety?

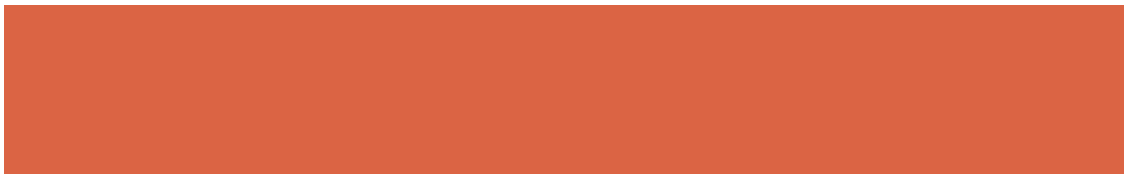
In order to formulate a conclusion on the research question multiple research methods have been employed: statistical-, urban- and, observatory analysis of the neighborhood. The statistical analysis of the socio-economic structure in the



Figures 5 7,
Distribution
of food to
residents in the
neighborhood,
(middle and
bottom) provided
by the community
kitchen (top)
, made by the
authors.

neighborhood is based on identifying the demographic composition, amenities and the quality of life in Moerwijk South. This is done by retrieving data from government websites and by using a pollen sniffer to obtain samples of the air quality in the designated area. The sample has been retrieved by putting the sniffer at a specific location for 30 minutes. This resulted in data about bacteria and other microorganisms in air. The urban analysis consists of a description of the urban context, and topology of the neighborhood. The data for this analysis was gathered from government websites and archives. This part of the research enabled us to define the socio-economic structures in the neighborhood that can be seen as indications for the status of the social cohesion in the neighborhood.

Initially data needed to be gathered by collaborating with a volunteer residing in Moerwijk South. Unfortunately we noticed, as mentioned before, that it was challenging to get in contact with residents of the neighborhood and they were reluctant to engage with us. Therefore, we needed to improvise and alter our approach. We decided to use a broader scope and look at the neighborhood instead of one household. In order to gain insights we did an observatory analysis that focused on how residents behave outside their house, how they display their house, and if they privatized parts in their street. We used the gate method at two different places to observe the movement of people in the neighborhood. By creating an invisible gate in a street we were able to observe the behavior of people, the ratio of man/women, and their mode of transport. The results of this method can be found in annex I and II. The observatory analysis is substantiated with photos of the neighborhood. The aim of this analysis was to identify signs of, for example neglect, isolation, or crime and to show the identity of the neighborhood. Additionally the observatory analysis is supported by short videos of the neighborhood taken by us.



Socio-economic Characterization

The socio-economic analysis is based on statistical data about the population, nationality, education, health, households, SES & income and lastly crime, nuisance and social cohesion. With this retrieved information we have been trying to give an indication of the characteristics of the population in Moerwijk South.

5 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>

6 Wijk Moerwijk (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/wijk/wijk-36-moerwijk-den-haag/>

7 Héél véél informatie over Den Haag. (2021, April 18). AlleCijfers.nl. <https://allecijfers.nl/gemeente/den-haag/>

8 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>

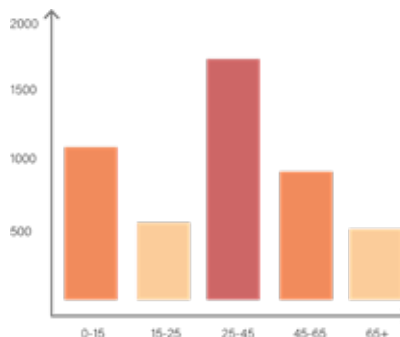
Figure 10, a graph showing the distribution population by age groups, made by the authors, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

As visible in figures 8 and 9, the population of Moerwijk South has been steadily increasing according to data available from 2013, but in 2022 the neighborhood has lost around 200 inhabitants.⁵ This statistic is following the general trend of Moerwijk, which has been decreasing in population since 2020 with a total of 21,385 inhabitants to 2022 with 20,755.⁶ In contrast, the population of the municipality of the Hague has been increasing progressively since 1996 with about 25%.

Population Demographics

⁷ People are moving out of Moerwijk, with a peak in migration in 2021, where almost 2% of the inhabitants left the neighborhood. In our research area; the south part of the neighborhood, the record outward migration of nearly 3.5% occurred in 2022.⁸

The age distribution of the neighborhood is also striking, as visible in figure 9 there is a majority of people aged 25-45 years, but there is also an abundance of children between 0 and 15 years. Moerwijk South appears to be a family neighborhood, although during the visits this was not observed. We visited the site during a sunny day in the spring break in february, however we did not notice many children playing outside. The spatial characteristics discussed in chapter 2 present data about the quality of public spaces and amenities especially for children.



Year	Population
2022	4,735
2021	4,905
2020	4,825
2019	4,765
2018	4,600
2017	4,275
2016	4,150
2015	3,945
2014	3,870

Figure 8, table with the year and population, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

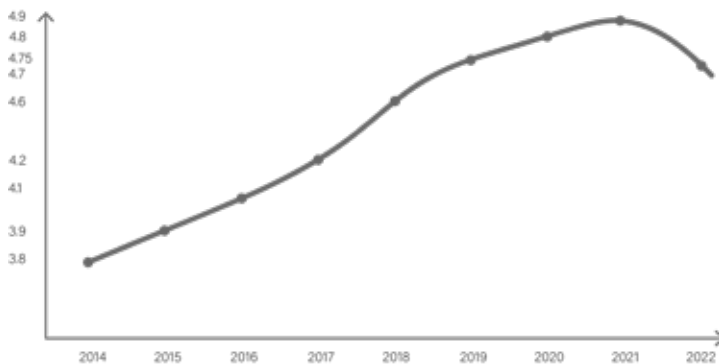


Figure 9, a line graph showing the (decline of) population of Moerwijk South, made by the authors, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

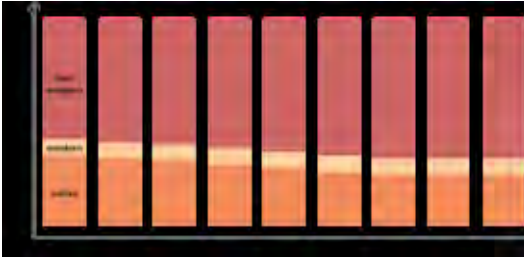


Figure 11, a graph showing the distribution of nationality of Moerwijk South native, western and non western, made by the authors, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

9 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>

10 Ranglijst: autochtoon en migratie achtergrond van de inwoners per wijk in de gemeente Den Haag. (2023, January 28). AlleCijfers.nl. <https://allecijfers.nl/ranglijst/autochtoon-en-migratie-achtergrond-van-de-inwoners-per-wijk-in-de-gemeente-den-haag/>

11 Ibid.

The nationality in Moerwijk South is mainly composed of Moroccans (795 inhabitants), native Dutch, Western migrants, Dutch Antilles, Surinamese, and Turkish, and the majority of the population - 24.8% (895 inhabitants) of the nationalities - are from other countries, indicating the diversity in the population.⁹ Comparing all four neighborhoods belonging to Moerwijk, the number of western inhabitants is relatively lower in South, approximately 67% of the 4,735 inhabitants are non-western. This percentage has been increasing since 2013, when the non-westerners represented 58% of the population, still being the majority in the neighborhood. On the other hand, the number of indigenous Dutch inhabitants has been decreasing from 34% in 2013 (1,331 people) to 23% in 2022 (1,130 people), representing a 15% decrease. The population of western migrants has been steady, around 8% every year. Looking at the general statistics in the Hague, Moerwijk ranks 3rd for the highest population of non-westerners, following Binckhorst in first place and Hoornwijk in second.¹⁰ Moerwijk is also in 4th place for the highest population of Moroccans (12%) and Antillians and Arubians (5.2%), and in 6th place for Turkish inhabitants (13%).¹¹ Moerwijk is quite an international neighborhood with foreign majorities.

The majority of the residents in the neighborhood have a low educational level, represented by 43% of the total population. Only 19.3% have obtained a higher educational level according to a study from 2020.¹² Compared to all other neighborhoods and districts in the Hague, Moerwijk has one of the lowest share of residents with a high level of education, ranked in 5th place.¹³

Moreover, Moerwijk is one of the neighborhoods with a higher rate of new early school leavers, around 3.2% per year, whereas the average for the Hague ranges between 2.9% in 2018 to 2.3% in 2020. Moerwijk also has a higher percentage of pupils in kindergartens and primary schools with a risk of educational disadvantage - 48% (1.255) compared to the city average of 27% (14.850) in 2020. These levels have decreased from 2019, where the numbers were 1.305 and 15.125, respectively.¹⁴

12 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-South-den-haag/>

13 Leefbaarheidscirkel. (n.d.). Den Haag. [incijfers.nl. https://denhaag.incijfers.nl/content/leefbaarheidscirkel](https://denhaag.incijfers.nl/content/leefbaarheidscirkel)

14 Mosaic6. (n.d.). Den Haag. [incijfers.nl. https://denhaag.incijfers.nl/dashboard/wijkprofielen/onderwijs/?regionle-vel-wijk®ion-code=36](https://denhaag.incijfers.nl/dashboard/wijkprofielen/onderwijs/?regionle-vel-wijk®ion-code=36)

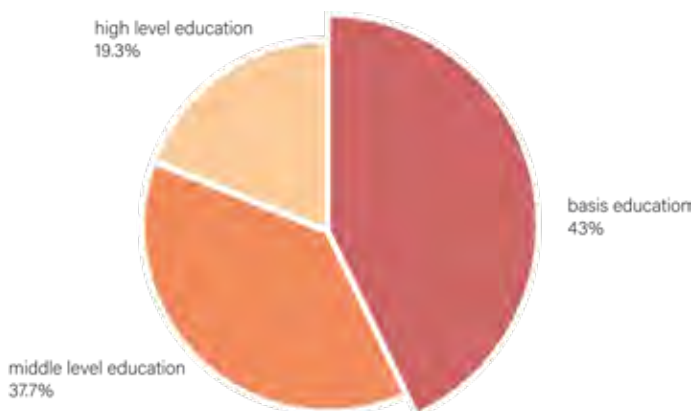


Figure 11, a graph showing the distribution of education of Moerwijk South low, middle and high level education, made by the authors, derived from <https://allecijfers.nl/buurt/moerwijk-South-den-haag/>, 2020.

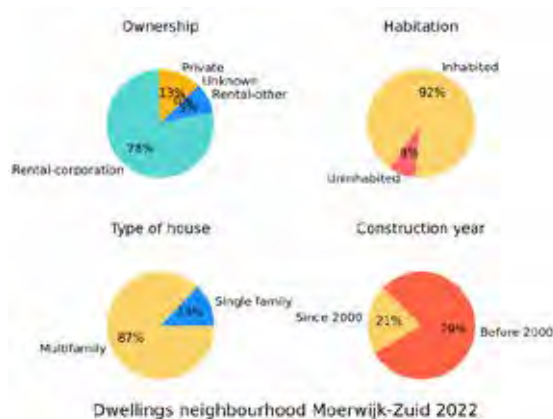
Figure 14, table with percentages of heaverage home value per year, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

Year	Average home value
2022	€196,000
2021	€162,000
2020	€144,000
2019	€119,000
2018	€106,000
2017	€100,000
2016	€93,000
2015	€85,000
2014	€87,000

Figure 15, table with household compositions for 2022, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.

Households	Amount
Households	2.305
Households 1 person	1.205
Households no children	330
Households with children	770
Households average size	2,00

Figure 16, charts with dwelling compositions, derived from <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>, 2022.



Around 50% of the households are single-living. Only 33% of the households are with children, which could suggest that household composition resulted in the lack of activities on the streets. However, due to a lack of access to the database, there is no further data we could apply to narrow down the demographic distribution to the housing scale hence it's impossible to present the distribution of nationality and household type within the research area.

The figure x shows that 78% of the 2562 houses in Moerwijk South are owned by social housing corporations. Only 9% of the houses are private rental and 13% privately owned, of which 8% are unoccupied. 87% are built for multiple families and 13% are for single-families. Most of the houses 79% were built before 2000. ²³

Households, SES & Income

The Socio-Economic Status (SES) of a neighborhood is indicative of the levels of wealth, education and employment and is closely related to health factors. Moerwijk is one of the neighborhoods with the lowest SES score in the municipality of the Hague. Surprisingly, Moerwijk South has a higher score than West and East. Only North has a higher SES score. ²⁴

23 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>

24 CBS Statline. (n.d.). Opendata. cbs.nl. <https://opendata.cbs.nl/#/CBS/nl/dataset/85163NED/table>

District	Private Households	SES
The Hague	255 600	0,175
Moerwijk	10 700	0,724
Moerwijk Oost	1 700	0,842
Moerwijk West	3 200	0,908
Moerwijk Noord	3 400	0,529
Moerwijk South	2 400	0,676

Figure 17, table with household and SES score per neighborhood, derived from <https://opendata.cbs.nl/#/CBS/nl/dataset/85163NED/table>, 2020.

ARCHITECTURAL ETHNOGRAPHY

Development all crimes total

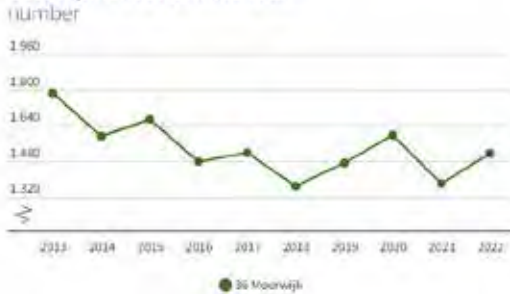


Figure 18, charts with dwelling compositions, derived from <https://denhaag.incijfers.nl/dashboard/wijkprofielen/leefbaarheid-en-veiligheid/?regionalevel=wijk®ioncode=36>, 2022.

24 Veiligheid & leefbaarheid Den Haag Southwest. (2021, March 4). Den Haag Southwest. <https://>

Moerwijk is a neighborhood with a relatively high number of residents that have a criminal record.²⁴ In 2022 1515 crimes were reported in the neighborhood. The residents in Moerwijk feel relatively more unsafe. In Moerwijk over 47.7% of the population feels unsafe as compared to 31.4% in the rest of The Hague.²⁵ In Moerwijk the police particularly have to respond to nuisance complaints.²⁶ The only neighborhood which displays more instances of reports of nuisance in the city center.²⁷ In 2022 theft was the most registered crime in Moerwijk South.²⁸

In the neighborhood the ambiance amongst people could be considered hostile. In 2021 firefighters needed to intervene between two neighbors, one of them used a stink bomb on the porch which caused a nuisance for many neighbors.²⁹

Crime	Neighbourhood	The Hague
High Impact Crimes (per 10,000 inhabitants)	74	18
Violent crimes (per 10,000 inhabitants)	95	76
Thefts (per 10,000 inhabitants)	185	198
Nuisance	Neighbourhood	The Hague
Reports of nuisance youth (per 10,000 inhabitants)	93	120
Reports of nuisance persons (per 10,000 inhabitants)	232	217
Reports of other nuisance (noise, drugs, conflict mediation) (per 10,000 inhabitants)	713	371

Figure 19, charts with crime data, derived from <https://denhaag.incijfers.nl/content/leefbaarheidscircel>

According to a research done by the municipality of The Hague in 2019, compared to the other deprived neighborhoods in South West, Moerwijk is a neighborhood where the residents feel the most lonely and depressed. The neighborhood also has the lowest average income, there is a high number of people living from social benefit, and children quit school earlier. In a study about social cohesion conducted by the Safety monitor (Veiligheidsmonitor) about the quality of life in 47 neighborhoods in the Hague in 2021, Moerwijk ranks below the average score. Being given a score of 5.2, it is one of the neighborhoods with lowest social cohesion, with only 4 neighborhoods scoring lower. The investigation was performed through a structured interviews with residents, who were being asked to score the following statements:

1. *The people in the neighborhood treat each other in a pleasant way.*
2. *If I were to go on holiday or be absent for a longer period of time, I would dare to give my house key to the neighbors.*
3. *I am satisfied with the population composition in the area.*
4. *I feel at home with the people who live in the area.*
5. *I live in a nice neighborhood where people help each other.*
6. *In this neighborhood, people dare to call each other to account for undesirable behavior.*
7. *I have a lot of contact with other local residents.*
8. *The people in the neighborhood barely know each other.*



Figure 20, charts with nuisance reports, derived from <https://denhaag.incijfers.nl/content/leefbaarheidscircel>

15 Buurt Moerwijk South (gemeente Den Haag) in cijfers en grafieken. (2023, March 22). AlleCijfers.nl. <https://allecijfers.nl/buurt/moerwijk-south-den-haag/>

16 Héél véél informatie over Nederland. (2021, September 5). AlleCijfers.nl. <https://allecijfers.nl/nederland/#100-onderwerpen>

17 CDC. (2020, May 26). Loneliness and Social Isolation Linked to Serious Health Conditions. <https://www.cdc.gov/aging/publications/features/lonely-older-adults>.

18 National Academies of Sciences, Engineering, and Medicine. 2020. Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25663>.

Physical health is an important factor to consider when evaluating social aspects of an individual in a community. 72% of people aged between 18 and 65 reported having good or very good perceived health, evaluated through a health monitoring survey, whereas 51% of senior residents reported the same.¹⁵ In the whole of the Netherlands, these statistics are higher, 82% and 67%, respectively¹⁶, and for the municipality of the Hague - 79% and 61%, respectively. According to the Center for Disease Control and Prevention from the U.S Department of Health and Human Services, loneliness and social isolation can be of direct influence to health conditions.¹⁷ Moreover, a study from the National Academies of Sciences, Engineering, and Medicine in the U.S. found that:

Health

“Poor social relationships (characterized by social isolation or loneliness) was associated with a 29% increased risk of heart disease and a 32% increased risk of stroke.”

“Loneliness was associated with higher rates of depression, anxiety, and suicide.”

“Loneliness among heart failure patients was associated with a nearly 4 times increased risk of death, 68% increased risk of hospitalization, and 57% increased risk of emergency department visits.”¹⁸

In the Moerwijk South neighborhood, 32% of residents between 18 and 65 years of age stated they have 1 or more long-term conditions¹⁹, which is higher compared to the Hague (28%) and the Netherlands (28%).^{20,21} According to a research done by the municipality of The Hague in 2019, compared to the other deprived neighborhoods in South West, Moerwijk is a neighborhood where the residents feel the most lonely and depressed. The ratio of people above 19 years old who feel severely lonely is 24% for Moerwijk, in contrast to 16%, which is the average for the city of the Hague.²²

19 Buurt
Moerwijk South
(gemeente Den
Haag) in cijfers
en grafieken.
(2023, March
22). AlleCijfers.nl.
<https://allecijfers.nl/buurt/moerwijk-South-den-haag/>

21 Héél véél
informatie over
Nederland. (2021,
September
5). AlleCijfers.
nl. <https://allecijfers.nl/nederland/#100onderwerpen>

Health Behavior

Meets alcohol guideline	69%
Drinker	49%
Heavy drinker	6%
Excessive drinker	3%
Underweight	2%
Normal weight	43%
Overweight	55%
Severe obesity	20%
Smoker	26%
Meets exercise guideline	44%
Weekly athletes	40%
Walk to school or work	40%
Cycling to school or work	31%
Walk and/or cycle	59%
Lonely	64%
Severely/very seriously lonely	24%
Emotionally Lonely	46%
Social Lonely	46%
Moderate control over life	85%
Difficulty getting around	33%
Serious noise nuisance	11%
Volunteer work	16%
Moderate/high risk of anxiety or depression	59%

Value

Figure 12, table
with percentages
of health and
social profiles,
derived from
<https://allecijfers.nl/buurt/moerwijk-South-den-haag/>, 2022

Microorganisms in the air and respiratory health in the neighborhood

The pollen sniffer was used at the intersection between the Rijnauwenstraat and the Cranenburglaan. It detected 301 species in the area. This is a relatively high number of different species. Within close distance there are multiple green areas located, this could be an explanation for the high variety of species of fungi and bacteria. A high number of different species can positively influence the microbiome of the residents. As visible in table x, in the case of Moerwijk South the percentage of people having asthma is slightly lower, but the acute and other respiratory diseases are on the contrary higher than in West, and Moerwijk North and East.

ICPC-code	Type	Moerwijk		
		Moerwijk West	Moerwijk South	Moerwijk North East
R95	COPD	2.7%	3.0%	4.3%
R91	Chronic bronchitis/ bronchiectasis	0.8%	1.0%	1.3%
R96	Allergic asthma	11.1%	8.6%	10.4%
R74	Acute upper respiratory tract infection	4.8%	7.2%	6.1%
R83	Other respiratory infection(s) (diphtheria,covid-19)	8.5%	9.7%	6.5%
R80	Influenza	NA	0.6%	NA
R87	Laryngo-Tracheo-Bronchial Foreign Bodies	0.8%	0.7%	0.6%
R77	acute laryngitis/tracheitis	NA	NA	0.3%

Figure 13, Prevalences in of respiratory tract infections in Moerwijk, where NA indicates a percentage too small to be displayed. Table provided by researchers of LUMC, 2023



Spatial Analysis

The site analysis is partitioned into multiple aspects; greenery and space, density, amenities, public transport and accessibility, height, age, typology, and as last safety. These factors are analyzed because they are considered as having a potential influence on the social cohesion in the neighborhood. The analysis is based on statistics and substantiated with observations.

**SPATIAL
ANALYSIS
AND HEALTH
INDICATORS**

-0,31

Leefbaarometer¹
Total Score
Scale: Grid

103

Residential Density
Dwellings / Hectare

21,1%

Intake of more than 5+
types of medication²
Scale: Ypenburg, 2017

26,5%

Ground Space Index
Groundfloor Surface
Occupation / Hectare

72%

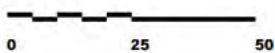
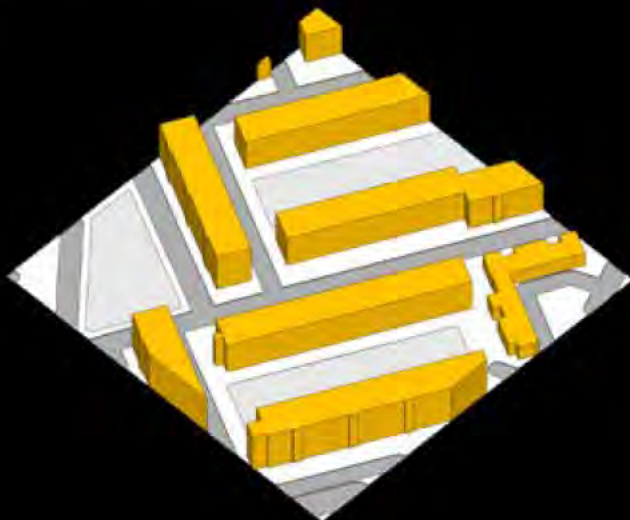
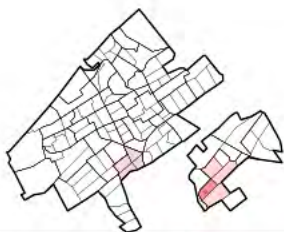
Perceived Good Health
Moerwijk-Noord,
aged 18-65³

25,73m²

Average Household
Footprint
10,000 x GSI / Households

51%

Perceived Good Health
Moerwijk-Noord,
aged 65+³



URBAN





Greenery

As visible on the site map of Moerwijk South, approximately 34% of the land mass is green space, which is distributed by playground, public greenery and courtyard. There's a portion of public greens present as the main corridor in the middle of Cannenburglaan, and some present as several triangle shaped fields in front of the buildings. The majority of trees that are larger in size and older in age are concentrated in playground, corridors, and courtyards.

Public greenery

The corridor in the middle of Cannenburglaan is more complete in terms of size in comparison to other public green spaces. Located in the middle of the neighborhood, theoretically with access to both the northern and southern part of the neighborhood, the connection seems to be cut off by the high density of parking on both sides of the road.

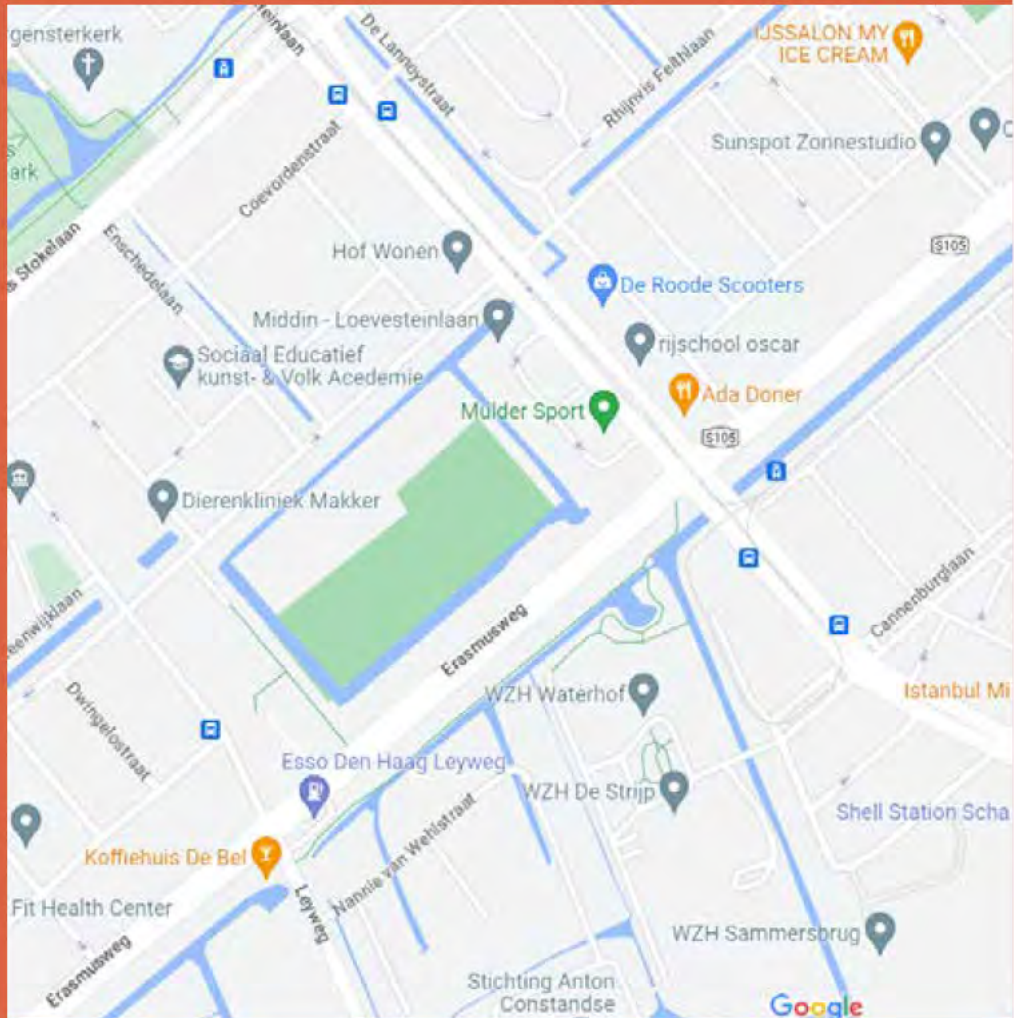
Playground

The only playground in the research area sits at the upper right of the neighborhood, which is relatively off the center and not well connected to the neighborhood. There are tracks surrounding the pond and benches implemented under trees next to several sets of playground equipment. Judging by the component of the elements, the location could have been the one of the factors of low utilization regardless of perception of safety.

Courtyard

Every block of the neighborhoods contains a courtyard, where all balconies are facing to. All courtyards are given good care, some of them are equipped with community farms, but often not utilized by the inhabitants. In some of these gated courtyards there are signs that say: 'prohibited to play soccer' and 'child playground, prohibited for dogs'

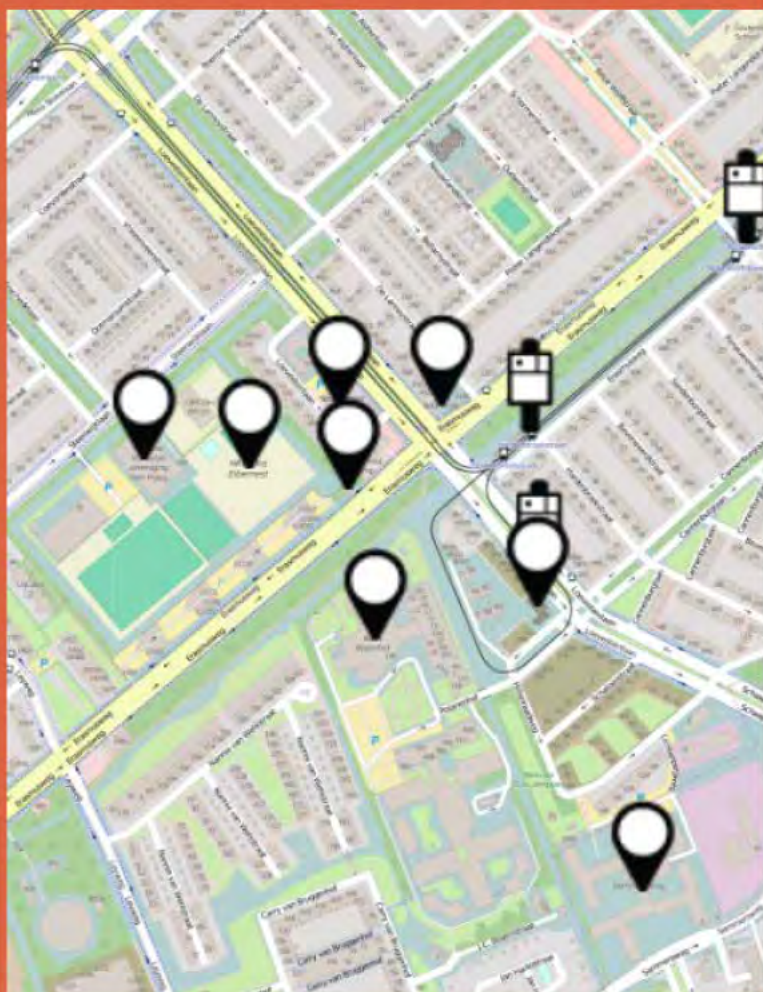
ARCHITECTURAL ETHNOGRAPHY



Amenities



The map shows relatively few amenities in the neighborhood. It consists mainly of buildings that are utilized for housing. However, it is significant that within this neighborhood there are three community centers located: Stichting bij Betje, Hart van Moerwijk, and Stichting Sifa. The latter is a more specific community center that guides and supports immigrants. At the edge of the neighborhood the park Overvoorde is located. Amenities such as supermarkets are located in the Betje Wolfstraat, which is a walking distance from the neighborhood. In the distinct area 'de Grote Beer' can be found.



Transport

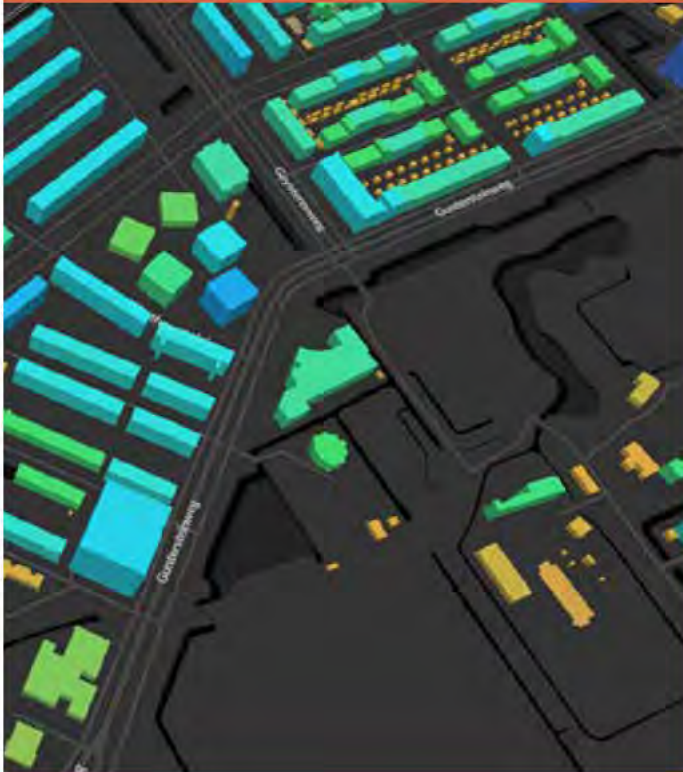
The neighborhood is connected to other areas both by public transport and a considerably large road. However, the neighborhood is mainly accessible at one side of the neighborhood. At this border there are two tram stops.





Height

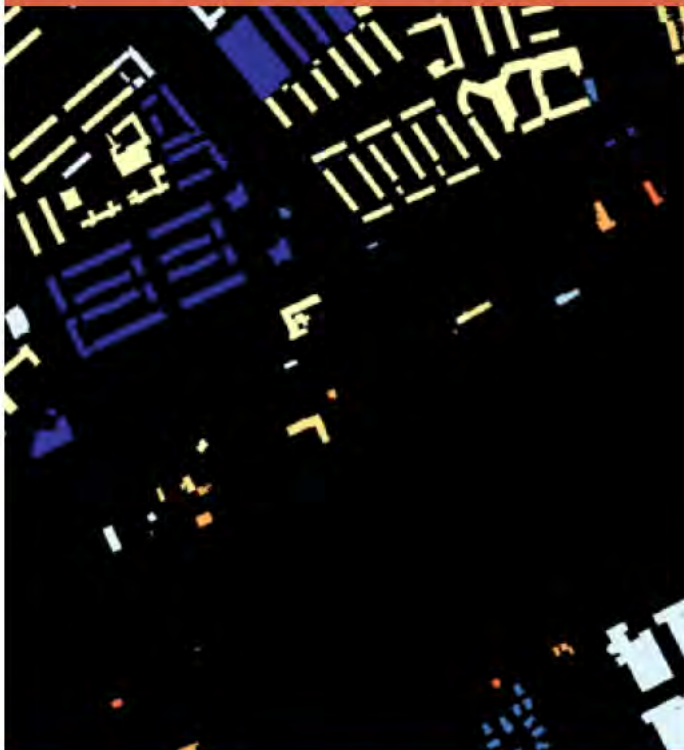
When analyzing the height of the buildings in the neighborhood, it is clear that it consists of mainly multi layered complexes. Only a few structures consist of one floor buildings, but most of the buildings are apartment complexes with 2 or more apartments on top of each other.





Age


The buildings in Moerwijk South were mainly built between 1945-1960. The facades of the buildings are as visible in the pictures in the next pages to some extent maintained. There are new buildings at the east side of the neighborhood that were built after 2005. This is a nursing home complex.



ARCHITECTURAL ETHNOGRAPHY







The observatory analysis entails observations we did during our visits to the neighborhood. We encountered some residents and had brief conversations with them. The analysis also includes observations about the spatial context of the neighborhood and how residents utilize personal and public spaces.

The spatial context in the research area could be categorized to three types in terms of their publicity, namely the main streets

that are connected to other neighborhoods, secondary streets which are for inner neighborhoods, and courtyards that are enclosed by the collective housing.

In the nearby neighborhood Moerwijk West the residents of Moerwijk South can fulfill their daily needs at the supermarket and other shops. The public transport is also located at the border between Moerwijk South and West, via the mainstreet Erasmusweg and its intersections residents can access these facilities.

We used the gate method to monitor movement in the neighborhood at two different times. Below the main observations are described, and more detailed results can be found in annex I and II. The major group of the residents, single or with kids, rarely along with friends (guessing based on the interaction and age), were observed with their shopping

Observatory Research

bags. The ones that shopped would usually walk home via Erasmusweg and turn left at the intersection with secondary street which possibly leads to their home. Based on the displayed activities, the main streets perform the characteristic of a corridor. There are more acts of passersby instead of chit-chatting.

In general, the behavioral patterns present a constant movement. Users usually have a clear destination, for instance, shopping,



Figure 21:
example smaller
playgrounds in
the neighborhood,
made by the
authors.



Figure 22: largest
playground in
Moerwijk South,
made by the
authors.



Figure 23:
invitation to social
neighborhood
events, made by
the authors.

Estrangement amongst neighbors

A resident who lived in the neighborhood for 28 years. However, she only knew her next door neighbor and her neighbor who lives across the street. She said that the last couple of years a lot of people moved and that she did not feel the need to interact with them.

Noise complains about playground

There is one larger playground in the research area, and some smaller playground sets (figure x). The larger playground was quite busy when we visited it (figure x). We spoke to one resident who mentioned that the playground that was located near their house was broken down due to noise complaints from the neighbors.

Connection with neighbors

Figure x shows a poster made by a neighbor that invites other residents for two events to connect and interact with each other. The neighborhood has a wide variety of nationalities and on the poster the invitation is written in different languages. This could be interpreted as a willingness to all residents and wanting to engage with each other.

The outside participation kitchen

The Participation kitchen that is located in the community center 'Hart van Moerwijk' has an outside kitchen. This kitchen serves as a counter where the residents can grab free food. One of the employees of the Participation Kitchen mentioned that when they stock products in the outside kitchen, the next day almost all the food is gone. He said that people are grateful and in need of the free food. This is significant as this seems contradicting to the experience we had when distributing free food. In our experience the residents were reluctant to take the free food.

ARCHITECTURAL ETHNOGRAPHY









Figure 24: Front yards, made by the authors.

Privatization of the front yard

There are some buildings that have a front yard. The residents of these houses do not seem to focus on the appearance of their garden figure xx. Most of them are tiled and greenery is often lacking. We met one resident who privatized her front garden and put statues and birdhouses in her yard (figure x). She mentioned that she had lived in that house for 28 years and it was important for her that her house felt like a home.

Residents pissing on each other facades

Figure 25: Sign on the facade of an apartment building about pissing on the facade, made by the authors.

At one of the apartment complexes we noticed the sign in figure x1 that said in Dutch 'do not piss here, piss somewhere else, this is not a urinal!' at the door of an apartment complex. This could indicate that residents or visitors of the neighborhood

do not care about someone else's property and see facades in the neighborhood as a urinal. The sign could indicate that the residents of the apartment complex feel that the common entering hall is a part of their house and that it needs to be clean.



Ownership of shared enteringhall

We noticed that in one apartment complex the entering hall was decorated with plants as visible in figure x11 and x12. This could indicate that this hallway feels as an extension to this residents house.



Figure 26:
Decoration in
the entering hall
of an apartment
complex, made by
the authors.



Figure 27: Plants
in the shared
entering hall of
an apartment
complex, made by
the authors.



Figures 28 30,
use of balconies
of residents in
various locations,
made by the
authors.

Functionality of the balconies

Many of the houses in the neighborhood have a small balcony or garden. We observed the same for the balconies as we did for the front gardens of houses. The residents seem to utilize the balcony mainly as a functional place; to dry laundry or as storage. Figure x1a, x2a, x3a show some of the balconies in the neighborhood. Another observation about these balconies is that residents tend to put a fence around their balconies as visible in figure x2a and x3a. The fact that people use their balconies primarily as a functional space rather than a personal space could be interpreted as the need for more storage room as their apartments are too small or a lack of feeling the urge to make a house more personal.

The closed curtain culture in Moerwijk South

In the Netherlands there is an open curtain culture, people can often look through the windows of houses. As visible in figure x3b and this is not the case in Moerwijk South, in many of the houses it is not possible to see the inside of it. Residents blocked the windows with curtains and in the windows, at the back of the apartments, stuff is stored. This observation can be considered as a way for citizens to gain privacy and be anonymous because people cannot form an opinion about the rather neutral appearance of their house.



Figure 31, use of balconies of residents in various locations, made by the authros.

ARCHITECTURAL ETHNOGRAPHY





Figures 32-36, use of balconies of residents in various locations, made by the authors.



During the conversations we had with the residents, several people said that they felt unsafe in the neighborhood, especially at night. They stated that the neighborhood got more unsafe the past couple of years. Multiple people mentioned murders in the last year that made them feel unsafe. One of these residents said that she does not want her 14 years-old son to go outside during the night because of the recent crimes. Another citizen spoke about the increased drugs dealing in the neighborhood, according to her is drug being dealt at every corner.

It could be argued that health pays a contribution to feeling safe both inside and outside of your house. One resident mentioned that the outside of her house has been renovated a couple of years ago, however the inside of her house has

Perception of safety & health

not. She mentioned that she still has mold inside of her house and even though extra walls have been placed at the outside of her house, it was still drafty inside.

Another resident mentioned that she removed the laminate flooring because she suffered from silverfish bugs inside of her house. She said that because of these bugs she felt that her house was dirty, which impacted her health because of lacking hygiene.



Discussion

The aim of this research was to formulate an answer to the following research question: 'How is social cohesion displayed in different spatial aspects in Moerwijk Zuid, and in turn what effect does the spatial expression have on the social cohesion and perception of safety?'. To address the question, the following key findings are deemed to be of importance.

By analyzing the statistical data of socio-economic characteristics of the inhabitants, we retrieved the following insights about the population. First, Moerwijk South has a high variety in ethnicities in the neighborhood and there is a continuous flow of residents moving in and out of the neighborhood. Around 50% of the households are single living. The majority of people in these households have a low educational level and there is a high rate of school dropouts. Second, the overall financial capital of the residents is considered below modal income. Third, the inhabitants' mental health can be considered as poor. Last, compared to other neighborhoods in the Hague Moerwijk South is the neighborhood with the highest number of nuisance complaints and residents perceive their neighborhood as relatively unsafe. This might be related to the high number of people with a criminal record.

Based on the spatial analysis we gained a better understanding of the neighborhood. We considered the observations described below as most insightful. First off, inside the neighborhood there is a lack of amenities such as shops and there are only public transport stops at the border with Moerwijk West. On the contrary there is a relatively high number of three community centers within the area. Additionally, the neighborhood is covered for 34% with either courtyards, or public green areas. In these public areas there are multiple initiatives for social interaction, such as community gardens. However, most of

them are not utilized. Also, the (gated) courtyards are often well maintained but again do not seem to be utilized by people. In these courtyards there are conflicting signs that indicate that it is a children's playground, but children cannot play soccer. Moreover, there is only one large playground in the neighborhood, next to this only a number of single playsets are placed throughout the neighborhood. The single playsets, based on their state, are not used often and when we visited the large playground it was calm.


Our third analysis focused on observing the behavior of residents on the streets. The first noteworthy observation was that people on streets and in the green areas were in constant movement, regardless of the weather. When these residents crossed paths they did not interact with one another. Moreover, we found out that the Participation Kitchen supplies free food in their outside kitchen. These supplies are taken by residents during nightfall, rather than during the day. Also, we observed that the front yards or balconies are either used as extra storage room, or they are completely empty. Only a few residents put benches, statues or greenery on their personal property. Next to that, it was noted that most residents keep their curtains closed. The time of day nor the weather hardly had an influence on whether people opened their curtains.

The gathered data shows that there is a lack of social cohesion. For example, there are not many amenities in the neighborhood, except for the relatively high number of community centers. This could be considered as a response to the need for help in making social connections with other residents. The fact that the food supplied by the Participation Kitchen is mostly taken at night is an interesting phenomenon. This can be interpreted as a way for people to avoid their neighbors. Also, there are various community gardens, but many of them are not used.

This could be considered as another indication of lack of social cohesion. This underutilization of green space is occurring throughout the neighborhood, as people only move through these places. They do not interact when they encounter one another. Which could also be an implication for lack of social connections. But not only the way people behave outside of their houses can be possibly linked to inadequate social engagement. The closed curtain culture in Moerwijk South can be interpreted as a way to remain anonymous and keep other people out. The empty or completed packed balconies and front gardens could also be seen as a way to express this feeling of anonymity. As many people do not privatize their property, and do not make it a place for themselves to connect or express their personal preferences. Lastly, the high number of nuisance complaints can also be seen as a lack of social cohesion. Seemingly, people do not connect their neighbors directly but they call the police first.

Our research is based on three extensive analyses, and on these findings a solid conclusion can be formulated. Nevertheless, there are some limitations to our research. One of the limitations is not having more indepth communication with a resident. This would have enabled us to gain more insights about their perception and interpretation of our findings. Moreover, we based a part of our research on multiple visits to the neighborhood. However, the interpretation of these observations could be colored by personal bias and frame of reference. The last limitation of our research is time shortage. If we would have had more time to visit the neighborhood more often, we would have been able to retrieve more data and observe the behavior of the residents more thoroughly. Yet, the formulated conclusion in the following section creates insights for further research. We recommend conducting more research on the phenomena that people seem to be avoiding

each other when getting free food from the Participation Kitchen. This raises the question if this is because they feel ashamed or for other reasons. Also, for further research we would suggest collaborating with the Participation Kitchen, this could be a way to connect with residents. So questions like 'what specific aspects of the neighborhood make you feel involved with your neighbors?' could potentially be answered. Moreover, there seems to be a link between the perception of safety and how people use the spatial context. To be more precise, it would be interesting to see if and why people make certain choices in the display of their houses because they feel relatively more unsafe compared to other neighborhoods.



Based on the main observations done in the three analysis the following answer has been formulated on the research question 'How is social cohesion displayed in different spatial aspects in Moerwijk Zuid, and in turn what effect does the spatial expression have on the social cohesion and perception of safety?'

The average rating of the social cohesion in the neighborhood is lower than in other areas in the Hague. This lack of social cohesion is displayed in different spatial aspects. First, there is a high percentage of greenery that could potentially be used by residents for social interactions. But in reality these spaces are hardly used, except as a passage. Residents are in constant movement and interaction amongst them is almost nonexistent. Second, many buildings have a front yard or balcony, which are often utilized in ways that differ from their original design. The balconies used as storage rooms or completely empty do not invite social interaction with neighbors. Third, another indication of anonymity and diminished social cohesion can be seen in the facades of houses in the neighborhood. The houses seem empty because of closed blinds, regardless of the time of day or the weather. The behavior of residents and how they display their houses could have a fortifying impact on the already lacking social cohesion, and deteriorate the feeling of loneliness and anonymity. Not knowing who

Conclusion

your next door neighbor is, not even knowing if they are at home, could have an impact on the social cohesion in the neighborhood and the perception of safety. This research aimed to answer the question how the lack of social cohesion is displayed. Therefore, it would be interesting to conduct further research that is focused on the interpretation of our findings given by residents and their perception on the social cohesion in their neighborhood. This could create insights on why the engagement in the neighborhood is lacking. But most importantly how this can be improved.

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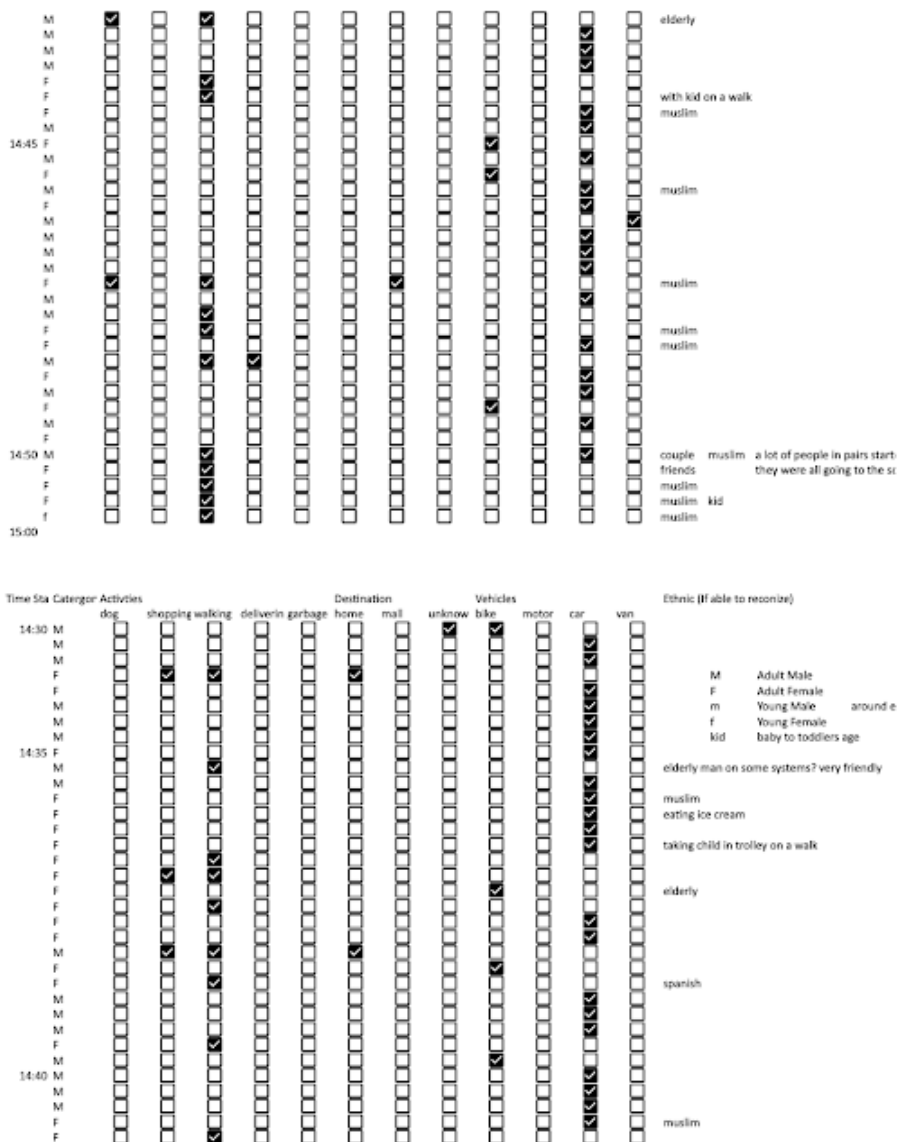


Figure 1: Chart with results from the gate method.

Appendix I

We used the gate method to analyze and document the behavior of residents in a more systematic way. By using the gate method we created an 'invisible gate' and when people passed through the gate we documented their behavior, what they were carrying and what their mode of transport was. We did this on two separate moments to notice if people are behaving differently on various moments. The first 'gate' was placed at the intersection where we also took the air sample; between the Rijnauwenstraat and the Cranenburglaan. Below figure 1 and 2 indicate the invisible gate.

The experiment was done during a weekday and the chosen location was on one of the main roads of the neighborhood. It is an access road that leads to streets where most of the entrances of the apartment complexes are. During the experiment the street was mainly used by cars and pedestrians passing the gate to go to a destination somewhere else. Some people were carrying shopping bags. Most of the people who were crossing the gate either walking, by bike or car, were passing it alone. The majority of the people who were passing appeared to be muslim, and 10 of them were wearing a hijab.



Figure 2: photo of observation location.

Figure 3: map that indicates the position of observation.



Figures 1 3 Location of the second gate method performed.

Appendix II - 23/03

We used the gate method to analyze and document the behavior of residents in a more systematic way. By using the gate method we created an 'invisible gate' and when people passed through the gate we documented their behavior, what they were carrying and what their mode of transport was. We did this on two separate moments to notice if people are behaving differently on various moments. Below figure 1 and 2 indicate the invisible gate, which was positioned at the Remmersteinstraat.

The chosen location was on a relatively busy street, with the primary school on one end and the tramline to the Hague and Moerwijk station on the other end. The experiment was carried out on a weekday in the afternoon in order to retrieve data different from the one obtained during the weekend visit. It was a sunny day so many people were outside. Some were returning home from shopping, others doing deliveries, walking with children or talking on the phone. It was interesting to observe that the majority of people that crossed the invisible "gate" did so alone. Either walking, cycling or driving, the activity of people on the street was mostly unaccompanied. There were two elderly people, a man and a woman, who seemed to be enjoying a sunny walk. 10 of the passing women wore hijabs.

Around 15:00 pairs of people started passing me from one direction, which even in the short time I was there felt unusual. I followed them to the primary school, where they were waiting to pick up their children (figure 4).

We observed that the people don't utilize the public spaces around the buildings and in the neighborhood as a whole. Despite the good weather and a lot of activity on the street, as the majority of observed people were traveling by car, the courtyards and parks were empty (figure 5).

When taking the bottom left photo, a man showed up in the window seemingly annoyed and asked what I'm doing there. After a small conversation, he said he has been living here for ten years, and there was always some sort of trash outside this door. He lives there with his wife and child. This observation could indicate that even though people are not concerned with the appearance of their neighborhood, they do in fact keep an eye on the neighborhood.

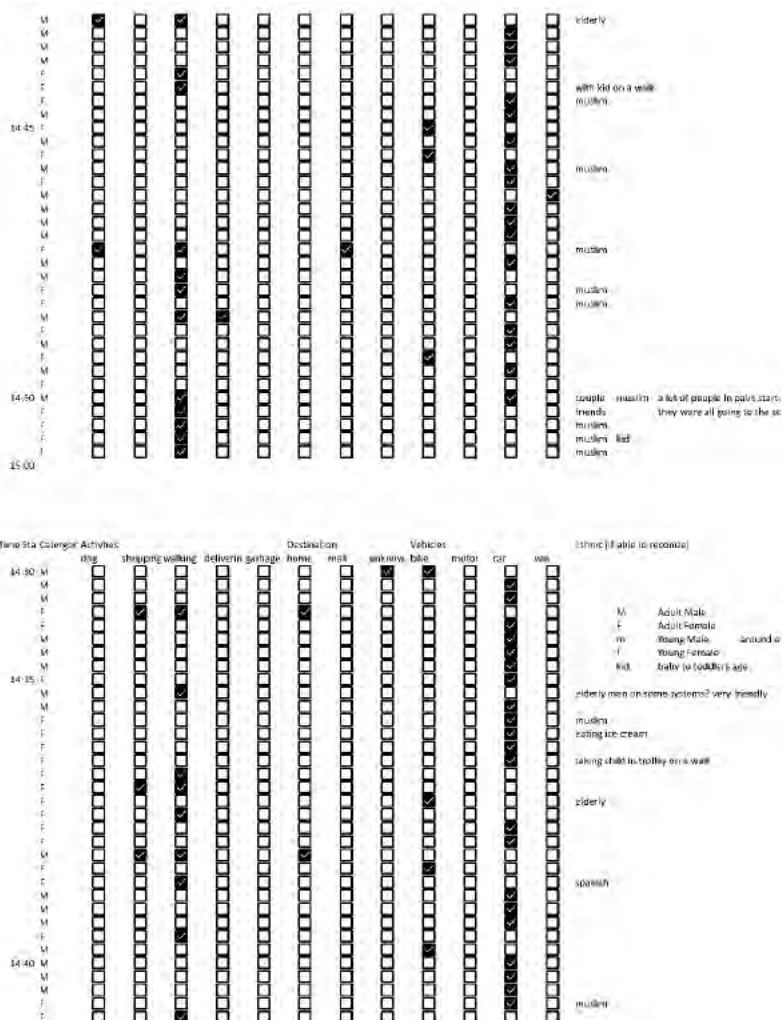


Figure 4: Chari with results from the gate method.



Figures 5-9: Decay in the neighborhood, various locations
 Figures 10 (bottom right): Following the pairs of people.



Translations

VERTALINGEN

ÇEVIRILERI

مچارت

Samenvatting in het Nederlands

De Buurt

Gelegen in het zuidelijke Enscamp-district van Den Haag, kwam de wijk Moerwijk, ontworpen door Willem Dudok, tot stand in de naoorlogse periode. Hoewel de bouw in de jaren 1930 begon, verergerde de oorlogsverwoesting in Nederland het tekort aan woningen, wat leidde tot een versnelde ontwikkeling van Moerwijk in de jaren 1950 om ontheemde bewoners te huisvesten. In de late jaren 1950 bereikte de bevolking van de gemeenschap haar hoogtepunt. Oorspronkelijk bestaande uit jonge gezinnen, vakwerkers en ambtenaren, onderging Moerwijk een demografische verschuiving, met een afname van bewoners naarmate de vergrijzing zich in de jaren 1970 voltrok.

Vandaag de dag heeft het demografische landschap van Moerwijk aanzienlijke veranderingen ondergaan, met een meerderheid van migranten als bewoners. Dit rapport richt zich specifiek op Moerwijk Zuid, begrensd door belangrijke straten zoals Erasmusweg, Loevesteinlaan, Guntersteinweg en Geysterenweg. Dit deel van de wijk omvat 14 blokken en kent zeven verschillende woongebouwtypologieën. Het analyseren van de evolutie van Moerwijk Zuid biedt inzicht in de dynamische veranderingen en diverse gemeenschappen die deze ooit voornamelijk naoorlogse woonwijk hebben gevormd.

Het proces

Om de buurt beter te begrijpen, zijn we een partnerschap aangegaan met de Participatiekeuken in Moerwijk Zuid, een buurthuis waar bewoners samen kunnen koken en met elkaar in contact kunnen komen. Het centrum deelt gratis voedsel en benodigdheden uit via een open keuken. De manager heeft ons royaal voorzien van tomatenpasta en champignonsoep, die we in de buurt hebben verspreid, herkenbaar door het dragen van schorten. Bewoners waren echter terughoudend om voedsel van 'vreemden' te accepteren, en de meesten wezen de boodschappen af. Ondanks dit hebben we kort gesprekken gehad met 8 bewoners, waarbij we inzicht kregen in hun percepties van de buurt. Helaas accepteerde slechts één bewoner het gratis voedsel.

Deze interacties onthulden een overheersend gevoel van toenemende onveiligheid in de buurt in de afgelopen jaren. Twee steekincidenten werden herhaaldelijk genoemd tijdens onze gesprekken. Ondanks onze inspanningen waren geen van de bewoners bereid om diepere gesprekken aan te gaan of deel te nemen aan videorapportages over hun perceptie van gezondheid in de buurt.

Naast de samenwerking met de Participatiekeuken hebben we tweetalige flyers ontworpen (in het Nederlands en Engels), te zien in afbeeldingen 3 en 4, met als doel een breder publiek te bereiken. Deze flyers werden verspreid in het buurthuis en onder bewoners om duidelijkheid te verschaffen over ons onderzoek en deelname aan te moedigen.

Türkçe Özet

Mahalle

Lahey'in güneyindeki Enscomp bölgesinde bulunan, Willem Dudok tarafından planlanan Moerwijk mahallesi, II. Dünya Savaşı sonrasında ortaya çıktı. İnşaatı 1930'larda başlamış olmasına rağmen, Hollanda'daki savaş tahribatı konut sıkıntısını artırdı ve Moerwijk'in gelişimini 1950'lerde yerinden edilmiş sakinlere yer sağlamak amacıyla hızlandırdı. 1950'lerin sonlarında nüfus zirvesine ulaşan topluluk, başlangıçta genç aileler, becerili işçiler ve yetkililerden oluşurken, demografik bir değişim yaşadı ve yaşlanan nüfusla birlikte 1970'lere doğru sakin sayısında bir azalma yaşandı.

Bugün, Moerwijk'in demografik manzarası önemli ölçüde değişmiş olup, çoğunluğu göçmen olan sakinler tarafından işaretlenmiştir. Bu rapor özellikle Erasmusweg, Loevesteinlaan, Guntersteinweg ve Geysterenweg gibi ana caddelerle sınırlanan Moerwijk Güney'i üzerinde odaklanır. Mahallenin bu bölümü, yedi farklı konut yapısı tipini içeren 14 bloğu kapsar. Moerwijk Güney'in evrimini analiz etmek, bu bir zamanlar çoğunlukla savaş sonrası konut alanını şekillendiren dinamik değişiklikler ve çeşitli topluluklara dair içgörüler sunar.

Süreç

Mahalleyi daha iyi anlamak için Moerwijk Güney'deki Participation Kitchen ile ortak olduk, burası sakinlerin akşam yemeği yapabileceği ve birbirleriyle etkileşimde bulunabileceği bir toplum merkezi. Merkez, açık bir mutfaktan ücretsiz yiyecek ve malzeme dağıtıyor. Yönetici, bize domates sosu ve mantar çorbası gibi ücretsiz yiyecek sağladı; bunları tanınabilir olmak için önlüklerle mahallede dağıttık. Ancak, sakinler ,yabancılarından' yiyecek almaya isteksizdi ve çoğu alışverişi reddetti. Buna rağmen, 8 sakinle kısa konuşmalar yaparak mahallelerine dair algıları hakkında bilgi edindik. Ne yazık ki, sadece bir sakin ücretsiz yiyeceği kabul etti.

Bu etkileşimler, geçen birkaç yılda mahallede artan güvensizlik hissinin yaygın olduğunu ortaya koydu. Sohbetlerimiz sırasında iki bıçaklama olayı defalarca bahsedildi. Çabalarımıza rağmen, hiçbiri daha derinlemesine konuşmaya veya mahallede sağlık algılarına dair video raporlara katılmaya istekli değildi.

Participation Kitchen ile işbirliğinin yanı sıra, Hollandaca ve İngilizce olarak hazırlanan iki dilli el ilanları (şekil 3 ve 4'te gösterilenler), daha geniş bir kitleye ulaşmayı amaçlayarak tasarlandı. Bu el ilanları, araştırmamız hakkında netlik sağlamak ve katılımı teşvik etmek amacıyla toplum merkezinde ve sakinler arasında dağıtıldı.

ملخص باللغة العربية

الحي

يقع حي Moerwijk في منطقة EnsCamp الجنوبية في لاهاي ، وقد ظهر في حقبة ما بعد الحرب العالمية الثانية. على الرغم من أن البناء بدأ في ثلاثينيات القرن العشرين ، إلا أن الدمار في زمن الحرب في هولندا أدى إلى تفاقم نقص المساكن ، مما أدى إلى تسريع تطوير Moerwijk في خمسينيات القرن العشرين لاستيعاب السكان النازحين. وصلت إلى ذروتها السكانية في أواخر خمسينيات القرن العشرين ، وشهد المجتمع ، الذي يضم في البداية الأسر الشابة والعمال المهرة والمسؤولين ، تحولا ديموغرافيا ، مع انخفاض في السكان مع شيخوخة السكان الذين تتراوح أعمارهم في سبعينيات القرن العشرين. اليوم ، تحول المشهد الديموغرافي في Moerwijk بشكل كبير ، حيث تميز غالبية السكان المهاجرين. يركز هذا التقرير بشكل خاص على جنوب مورفايك ، الذي تحده الشوارع الرئيسية - إيراسموسفيج ، لوفيستشتابنلان ، غونترشتابنفيج ، وغيسترينفيج. يضم هذا القسم من الحي 14 مبنى ، ويضم سبعة أنواع متميزة من المباني السكنية. يوفر تحليل تطور Moerwijk South نظرة ثاقبة للتغيرات الديناميكية والمجتمعات المتنوعة التي شكلت هذه المنطقة السكنية التي كانت في الغالب بعد الحرب.

العملية

لفهم الحي بشكل أفضل ، دخلنا في شراكة مع مطبخ المشاركة في Moerwijk South ، وهو مركز مجتمعي حيث يمكن للمقيمين طهي العشاء والتفاعل مع بعضهم البعض. يوزع المركز الطعام والإمدادات مجاناً من مطبخ مفتوح. زدونا المدير بسخاء بصلصة المعكرونة بالطماطم وحساء الفطر ، الذي وزعناه في الحي ، مرتدين مآزر للتعرف عليها. ومع ذلك ، كان السكان مترددين في قبول الطعام من «الغرباء» ، ورفض معظمهم البقالة. على الرغم من ذلك ، أجرينا محادثات قصيرة مع 8 سكان ، واكتسبنا نظرة ثاقبة على تصوراتهم عن الحي. لسوء الحظ ، قبل مقيم واحد فقط الطعام المجاني.

كشفت هذه التفاعلات عن شعور سائد بزيادة انعدام الأمن في الحي على مدى السنوات القليلة الماضية. تم ذكر حادثتي طعن مرارا وتكرارا خلال محادثتنا. على الرغم من جهودنا ، لم يكن أي من السكان على استعداد للمشاركة في محادثات أكثر تعمقا أو المشاركة في تقارير الفيديو حول تصورهم للصحة في الحي.

بالإضافة إلى التعاون مع مطبخ المشاركة، قمنا بتصميم منشورات ثنائية اللغة (باللغتين الهولندية والإنجليزية) معروضة في الشكّلين 3 و 4، بهدف الوصول إلى جمهور أوسع. تم توزيع هذه النشرات في المركز المجتمعي وبين السكان لتوفير الوضوح حول بحثنا وتشجيع المشاركة.

ARCHITECTURAL ETHNOGRAPHY

MWW1

Moerwijk West Case Study Area 1

INSIDE OUT

Binnenstebuiten

ANOUK HAGEN, JEMMA SCHEIJDE, RIES SCHOUTEN

Housing and Health in the Hague

The 2022/23 edition of the MSc2 elective course “Architectural Ethnography” explores the interface between the disciplines of architecture, anthropology, microbiology and public health, to investigate how spatial configurations and social practices influence and are influenced by the interactions between humans, non-humans and the diversity of environmental microbiota. Working in collaboration with students, teachers and researchers of Leiden University Medical Centre (LUMC) and Hogeschool Leiden, this report examines a case study areas located in Moerwijk West, one of the neighbourhoods of Moerwijk, in the Dutch municipality of The Hague. Using a pioneering combination of environmental microbiome research with ethnographic research and spatial analysis this research aims at answering the following research question:

how urban and housing design influences interactions between humans, non-humans and the diversity of environmental microbiota and promotes lung-friendly behaviour?

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Introduction

Moerwijk is a post-war neighbourhood located in The Hague in the Netherlands. The structure of this neighbourhood was largely designed by Dudok in 1949, whose main concept for the neighbourhood was that its infrastructure should be connected to the new road infrastructure of The Hague (Agricola, 2002). Moerwijk-West, and more specifically the fragment we deal with, consists of rows of three-storey housing. These buildings have the same overall appearance, but comprises different sized buildings to make up an urban block that consists of

ARCHITECTURAL ETHNOGRAPHY

streets with front gardens alongside them as well as access portals, and semi-private courtyards that fill the gaps between these buildings. The buildings themselves are brightly painted in orange, blue and red. Overall, we aim to see how this specific building type has an effect on the lung health of the people living in this neighbourhood.

To first understand the demographics of this neighbourhood and a broad understanding of the people who live here, a socio-economic analysis is conducted. This is done using both data obtained from census resources. We will also include people's personal experiences in relation to demographic research in this section that we obtained from multiple sources while visiting the community centre.

Thereafter, we will perform a spatial analysis to better understand the built environment in which the aforementioned population exists. This will be executed in different scales to ensure all factors are accounted for that might affect a person's health.

Once we have an understanding of the people, physical buildings and site, we will further conduct research on one volunteer to better understand an individual's perception of their health in this particular built environment. To do this, we will first conduct a floor plan and site routine drawing to better understand what this individual does with their day, and to generally become more comfortable with each other. We will thereafter leave this individual with a camera, whereby they record snippets of what they think is healthy and unhealthy for them in their routine, both indoors and outdoors.

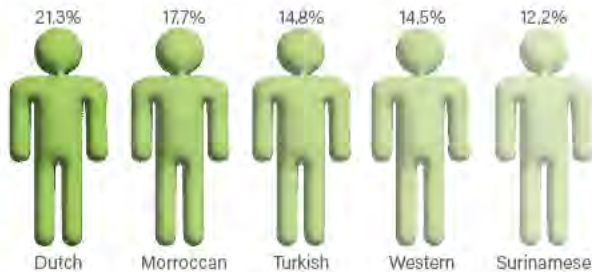
Finally, we will gather the data acquired in all three steps to

come to a conclusion about the effects of this particular built environment on lung health.



Socio-economic Characterization

Moerwijk is characterised as being a multicultural district with people of diverse nationalities and social standings. It also has a low livability metre score ("leefbaarometer") and the stereotype of being a part of The Hague that is relatively unsafe. By doing a deeper demographic study that involves hard data and personal opinions from people we have spoken to, we aim to see if these preconceptions hold true, as well as investigating if people's opinion of the neighbourhood aligns to the impressions that the data and livability metre give.



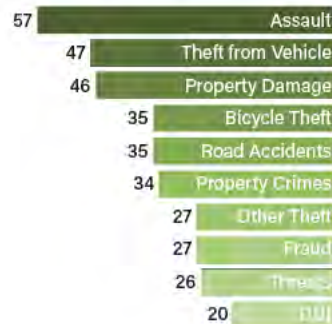
Social

Nationality
Makeup of
Moerwijk West

The population of this neighbourhood is 6240 people, which has only increased by 2% in 10 years (AlleCijfers, 2023). There is a relatively even share of age groups in this area and there are very few (5%) people living alone in this neighbourhood, which is indicative of a familial neighbourhood.

The cultural makeup of this population is indeed diverse, reflective of the fact that the neighbourhood's reputation holds true. Currently, only 21% of the population is Dutch (a decrease from 30% in 2013), while the rest is multinational. The largest populations in this neighbourhood are the Moroccan population (17.7%) and the Turkish population (14.8%).

Based on our experiences of speaking to people in the community centre, there is still some sense of community in this neighbourhood, despite the neighbourhood's low score for community on the liveability metre. While visiting, however, we did notice that people of different backgrounds and mother tongues stuck to



their own groups, so there was very little cross-cultural communication occurring, meaning that while there is some sort of community, it's typically a community that sticks to its own culture.

While in the community centre, we also heard a lot about crime in the neighbourhood and people's personal experiences with it - from more mundane crimes such as littering to people carrying a knife in a person's doorway. The data from this neighbourhood holds up that the crime rates are relatively high. The crimes reported in this area make up 1.2% of the crimes reported in The Hague, despite Moerwijk West only making up 0.5% of the area in the Hague, and 1% of its population. This shows that the crime rate indicated in this neighbourhood is relatively high, perhaps also reflective of the low score for safety (-0.3) on its livability metre score.

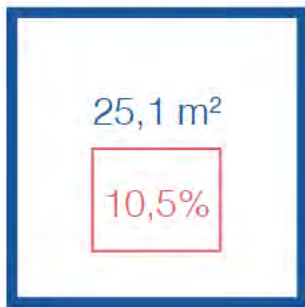
The perceived good health in Moerwijk is relatively low (45% for people aged 65 and over). There are also 10.5% of people who have someone in their household requiring informal healthcare. While compared to the Netherlands this isn't very high, due to the density and small apartment sizes, it's quite a drastic number.



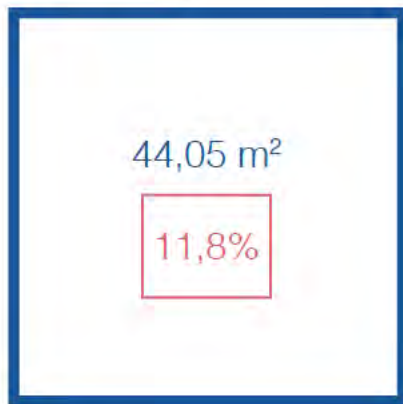
Left: Number of Reported Incidents by Crime Types in 2022

Right: Impression of the Community Centre

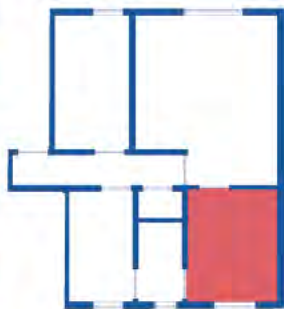
Moerwijk-west



Den Haag



The N



54,8 m²



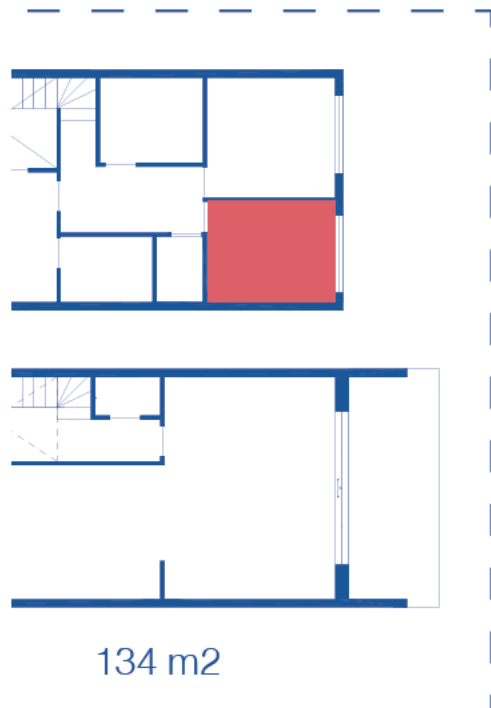
80,1 m²



* examples showing the impact of informal healthcare

Diagram of the
Informal Care
Compared with
Dwelling and
Household Size

Netherlands



Economic

The low economic standings in this neighbourhood are very prevalent from both data recorded as well as interactions we've had with people in this neighbourhood.

The average income in Moerwijk West is €16 500 per year, which makes it the neighbourhood with the third lowest income in The Hague. 28% of the households in this neighbourhood fall below the social minimum, compared to an average of 7% of people who fall below the social minimum in the Netherlands.

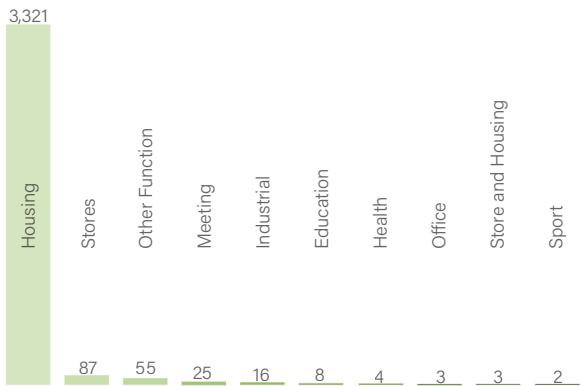
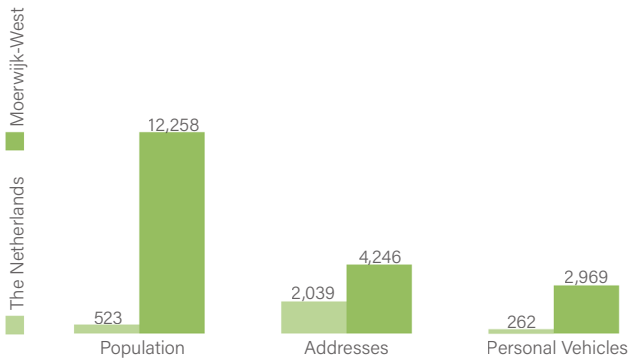
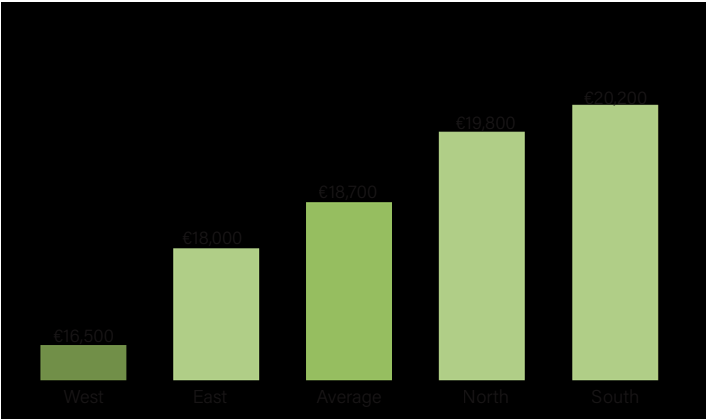
**"People here can't afford cars, so we walk everywhere."
"I would feel bad to show up with a car at a community centre."**

Due to the factor of our neighbourhood being mostly social housing (72%), the low income levels prevalent in this area are justified. Based

on communication with residents of this housing, people are not content with the quality of their homes. These homes are currently managed by Hof Wonen, however have received little maintenance since they overtook the task of maintenance 30 years ago. The degradation and neglect of these buildings could affect the rising crime rates (find reference).

Based on the communication we've had with residents in Moerwijk West, there are very few people who own cars due to their low income. This means that most people walk everywhere, which is a reference we've heard from multiple people we've spoken to. What we've heard about the lack of cars opposes the fact that the density of cars in Moerwijk West being 2969 per square kilometre, in comparison to the national average of 262 cars per square kilometre.

CASE STUDY AREA: MWW1





Spatial Analysis

Moerwijk West consists of walk-up apartment blocks, which have GSI of 25%. This leaves space for different types of gardens, from communal to private. It has a high residential density and small household footprint, which means that many families live in small apartments close to each other. That is one of the reasons it has a negative score on the Leefbaarometer. The building blocks are made up of stamps, that are repeated throughout the neighbourhood. The only thing that's diverse is the coloured paint.

**SPATIAL
ANALYSIS
AND HEALTH
INDICATORS**

-0.47

Leefbaarometer¹
Total Score
Scale: Grid

102

Residential Density
Dwellings / Hectare

21.1%

Intake of more than 5+
types of medication²
Scale: Moerwijk, 2017

25.6%

Ground Space Index
Groundfloor Surface
Occupation / Hectare

65%

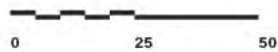
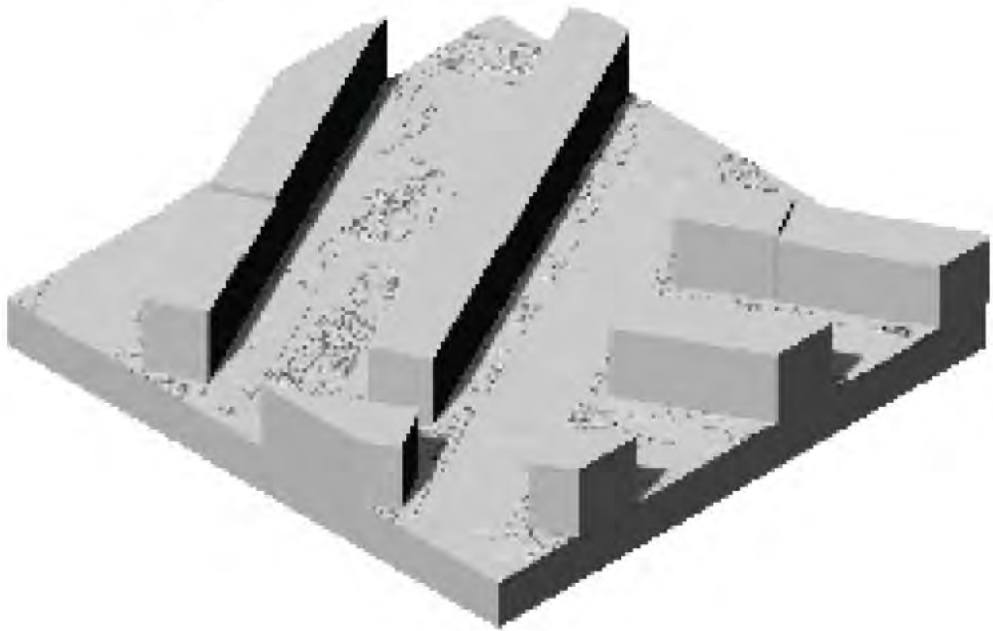
Perceived Good Health
Moerwijk-Noord,
aged 18-65³

25.1m²

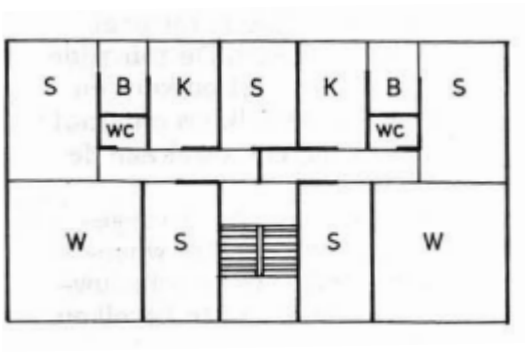
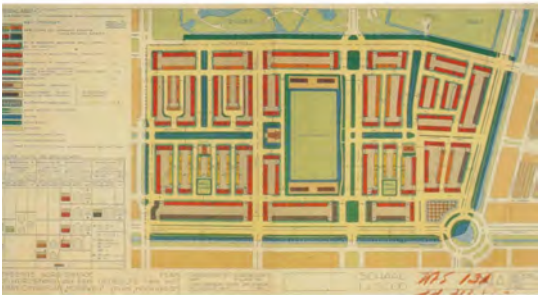
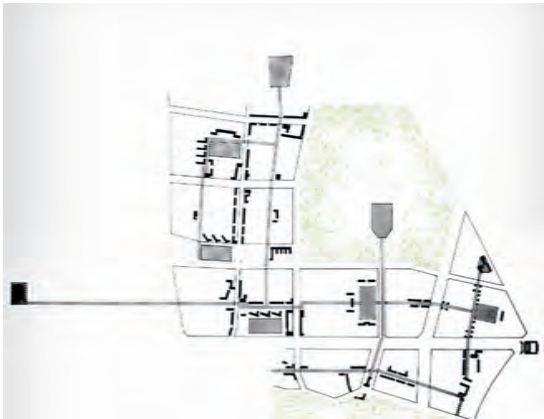
Average Household
Footprint
10,000 x GSI / Households

46%

Perceived Good Health
Moerwijk-Noord,
aged 65+³



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Dudoks plan from
larger to smaller
scale

The layout is part of a plan Dudok made for Den Haag Zuid west after the war to house workers. Dudok divided the Hague in 7 equal parts, without an assigned centre of the city. Within these parts were districts and neighbourhoods, and were supposed to stimulate a 'neighbourhood mindset'. The area is chained to an axis of green that starts in Zuiderpark. This area is part of Moerwijk 3.

The buildings are made up of blocks that are repeated to form different lengths of strips. They have a basement for storage and are 3 storeys high. Between the bedroom and the living room, glass doors make sure there is light and air from both sides of the building. The floorplan is designed for families. The floorplan is determined quite directly by rules from the government to enhance the wellbeing through demands of air, light and space. The orientation is determined by the preferred street versus garden side of the designer. The streetside is supposed to be more formal and houses the living rooms and hallways. The garden side is a bit more informal and the kitchen with balconies and bathrooms are located on this side. Clothes that are let to dry and cluttered balconies make a more informal appearance.

The buildings are likely to be built with bricks and the walls can be divided into dividing walls (22cm) and non dividing walls (11-18 cm). The non carrying walls are built with either brick or alluvial stone. The floors and roofs are made of wood, stone or concrete. Most of the buildings are solid, some are made with a cavity.

The relation with the communal gardens is not direct, you have to take a walk before you reach it. Besides the building is a bit higher because of the basement and the living room is on the street side.



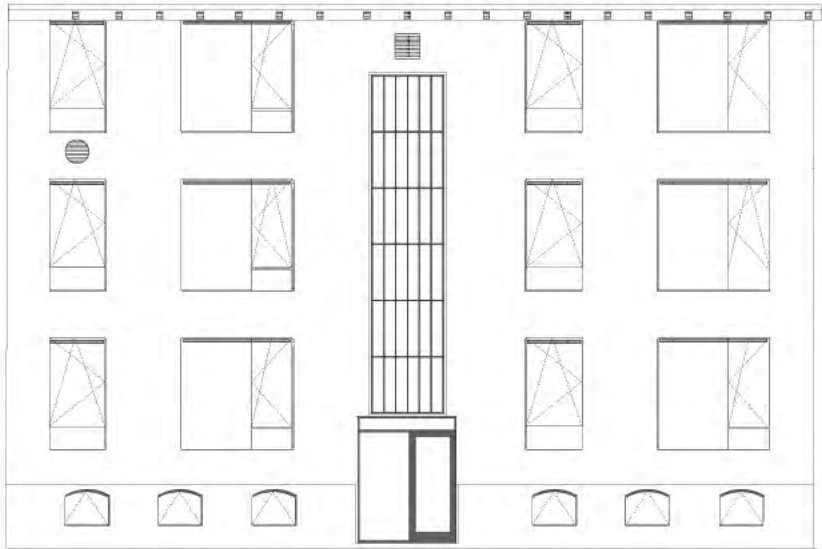
Facades of the
Roemer Visscher
straat

In the end of the 80's there have been renovations due to insulation values and right now there is also a plan to renovate the buildings to conform to the new standards.

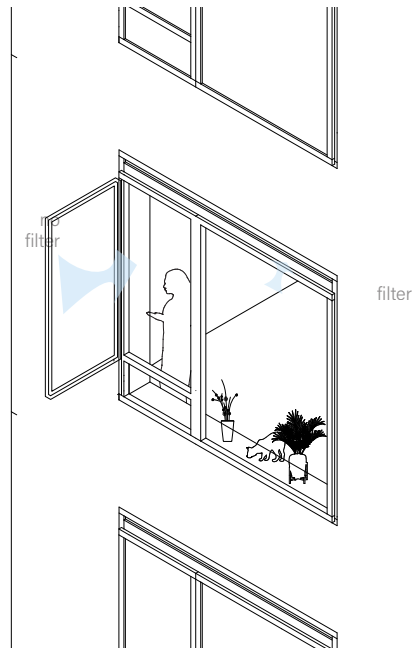
The greenery of the neighbourhood and its connection to the green lines in the surroundings might stimulate the inhabitants to exercise. It is closely related to the Zuiderpark, where there is room to run or do other exercises. Some people have dogs and use the park for a more green round around the block. Within the blocks we have investigated, there are multiple point where you have a direct view at the park and the impressive sports centre. For safety, but also health, many people in this neighbourhood practice martial arts like krav maga or kickboxing. There are some playground and soccer fields within the courtyards, but they are almost never used.

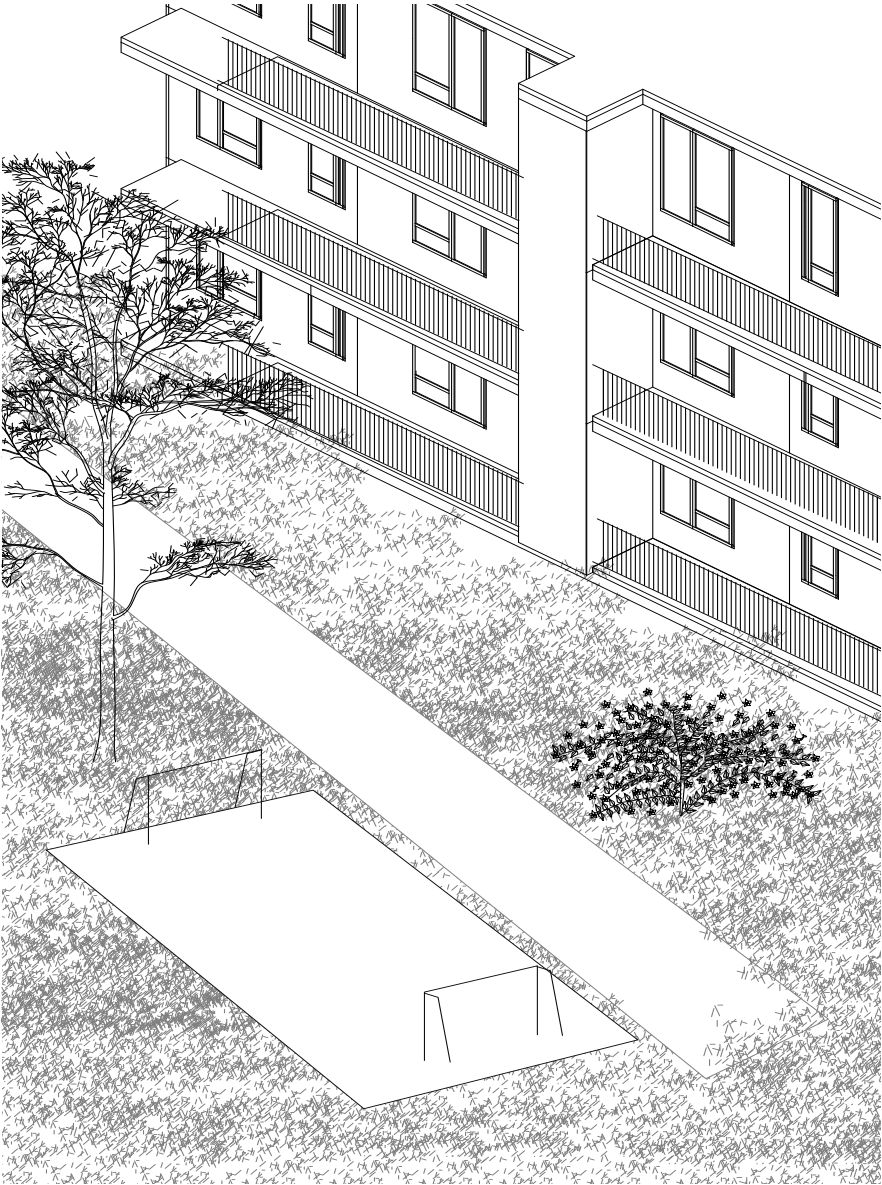
During a renovation some years ago, the buildings were painted in bright colors, orange-red and blue. The color red can stimulate faster breathing as well as increase heart rate and it can also stimulate hunger (Johnsson, 2008). It increases the performance and motivation, which helps with sports. At the same time, the greenery has a calming effect on the residents.

The buildings are close to a busy road, which has an impact on the air quality. The window frames are made of plastic and are also replaced during a renovation, but are double glass and it is not clear whether they have proper sealing for draft. Besides, there is probably insufficient insulation, and in combination with the rise of gas prices, residents will want to save money and live in cold homes. In the summer, the apartments will be too hot and the residents can't afford a cooling system. This has a big impact on the comfort and health of the residents. The lack of insulation also causes condensation and humidity, which in turn can cause unhealthy fungi.



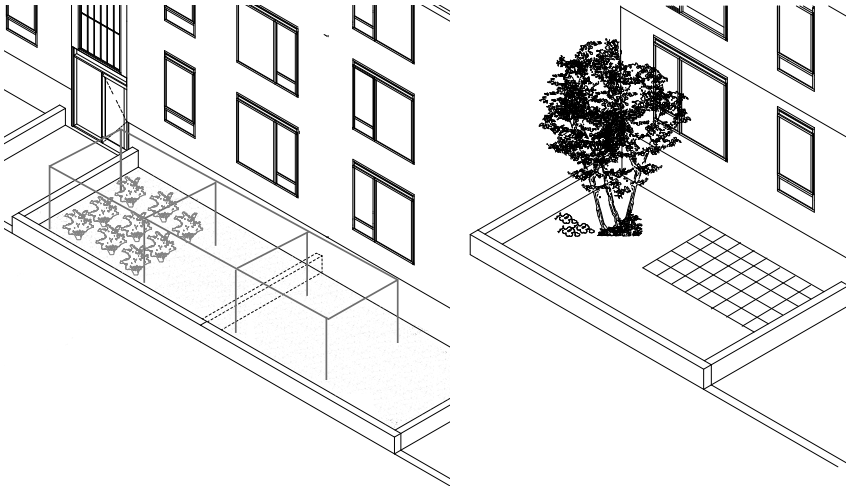
Whenever the inhabitants of this area want some fresh air, they can open their windows or open the ventilation grid. This determines whether they have direct air from the surroundings or with filter. The air quality in this neighbourhood is quite good, there is a lot of biodiversity, which has a positive impact on the types of microbiomes to which they get exposed. And this has a positive impact on their health, mostly concerning their immune system. The appartments have openable windows on both sides of the buildings, so they can ventilate by opening those windows. But the rooms are probably not connected with grids in the doors or shorter doors. This can also be positive, considering that a large part of the inhabitants smoke, and with closed off rooms, they can limit the area where the smoke goes. Our participant noted that he smokes indoor since he is prohibited to enter the balcony due to safety issues.





There are multiple typologies of outdoor space. The backgarden is communal and has a more informal character. There are playgrounds and soccer fields, but when we visited these weren't used.

On the front of the building, everybody uses their garden differently. Some have mostly tiles, others decide to combine their garden to have a larger garden to grow vegetables. You can see that some take very good care of their gardens and this would indicate that they also enjoy gardening and it could provide a hobby for them.





Synthesis Participatory Action Research

The aim of this part of the research is to find a volunteer to give their personal experiences with the neighbourhood to contrast and compare what the opinions that the data we researched gives us. We also would like insight into his daily life, and how the elements of health, behaviour and space correlate within his environment to give insight into the research question. Our volunteer has certain very strong opinions which will be presented, and while they might not represent the entire truth, his opinions represent his experience, and thus, his truth.

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In place of a video diary, we conducted several interviews with our volunteer, due to circumstances that prevented us from entering his house. We were still able to distinguish patterns of behaviour that relate his health and space, despite this.

Our volunteer lives in a one bedroom apartment with four people and two large dogs. He uses what is originally planned as a side room as his bedroom. The volunteer does all his work, eating and sleeping in the same single room, while his mother, the owner of the apartment, uses the bedroom and living room as her space. Since the volunteer's mother has dementia, he lives in this dwelling with her as her primary caretaker. The volunteer's children use the storage room in the basement as their bedroom, while still being able to make use of the space above, such as the living room, bathroom and kitchen.

The health of others, as well as the volunteer's own health, is affected by the space with which they are provided. Our volunteer smokes, however, due to the balconies being of insufficient quality, whereby they might collapse, he has to smoke inside, in the room where he spends most of his time. On top of this, due to the volunteer's mother's ailments, he smokes in his room with the

"I try to set a good example for my children by walking everywhere."

door closed, further decreasing the ventilation of his smoke, and making for an overall unhealthy habitat.

This is the same problem that many of the residents in this

area face, where they're faced with the choice to smoke on the street or in the comfort of their own home.

The volunteer aims to compensate for this bad habit by ensuring that there are lots of plants of various kinds present in the house, where he says he has too many to count. The small size of the dwelling, mixed with the density of the people living within, does not stop the volunteer from keeping so many plants, despite potential routing issues that might be caused thereafter, highlighting the importance of these plants.

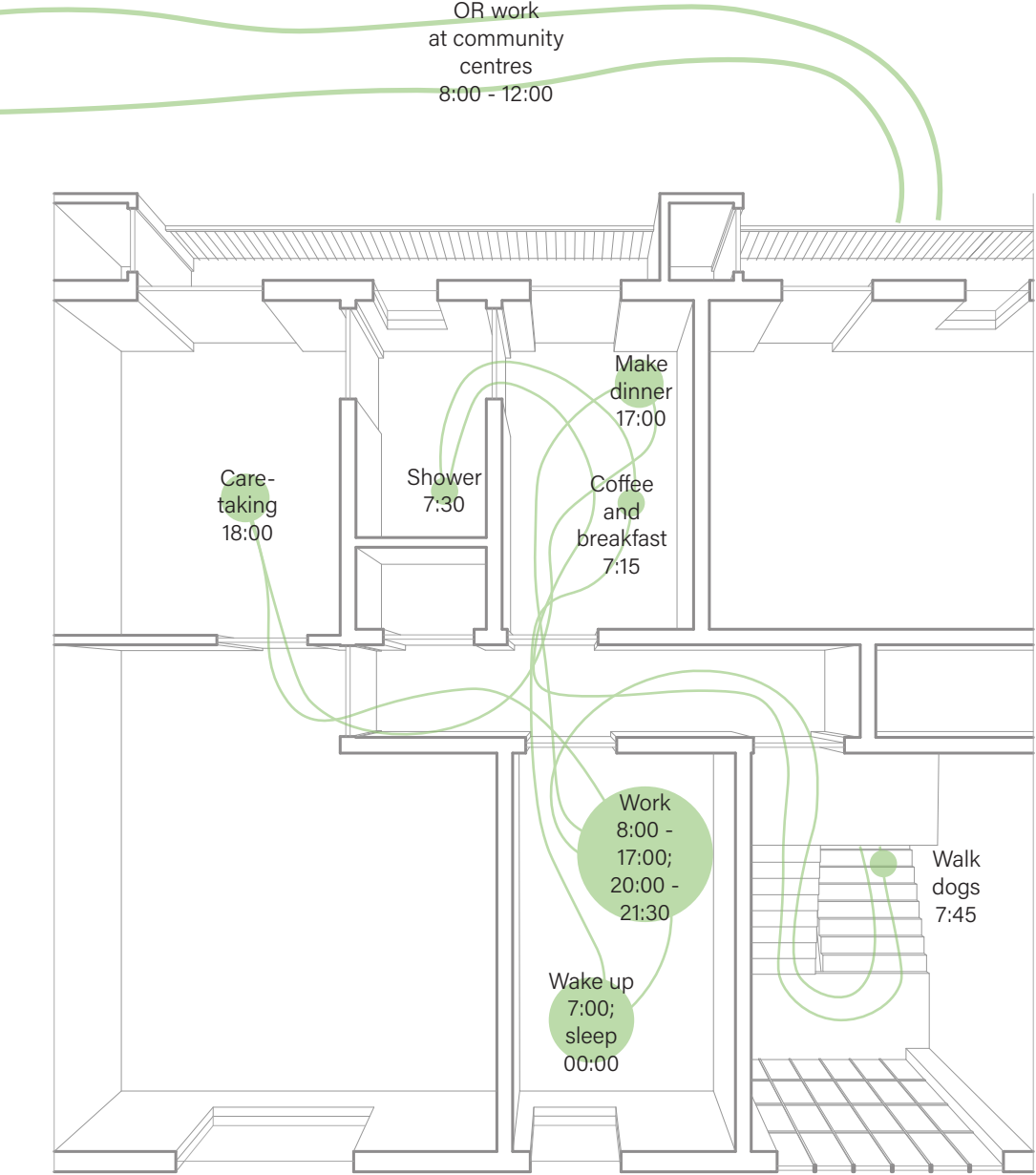
Due to the poor health of the volunteer's mother, his behaviour has to change. The volunteer has to be home at specific times throughout the day to ensure

his mother is receiving the correct food, because she has both dementia and diabetes, and has to follow a strict diet.

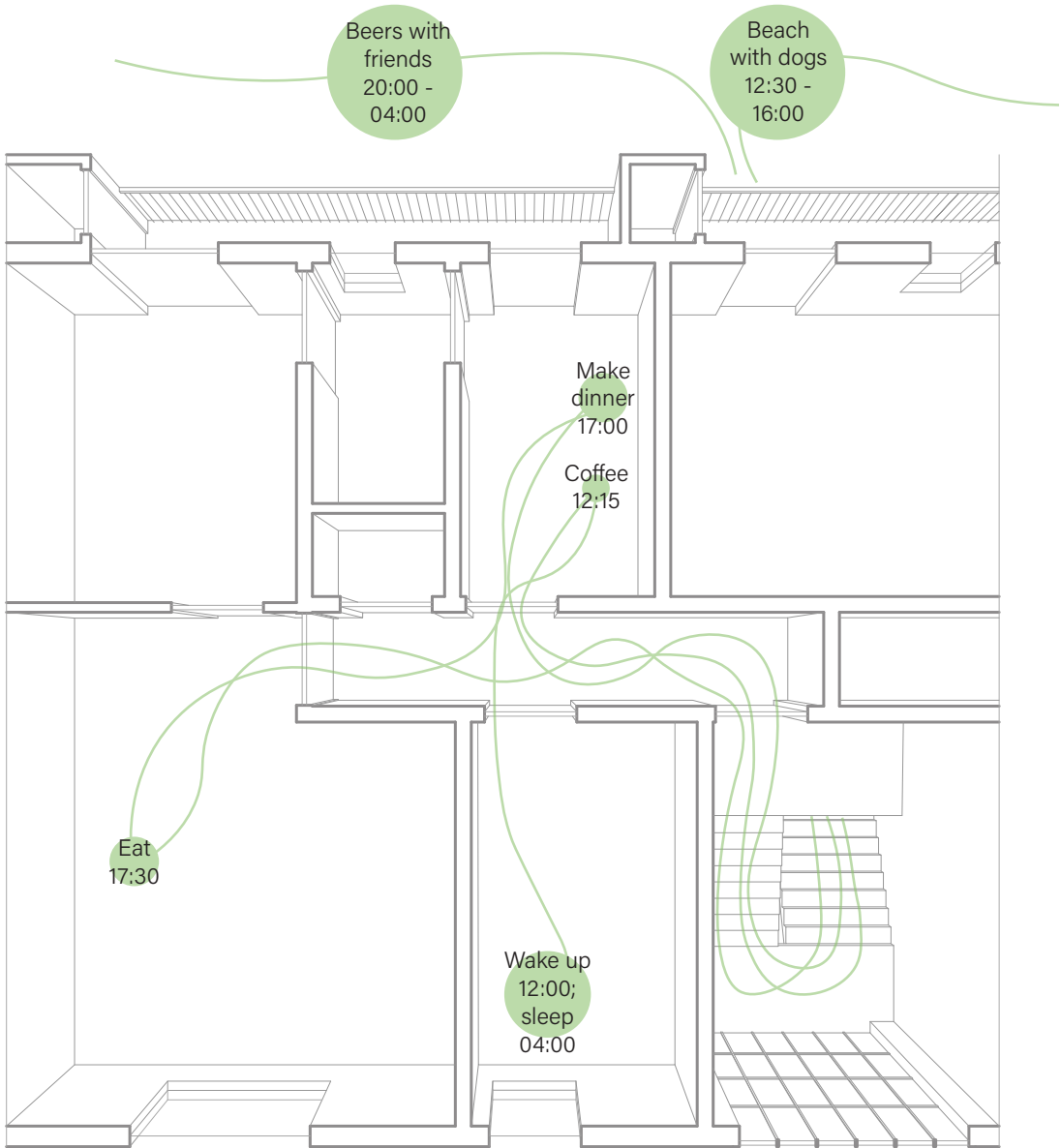
Due to the nature of the job the volunteer has, where he visits two community centres a day, the volunteer spends a lot of his time outdoors, walking. He says he walks everywhere to set a good example for his children and to show them how they can achieve a healthy lifestyle. Due to the crime in the area, the volunteer practices krav maga, as well as his children. This shows how the environment they're in, encourages a certain healthy behaviour of attending a sport that is beneficial for self defence.

As a whole, there are a lot of environmental factors on a larger scale that affect the volunteer's health and behaviour in both negative and positive ways.

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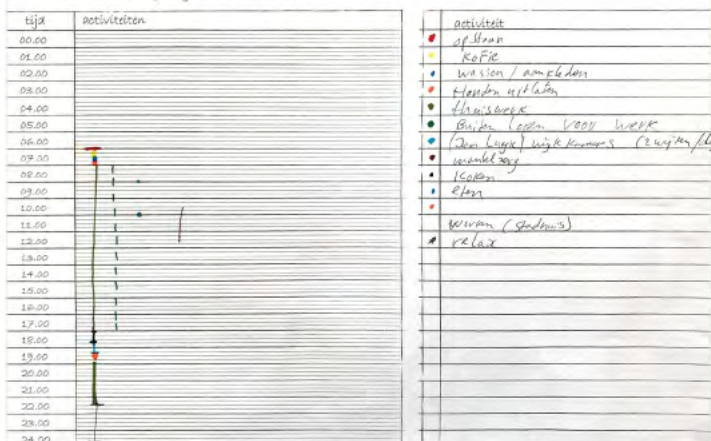


WEEKDAYS

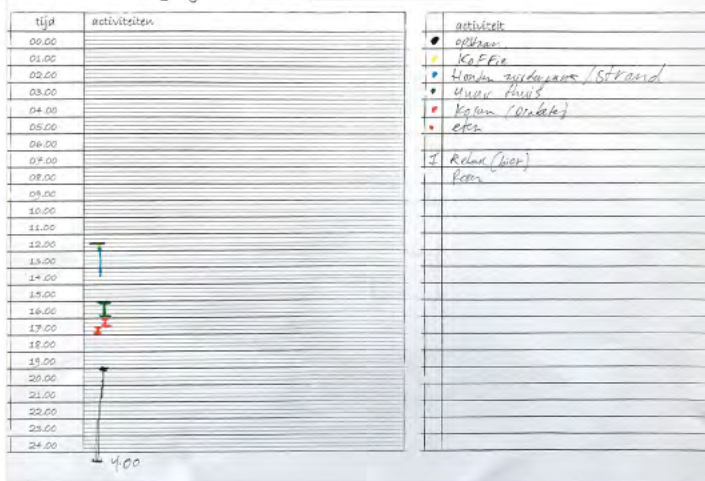


WEEKENDS

activiteit 1.1 dagelijkse routine Doordeweeks



activiteit 1.1 dagelijkse routine Weekend



Timeline of
activities
Top: weekdays
Bottom: weekends

Based on the floorplan activity, we noticed that the volunteer lives a very diverse life. It was very difficult for us to do this task with our volunteer, based on the nature of his days; he is not very susceptible to falling into a routine. Every day in the week, the volunteer wakes up at 7am. He then starts a morning routine that repeats every day that consists of getting coffee, breakfast, showering and then walking the dogs. It's after these events where the day can unfold in any way. The volunteer either works from home in the morning and goes to community centres in the evening or vice versa, however it's clear that half of his workday is always spent outside. The volunteer aims to visit two community centres a day and visits a large number of centres in Moerwijk as a whole. After five, the volunteer prepares dinner for himself, his mother and his two children that they after spend eating together. It's important that the volunteer does this part of his daily routine at a certain time, because his mother has diabetes and he has to monitor her insulin levels. Thereafter, the volunteer continues working from home, or he occasionally goes outside again to visit the city hall. After this is done, the volunteer spends around two hours relaxing.

On the weekends, the volunteer has the same morning routine as during the week, but likes to wake up a lot later, because he likes to go out with his friends until late at night. After he's awake, he likes to spend the weekend with his dogs going out after lunch. He still makes sure to be home for dinner at the same time, but thereafter goes out with his friends.

Overall, it became quite clear to us that, while this activity gave us a helpful insight into what the volunteer does generally, it wasn't as indicative of his lifestyle for someone with a very diverse life.



Conclusion

We have found from this study that in Moerwijk West, there is a strong correlation between the environment, behaviour and health.

The spatial analysis of this area presents us with the fact that the buildings are merely repetitions of each other with varying lengths and very little variety in terms of form; the only variety presents itself in the colour of the building blocks. The area is also monofunctional whereby there is a shopping street

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where shops are located, and the rest of the block is dedicated solely to housing and the functions that follow this kind of area such as parks. The dwellings themselves were a post-war development, which generally speaks for their lack of quality in terms of insulation. Despite this however, the dwellings are generally quite well ventilated.

The socio-economic indicators show that this is a neighbourhood full of ethnic diversity. From experience, we have seen that while there is some sense of community in this neighbourhood, it's typically a monocultural sense of community where people stick to people with similar languages and backgrounds. This opinion was backed up by our volunteer, whereby he said that people in this neighbourhood typically stick to their own block, because outsiders are seen as a risk of danger. Which generally, also speaks for the very high crime rates in this neighbourhood.

These values as a whole indicate that the way people behave is indicative of their environment, and is affected by their health. An instance that depicts this is that the poor building quality means that the balconies are not of sufficient structural quality. This means that many people who do smoke in this neighbourhood, prefer to smoke inside or in the access portals to shelter from bad weather conditions. This affects everyone, because even people who do not smoke, are affected by this environmental insufficiency by means of second hand smoke.

The design of the interior courtyards depicts another instance of these three factors coming together. These courtyards were mainly catered towards children, however as the demographics show, a small population of this neighbourhood is actually catered to using these spaces. Because of this, these courtyards sit empty. Due to their bad design, people are more reluctant to use outdoor spaces, affecting their mental and physical health due to the fact that people would rather be sitting indoors.

As noted by our volunteer, however, not all the negative aspects of this neighbourhood have negative consequences. Because of the high crime

rates, and the general feeling of unsafety, many people in this neighbourhood have resorted to self-defence classes. Overall, this means that the negative consequences of the neighbourhood, increase the health of people through sport.

Overall, it can be seen that the physical environment affects peoples behaviour in this neighbourhood. Generally, this behaviour either has outcomes of increasing or decreasing their heath.

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Databases and Digital Platforms

Leefbaarometer

(Database with indicators on quality of life)

www.leefbaarometer.nl

Development of The Hague SouthWest

(Municipality of The Hague)

<https://www.denhaag.nl/nl/in-de-stad/wonen-en-bouwen/ontwikkelingen-in-de-stad/ontwikkelingen-den-haag-zuidwest.htm>

AllCharts.info

(Statistical data about neighbourhood in The Netherlands)

allcharts.info

List of Illustrations

Scheijde, Jemma. *Impression of Community Centre*. A4.

Drawing of inside a building. Pen and Paper.

Schouten, Ries. *Mantelzorg Compared to Density*. A4. Digital Drawing.

Hagen, Anouk. *Interior Square*. A4. Digital Drawing.

Hagen, Anouk. *Outside Courtyards*. A4. Digital Drawing.

Scheijde, Jemma. *Floorplan Activity*. A4. Digital Drawing.



Translations

VERTALINGEN

ÇEVIRILERI

مچارت

Samenvatting in het Nederlands

De Buurt

Moerwijk is een naoorlogse wijk in Den Haag in Nederland. De indeling van deze wijk werd grotendeels ontworpen door Dudok in 1949. Het belangrijkste idee voor de wijk was de integratie van infrastructuur met het nieuwe weggennet van Den Haag (Agricola, 2002). Moerwijk-West (en voornamelijk het gebied dat wij onderzoeken) bestaat uit rijen huizen van drie verdiepingen. Deze gebouwen hebben een consistente bouwstijl, maar verschillen in grootte om stedelijke blokken te creëren met straten, voortuinen, toegangspoorten en semi-private binnenplaatsen in het midden. De gebouwen zelf zijn geschilderd in felle kleuren zoals oranje, blauw en rood. Ons belangrijkste doel is om te onderzoeken hoe dit specifieke type gebouw de longgezondheid van de bewoners in deze buurt kan beïnvloeden. Moerwijk wordt gekenmerkt als een multiculturele wijk met een diverse bevolking wat betreft nationaliteiten en sociale achtergronden. Verder heeft de wijk een lage leefbaarheidsscore, zoals aangegeven door de leefbaarometer en staat het bekend als relatief onveilig binnen Den Haag. Moerwijk-West bestaat uit portiekflats, die een GSI (green space index) van 25% hebben. Dit maakt verschillende soorten tuinen mogelijk, van gemeenschappelijk tot privé. De buurt heeft een hoge woondichtheid met veel gezinnen die dicht op elkaar wonen in kleine appartementen. Dit is een van de redenen voor de lage score op de leefbaarheidsmonitor. De bouwblokken in de buurt bestaan uit herhalende bouwkundige patronen met als enige zichtbare verschil de gebruikte kleur verf. Door middel van een uitgebreid demografisch onderzoek dat zowel kwantitatieve gegevens als persoonlijke meningen uit interviews bevat, willen we bepalen of de vooroordelen over de buurt juist zijn. Daarnaast proberen we te begrijpen of de belevingen van de bewoners overeenkomen met de indrukken die de data en de leefbaarheidsindex overbrengen.

Het proces

Deze fase van het onderzoek is erop gericht om een vrijwilliger te vinden die bereid is om zijn of haar persoonlijke ervaringen uit de buurt te delen. Deze inzichten vormen een waardevol contrast in vergelijking met de gegevens die via ons onderzoek worden verzameld. We willen meer inzicht krijgen in het dagelijks leven van de vrijwilliger en de verbanden onderzoeken tussen gezondheid, gedrag en de ruimtelijke elementen in hun omgeving om onze onderzoeksvraag te beantwoorden. De geselecteerde vrijwilliger kan een uitgesproken mening hebben, en hoewel deze meningen misschien niet de hele waarheid bevatten, weerspiegelen ze oprecht hun eigen ervaringen en perspectieven. Als onderzoekers hebben we ook onze eigen blik op het gebied, zoals ook de vrijwilliger zijn of haar leefruimte waarneemt vanuit een uniek standpunt. Door alle ervaringen, verhalen en gesprekken met elkaar te verbinden konden we een verhaal ontwikkelen over het dagelijks leven van de vrijwilliger. Mede hierdoor begrijpen we de buurt een stuk beter!

Türkçe Özet

Mahalle

Moerwijk, Hollanda'nın Den Haag şehrinde bulunan savaş sonrası bir mahalledir. Bu mahallenin yapısı büyük ölçüde Dudok tarafından 1949'da tasarlanmıştır; mahallenin ana konsepti altyapısının Den Haag'ın yeni yol altyapısıyla bağlantılı olması gerektiği idi (Agricola, 2002). Moerwijk-West ve daha spesifik olarak ilgilendiğimiz parça, üç katlı konutlardan oluşmaktadır. Bu binalar aynı genel görünüme sahiptir, ancak sokaklarla yan yana yer alan ön bahçeler, erişim portalı ve bu binalar arasındaki boşlukları dolduran yarı özel avlularla bir şehir bloku oluşturacak şekilde farklı boyutlarda olacak biçimde yapılmışlardır. Binalar turuncu, mavi ve kırmızı renklerle parlak bir şekilde boyanmıştır. Genel olarak, bu belirli bina tipinin bu mahallede yaşayan insanların akciğer sağlığı üzerinde nasıl bir etkisi olduğunu görmeyi amaçlıyoruz. Moerwijk, çok kültürlü bir bölge olarak nitelendirilmekte ve farklı milliyetlerden ve sosyal konumlardan insanlar barındırmaktadır. Aynı zamanda düşük bir yaşanabilirlik metre puanına („leefbaarometer“) ve aynı zamanda küçük dairelere sahiptir ve Den Haag'ın nispeten güvensiz bir bölümü olduğu yönündeki stereotipe sahiptir. Moerwijk West, GSI'si %25 olan yürüme mesafesi apartman bloklarından oluşur. Bu, ortak kullanılanlardan özel olanlara kadar farklı türde bahçeler için yer bırakır. Yüksek bir konut yoğunluğuna ve küçük dairelere sahiptir, bu da birçok ailenin birbirine yakın küçük dairelerde yaşadığı anlamına gelir. Bu, Leefbaarometer'da (yaşam standartları) negatif bir puan almasının nedenlerinden biridir. Bina blokları, mahalle boyunca tekrarlanan damgalarla oluşturulur. Tek çeşitliliği renklendirilmiş boya oluşturur. Konuştuğumuz kişilerin kişisel görüşlerini ve açık verileri içeren daha derinlemesine bir demografik çalışma yaparak, bu önyargıların gerçeği yansıtıp yansıtmadığını görmeyi amaçlıyoruz, ayrıca insanların mahalle hakkındaki görüşlerinin veriler ve yaşanabilirlik metre izlenimleriyle uyumlu olup olmadığını araştırıyoruz.

Süreç

Araştırmanın bu aşaması, deneyimlerini mahalle ile paylaşmaya istekli bir gönüllü bulmayı amaçlar; bu da araştırmamız aracılığıyla toplanan verilerle değerli bir karşılaştırma ve kontrast sağlar. Gönüllünün günlük yaşamına dair anlayış kazanmaya çalışarak, çevreleri içinde sağlık, davranış ve mekansal unsurlar arasındaki etkileşimi keşfetmeyi ve araştırma sorumlusun üzerine ışık tutmayı amaçlıyoruz. Seçtiğimiz gönüllü güçlü görüşlere sahiptir ve bu görüşler belki tüm gerçeği kapsamasa da, kendi deneyimlerini ve gerçeklerini otantik bir şekilde temsil eder. Araştırmacılar olarak bizler de bölgeye kendi benzersiz perspektiflerimizi getiriyoruz; tıpkı gönüllünün yaşam alanını kendi bireysel bakış açısından nasıl algıladığı gibi. Farklı kısa ve karmaşık deneyimler, hikayeler ve konuşmaları bir araya getirerek, gönüllünün günlük yaşamına dair daha kapsamlı bir öykü ortaya çıkıyor; bu da mahalleye olan anlayışımızı zenginleştiriyor.

ملخص باللغة العربية

الحي

Moerwijk هو حي ما بعد الحرب يقع في لاهاي في هولندا. تم تصميم هيكل هذا الحي إلى حد كبير من قبل دودوك في عام 1949 ، وكان مفهومه الرئيسي للحي هو أن بنيته التحتية يجب أن تكون متصلة بالبنية التحتية الجديدة للطرق في لاهاي (أجريكولا، 2002). يتكون Moerwijk-West ، وبشكل أكثر تحديدا الجزء الذي نتعامل معه ، من صفوف من المساكن المكونة من ثلاثة طوابق. هذه المباني لها نفس المظهر العام ، ولكنها تضم مبان مختلفة الأحجام لتشكل كتلة حضرية تتكون من شوارع مع حدائق أمامية بجانبها بالإضافة إلى بوابات الوصول ، وساحات شبه خاصة تملأ الفجوات بين هذه المباني. المباني نفسها مطلية بألوان زاهية باللون البرتقالي والأزرق والأحمر. بشكل عام ، نهدف إلى معرفة كيف يؤثر هذا النوع المحدد من المباني على صحة الرئة للأشخاص الذين يعيشون في هذا الحي. تتميز Moerwijk بأنها منطقة متعددة الثقافات مع أشخاص من جنسيات ومكانة اجتماعية متنوعة. كما أن لديها درجة متر منخفضة للعيش («-leefbaarrometer») والصورة النمطية لكونها جزءا من لاهاي غير آمنة نسبيا. يتكون Moerwijk West من مجمعات سكنية للمشبي ، والتي تحتوي على GSI بنسبة 25٪. هذا يترك مساحة لأنواع مختلفة من الحداثي ، من المشتركة إلى الخاصة. تتميز بكثافة سكنية عالية وبصمة منزلية صغيرة ، مما يعني أن العديد من العائلات تعيش في شقق صغيرة قريبة من بعضها البعض. هذا هو أحد أسباب حصولها على درجة سلبية على Leefbaar-meter. تتكون اللبنة الأساسية من طوابق تتكرر في جميع أنحاء الحي. الشيء الوحيد المتنوع هو الطلاء الملون. من خلال إجراء دراسة ديموغرافية أعمق تتضمن بيانات صلبة وآراء شخصية من الأشخاص الذين تحدثنا إليهم ، نهدف إلى معرفة ما إذا كانت هذه الأفكار المسبقة صحيحة ، بالإضافة إلى التحقيق فيما إذا كان رأي الناس في الحي يتوافق مع الانطباعات التي تعطيها البيانات ومقياس قابلية العيش.

العملية

تهدف هذه المرحلة من البحث إلى العثور على متطوع على استعداد لمشاركة تجاربه الشخصية مع الحي ، مما يوفر تباينا ومقارنة قيمة للبيانات التي تم جمعها من خلال بحثنا. نسعى إلى اكتساب نظرة ثاقبة للحياة اليومية للمتطوع ، واستكشاف التفاعل بين الصحة والسلوك والعناصر المكانية داخل بيئتهم لإلقاء الضوء على سؤالنا البحثي. يحمل المتطوع الذي اخترناه آراء قوية ، وعلى الرغم من أنها قد لا تشمل الحقيقة بأكملها ، إلا أنها تمثل بشكل أصيل تجربتها وحقيقتها. كباحثين ، نقدم أيضا وجهات نظرنا الفريدة إلى المنطقة ، تماما كما يدرك المتطوع مساحة معيشته من وجهة نظره الفردية. من خلال نسج تجارب وقصص وملاحظات فوضوية قصيرة متنوعة ، يظهر سرد أكثر شمولاً حول الحياة اليومية للمتطوع ، مما يثري فهمنا للحي.

MWW2

Moerwijk West Case Study Area 2

DEMOGRAPHIC SHIFT

*Demografische
Verschuiving*

LUIZA ZEILINGER, PERLE HAGESTEIJN

Housing and Health in the Hague

The 2022/23 edition of the MSc2 elective course "Architectural Ethnography" explores the interface between the disciplines of architecture, anthropology, microbiology and public health, to investigate how spatial configurations and social practices influence and are influenced by the interactions between humans, non-humans and the diversity of environmental microbiota. Working in collaboration with students, teachers and researchers of Leiden University Medical Centre (LUMC) and Hogeschool Leiden, this report examines a case study areas located in Moerwijk West, one of the neighbourhoods of Moerwijk, in the Dutch municipality of The Hague. Using a pioneering combination of environmental microbiome research with ethnographic research and spatial analysis this research aims at answering the following research question:

how urban and housing design influences interactions between humans, non-humans and the diversity of environmental microbiota and promotes lung-friendly behaviour?

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Introduction

Architectural Ethnography examines everyday living patterns, how space is organized and spaces' social life. Participants in this course will use research techniques taken from anthropology and architecture to examine the relationships between space, place, and people in urban settings.

ARCHITECTURAL ETHNOGRAPHY

The MSc2 elective will explore the intersection between the fields of architecture, anthropology, microbiology, and public health to look at how spatial arrangements and social practices affect and are influenced by interactions between people and non-people as well as the variety of environmental microbiota. (TU Delft, 2023)

The course will look into case study regions in The Hague's Moerwijk and Ypenburg districts. This particular report examines the case study area Moerwijk West 2.

This research report contains a variety of research methods. The first one is 'socio-economic characterization'. Socioeconomic status refers to the categorization of individuals based on their level of education, income, and employment type. Mainly desk research is required for this method and this will result in diagrams with factual data.

The second method is 'spatial analyses'. Spatial analysis is a form of geographic analysis that aims to clarify the spatial manifestation of human behavior patterns. This chapter will provide drawings of the space around the case study, which will represent certain facts and observations.

The third research method is 'synthesis participatory action research'. **The word "participatory" refers to the involvement of the researchers who gathered the data.** Research tool 'the video diary' was included as one of the main tools for data collecting. That chapter will feature screenshots from those videos. Secondly, 'the participatory floor plan and timeline activity' was used as a technique. A volunteer participant who resides in the case study location had to tell us about his timeline activity using our documented drawings.

The last method was the 'the outdoor air sampling' which was carried out by the Leiden University.

Next to these research methods, the data collection also includes participant observations, interviews with residents, self-made pictures, spatial analysis of public spaces, and analysis of health indicators.

After finishing this course and creating this research report at least the following learning goals will be achieved (TU Delft, 2023):

- Understand elements that influence how housing affects people's health and wellbeing.
- Participate in transdisciplinary collaborations across the domains of architecture and the life sciences to create co-produced research outputs.
- Look at relationships between disease patterns, behavioral patterns, ambient microbiota, and the spatial arrangement of homes.
- Apply quantitative and qualitative research techniques to case studies of residential neighborhoods and housing units in actual settings.
- Contrast and link data sets that incorporate spatial analysis, ethnographic study, and environmental microbiome research.



Socio-economic Characterization

Socioeconomic status refers to the categorization of individuals based on their level of education, income, and employment type. Individuals with a lower socioeconomic status often face limited access to financial, educational, social, and health resources in comparison to those with a higher socioeconomic status (National Cancer Institute, 2023). This section examines the socio-economic position of Moerwijk located in The Hague. In order to give as much as factual data possible, multiple charts with short descriptions are given. The conclusion will summarize the data and provide a statement about potential development.

Moerwijk District

Moerwijk-West highlighted on the map. Source: Alle Cijfers, 2022.



Moerwijk is a region located in the Escamp district of The Hague. It is surrounded by neighboring districts such as Wateringse Veld, Morgenstond, Zuiderpark, Groente- en Fruitmarkt, Laakkwartier and Spoorwijk. The construction of Moerwijk

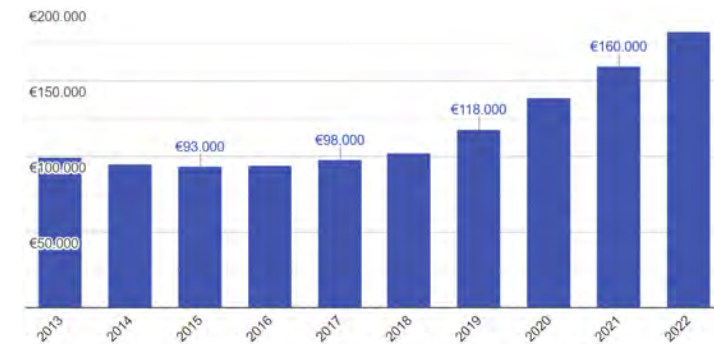
took place in the years following the Second World War and was designed by Willem Dudok. Four neighborhoods have been designed around the large central Erasmusplein (Moerwijk 2, 3, 4 and 5), each with a certain level of facilities such as a church, a shopping centre, parks and a school. In Moerwijk-West there is a shopping street on the Jan van Luykenstraat.

Between 2013 and 2022, there has been a 5.3% increase in the number of people living in the Moerwijk district, with 1,050 more residents recorded in the population register as of January 1, 2022, bringing the total population to 20,755 (Alle Cijfers, 2022).

The number of inhabitants for the Moerwijk district. Data for the years 2013 to 2022. Source: Alle Cijfers, 2022.

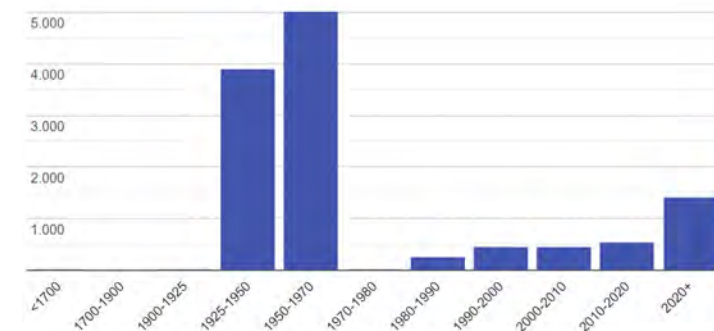


The average of the house values for the Moerwijk district is shown below. The table presents the data for the years 2013 to 2022. The average home value in Moerwijk has increased by €84,000 from €99,000 in 2013 to €183,000 in 2022. That is a percentage of 85% (Alle Cijfers, 2022).



Average property value per year.
Source: Alle Cijfers, 2022.

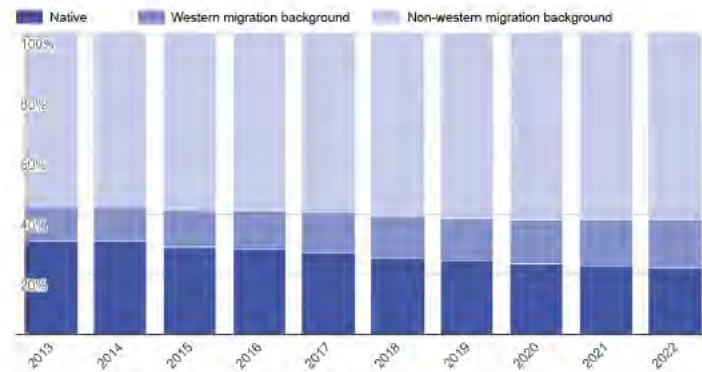
The BAG contains the official data of all addresses and buildings in the Netherlands. The table below provides an overview of the number of buildings by year of construction for the Moerwijk district. The first peaks represent the reconstruction after the Second World War. Construction has also increased in recent years. The purpose of use of these buildings is mainly residential, followed by the retail function in second place (Alle Cijfers, 2022).



Overview of the number of buildings by year of construction for the Moerwijk district. Source: Alle Cijfers, 2022.

Population

Distribution of the population by indigenous people, migration Western and migration non-Western. Source: Alle Cijfers, 2022.

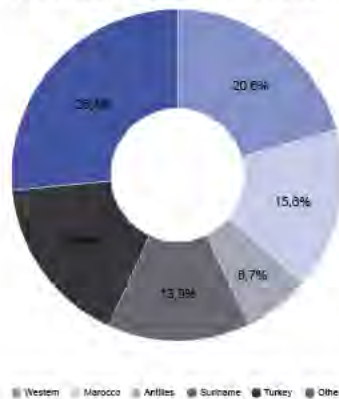


This table shows the distribution of the population according to native Dutch residents and residents with a Western or non-Western migration background for the Moerwijk district. Data are for the years 2013 up to and including 2022. The number of native residents in the Moerwijk district has decreased from 6,109 in 2013 to 4,580 in 2022. That is a percentage of 25% (Alle Cijfers, 2022).

In 2022, the two most frequent migration backgrounds in the Moerwijk district are 'Other,' with 4,275 residents, and Western, with 3,325 residents. Western refers to individuals who originate from European countries (excluding Turkey), North America, Oceania, Indonesia or Japan (Alle Cijfers, 2022).

On the other hand, Non-Western encompasses individuals with a migration background from Turkey, Africa, Latin America, and Asia, except for Indonesia and Japan. Additionally, people from Morocco, Antilles, Suriname and Turkey also form part of the district's population (Alle Cijfers, 2022).

Population in the Moerwijk district based on their country of birth or that of their parents. Source: Alle Cijfers, 2022.



The most significant age group in the Moerwijk district is individuals between 20 and 64 years old. The younger and older populations are relatively small in comparison. This age distribution pattern is similar to that of The Hague in general.

However, there has been a difference in the average age trend between the two regions. In 1963, the average age in Moerwijk was approximately five years higher than that of The Hague. Still, as of 2022, it was observed to be a few years lower. As a result, the Moerwijk district has experienced a distinct reduction in its average age over time. In 2007 the average age in Moerwijk was equal to that of The Hague in general (Den Haag in Cijfers, 2022).

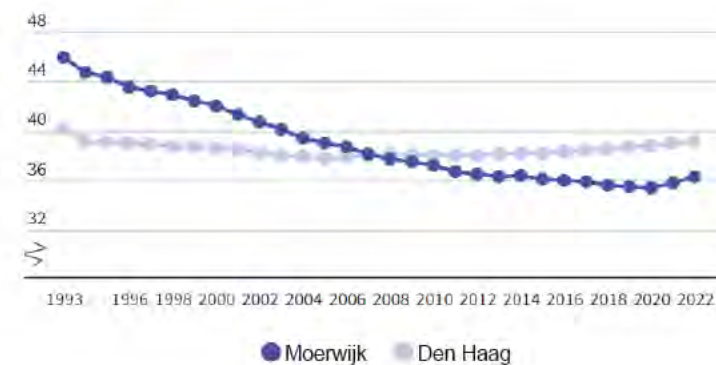
Moerwijk



Den Haag



Percentage of inhabitants by age. Source: Den Haag in Cijfers, 2022.

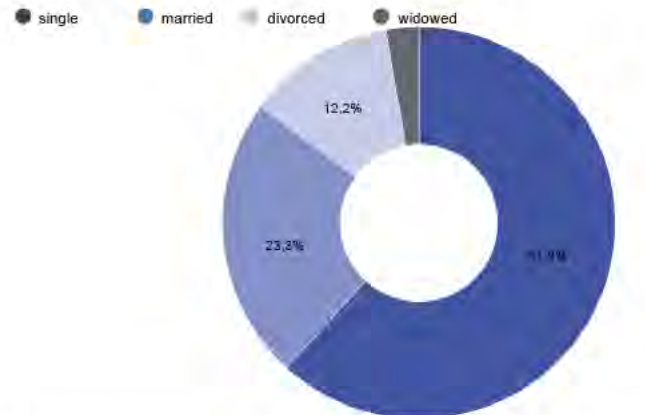


Development average age of inhabitants over years. Source: Den Haag in Cijfers, 2022.

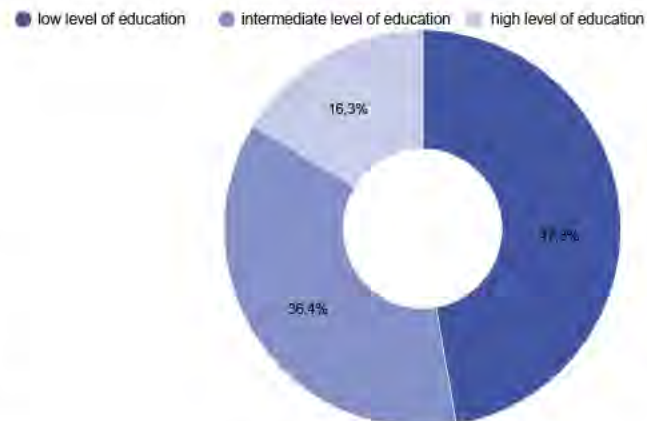
Education

Upon examining the marital status of Moerwijk's residents, it is notable that a significant proportion of individuals are unmarried. Approximately one-fourth of the population is married, with the remaining being either divorced or widowed.

The lower chart illustrates the proportion of individuals with low, intermediate, and high levels of education in the Moerwijk neighborhood. Nearly half of the population has a low level of education, while only 16.3% have attained a high level of education. Despite this, there are several educational institutions in the region (Alle Cijfers, 2022).

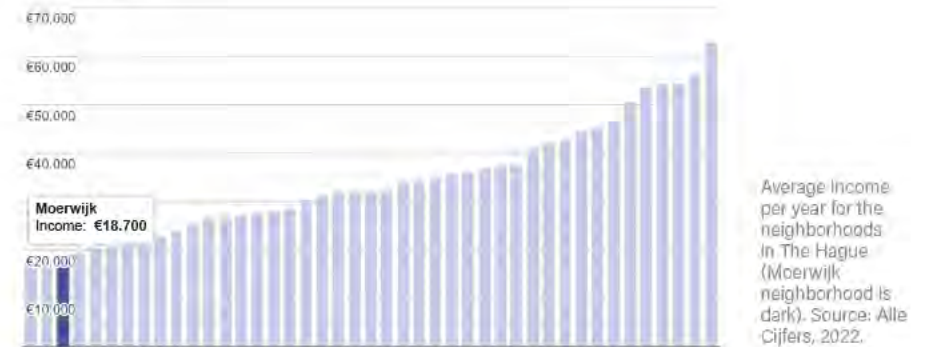


Number and percentage of inhabitants on 1 January 2022 by marital status. Source: Alle Cijfers, 2022.



The number of inhabitants per level of education shows the percentage of people with a low, medium and high level of education for the Moerwijk district. Source: Alle Cijfers, 2022.

Income



The graph above shows the average gross income per year for the neighborhoods in The Hague. The Moerwijk district is one of the lowest in The Hague. The average income per inhabitant in the Moerwijk district is €18,700.

The neighborhood with the lowest average income is the Schildersbuurt with an amount of €17,000. This does not differ much from that of Moerwijk. The neighborhood with the highest average income in The Hague is Van Stolkpark and Scheveningse Bosjes with an amount of €62,800. This is a considerable difference with that of Moerwijk.

22% of the households in the Moerwijk district have an income at or around the social minimum. Student households and households with an incomplete annual income are not included in this.

24% of households have a low income, 22% of households below or around the social minimum and 36% of households up to 120% of the social minimum. The social minimum is the legal subsistence minimum as determined in political decision-making. (Alle Cijfers, 2022)

Safety

The most recent data on the number of crimes per 1,000 inhabitants for the Moerwijk district. Source: Alle Cijfers, 2022.



Over the course of a decade, from 2012 to 2022, a total of 17,321 crimes were registered in the Moerwijk district, which were categorized into 45 different types of offenses. In 2022 alone, the police recorded 1,515 crimes in the Moerwijk district. The most prevalent types of offenses in 2022 were 'vandalism' or 'property damage' (151 offenses) and 'road accidents' (147 offenses). Furthermore, in 2022, there were 31.03 crimes of theft per 1,000 inhabitants in the Moerwijk district.

Moerwijk experiences various types of theft, including burglary in homes, garage boxes, and motor vehicles. Sex crimes come in second place. There were 224 traffic accidents in total in 2021 in the Moerwijk district (Alle Cijfers, 2022)

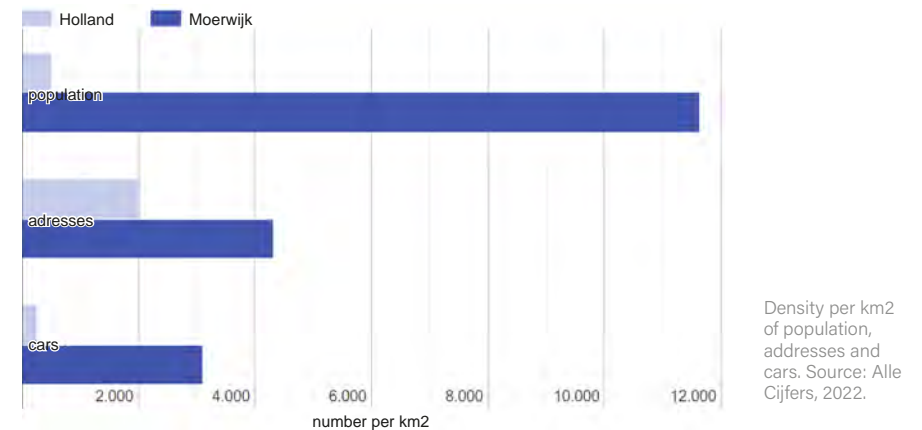
Total number of registered crimes in the Moerwijk district, 2012 to 2022. Source: Alle Cijfers, 2022.



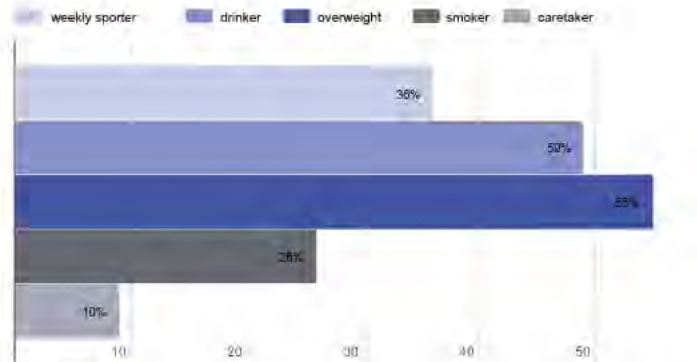
Density

The graph shows the number of residents, addresses and passenger cars per square kilometer of land. This gives a picture of “the degree of concentration of human activities” in the Moerwijk district compared to the average for the Netherlands. Compared to the Netherlands the density of all factors are very high (Alle Cijfers, 2022).

Building the proposed number of social rental homes in such a high density is a risk. In the long term, this concentration will not solve the social decay in the neighbourhoods, but will reinforce it (Gemeente Den Haag, 2004).



Health

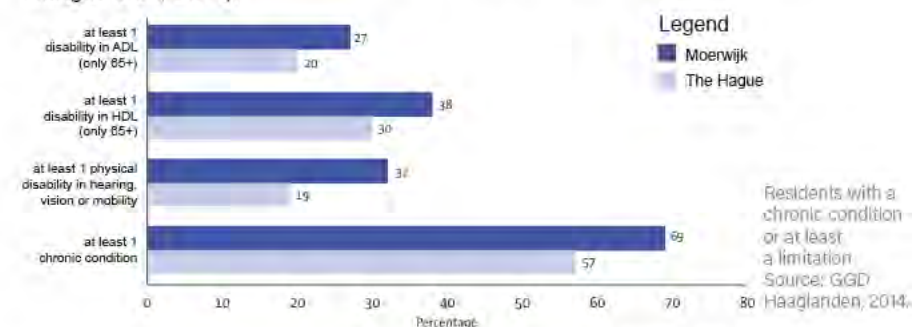


Percentages of residents categorized by their health behavior. Source: Alle Cijfers, 2022.

The findings of the health monitor survey were also noteworthy. The table displays the proportion of residents aged 19 years and above who identified themselves as 'Sporter,' 'Drinker' or 'Smoker' (Alle Cijfers, 2022).

A weekly sporter refers to the percentage of people aged 18 or older who participate in sports at least once a week. An excessive drinker refers to someone who is 18 years or older and consumes more than 14 glasses (for women) or 21 glasses (for men) of alcohol per week. A smoker refers to the percentage of people aged 18 or older who answer the question "Do you ever smoke?" answered 'yes,' excluding electronic cigarettes. The table also shows the percentage of individuals who have a BMI indicating 'Overweight' and the proportion who are 'Informal carers.' Severe obesity is defined as an individual aged 18 years or older with a BMI of 30.0 kg/m² or higher. A caretaker refers to the percentage of people aged 18 or older who provide informal care. The informal care must have lasted for at least 3 months, or it must involve at least 8 hours of care per week. (RIVM, 2016)

With regard to physical health, the percentage of residents with a good perceived health is lower than the average for The Hague. The percentage of residents with at least 1 chronic condition is higher in Moerwijk. In addition, the percentage of residents with at least 1 physical disability in hearing, seeing or mobility also higher in Moerwijk (GGD Haaglanden, 2014).



With regard to mental health, the percentage of residents who feel happy is lower in Moerwijk compared to the Hague. The percentage of residents who feel lonely is also higher in Moerwijk. The percentage of residents who feel they have no control over their own life is higher up again in Moerwijk. Finally, the percentage of residents with an increased risk of anxiety and depression is also higher in Moerwijk.

It follows from this that the percentage of residents who use care and who had contact with mental health care is therefore also high in Moerwijk (GGD Haaglanden, 2014).



Conclusion

In conclusion, Moerwijk is a district in The Hague, located in the southern part of the city. According to the most recent data from allecijfers.nl, the district has a population of approximately 20,755 people as of 2022. This represents a relatively small portion of The Hague's total population, which was estimated at 547,631 in 2020.

In terms of housing, the average value of houses in Moerwijk district is lower than the average value in The Hague. As of 2021, the average value of houses in Moerwijk was €170,000, compared to €356,000 in The Hague as a whole. Moerwijk also has a higher number of multi-unit buildings compared to The Hague, with approximately 63% of its buildings being multi-unit.

Moerwijk district has a relatively high percentage of residents from non-Western backgrounds, with around 65% of its population being of non-Western origin. The district also has a higher unemployment rate compared to The Hague as a whole, with a rate of 9.9% compared to 6.2% in The Hague. The average age of residents in Moerwijk is lower than the average age in The Hague, with a median age of 30 years old.

In terms of marital status, Moerwijk has a higher percentage of single residents compared to The Hague as a whole. As of 2021, approximately 52% of Moerwijk's population was single, compared to 41% in The Hague. In terms of education, Moerwijk has a lower percentage of residents with a high level of education compared to The Hague. As of 2021, only 12% of Moerwijk's population had a higher education degree, compared to 32% in The Hague.

The average income in Moerwijk is lower than the average income in The Hague. As of 2021, the average income in Moerwijk was €20,300 per year, compared to €32,900 in The Hague. Moerwijk also has a higher rate of reported crimes compared to The Hague as a whole, with a rate of 87 crimes per 1,000 residents compared to 50 crimes per 1,000 residents in The Hague.

In terms of density, Moerwijk district is more densely populated than The Hague as a whole. As of 2021, the population density in Moerwijk was approximately 13,310 people per square kilometer, compared to 3,728 people per square kilometer in The Hague. In terms of health, Moerwijk has a higher rate of reported health problems compared to The Hague as a whole, with a rate of 31% of residents reporting health problems compared to 20% in The Hague.

Overall, the Moerwijk district has a contrastive socioeconomic and demographic character from The Hague. Although it only makes up a small portion of the city's total population, Moerwijk is a crucial area for social and economic development due to its high proportion of non-Western residents, lower average income and education level, higher rates of reported crimes, and health issues.

Spatial Analysis

Spatial analysis is a form of geographic analysis that aims to clarify the spatial manifestation of human behavior patterns using mathematical and geometrical principles. This is commonly referred to as locational analysis (Dartmouth College Library, 2005). Spatial analysis involves various techniques such as measuring distances and shapes, creating routes and monitoring transportation, and determining connections between objects, events, and places by referencing their geographic positions, both in real-time and in the past (EOS Data Analytics, 2021). This section contains a spatial analysis of Moerwijk district located in The Hague.

**SPATIAL
ANALYSIS
AND HEALTH
INDICATORS**

-0,26

Leefbaarometer¹
Total Score
Scale: Grid

100

Residential Density
Dwellings / Hectare

21,1%

Intake of more than 5+
types of medication²
Scale: Ypenburg, 2017

29,2%

Ground Space Index
Groundfloor Surface
Occupation / Hectare

65%

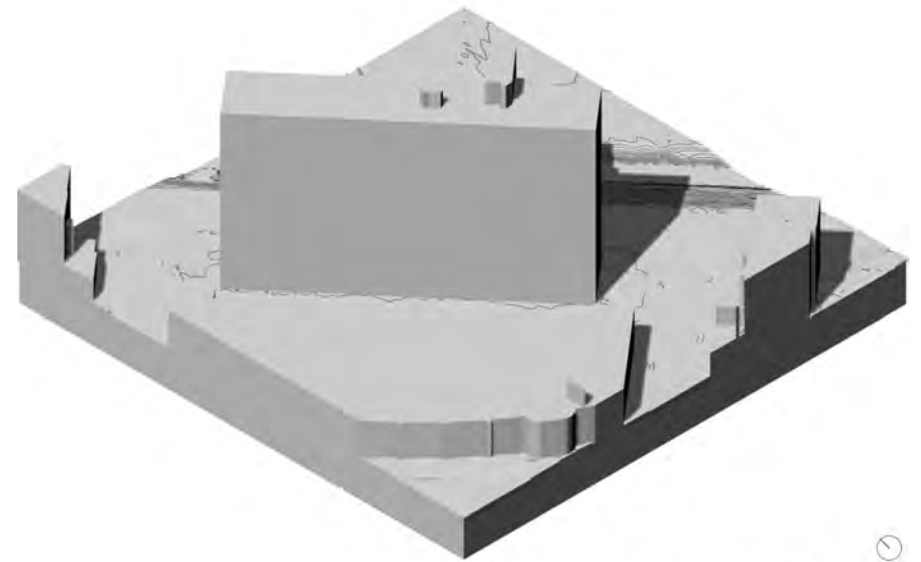
Perceived Good Health
Moerwijk-Noord,
aged 18-65³

29,2m²

Average Household
Footprint
10,000 x GSI / Households

46%

Perceived Good Health
Moerwijk-Noord,
aged 65+³



Indicators

Spatial analysis can provide valuable insights into the relationship between the built environment and health outcomes in a particular area, such as Moerwijk district in The Hague. One important factor to consider is residential density, which in the case study MWW2 is relatively high with a score of 100. High density areas may be associated with increased exposure to air pollution and noise, which can negatively impact health.

Another important factor is the ground space index, which refers to the percentage of a given area that is covered by buildings. In the case study, the ground space index is 29.2%, which suggests that there is relatively little open space available for residents to use for physical activity or other health-promoting activities.

The average household footprint in the case study is also relatively small, at 29.2 m². This may suggest that residents have limited space within their homes for physical activity or other health-promoting behaviors, which could contribute to health problems over time.

The leefbarometer is a measure of livability that takes into account a variety of factors, including safety, social cohesion, and access to amenities like green space and public transportation. In the building(s) of MWW2, the total score on the leefbarometer is -0.26, indicating that there may be some challenges to achieving a high quality of life in this area.

Finally, it is worth considering the usage of medication in the area, which is relatively high at 21.1%. While medication usage alone cannot tell us about the underlying health conditions or causes, it does suggest that there may be a significant need for medical care and attention in this area.

It is noteworthy that, despite the challenges described in the spatial analysis, a significant proportion of residents still report perceiving good health. According to the available data, 65% of people between the ages of 18-65 perceive their health to be good, which is encouraging.

Furthermore, 46% of people aged 65 and over also report perceiving good health. This is a positive indication of the overall health status of this age group in the district, although it is still somewhat lower than the proportion of younger residents who report good health.

Overall, a spatial analysis of the case study MWW2 suggests that there may be some challenges to achieving good health outcomes in this area. High residential density, limited open space, small household footprints, and low livability scores may all contribute to health problems over time. Understanding these factors can help policymakers and public health officials develop targeted interventions to improve health outcomes in Moerwijk and other similar areas.

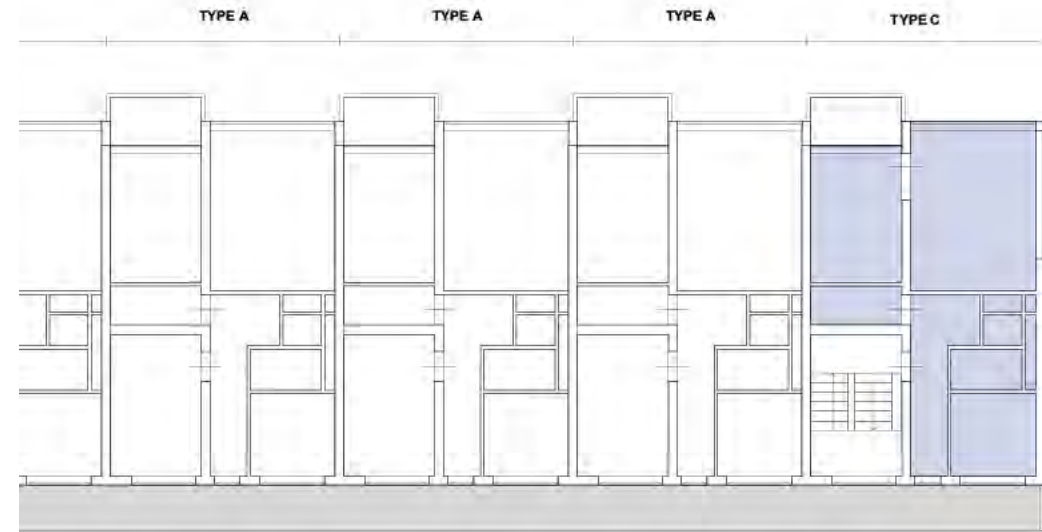
Apartment



Floorplan of
the apartment
complex as case
study for MWW2.
Source: own
drawing

The apartment complex located between the Albert Heijn and the football club T.A.C.' 90 on Sara Burgerhartweg in Moerwijk, is an interesting architectural feature in the area. The complex was built in the late 1960s and early 1970s as part of a wider effort to provide housing for elderly in the area. Today, it is home to a diverse community of residents from different backgrounds and age groups.

The design of the complex is characterized by its modernist aesthetic, with clean lines and a focus on functionality. The apartments themselves are designed to be compact and efficient, with open plan living spaces and small bedrooms. The floor plan of each apartment is carefully designed to maximize space and light, with large windows on both sides that let in plenty of natural light.



Despite its age, the complex has been well-maintained over the years and remains now a popular choice for residents looking for affordable housing in the area. Its central location, close to shops, restaurants, and other amenities, makes it an attractive choice for many people.

One of the units was available for us to survey. We examined the apartment type B. The this one is the biggest apartment. It has a hallway leading to a kitchen, bathroom, storage space, dining area, and three bedrooms. It comes with a balcony as well and is therefore able to be naturally ventilated.

Neighbourhood

Quality of Life shown in a plan of the case study area. Source: own drawing.



Quality of Life - Zuidwest 2020

Very Poor Quality	Low Quality
Poor Quality	Average Quality

The quality of life in Moerwijk is characterized by a mix of strengths and challenges. On the one hand, the area benefits from a diverse population that brings a richness of culture and perspective. There are many local organizations and initiatives that work to promote social cohesion and improve the lives of residents, such as community gardens, sports clubs, and cultural events. However, Moerwijk also faces a range of challenges that impact the quality of life for its residents. These include high levels of poverty and unemployment, low levels of educational attainment, and a lack of access to quality healthcare and other basic services. The area also has high levels of crime and social disorder, which can lead to feelings of insecurity and a decreased sense of safety for residents.



In this drawing a distinction is made between residential functions and a mixed use. The apartment complex is a notable residential building in this area. It is the largest.

Zoning
 Mixed - Use
 Residential

Zoning shown in a plan of the case study area. Source: own drawing.



In this drawing the greenery is highlighted. There is quite some greenery in the case study area provided by the football field, trees and grass around the canal.

Greenery
 Trees
 Canals
 Grassland

Greenery shown in a plan of the case study area. Source: own drawing.



In this drawing the amount of parking is visible. There is more room for cars than other mobilities as cars park on the sidewalk. This also relates to the large amount of cars in Moerwijk.

Mobility
 Parking
 Designated Bike Paths

Mobility shown in a plan of the case study area. Source: own drawing.



Synthesis Participatory Action Research

The word “participatory” refers to the involvement of the researchers who gathered the data. This approach emphasizes the intricacies and potential for uncovering new insights. While the participatory action synthesis process does not aim to reach a consensus, it does provide a chance for different perspectives to be discussed and negotiated in relation to a common topic, rather than relying solely on evidence from one perspective or source (Wimpenny & Savin-Baden, 2012). This section contains our participatory action research of Moerwijk district located in The Hague.

Interviews

On Sunday, March 5, we met with our first participant. Our participant is an 83-year-old man who lives on the sixth floor of our designated residential building. He described himself as eager to learn, ambitious, helpful, and prefers to spend most of the time on his own. The man refers to himself as a hermit, implying that he spends the majority of his time inside his home.

Summary of the interview:

Personal and community

Q: When did you move to Moerwijk and why did you choose to live in this building?

A: I moved to Moerwijk in 1950 because of my father's job. I lived near my elementary school. Later on, I attended secondary school. This current building is now right in the middle of the two. This is how I got to know the neighborhood. When I saw at the time that there were plans to build this flat, I immediately knew that I would want to live there. It was set up as a senior flat and was only feasible for wealthy people.

Q: Do you live alone or with family?

A: I divorced my first wife. I later met my second wife in a support group. She already lived here and I moved in with her in 1984. She has a disabled son. My wife passed away 6 years ago and her son still lives with me. He has his own wing.

Q: Do you have regular visitors?

A: As I told you before I like to spend time on my own. Sometimes my children and/or grandchildren visit me. I also sometimes help people with their taxes or other documentation, because I used to work as a civil servant. I have a lot of legal and economic knowledge.

Q: Do you know about any renovation work being done since you've been living here?

A: The building is well maintained by the housing association.

Q: How do you perceive the age demographic in this building/neighborhood?

A: At the time, the building was completed as a senior flat. You had to be at least 55 years old to live here, so in the past, only the elderly lived here. Later, the municipality had to release 10-15% of the homes for social rent and foreigners. A little later the age limit was also removed. Now a mix of different ages lives here. I think half of them are still elderly.

Q: How is your relation to your neighbors, is there a sense of community?

A: There used to be a very good atmosphere among the residents. Everyone knew each other, so there definitely was a sense of community. Unfortunately, this changed when foreigners came to live here. Some don't speak the Dutch

“There used to be a very good atmosphere among the residents. Everyone knew each other, so there definitely was a sense of community.”

language, so you can't have a conversation with them.

Q: Does the building provide space for social encounters?

A: Yes there is room for that. We used to meet downstairs at the mailboxes. There you could talk. You also met each other in the galleries and greeted each other, or even sat down for a while. Now that is no longer the case. Only the old people from the past still meet each other.

Health

Q: What kind of living environment do you need for a healthy life?

A: The view is the most important thing for me. And I love that I have this on both sides. I think every architect should think about this!

Q: How often do you open your windows for natural air ventilation?

A: I open my windows quite often. That again is so nice that I have the option on both sides. When it is warm I can open both sides and it drafts through. Or if there is a lot of wind I can open just one side.

Q: Are there any distractions in the area such as smell and noise?

A: I am not bothered by smell and noise. I don't smell any restaurants in the area and I like the sound of the environment, for example, the football club.

Q: Do you sometimes feel restricted by your health/physical limitations regarding your mobility?

A: Mentally I am still very much up to date, but physically I can't do everything I used to be able to do. But I don't feel limited! I just don't go far, because I prefer to stay at home.

Q: What kind of transportation do you use?

A: I do everything on foot. I walk to the Albert Heijn and very occasionally to the Zuiderpark. I only take the car when I have to visit family from afar. I also used to go to work by car. The building has a closed parking lot. You have to pay for it, so half the site is empty. People choose to park on the streets for free.

On Wednesday, March 8, we met with our second participant. He is a 61-year-old man who lives on the second floor of our designated residential building. He told us he lived on the streets for 3 years, so he is very happy to have a home now. He also shared that he has been arrested several times, slept in his car for a while, is a heart patient, and that he is in debt restructuring.

Summary of the interview:

Personal and community

Q: When did you move to Moerwijk and why did you choose to live in this building?

A: I came to Moerwijk 3 years ago. I was offered a residence in the building.

Q: Do you live alone or with family?

A: I live alone.

Q: Do you have regular visitors?

A: Yes, I do like a party, so sometimes I enjoy myself at home with friends or a woman. But I normally visit others.

Q: Do you know about any renovation work being done since you've been living here?

A: I don't really know. Sometimes something needs to be done and I ask about it, but it takes weeks before it finally happens. I could also do it myself, but I pay rent for this.

Q: How do you perceive the age demographic in this building/neighborhood?

A: The age differs. I like that!

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Q: How is your relation to your neighbors, is there a sense of community?

A: I get on very well with some neighbors. There is a woman living next to me that I get on well with. But there are also neighbors who immediately complain when I have music on. These are not the older people, but the younger ones! The atmosphere changed a lot as more and more different people came. There is only a sense of community with some people who know each other. I was also threatened once by my neighbor. I told him to get out or else I would throw him over the balcony... There are 2 men from Stedion around here who help with social problems. They are called in by the police.

Q: Does the building provide space for social encounters?

A: I like to watch football on Saturdays with my neighbor in the gallery, but even then there are people bothered, that we cause a nuisance.

“I was also threatened once by my neighbor. I told him to get out or else I would throw him over the balcony...”

Health

Q: What kind of living environment do you need for a healthy life?

A: Well I am a heart patient, so when it comes to health I am often in the hospital. I also go outside a lot, I go to the shops or I go to Zuiderpark to smoke.

Q: How often do you open your windows for natural air ventilation?

A: I sometimes open the windows. Only the windows are not cleaned, so I have now found a solution to do this myself. I also want to do this for my neighbors.

Q: Are there any distractions in the area such as smell and noise?

A: I am not bothered by smell or noise. Oh, there was once a neighbor who threw mayonnaise down the stairwell. That you could smell. I have no problem with sound. Other people are more likely to be bothered by me. The building is quite noisy. Also, you are not allowed to drill into the walls because of asbestos. They prevented this by using lowered ceilings and well-plastered walls.

Q: Do you sometimes feel restricted by your health/physical limitations regarding your mobility?

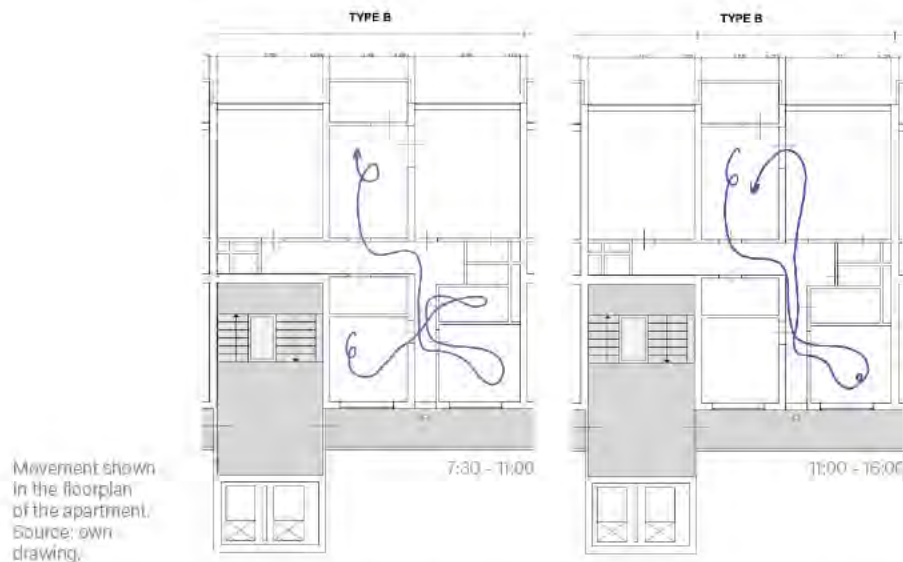
A: Yes I used to like cycling, but now I can't. I only have 50% of my health left since my heart attack.

Q: What kind of transportation do you use?

A: I move with my scooter (scootmobil). Sometimes I walk, but not often.

A day in the life

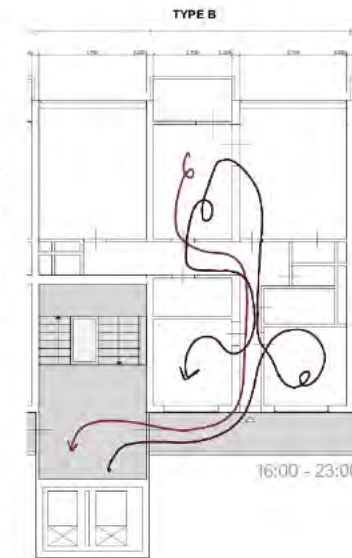
Participant 1 gave us a glimpse into his daily routine. He mentioned that since retiring, his days have been quite monotonous. He wakes up at around 7:30 am, takes a morning shower, and then gets dressed. He leisurely enjoys his breakfast and tidies up the kitchen afterwards. He spends the rest of the morning watching TV and reading teletext to stay updated with current events, which makes him feel connected to the world (see drawings below).



Between 12 and 1 pm, he takes a break for lunch, and then engages in what he calls “work,” which involves tasks related to his previous profession. This may include assisting others with tax filings or paperwork. He also spends time cleaning his house, shopping, or solving puzzles. He typically shops at the Albert Heijn store located nearby and does not venture out beyond that area.

Towards the end of the afternoon, he does some shopping and then returns home to prepare dinner. The remainder of his evening is spent reading and watching TV. He's interested in the proceedings of the Second Chamber, so depending on their activity he may retire to bed earlier or later.

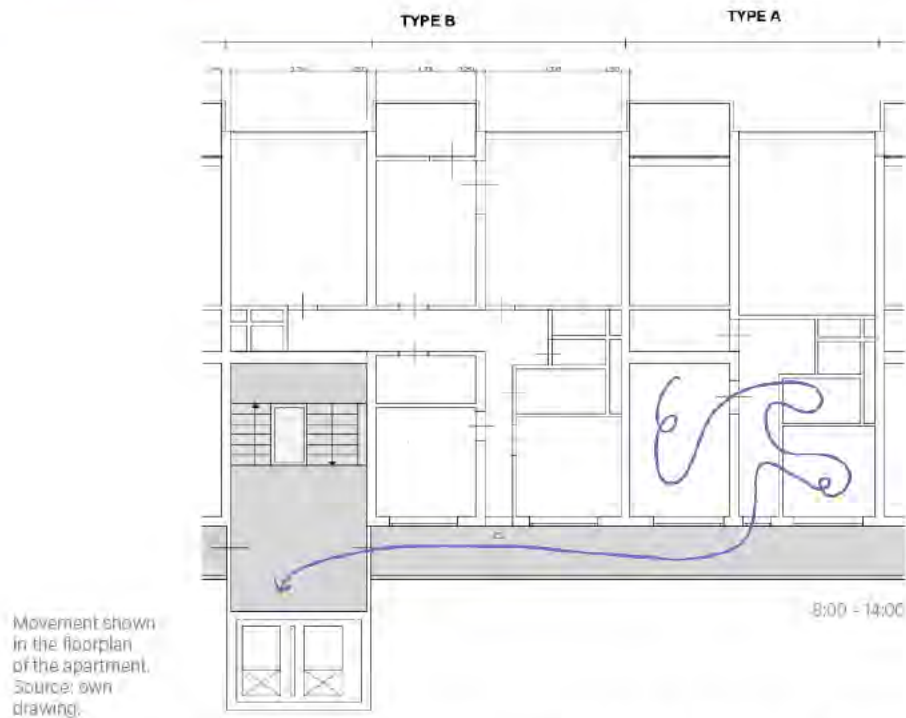
He does not utilize the additional bedroom in his home because he shares his living space with a handicapped son of his wife. The son occupies his own separate area, allowing them to live alongside each other.



Movement shown in the floorplan of the apartment. Source: own drawing.



Movement shown in a plan of the case study area. Source: own drawing.

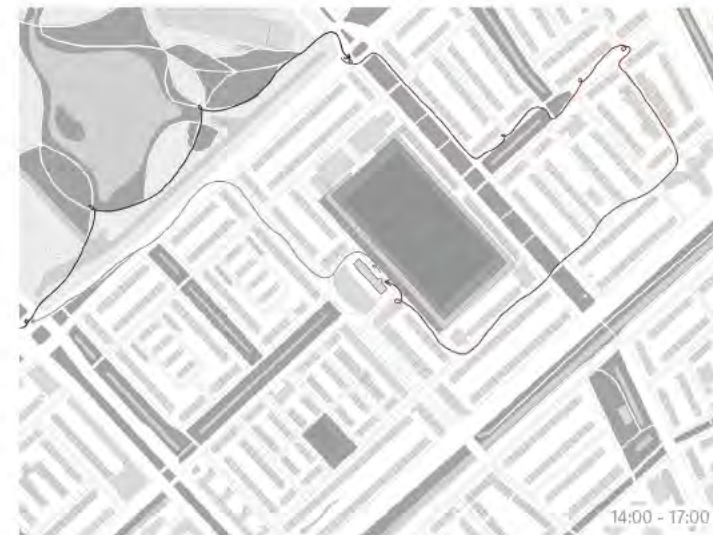


Participant 2 also talked to us about his day. When he needs to see the thrombosis service, this man gets up early in the morning. This is a weekly visit. However, if it was late the previous night, he may choose to sleep in until late in the afternoon.

He obtained all of his furniture from others. As a result, one of the rooms has evolved into a sort of rubbish room. He intends to use this for something.

Additionally, this participant is a true outdoorsman. He frequently goes to the Zuiderpark in the afternoon, hangs around in the commercial areas, or visits friends.

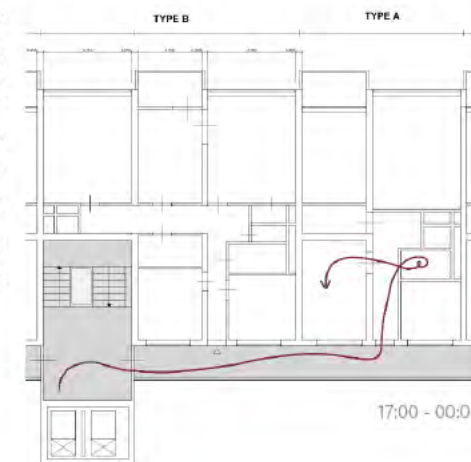
He likes to put on music when he gets home. Regularly, alcoholic beverages are served with this.



Movement shown in a plan of the case study area. Source: own drawing.

Going to the casino and watching football from the gallery with his neighbor are activities that this participant does on weekends.

Something this man still plans to do is to wash the windows. He says that this is hardly ever done and has now come up with a solution himself. He also wants to offer this to other residents of the building. However, he is not allowed to earn from this, because otherwise he will no longer be entitled to the government's money.



Movement shown in the floorplan of the apartment. Source: own drawing.

Case study visuals



Picture of the case study building taken from the Sara Burgerhartweg. The galleries that sometimes are used for social purposes by residents are visible.



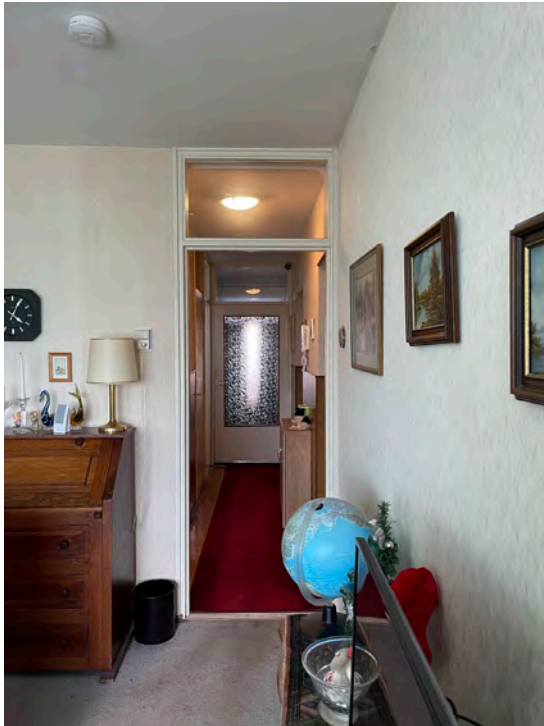
Picture of the entrance of the building taken from the Sara Burgerhartweg. The door opens automatically for everyone.



Picture of post boxes taken after entering the building. This is the only 'social room' in the building.



Picture of the common area in front of the elevators. It is not furnished and does not invite people to socialize.



Picture of the hallway in the apartment taken from the living room. From the front door you walk straight into the living room.



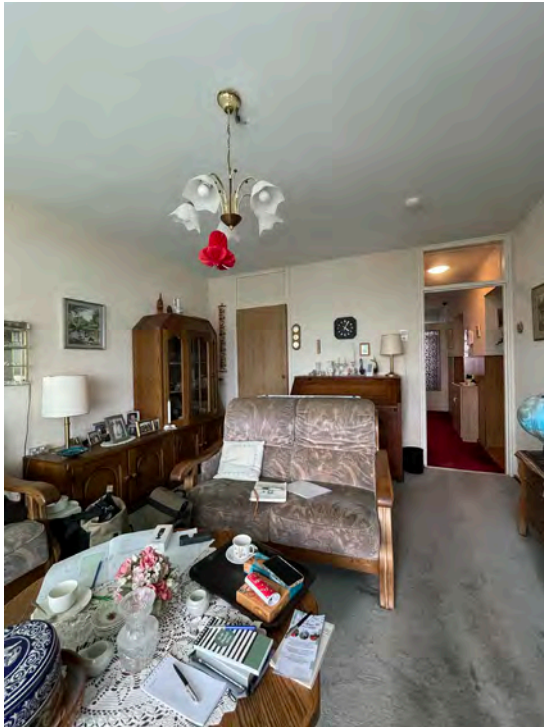
Picture of the hallway leading to the other bedroom. This corridor connects both wings within the house.



Picture of the storage and bathroom doors taken from the hallway.



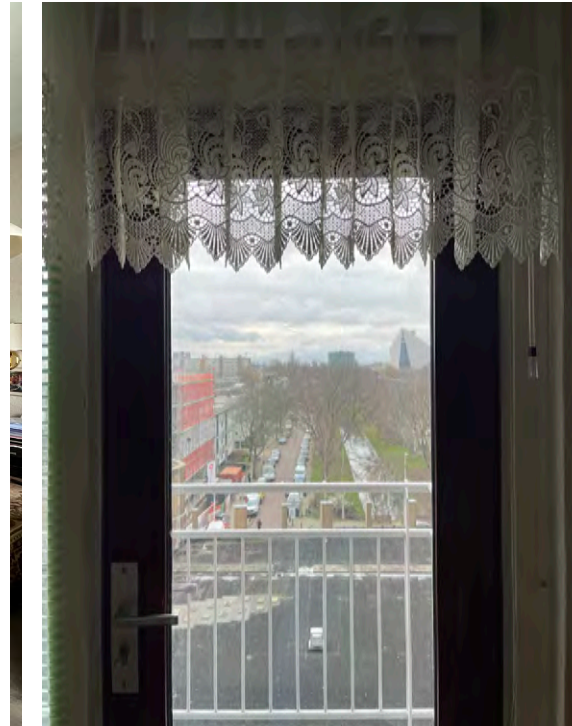
Picture of the kitchen adjacent to the hallway. The kitchen window overlooks the gallery.



Picture of the living room. This space was mainly used for guests.



Picture of the dining / study room. This is where the participant spends most of his day.

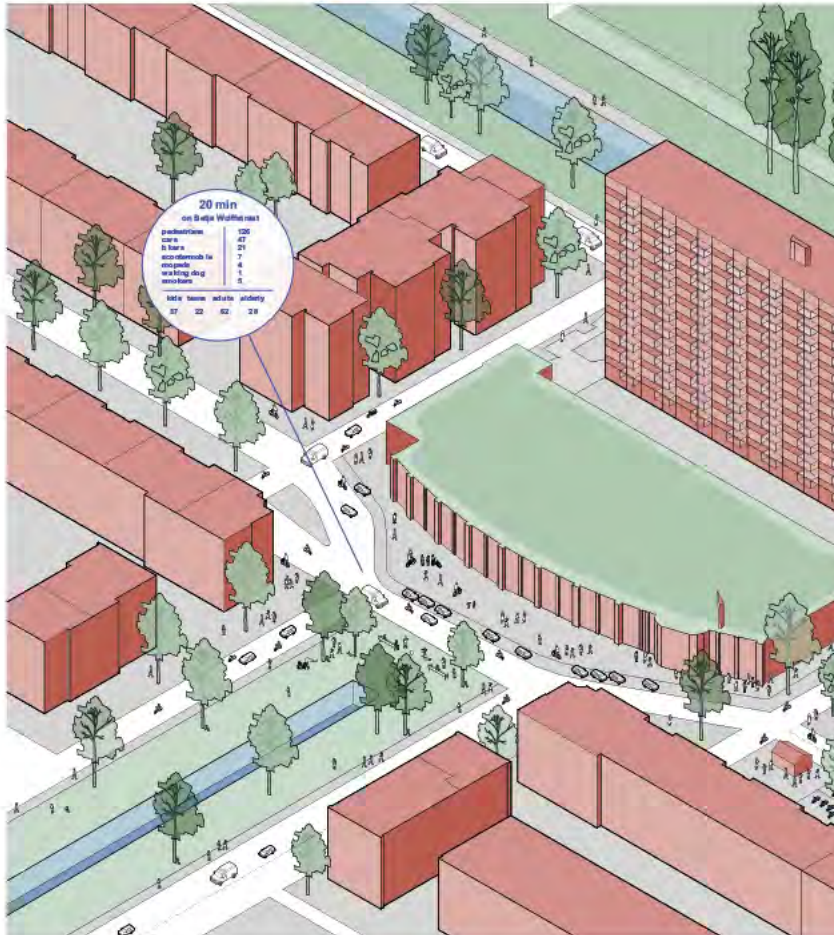


Picture of the door leading to the balcony. The door of the balcony is adjacent to the dining room.

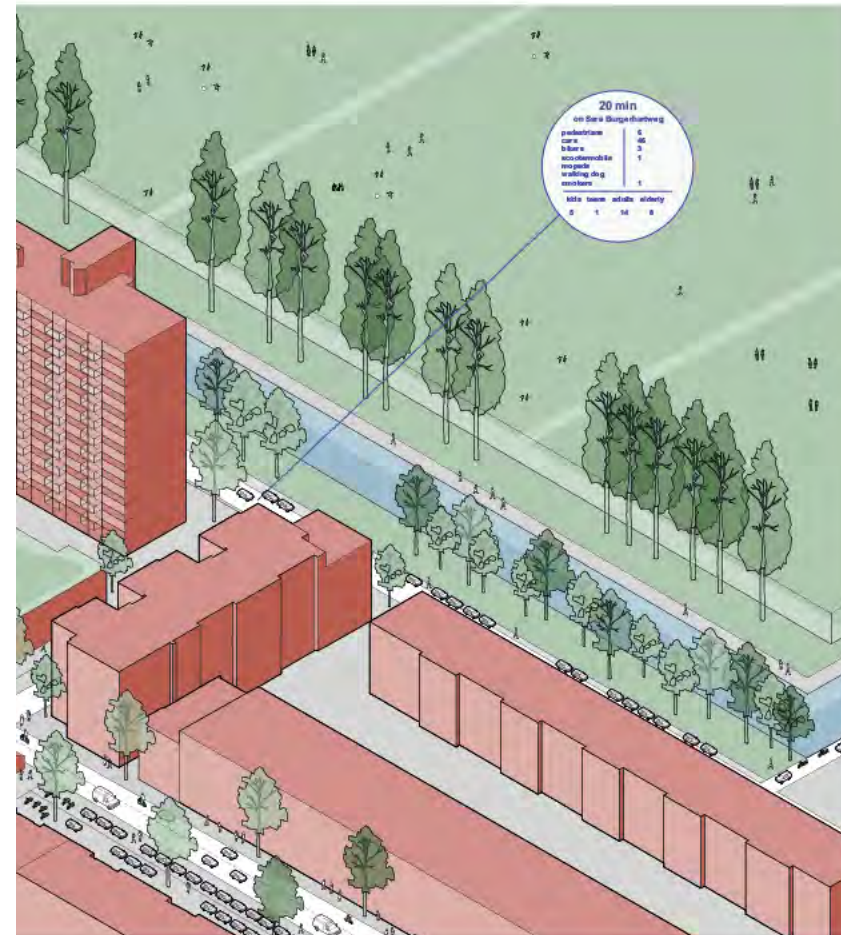


Picture of the view from the balcony. This view is in a south-westerly direction. The notable building that can be seen is the Escamp building.

Observation Moerwijk West



During our visit to our case study, we made observations for 20 minutes. We did this in two places in the area. The location on the left is on the Betje Wolffstraat next to the supermarket. This is a busy street. Many pedestrians (126) came by in the time we attended. These were mainly people doing groceries. Also 47 cars and 21 bikes passed through the street. Other people passed by on a scootmobile or mopeds. The amount of adults were the highest, followed by kids. Also elderly and teenagers were present. The people in this street are very diverse.



Axo from our case study area MWW2. Source: own drawing.

The location on the right was the street directly adjacent to the building, the Sara Burgerhartweg. This is a fairly quiet street. In the 20 minutes that we were present, 28 pedestrians passed by. This was exceeded by a number of 46 cars. In this time only 3 cyclists and 1 mobility scooter passed by. We also looked at the age of the passers-by. The largest number was represented by adults, namely 14. The elderly followed with a score of 8. Teenagers and children are rare in the area. This is most likely because the building is made up of elderly residents.

Microbe Analysis

	Species number	ShannonBacteria	ShannonFungi
MWO1	204	4,352	2,615
YPM1	296	3,865	2,512
MWO2	263	4,452	2,663
YPB1	163	3,588	2,395
MWW1	238	4,077	2,477
MWW2	143	3.83	2,396
MWS1	99	2,638	2,578
MWS2	301	4,005	2,26
YPW1	157	1,906	2,329
MWN2	201	4.29	2,832
MWN1	156	3,925	1,929
YPS1	125	3,001	2,307

Outdoor
Airsampling
Results, Source:
LUMC

We evaluated the case study area with distinct social-spatial characteristics in partnership with students, tutors, and researchers from Leiden University Medical Centre (LUMC) and Hogeschool Leiden. For example, we had to include the results of the air sampling you can see above.

ShannonBacteria and ShannonFungi are two indices used in microbial ecology to measure the diversity and evenness of bacterial and fungal communities, respectively. The indices were developed by the ecologist Claude Shannon and are widely used in microbial ecology research.

The ShannonBacteria index measures the diversity of bacterial species present in a sample, taking into account both the number of species present and their relative abundance. The higher the ShannonBacteria index, the greater the bacterial diversity in the sample.

Similarly, the ShannonFungi index measures the diversity of fungal species present in a sample, taking into account both the number of species present and their relative abundance. The higher the ShannonFungi index, the greater the fungal diversity in the sample.

These indices are useful in environmental monitoring, as they can provide information on the health and diversity of microbial communities in a particular area. They can also help identify changes in microbial diversity over time or in response to environmental factors. (Iffis. et al, 2017)

The number of species found in our case study area (143) is lower than the scores of some of the other areas, which ranged from 99 to 301. However, it's important to note that the number of species found can be influenced by many factors, such as the location and size of the area, the type of environment, the time of year, etc. (Engh. et al, 2015)

Based on the ShannonBacteria score of 3.83, it can be inferred that the bacterial diversity in the case study area is relatively low. A higher ShannonBacteria score indicates a greater diversity of bacterial species in the sample. Also the higher the diversity, the healthier the area.

On the other hand, the ShannonFungi score of 2.396 suggests a relatively low diversity of fungal species in the area. However, it's important to note that these scores are just one aspect of the overall environmental quality of the area and should be considered in conjunction with other factors such as air pollution levels, water quality, and presence of hazardous materials.



Conclusion

In conclusion, this report provides a comprehensive socio-economic characterization of Moerwijk West. Through the collection and analysis of various data sources, including demographic data, various statistics, housing conditions, and interviews, we have gained a better understanding of the economic and social dynamics that shape this community.

Our findings indicate that Moerwijk is a diverse and multicultural neighborhood, with a high percentage of residents from non-Dutch backgrounds.

However, the neighborhood also faces significant socio-economic challenges, such as high levels of unemployment, low-income levels, and a high concentration of social housing. These challenges are compounded by other factors, such as low levels of education, limited access to healthcare services, and a lack of community resources. Despite these challenges, however, our analysis also reveals the resilience and resourcefulness of Moerwijk's residents, as well as the potential for positive change through community engagement and targeted interventions.

The spatial analysis of Moerwijk district reveals several factors that can impact the health outcomes and quality of life of its residents. High residential density, limited open space, small household footprints, and low livability scores are some of the key challenges that need to be addressed to improve health outcomes in the area.

However, it is important to note that despite these challenges, a significant proportion of residents still perceive their health to be good. This again suggests that there are also strengths in the area. Therefore, policymakers and public health officials should focus on developing targeted interventions that address the challenges identified by the spatial analysis while building on the strengths of the area. For instance, increasing the availability of green space and promoting physical activity can help improve the health outcomes of residents. Enhancing access to quality healthcare and other basic services, as well as supporting local initiatives that promote social cohesion, can also contribute to improving the quality of life in the area.

Based on the two interviews provided, there are several differences and similarities between the two participants. In terms of personal background, the first participant is an 83-year-old man who has lived in the residential building for many years. He describes himself as a hermit and prefers to spend most of his time alone. The second participant is a 61-year-old man who moved to the building three years ago after experiencing homelessness and being offered a residence there. He lives alone, enjoys parties, and sometimes hosts friends at his place.

Regarding their perceptions of the building and community, the first participant has a sense of nostalgia for the building's past when it was exclusively for seniors and had a stronger sense of community. He notes that the introduction of social housing and foreign tenants has changed the atmosphere, with some residents unable to communicate with each other due to language barriers. He believes that the building is well-maintained and has space for social encounters, although this is less common now than it was in the past. In contrast, the second participant has only lived in the building for a few years and does not comment on its history. He seems more focused on his personal relationships with others and does not mention any community spaces or gatherings.

Regarding health and living environment, the first participant emphasizes the importance of having a good view from his apartment and enjoys opening his windows for natural air ventilation. He does not report being bothered by noise or smells in the area. The second participant does not mention specific environmental factors but does note that he is a heart patient and is in debt restructuring.

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The daily routines and activities of both participants have allowed us to better understand them and how they use the space around them. Participant 1 seems to have a fairly structured routine, with a mix of leisurely activities and tasks related to his previous profession.

Participant 2, on the other hand, seems to have a more spontaneous and flexible schedule. He enjoys spending time outdoors and socializing with friends, and even has plans to offer window washing services to other residents. Overall, it's fascinating to see the different ways in which individuals structure their days and find fulfillment in their activities.

Based on our 20-minute observations, it appears that the Betje Wolffstraat is a much busier street compared to the Sara Burgerhartweg. This is due to the fact that there is a supermarket and other facilities located on the Betje Wolffstraat, which draws more people to the area. It is also interesting to note that the demographics of the two streets are quite different, with the Betje Wolffstraat being more diverse in terms of age groups represented.

Overall, the socio-economic characterization and the spatial analysis of Moerwijk West provides valuable insights into the relationship between the built environment and health outcomes, highlighting the need for integrated and multidisciplinary approaches to address the complex challenges faced by the area. And through the participatory action research that we conducted, including interviews with the participants, descriptions of their daily lives, and observations in two different locations, we gained valuable insights into the social dynamics and daily routines of the area.

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Translations

VERTALINGEN

ÇEVIRILERI

مچارت

Samenvatting in het Nederlands

De Buurt

Moerwijk is een wijk in het stadsdeel Escamp van Den Haag. Het wordt omringd door wijken zoals Wateringse Veld, Morgenstond, Zuiderpark, Groente- en Fruitmarkt, Laakkwartier en Spoorwijk. De bouw van Moerwijk vond plaats na de Tweede Wereldoorlog en werd ontworpen door Willem Dudok. Rond het grote centrale Erasmusplein zijn vier buurten ontworpen (Moerwijk 2, 3, 4 en 5), elk met een breed assortiment aan voorzieningen, waaronder een kerk, een winkelcentrum, parken en een school. In Moerwijk-West is er een winkelstraat aan de Jan van Luykenstraat. Moerwijk heeft een ander sociaal-economisch en demografisch profiel dan de rest van Den Haag. Hoewel het slechts een klein deel van de totale stadsbevolking omvat, is Moerwijk een cruciaal gebied voor sociale en economische ontwikkeling. Het heeft namelijk een hoog aandeel niet-westerse inwoners, een lager gemiddeld inkomen en opleidingsniveau, hogere criminaliteitscijfers en gezondheidsproblemen. Ondanks deze problemen tonen de bewoners veerkracht en vindingrijkheid. Dit laat zien dat er potentie is voor positieve veranderingen door de gemeenschap te betrekken en door gerichte interventies. De ruimtelijke analyse laat zien dat uitdagingen zoals hoge woondichtheid, beperkte open ruimte en lage leefbaarheidsscores, van invloed zijn op de gezondheidsresultaten. Beleidsmakers moeten doelgerichte interventies inzetten, zoals het vergroten van groene ruimten, het bevorderen van lichaamsbeweging, het verbeteren van de toegang tot gezondheidszorg en het ondersteunen van lokale initiatieven voor sociale cohesie.

Het proces

De kwaliteit van leven in Moerwijk toont een combinatie van sterke punten en uitdagingen. Het gebied profiteert van zijn diverse bevolking, omdat die bijdraagt aan een rijk cultureel landschap. Tal van lokale organisaties en initiatieven werken aan het verbeteren van de sociale cohesie en het leven van de bewoners door middel van gemeenschapstuinen, sportclubs en culturele evenementen. Door de dagelijkse routines en activiteiten van twee deelnemers van dichtbij te observeren, wordt duidelijk op welke unieke manier zij gebruik maken van hun omgeving. Deelnemer 1 heeft een gestructureerde routine met zowel vrije tijds- als professionele activiteiten, terwijl deelnemer 2 een spontaner en flexibeler schema heeft met buitenactiviteiten en van plan is om diensten aan de gemeenschap te verlenen. Uit de observaties blijkt dat de Betje Wolffstraat drukker is dan de Sara Burgerhartweg, deels door de aanwezigheid van een supermarkt en andere voorzieningen die meer mensen naar het gebied trekken. Bovendien is er een demografisch verschil tussen deze twee straten, want de Betje Wolffstraat kent een grotere leeftijdsdiversiteit. De sociaaleconomische karakterisering en ruimtelijke analyse van Moerwijk-West bieden waardevolle inzichten in de samenhang tussen de gebouwde omgeving en gezondheidsresultaten. Ze benadrukken het belang van geïntegreerde en multidisciplinaire benaderingen om de complexe uitdagingen van het gebied aan te pakken. Door middel van onderzoek met interviews, beschrijvingen van het dagelijks leven en observaties op verschillende locaties, ontstaat er meer kennis over de sociale dynamiek en dagelijkse routines in de wijk.

Türkçe Özet

Mahalle

Moerwijk, Den Haag'ın Escamp bölgesinde bulunan bir mahalledir. Wateringse Veld, Morgenstond, Zuiderpark, Groente- en Fruitmarkt, Laakkwartier ve Spoorwijk gibi mahallelerle çevrilidir. Moerwijk'in inşaaı İkinci Dünya Savaşı'nı takip eden yıllarda gerçekleşti ve Willem Dudok tarafından tasarlandı. Ana merkezi Erasmusplein etrafında dört mahalle olarak tasarlanmıştır (Moerwijk 2, 3, 4 ve 5), her bölge kilise, alışveriş merkezi, parklar ve bir okul gibi belli bir düzeyde olanaklarla donatılmıştır.

Moerwijk-West'te Jan van Luykenstraat üzerinde bir alışveriş caddesi bulunmaktadır. Moerwijk mahallesi, Den Haag'a kıyasla farklı bir sosyoekonomik ve demografik karaktere sahiptir. Şehrin toplam nüfusunun sadece küçük bir bölümünü oluşturmalarına rağmen Moerwijk, yüksek oranda Batılı olmayan sakinlere, daha düşük ortalama gelir ve eğitim düzeyine, yüksek oranlı bildirilen suçlara ve sağlık sorunlarına sahip olması nedeniyle sosyal ve ekonomik gelişim için hayati bir bölgedir. Bu sorunlara rağmen mahalle sakinleri önemli bir dayanıklılık ve yaratıcılık sergiliyorlar, bu da toplumun katılımı ve hedefe yönelik müdahaleleri yoluyla olumlu değişiklik potansiyeline işaret ediyor. Mekânsal analiz, yüksek konut yoğunluğu, sınırlı açık alan ve düşük yaşanabilirlik puanları gibi zorluklar, sağlık sorunlarını da etkiliyor. Politika yapıcılar, yeşil alanları artırmayı, fiziksel aktiviteyi teşvik etmeyi, sağlık hizmetlerine erişimi arttırmayı ve sosyal uyum için yerel girişimleri desteklemeyi hedeflemelidirler.

Süreç

Moerwijk'teki yaşam kalitesi semtin güçlü olduğu noktalar ve kendini göstermek istediği noktalar arasındaki bir ortaklıktır. Bu bölge kendi sakinlerinin farklılıklarından güç almaktadır. Çünkü bu, bir çoklu kültür zenginliği yaratmaktadır. Çok sayıdaki bölgesel kuruluşlar ve inisiyatifler, sosyal bir uyumun oluşması için çalışmaktadırlar. Bunun için mahalle ortak hobi bahçeleri oluşturmaktan spor kluplerine ve kültürel etkinliklere kadar bir çok çalışma yapmaktadırlar. Mahalleden iki kişinin günlük olağan yaşamlarını ve aktivitelerini yakından takip ettiğimizde, her iki bireyin de çevrelerini değiştirmek için kendilerine özgü metodları olduğunu gözlemledik. Gözlemlenen birinci kişi planlanmış bir çalışma çizelgesi ile boş zaman ve profesyonel etkinlikleri organize ederken, ikinci gözlemlenen kişi kendiliğinden gelişen durumlarda ve daha esnek planlamaya dayanarak çevresine yardımcı olmaya çalışmaktadır. Yapılan gözlemlere göre Betje Wolffstraat'ın Sara Burgerhartweg'e göre daha kalabalık olduğu görülmüştür. Bunun bir nedeninin Betje Wolffstraat'ta bir süpermarketin ve daha değişik olanakların olmasından kaynaklandığını söyleyebiliriz. Bunların da üstünde, bu konudaki en büyük etken, iki sokak arasındaki demografik yapıdan kaynaklanmaktadır. Betje Wolffstraat'ta geniş bir yaş farklılıkları gurubu olduğu görülmüştür. Moerwijk-West'teki sosyal ekonomik karakter ve yaşam alanları analizleri, bu bölgede binaların yapısı ve sağlık arasında çok büyük bir ilişkinin olduğunu açıkça ortaya koymaktadır. Bu durum, bu bölgedeki girift ilişkilerin ele alınmasının güçlüklerini gösterdiği gibi birbirleri ile olan ilişkilerin de bir çok açıdan ele alınmasını zorunlu kılıyor. Günlük yaşamı her yönü ile ele alan ve söyleşilerle yapılan bu araştırmaya göre sosyal dinamik ve günlük normal yaşam alışkanlıkları arasında çok yoğun bir geçirgenlik söz konusudur.

ملخص باللغة العربية

الحي

Moerwijk هي منطقة تقع في منطقة Escamp في لاهاي. وتحيط به المناطق المجاورة مثل ووترينغس فيلد ومورغنستوند وزاويدربارك وجروينتي إن فروت ماركت ولاكوارتييه وسيورفايك. تم بناء Moerwijk في السنوات التي سبقت الحرب العالمية الثانية وصممه ويليم دودوك. تم تصميم أربعة أحياء حول Erasmusplein المركزية الكبيرة (Mo-erwijk 2 و 3 و 4 و 5) ، ولكل منها مستوى معين من المرافق مثل الكنيسة ومركز التسوق والحدائق والمدرسة. يوجد في Moerwijk-West شارع للتسوق في Jan van Luykenstraat. تتمتع منطقة Moerwijk بطابع اجتماعي واقتصادي وديموغرافي متباين من لاهاي. على الرغم من أنها لا تشكل سوى جزء صغير من إجمالي سكان المدينة ، إلا أن Moerwijk هي منطقة حاسمة للتنمية الاجتماعية والاقتصادية نظرا لارتفاع نسبة سكانها غير الغربيين ، وانخفاض متوسط الدخل ومستوى التعليم ، وارتفاع معدلات الجرائم المبلغ عنها ، والقضايا الصحية. على الرغم من هذه القضايا ، يظهر السكان المرونة وسعة الحيلة ، مما يشير إلى إمكانية التغيير الإيجابي من خلال المشاركة المجتمعية والتدخلات المستهدفة. يسلط التحليل المكاني الضوء على تحديات مثل الكثافة السكنية العالية ، والمساحات المفتوحة المحدودة ، ودرجات المعيشة المنخفضة ، مما يؤثر على النتائج الصحية. وينبغي لصناع السياسات أن يركزوا على التدخلات المستهدفة مثل زيادة المساحات الخضراء، وتشجيع النشاط البدني، وتعزيز فرص الحصول على الرعاية الصحية، ودعم المبادرات المحلية الرامية إلى تحقيق التماسك الاجتماعي

العملية

يستكشف هذا المشروع العلاقة العميقة بين المكان والإحساس والذكريات داخل المنازل، بهدف فهم كيف يؤثر ذلك على الرفاهية الجسدية والعقلية. يستخدم الباحثون نشاط خريطة لتفسير المنزل كترابك للآثار والذكريات، مع سعيهم لاكتشاف حميمية حياة المنزل من خلال التقاط لحظات غير متوقعة وأنماط السلوك. يبحثون في كيفية استخدام المساحات بطرق غير تقليدية، مثل شرب القهوة في غرف مختلفة أو القراءة على درج السلم. وعلاوة على ذلك، يدرس البحث ما إذا كانت هذه العادات „المنحرفة“ تتأثر بوجود أفراد العائلة أو الضيوف. يستكشف الباحثون أيضًا السؤال المثير للإعجاب حول ما إذا كانت غرفة جزئيًا „قذرة“ أو „متسخة“ تخلق بيئة أكثر جاذبية وترحيبًا، مع تقديم جسر بين الرفاهية الصحية والبرودة النقية. من أجل فهم متنوع، يوسع المشروع ليشمل عدة سكان، بما في ذلك الأطفال والشباب والكبار وكبار السن. يتم توزيع نشرات لدعوة وجذب أكبر عدد من السكان ممكن، مشجعين إياهم على مشاركة تجاربهم خلال الاجتماعات والأنشطة التي تركز على الرفاهية العاطفية والصحية الجسدية في سياق الأماكن العامة والمنازل. من خلال شمول وجهات النظر المتنوعة، يهدف البحث إلى كشف التعقيدات المتنوعة للعيش في الحي وتأثيره العميق على حياة السكان، مما يساهم في فهم شامل للارتباط المعقد بين التكوين المكاني والرفاهية.

