# The functional Separation in Pendrecht: Impact on Women and Children

How the Urban Plan Affected Connections and Isolation



Supervisor: A. Broekhuizen

TU Delft, Architecture, Urbanism and Building Sciences, AR2A011, Architectural History Thesis

## Summary

The urban plan of Pendrecht was influenced by the principles of the functional city, emphasizing the separation of functions. This was implemented through residential blocks clustered around communal gardens. Distances within the district were designed to be walkable, making it easy for childern to explore. Car-free zones and roads for destination traffic were introduced to separate traffic from the residential and recreational areas. This layout impacted both the physical structure and the social interactions within the community.

The functional separation of Pendrecht led to both connectedness and isolation. While isolation can be seen as a limitation in social interaction and physical separation from the surrounding environment, communal gardens and public spaces promoted social cohesion. Pendrecht was designed as an independent neighborhood with its own shops, schools and churches. This allowed women and children to live mostly within in the neighborhood without relying on the city of Rotterdam. However, pedestrians and cyclists' accessibility to the city and surrounding areas was limited.

In the 1950s, women were often housewives and had limited opportunities for paid employment. The social interactions, housekeeping and motherly roles were central in their daily lives. The walkable neighborhood and pedestrian- only center of Pendrecht made car ownership unnecessary for women. As a result, their freedom of movement and social interaction was significant within Pendrecht, but the need to leave the neighborhood was neglectable.

While Pendrecht offered green and play areas for younger children, the lack of connection to the surrounding areas limited the older children's exploration. The isolation of the district resulted in restricted social and spatial development for the older children. However, the designed green spaces and play areas created a safe environment for younger children. These areas were easily navigable, allowing mothers to supervise their childern. The urban plan prioritized play areas and public green spaces near the building blocks. Sufficient parking spaces were provided to prevent cars from overtaking these areas.

The separation of functions in Pendrecht created a form of isolation. Connections with the city were primarily necessary for working men and had little impact on the daily lives of women and childern. While the urban plan fostered a sense of community for women and children within the district, it also led to some degree of isolation. For women, the traditional gender roles of the time confined their daily lives to the home. Interactions were also largely limited to the neighborhood. Nonetheless, the walkable design, local shops and communal areas provided opportunities for social cohesion, while the green areas offered children the freedom to play. This contributed to a sense of connection and community within Pendrecht.

This research shows that the urban planning principle of functional separation in Pendrecht was not only a spatial strategy. It also resulted in a form of social and spatial isolation, particularly for women and childern. The neighborhood offered many opportunities for social interaction in its boundaries with walkable distances. At the same time, connections outside these boundaries were limited, leading to a lack of interaction with the surrounding neighborhoods. The functional separation contributed both to a strong sense of internal community and to a closed-off position in relation to the surroundings.

The key contribution of this thesis is the argument that the functional layout of Pendrecht can also be understood as a form of social isolation. This insight highlights how urban planning can have social consequences. Especially when they intersect with traditional gender roles.

Keyword	S
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Functional separation, communal areas, gender roles, connectedness, isolation

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## Introduction

After the Second World War, the city of Rotterdam was mostly destroyed and needed to be rebuilt. This created the possibility for major changes, whole new neighborhoods were built. The post-war reconstruction effort not only aimed to rebuild what was lost. Efforts were also made to implement modernist urban planning principles. These principles were inspired by international movements such as CIAM (Congrès Internationaux d'Architecture Moderne).

Pendrecht is one of those post-war neighborhoods and was designed by a member of the CIAM group. The principles they used, such as the functional separation, was implemented in the design by Lotte Stam-Beese. It focused on infrastructure, green areas and the layout of residential and work areas. The new layout of the neighborhood has innovative elements, but they also had a profound influence on the social lives of the residents.<sup>2</sup>

This thesis examines the influence of functional separation on the daily lives on women and childern in Pendrecht between 1950 and 1960. During this time, gender roles were traditionally defined. Women were mostly responsible for the housekeeping and took care of the children. They were primarily dependent on their direct environment. The urban plan of Pendrecht reinforced the division of roles.

This research offers a view on how modern urban planning gave spatial structure, but also how it influenced the social dynamic within a community. Until now, little specific research has been conducted on the position of women and children in Pendrecht. Therefore, this study provides a valuable contribution to the existing literature.

<sup>&</sup>lt;sup>1</sup> Wim Beeren, Rob Dettingmeijer, Patricia Wardle & Gerrit Burg, *Het nieuwe bouwen in Rotterdam 1920-1960*, (Delft University press, 1982)

<sup>&</sup>lt;sup>2</sup> Rudi Kegel, 'Plannen van de opbouw', *De onderste laag boven,* (Publicatieburo Bouwkunde, 1996), 17

## Methods & research

The main research question will be divided into sub-questions. These will help to get a clearer view on the subject and give context. The research aligns with the growing academic interest in women's studies and gender in urban history. It highlights how spatial planning has shaped the daily experiences of women and childern. This main research question will be answered by linking archival research to existing literature. Archival research delivers primary sources, while using secondary sources from the existing literature.

The main research question is ''How did the separation of function influence the daily experience of women and children in Pendrecht in the period 1950-1960?''. This question will be answered by the following sub-questions:

- How do the social and economic circumstances of the 1950-1960s reflect the division between men and women in the Netherlands?
- How did the design of Pendrecht's outdoor space between 1950 and 1960 influence the lives of children?
- What contribution did the separation of functions have to the isolation and the connectedness of families?

The archive material will be collected from the city archive in Rotterdam and consists of maps, publications, explanations and books. In addition, a literature study is conducted based on scientific articles, books and academic publications. The studies discuss gender roles in historical context. These insights help to better understand the experiences of women and childern in Pendrecht.

The gathered information will be analyzed and used when needed according to the suband main research question. Archival sources will be critically analyzed and assessed for relevance, while secondary sources are used to support interpretations and to offer an academic perspective.

The research has some limitations such as, the interpretation of historical data. This could be influenced by contemporary perspectives on gender and urban planning. The research is innovative but also challenging because of the minimal information about the position on women and children in Pendrecht. This gap in historical records reflects a broader academic trend in which roles of women and children in urban planning have often been overlooked. By addressing this, the study contributes to the expanding field of women's studies and gender history in spatial research. The lack of similar case studies and theoretical models also offers less support. These limitations are acknowledged and considered to ensure the validity of the study.

## Results

#### Division between men and women

After the second world war the Netherlands was in the midst of the reconstruction. Especially Rotterdam was badly affected during the bombing and had to build up most parts of the city. Due to the thrifting economy, people had more to spend. For example, rents became more expensive. With the reconstruction of the city new innovations where possible. Pipes were installed to heat homes, which would make daily life cheaper, more hygienic and less troubled. It was seen as a relief for housewives working in the kitchen to have running cold and hot water at hand.

The difference between men and women was clearly visible in the professional background. The men were expected to earn money, firstly to help their parents, but later to support their own family. From a young age men were taught that money should be an important driving force. After the war numerous men could not go back to the profession they had before the war. This reconstruction-generation was mainly concerned with restoring the situation within his own family. The motivation to earn enough money was high and with the growing economy many jobs were available, but they mostly had to accept that it would be in a different area of expertise. A new job for the breadwinner could mean that the family had to move. It was indisputable that the family would follow suit.

For the women of this time the situation was different. Numerous women completed the housekeeping school, but that didn't mean a job was the next step. However, some women did work before marriage, they mostly had caregiving or related professions. A paid job for women was mostly discouraged. This depended, among other things, on the standards that were taught at home. But the public also advertised the idea that women were meant for housekeeping and childcare. There where articles published in which the 'profession of the housewife' was praised. The housewife was seen as a profession for which they were often not trained, but as a decision one makes by entering a marriage with a man. For a woman, work was considered a temporary occupation so that she could return to the housekeeping as quickly as possible. It was common for women to leave their jobs upon marriage, as societal expectations dictated that their primary role was within the household. In addition, they were also paid less than the men for performing the same function, simply with the reason that the employer could make more profit with hiring women. A woman's competence was tested by her qualities in

<sup>&</sup>lt;sup>3</sup> Anne Jongstra & Arie van der Schoor, 'Herrijzend Rotterdam', *Rotterdam in de Wederopbouw*, (W. BOOKS, 2019), 27

<sup>&</sup>lt;sup>4</sup> Jongstra & Van der Schoor, 'Herrijzend Rotterdam', 43

<sup>&</sup>lt;sup>5</sup> Dieteke van der Ree, 'Opleidingsniveau- en beroepsachtergrond van de mannen', *Een deel van je leven: bewoners van het eerste uur en kinderen van toen uit Zuidwijk en Pendrecht over de betekenis van het wonen in de Zuidelijke Tuinsteden*, (n.a., 1992), 12-13 <sup>6</sup> N.a., 'Analyse van de resultaten en conclusies', *Wonen in de nieuwe wijk Pendrecht (Rotterdam)*, (Ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer, 1958), 14

<sup>&</sup>lt;sup>7</sup> Dieteke van der Ree, 'Opleiding en beroepservaring', *een deel van je leven: bewoners van het eerste uur en kinderen van toen uit Zuidwijk en Pendrecht over de betekenis van het wonen in de Zuidelijke Tuinsteden*, (n.a., 1992), 19

<sup>&</sup>lt;sup>8</sup> Dieteke van der Ree, 'Opleidingsniveau en werkervaringen van vrouwen', *Een deel van je leven: bewoners van het eerste uur en kinderen van toen uit Zuidwijk en Pendrecht over de betekenis van het wonen in de Zuidelijke Tuinsteden*, (n.a., 1992), 13-14 <sup>9</sup> E. Miesdag, 'Het wondere beroep van de huisvrouw', *Ons gezin*, (nationale federatie voor huishoudelijke en gezinsvoorlichting,

<sup>10</sup> N.a., 'De E.V.C. en de werkende vrouw strijd staat op de voorgrond', Werkend Nederland, (Dagelijks Bestuur, 1949), 2

housekeeping.<sup>11</sup> Earning money was often not seen as a possibility. Children of the male sex where more likely to help cover the costs then grown women.<sup>12</sup>

The labor participation of women was minimal, but not entirely inconceivable. In 1947 about 25% of women of the age between 15 and 64 belonged to the working population. This participation was still associated with the wedding day. Women mostly stopped working once they were married. From the 60's onwards, there was a rise in women reentering the workforce. This increase in labor participation was not due to more equal division of household tasks between men and women, but to the reduction in household labor time due to the rise of new technologies. Outsourcing household tasks was also not always financially beneficial. The hourly wage of a hired housekeeper was hardly less than the hourly wage of a skilled adult woman. In the hourly wage of a skilled adult woman.

The social and economic circumstances in the 1950's and the 1960's reinforce the existing gender roles in the Netherlands and make the separation between men and women even more clear. Men were the breadwinners and head of the family. They had the responsibility over the family income. While women assigned to housekeeping and childcare. This was stimulated by social expectations, standards from the parental home and by barriers due to wage inequality. The reconstruction meant new opportunities for men in labor, but women were mainly reminded of their role as housewives. The arrival of running water and heating systems made working in the housekeeping less demanding, but did not change the underlying division of roles.

Although female labor participation was low, some women did still work. This was often temporary, because most women stopped working after marriage. From the 1960's onwards, some women did return to the labor market, partly because new technologies made housework less time-consuming. Before this, hiring a housekeeper was often not finical beneficial.

The housewife was presented as a full-fledged profession, while paid work for women was considered a temporary profession. This limited their financial independence and confirmed the image of men as the breadwinners and heads of the household, while women remained economically dependent on their husbands.

<sup>&</sup>lt;sup>11</sup> N.a., 'Analyse van de resultaten en conclusies', 13

<sup>&</sup>lt;sup>12</sup> N.a., 'De huren', *Wonen in de nieuwe wijk Pendrecht (Rotterdam)*, (Ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer, 1958), 10

<sup>&</sup>lt;sup>13</sup> Kea Tijdens, 'De arbeidsparticipatie van vrouwen', *Een wereld van verschil: Arbeidsparticipatie van vrouwen 1945-2005*, (Erasmus Universiteit Rotterdam, March 2006), 1-3

<sup>&</sup>lt;sup>14</sup> Kea Tijdens, 'De dalende huishoudelijke arbeidstijd', *Een wereld van verschil: Arbeidsparticipatie van vrouwen 1945-2005*, (Erasmus Universiteit Rotterdam, March 2006), 4-5

## Influence of the outdoor space

The quality of life of cities in the 20<sup>th</sup> century in the Netherlands was distressing. The deteriorating of the city was the result of the increasing population that gathered in the city searching for employment. This caused the city to become overbuilt, creating traffic problems and making roads more difficult to reach. Multiple congresses were held to discuss the issues regarding the rapidly growing cities. This has played a significant role in shaping urban development. This caused the first designs of general expansion plans (AUP) for various cities in the Netherlands. The bombing of Rotterdam in 1940 meant that large parts of the city had to be rebuilt, but even before this event there were already plans to modernize the city.<sup>15</sup>

One of the most influential congresses of the 20th century was the Congrès Internationaux d'Architecture Moderne (CIAM). 16 The functional city was an important idea for urban planning that came from these congresses and was seen as the solution for modern urban planning. The members of the CIAM used the principle 'form follows function'. The simplicity of the design was important. The functional city focused on the coherence of four facilities: living, working, recreation and infrastructure. The need for improvement was most significant in housing but designing a public and green area shouldn't suffer any adverse consequences. High-rise buildings would facilitate housing and provide the opportunity to retain and create green areas in the neighborhood. CIAM also considered the preservation and creation of greenery important, like recreational areas and public space. These public areas where also used as a separation between living and working. The connecting factor of infrastructure was also discussed during the congresses. There should be a difference between high-speed roads and traffic in residential areas.<sup>17</sup> The separation of living and working will result in more order. All of this will ensure more residential unity and community formation, also between residents in different phases of life.18

Lotte Stam-Beese was one of the members of the CIAM and designed the Pendrecht district, from the post-war period in Rotterdam. It was designed with the aim of being an independent district with its own center. The facilities of the functional city were included in this design. The residential blocks provided housing and open area, allowing children from all floors of the building block to use the outdoor area. Furthermore, the axes in the district formed the connection between living and working, with green zones ensuring a clear separation. The influence that the CIAM had on urban planning is clearly visible in the design of Pendrecht. The choices that were made have had an impact on the interaction and movement in and through the district.<sup>19</sup>

<sup>&</sup>lt;sup>15</sup> Anouk Haamans, 'Inleiding', *De geplande, gebouwde en toekomstige functionele stad een onderzoek naar de CIAM plannen in Nederlandse steden,* (Utrecht University, 2018), 5-6

<sup>&</sup>lt;sup>16</sup> Haamans, 'Inleiding', 6

<sup>&</sup>lt;sup>17</sup> Anouk Haamans, 'De geplande stad', *De geplande, gebouwde en toekomstige functionele stad een onderzoek naar de CIAM plannen in Nederlandse steden,* (Utrecht University, 2018), 8-12

<sup>&</sup>lt;sup>18</sup> Anouk Haamans, 'De gebouwde stad', *De geplande, gebouwde en toekomstige functionele stad een onderzoek naar de CIAM plannen in Nederlandse steden,* (Utrecht University, 2018), 14

<sup>&</sup>lt;sup>19</sup> Haamans, 'De gebouwde stad', 14-15

The first design for the district already focused on the close connection between housing and public space. Communal gardens were introduced with direct access from the residential blocks. Significant consideration was given to the positioning of play and seating areas, as well as the accessibility of the garden from both the building blocks and the street, with the particular focus on younger children and supervising mothers. The play areas for younger children are located close to the access of the building blocks. Other sections of the communal garden are bordered by planting, creating a natural barrier between the different forms of use. Additionally, by incorporating raised garden areas, boundaries and seating spaces are created without compromising the overall unity of the communal garden.

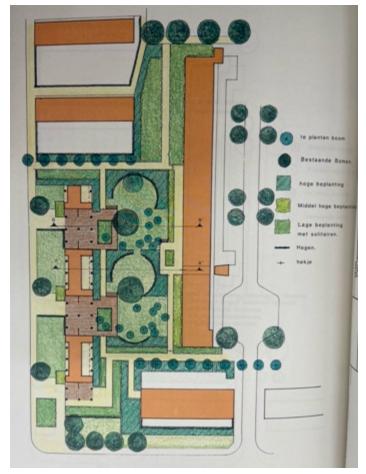


Figure 1 – Eijkelenboom, 'De ontwerpen', 27

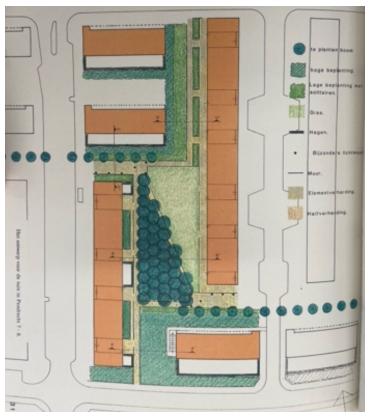


Figure 2 – Eijkelenboom, 'De ontwerpen', 28

<sup>&</sup>lt;sup>20</sup> Carolien Eijkelenboom, Donald Lambert, Jeroen Leemans, Kirsten Mastenbroek, 'Pendrecht en de wooneenheid', *de gemeenschappelijke tuin in Pendrecht*, (Urbis, 1993), 6

<sup>&</sup>lt;sup>21</sup> Carolien Eijkelenboom, Donald Lambert, Jeroen Leemans, Kirsten Mastenbroek, 'De gemeenschappelijke tuin, *de gemeenschappelijke tuin in Pendrecht*, (Urbis, 1993), 9-10

<sup>&</sup>lt;sup>22</sup> Carolien Eijkelenboom, Donald Lambert, Jeroen Leemans, Kirsten Mastenbroek, 'De ontwerpen', *de gemeenschappelijke tuin in Pendrecht*, (Urbis, 1993), 25

Given the large number of children in the neighborhood, there was always something to do outdoors. The children living in Pendrecht preferred playing outside rather than indoors, which occasionally resulted in considerable noise on the streets. The outdoor spaces in the neighborhood were sufficient for the children, as is evident from the absence of stories relating the city.<sup>23</sup> The green areas between the residential blocks provided the ideal playground for the children, while mothers were able to supervise them from the flats. The ability to play outdoors close to the building block played a significant role in the perceived value of the street. Residents of the neighborhood appreciate the healthy, safe, spacious and green environment that they wouldn't have in the city.<sup>24</sup>

Lotte Stam-Beese introduced car-free zones to ensure that the growing importance of the car wouldn't replace the outdoor spaces designated for children to play. In contrast to the city, the district was designed with a separation of living and working areas to preserve more space for recreation. This was an important aspect of the design, aligning with the principles of the functional city, which identified such separation as one of the four facilities for modern urban planning.<sup>25</sup>

In addition to prioritizing green and car-free zones, the spatial layout of Pendrecht was designed to ensure that essential facilities, such as shops and schools, were within a fifteen-minute walking distance from any point in the neighborhood. The neighborhood was subdivided into smaller units. Each of these units has its own cluster of facilities, ensuring that residents did not have to rely on cars for their daily needs. This design choice made the neighborhood accessible for women, childern and elderly residents. It reinforced a sense of independence and self-sufficiency within the community. The areas dedicated to recreation and the public gardens ensured that walking through the neighborhood felt safe for pedestrians. However, it is important to note that while the area was designed to be pedestrian friendly, clear, defined pedestrian paths were not a prominent design choice for Pendrecht. The distribution of the facilities and the overall layout are visible on historical maps of Pendrecht. This highlights how the design choices in Pendrecht enabled the freedom of movement for women and childern within the neighborhood.

<sup>&</sup>lt;sup>23</sup> Dieteke van der Ree, 'Kinderen van toen', *Een deel van je leven: bewoners van het eerste uur en kinderen van toen uit Zuidwijk en Pendrecht over de betekenis van het wonen in de Zuidelijke Tuinsteden*, (n.a., 1992), 15-16

 <sup>&</sup>lt;sup>24</sup> Dieteke van der Ree, 'Het groen; sociale functie, status en symboolwaarde', Een deel van je leven: bewoners van het eerste uur en kinderen van toen uit Zuidwijk en Pendrecht over de betekenis van het wonen in de Zuidelijke Tuinsteden, (n.a., 1992), 28-29
<sup>25</sup> Eva Bakker, 'Pendrecht', Van ideale woonwijk naar een wijk met problemen.. En weer terug?, (Rijksuniversiteit Groningen, januari 2021), 26

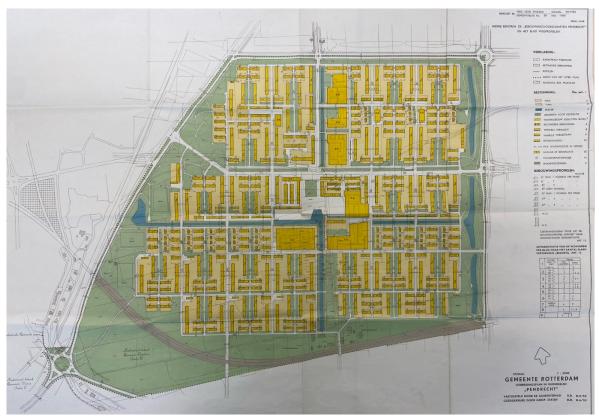


Figure 3 - Gemeenteraad, 'Uitbreidingsplan in onderdelen Pendrecht', Gemeente Rotterdam, (Gedep. Staten, 1953)

All-in all, the design of the outdoor space can be linked back to the CIAM's principles of the functional city. The four facilities guiding this design have enabled the district to provide sufficient living space and public green areas. The bombing in 1940 accelerated the need and opportunity to rebuild Rotterdam and therefore Pendrecht. High residential blocks created space for public green areas and recreation, while the connecting axes facilitate the separation of living and working and ensured links with the city and surrounding neighborhoods. The prominent function of the outdoor space was emphasized through a carefully planned spatial design, which included dedicated play areas for children and seating spaces to encourage social interaction. This created an environment where mothers could supervise their playing children both form the communal garden as well as from their own homes. The outdoor spaces played an essential role in the daily lives of the residents.

The choices that were made in the urban planning of Pendrecht influences the experience of the residents. Children spent considerable time outdoors, making use of the numerous green areas as playgrounds. As a result, the children had little desire for the crowded city environment. The green spaces and car-free zones also contributed to the safety and freedom in the neighborhood. The urban planning decisions based on the principles of the functional city had a positive impact on the daily lives of the children living in Pendrecht.

### Separation of functions

The urban plan of Pendrecht is influenced by the principles of the functional city. Which was based on the separation of functions. <sup>26</sup> This was applied in the neighborhood Pendrecht by clustering residential blocks as stamps with a communal outdoor garden area. Distances between functions within the district are designed to be walkable, ensuring that the layout supports the experiences and senses of exploration of the children in the neighborhood. <sup>27</sup> Car-free zones and roads for destination traffic have been created around the residential blocks, thus separating traffic from the residential and recreational areas. <sup>28</sup> The urban plan had influence on the physical layout of the district and the social dynamic within the community.

The isolation and connectedness of families in Pendrecht is related to the functional separation in the neighborhood. Isolation can be understood both as a limitation in social interaction, as well as physical isolation of the entire neighborhood from its environment. However, the presence of communal gardens and public spaces can contribute to social cohesion and connectedness in the neighborhood.

Pendrecht was designed as an independent city with its own facilities, such as shops, schools and recreational areas. This created a sense of community, allowing residents to conduct nearly all aspects of their daily lives within the neighborhood. It was therefore seen as a city neighborhood that could stand on its own, without having to rely on the city of Rotterdam.<sup>29</sup> The infrastructure was meanly geared towards car traffic and public transportation. The accessibility for pedestrians and cyclists to the city and surrounding neighborhoods was limited.<sup>30</sup> The newly defined neighborhoods in Rotterdam each developed their own district atmosphere and character.<sup>31</sup>

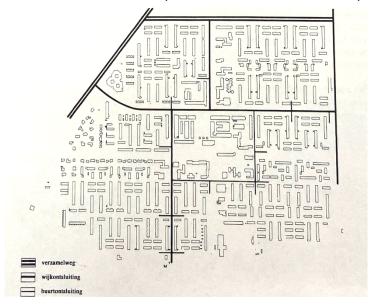


Figure 4 – Verheij, 'Openbare ruimte', 9

<sup>&</sup>lt;sup>26</sup> Haamans, 'De geplande stad', 8

<sup>&</sup>lt;sup>27</sup> L. Stam-Beese, 'Pendrecht-Rotterdam', *Bouw*, (Centraal weekblad voor het bouwwezen in Nederland en België, 1960), 4

<sup>&</sup>lt;sup>28</sup> StB/K, 'Stramienen der ontsluitingswegen', *Enige aantekeningen bij het uitbreidingsplan Pendrecht*, (Openbare werken, 1950), 3

<sup>&</sup>lt;sup>29</sup> Mario Bosch, 'over de wijkgedachte, buurtwinkels en wooneenheden', *Pendrecht het verhaal van een bijzondere wijk*, (Bewonersorganisatie Pendrecht, 1995), 3

<sup>&</sup>lt;sup>30</sup> Marc Verheij, 'Openbare ruimte', *Wijkvisie Pendrecht*, (gemeente Rotterdam dienst Stedebouw + Volkshuisvesting : Ontwikkelingsbedrijf Rotterdam, 1992), 9

<sup>31</sup> Stam-Beese, 'Pendrecht-Rotterdam', 4

The functional separation had an influence on the connection with the other districts, as well as on the connection within the district itself. Due to the separation of living and working, most men spent their day working outside the district. Ultimately, Pendrecht was initially built for workers employed in the harbor due to its location.<sup>32</sup> Meanwhile women often remained in the district as housewives, while children attended school there as well. The clusters that shaped the neighborhood consist of various residential units of mixed family compositions. This arrangement creates both a structural and social unity. The social cohesion between various groups is stimulated, with the layout of these residential units an openness has been obtained that makes the development of spatial relations possible.<sup>33</sup>

The functional separation in the neighborhood had an influence on the daily lives of women. Paid employment for women was not common at the time and was often regarded as an unnecessary occupation.<sup>34</sup> Due to the traditional division of gender roles that was already restrictive for women in this period, they were mainly dependent on their social interactions, housekeeping tasks and often supervisory, motherly role to children. Shops, schools and churches were within walking distances because in each of the four sub-districts within Pendrecht there were local shops for daily necessities. The center of Pendrecht was connected to each of these sub-districts and had more stores, community centers and other facilities. This area was exclusively for the pedestrians. It was therefore not necessary for women to own a car and travel outside of Pendrecht.<sup>35</sup> The freedom of movement and social interaction of women was significant within Pendrecht however, the opportunities or need to leave the neighborhood negligible.

Pendrecht has many green and play areas for the younger children, but the boarded neighborhood imposed restrictions for the older children. The barrier created for cyclists and pedestrians due to the lack of connections with the surrounding area meant that older children in the neighborhood were still largely dependent on exploring their own district. The independence of the district resulted in limited social and spatial development. However, the boarded neighborhood did provide safe and easily navigable play areas, where mothers could supervise the younger children. In favor of the street and play areas for children, the public green was brought as close as possible to the building blocks. Separate parks were not included as a priority in the urban plan of Pendrecht. To prevent parked cars from taking over the play areas, ample parking facilities were provided. By clearly defining the functions, a distinct separation is established between the communal gardens, which feature play areas for children, and the street space. The space of the street space.

<sup>&</sup>lt;sup>32</sup> Mario Bosch, 'Een beroemde wijk', *Pendrecht het verhaal van een bijzondere wijk*, (Bewonersorganisatie Pendrecht, 1995), 2

<sup>&</sup>lt;sup>33</sup> D01/Gr., 'De wooneenheid', *Toelichting bij het Uitbreidingsplan Pendrecht*, (Gedeputeerde Staten der Provincie Zuid-Holland, 1951), 2

<sup>&</sup>lt;sup>34</sup> Van der Ree, 'Opleidingsniveau en werkervaringen van vrouwen', 14

<sup>35</sup> L. Stam-Beese, 'Pendrecht-Rotterdam', 4

<sup>&</sup>lt;sup>36</sup> Marc Verheij, 'Openbare ruimte', *Wijkvisie Pendrecht*, (gemeente Rotterdam dienst Stedebouw+Volkshuisvesting: Ontwikkelingsbedrijf Rotterdam, 1992), 9

<sup>&</sup>lt;sup>37</sup> L. Stam-Beese, 'Stedebouwkundige visie', *Uitbreidingsplan Pendrecht*, (Tijdschrift voor Volkshuisvesting en Stedebouw, 1953), 124-125

In conclusion, it can be stated that the separation of functions in Pendrecht resulted in a form of isolation. The connection with the city was mainly necessary for the working man and had little added value for the daily life of women and children. The boarded unit that formed the district was designed to be walkable. Local shops, schools and churches were easily accessible and provided social cohesion. The play areas and communal gardens surrounding the building blocks also provided mothers with an opportunity to easily supervise their children. The freedom to play for children was thus largely unrestricted, fostering a sense of connection rather than isolation.

## Discussion

The findings of this study highlight the impact of the separation of functions in Pendrecht on the daily lives of women and children between 1950 and 1960. The results align with previous research on post-war urban planning. This study builds on that foundation by examining how such designs reinforced traditional gender roles. However, the findings also bring forward nuances that contribute to a more complex understanding of life in Pendrecht during this period. A key observation from this study is how the urban design reinforced the traditional role of women as housewives and caregivers. The walkable layout of the neighborhood, such as schools, shops, and churches, ensured that women could perform their daily routines without needing to travel outside the neighborhood. This was in line with broader societal norms that discouraged female labor participation and emphasized the importance of the housekeeping responsibilities.

However, this research also shows that female labor participation, although minimal, was not entirely absent. Some women did work before marriage, mostly in caregiving or related professions. Yet, societal norms dictated that they leave their jobs when they enter a marriage, reinforcing their economic dependence on their husbands. This aligns with women's employment which was largely seen as a temporary phase before marriage. While previous research has acknowledged this pattern, this study emphasizes how the physical design of Pendrecht facilitated and reinforced this traditional role. The study also incorporates the experiences of children in Pendrecht. The principles of the functional city provided a safe and green environment for younger children, where they could play freely under the supervision of their mothers. Communal gardens and car-free zones contributed to a sense of security and fostered strong neighborhood interactions.

However, the study also reveals limitations to this idealized vision of childhood in Pendrecht. While younger children benefited from the accessibility of outdoor spaces, older children faced more restrictions due to the isolation of the neighborhood. The separation of functions resulted in limited connections to other districts, reducing opportunities for social and spatial development. In practice, it appears that while the design of Pendrecht successfully catered to young children, it unintentionally hindered the mobility and independence of older children.

One of the most significant insights from this study is the dual nature of the separation of functions. On one hand, the neighborhood fostered a strong sense of community and provided a structured environment for families. On the other hand, it reinforced social isolation, particularly for women and older children. These findings invite further discussion on the broader implications of functional separation in urban planning. While the model of the functional city was designed to improve the quality of life through structured zoning, it also had unintended social consequences. The emphasis on clear separations between living, working, and recreational spaces may have contributed to reinforcing social divisions and limiting the freedom of movement of residents' daily lives.

Moreover, this study raises questions about the long-term impact of these urban planning choices. As women's labor participation increased from the 1960s onward, the rigid design of neighborhoods like Pendrecht may have posed challenges to adapting to new social dynamics. The limitations on movement and connectivity within the city may have made it more difficult for women to re-enter the workforce. Similarly, for children, the lack of external connections could have influenced their educational and social opportunities, shaping their long-term prospects.

Another consideration is the economic aspect of the separation of functions. While the urban plan of Pendrecht created a self-sufficient district, it also meant that economic opportunities were concentrated outside the neighborhood, reinforcing men's roles as breadwinners. The study suggests that wage inequality played a role in discouraging female employment. This dynamic further cemented traditional gender roles and highlights how urban planning and economic policies were connected.

The limitations of this study should also be acknowledged. The research primarily focuses on the period between 1950 and 1960, a time when societal norms were undergoing changes. While the findings provide valuable insights into the impact of urban planning on gender roles and childhood experiences, further research could explore how these dynamics evolved in later decades. Additionally, comparative studies with other post-war neighborhoods could provide a broader understanding of how different urban planning approaches influenced daily life.

In conclusion, the separation of functions in Pendrecht had a profound impact on the social structure of the neighborhood. While it provided a safe and structured environment for families, it also reinforced gender inequalities and limited freedom of movement for both women and older children.

## Conclusion

In Conclusion, the separation of functions in Pendrecht significantly influenced the daily lives of both women and children between 1950 and 1960. For women, the urban plan reinforced traditional gender roles. The neighborhood's layout enabled them to manage household responsibilities and engage in social interactions mainly within the boundaries of the district. Local facilities such as shops, schools and churches were within walking distance. As a result, women rarely needed to leave the neighborhood. This limited their freedom of movement in leaving the neighborhood. The urban plan reinforced the housekeeping and supervisory roles assigned to women. The neighborhood was structured to support their responsibilities as housewives and mothers. It offered a setting that aligned with their everyday routines. At the same time, it limited their opportunities for paid employment. It also reduced their chances to engage in activities outside their housekeeping responsibilities. Their social and economic roles remained largely confined to the home.

The separation of functions had a dual effect on the children living in Pendrecht. The urban plan provided a safe, green environment. It included numerous play areas, allowing younger children to play freely and independent within the communal gardens. These outdoor areas were located close to the homes, ensuring that mothers were able to supervise their children. The inclusion of car-free zones further protected these areas, fostering a sense of safety. However, the isolation created by the separation of functions meant that older children were more restricted than the younger children felt. The lack of connection to other parts of the city limited their social and spatial development, as they were mostly confined to their own neighborhood. As they grew older, this restriction may have hindered their independence and possibilities to explore beyond Pendrecht.

The key finding of this research is that the functional separation in Pendrecht not only influenced the freedom of movement of the residents but also reinforced traditional gender roles and social dynamics within the household. The neighborhood provided a sense of safety and community. At the same time, it created a form of isolation, particularly for women and older childern. Women's roles were largely confined to the home. The layout of the neighborhood made it practical for them to stay within its boundaries. This fit with the expectations of their daily routines. However, it also restricted their opportunities for social interaction beyond the district. Since women were mainly expected to take care of the household, many likely saw little need to go beyond the neighborhood. Yet this lack of necessity masked a deeper structural limitation. The urban design offered little support for alternative lifestyles or aspirations.

Older childern were limited in their chances for exploration and social development. The lack of strong connections to their surroundings meant that their environment remained small and within the boundaries of Pendrecht. This reinforced a sense of social and physical isolation form the broader urban environment. Younger childern, by contrast, benefited from the green courtyards and car-free zones that allowed them to play freely within the neighborhood.

These findings highlight how the urban design of Pendrecht fostered a strong sense of community within the district. At the same time, it reinforced social divisions and restricted the freedom of movement and opportunities of women and childern. Ultimately, the design of the neighborhood shaped not only the physical space, but also the daily lives of the people living in it.

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