

HOME BETWEEN HOUSE AND SELF

Reconstructing the Understanding of the Current State of Home

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'It shall be the concern of the authorities to provide sufficient living accommodation.'
- Article 22§2 of the Constitution of the Kingdom of the Netherlands

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Advanced Housing
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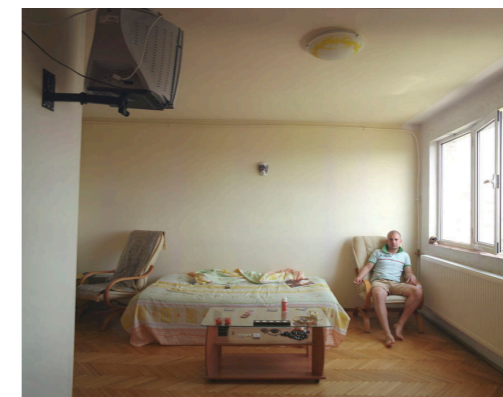


Figure 1. 10 different people customize identical apartments in the same building. From "These fascinating photos show how 10 different people customize identical apartments in the same building," by B. Girbovan, 2017 (<https://www.insider.com/photography-identical-apartments-2017-9>).

Housing Shortage in the Netherlands

After the Second World War, the Netherlands underwent the largest housing shortage because of the urgent need of houses that were destroyed by the war and the rapid population growth by the baby boom. Until now, many estimations have anticipated that the Dutch housing shortage problem will continue even though the government has tried to supply housing stocks since 1920; compared to the housing stock of 1,442,000 in 1920, the housing stock in 2022, 8,077,549, has increased by 460% (CBS, 2023a). Despite the supply, the estimated housing shortage rate reaches at 390,000 units in 2022, and the housing shortage will reach a peak of 415,000 houses in 2024 (Primos, 2020).

With the forecast of sharp population growth – 19 million in 2034 and 20.7 million in 2070 (CBS, 2022a) – the housing shortage problem will mainly be the problem in the Randstad. The population in the Randstad provinces is foreseen to grow by 700,000 between 2010 and 2025, and the number of households will rise by more than 400,000. In the long term, the population growth in the Randstad

provinces will continue by 400,000 between 2025 and 2040 (CBS, 2011). Thus, the shortage is estimated to be most challenging in the Randstad provinces as seen in Figure 2.

This worsening situation, especially in Randstad, has to do with supply and demand. The lack of an affordable housing supply and the changing demand for qualitative needs are the initial causes (Hesselink, 2021). To analyze what encompasses the current problematic supply and demand relationship in the housing shortage, it is critical to notice that there are two actors involved: post-war housing and new target groups.

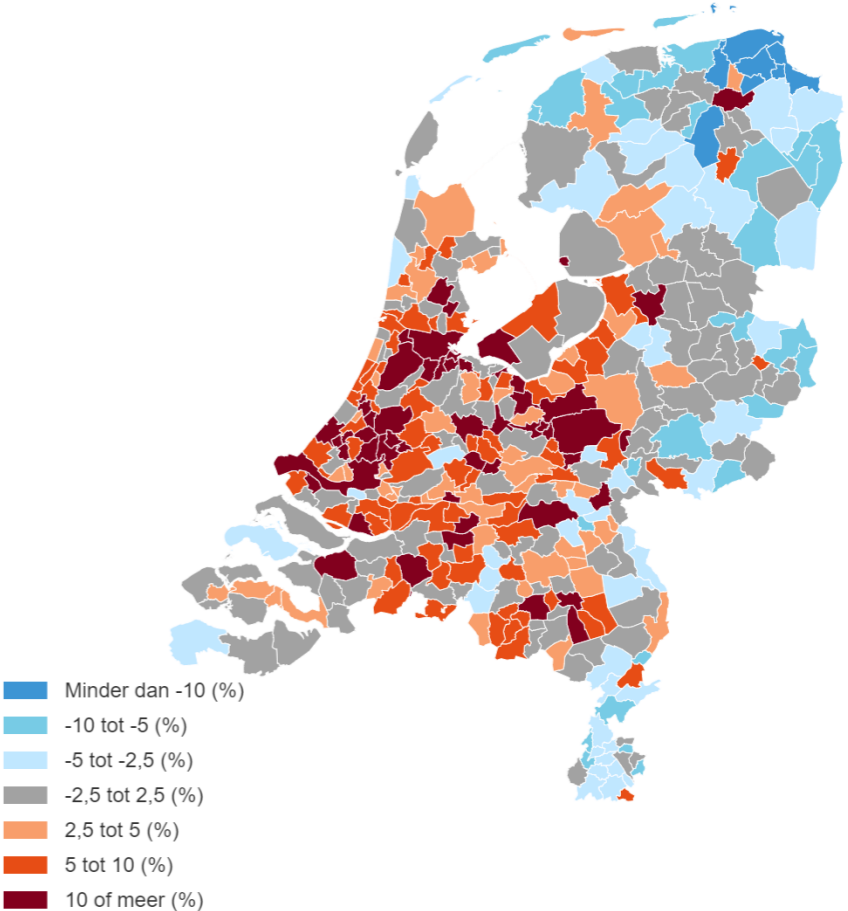


Figure 2. Regional population growth. From "CBS," by CBS & PBL, 2019 (<https://www.cbs.nl/nl-nl/nieuws/2019/37/sterke-groei-in-steden-en-randgemeenten-verwacht>).



1. Post-war housing

The Dutch government has set the plan to build 1 million additional homes by 2030, mainly focused on the inner-city densification. However, a few plans already seem impossible to achieve; the goal of annual 100,000 new homes in 2022 have failed by having only 66,000 homes built. With the stricter regulations of the building permit, it is expected that even fewer homes will be added in 2023 (NL Times, 2022).

The Dutch government already experienced a big housing shortage after the Second World War. Thus, the current housing shortage problem is closely intertwined with the existing post-war residential projects of 1.5 million dwellings between 1945 and 1960, which are the result of the previous housing shortage. As the government became the main leader, the governments and large private developers initiated many residential projects in a short period of time. The primary goal of the post-war housing projects was to create new living space for as many inhabitants as possible with a limited number of re-

sources and time. These projects were planned as uniform, large-scale developments with open, green, and street spaces (ICOMOS Netherlands, 2003).

Figure 3. Post-war housing Bijlmermeer, Amsterdam. From "Vijftig jaar Bijlmer: in idealeen kun je niet wonen," by nrc, n.d. (<https://www.nrc.nl/nieuws/2018/11/28/in-idealeen-kun-je-niet-wonen-a2780208?epik=dj0yJnU9N-05MT1hSbWFOQXc3cHdVvzBDbTNSNEdwZy-05dlRCQm4mcD0wJm49S2tiZHZ5OW9VcF-9hakJQejYwMWVvZyZ0PUFBQUFBR1E2MC04>).

2. New target groups

As the Dutch population is estimated to grow over the next 50 years to 20.7 million until 2070, the changing pattern of the population dynamics indicate the target groups for the future housing stocks. Whereas the large part of the population growth after the war was due to the natural birth, the future population growth will be caused primarily by migration and increasing lifespan (CBS, 2022a).

2.1. Single-person household

The population group that will most rapidly increase is the single-person household as there is already a 'household shrinkage' phenomenon, meaning that the growth of the number of households is faster than the growth of the number of population (Figure 4). The Dutch household in 2020 consisted of 2.13 inhabitants whereas the household in 1900 consisted of average 4.70 inhabitants. Thus, there is the decline of the standard 4-person household and the increase of single-person household (CBS, 2022b). The sharply increasing single-person households include the aging population who is living alone, especially the post-war generations of over-65s. (CBS, 2019).

2.2. Migrants

Since 2000, the major population growth has resulted from a migration. Figure 5 shows that while the 'natural increase' gradually decreases, the 'migration growth' increases. Over the next few decades, it is forecasted that the Dutch population growth will solely depend on the migrant arrivals (CBS, 2023b). Immigration is going to live mainly in Randstad where the many existing internal migration groups already exist. Immigrants who are mostly young, highly educated starters will join the existing migration group in the Randstad (Hesselink, 2021).

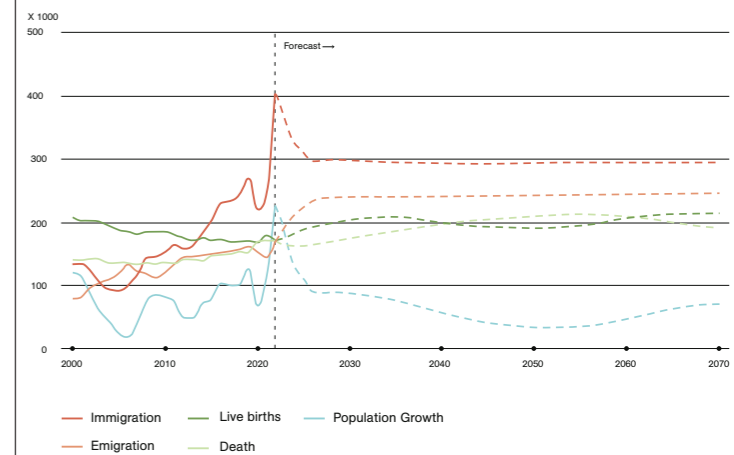
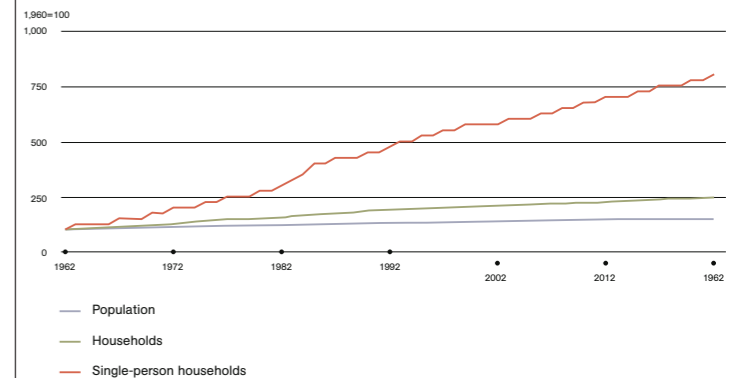


Figure 4. Growth in population and households. From "CBS," 2022 (<https://www.cbs.nl/en-gb/visualisations/dashboard-population/households/households-today>), adapted by author.

Figure 5. Population dynamics per year. From "CBS," 2022 (<https://www.cbs.nl/en-gb/news/2022/50/forecast-larger-population-due-to-migration>), adapted by author.

PROBLEMS

General Problem

Dutch housing shortage in relation to post-war housing and new target groups are caused by the discrepancy between the supply and demand in the housing market. The two key actors show how the government dealt with the previous housing shortage and what the differences are from the current housing shortage. With the two actors involved, general problems have been derived from the socio-demographic, economic and spatial perspectives in terms of supply and demand.

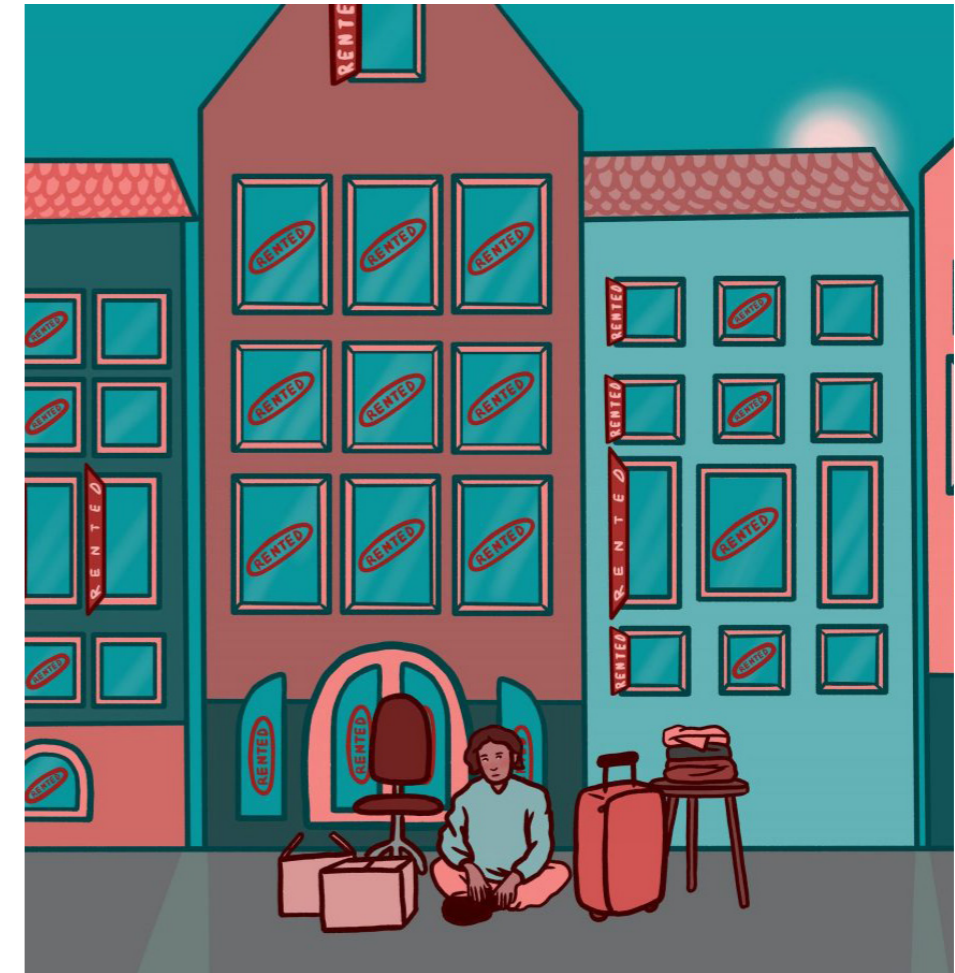
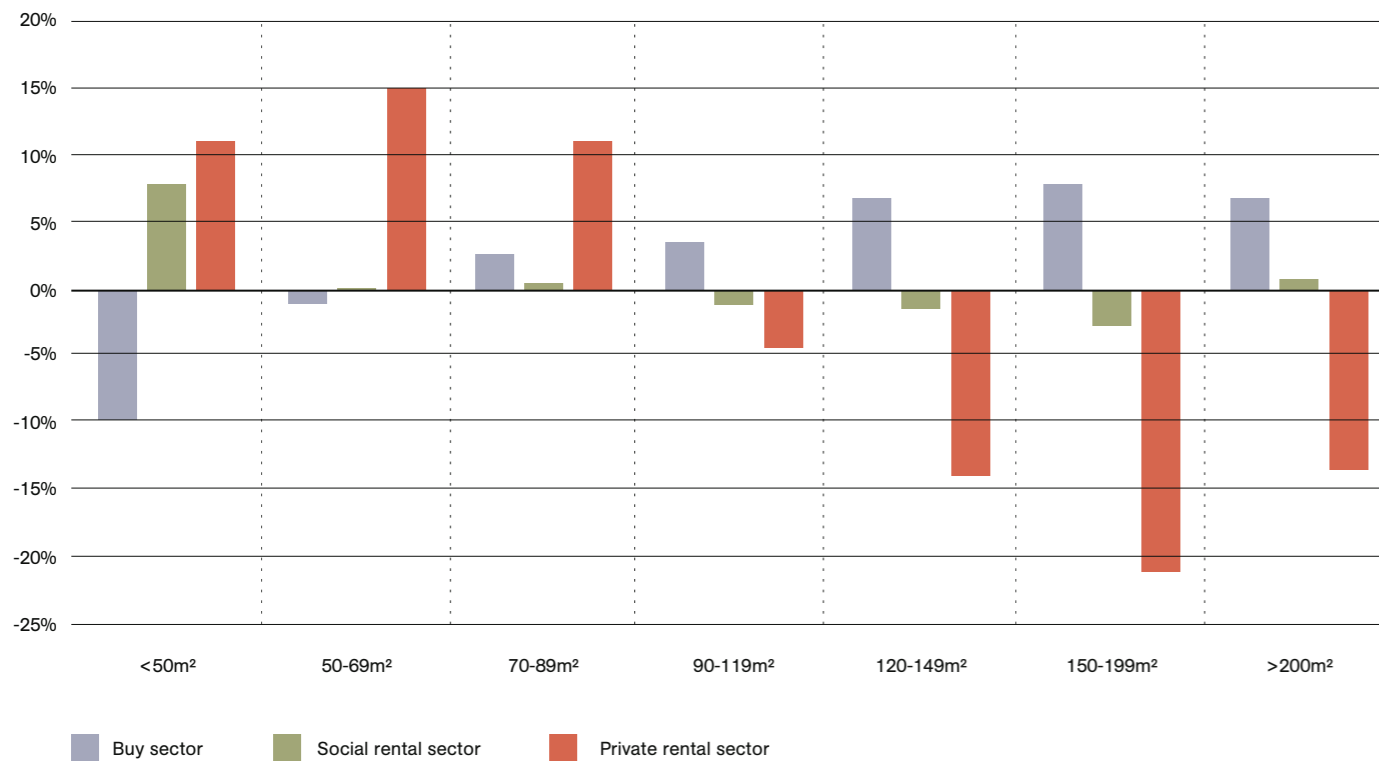


Figure 6. Middle incomers have nowhere to move. From "Erasmus Magazine," by M. Alonderyte, 2022 (<https://www.erasmusmagazine.nl/en/2022/09/08/housing-shortage-continues-to-rise-dutch-cabinet-launches-action-plan/>). Copyright by Erasmus Magazine.

PROPERTY SIZE CLASSES BY OWNERSHIP

Five-year growth 2015-2019



1. Insufficient supply of affordable houses for growing target groups

The increasing housing prices combined with the high mortgage interest rates makes it impossible for those who are relatively affluent to buy a house. However, this is not the only reason. 34% of the houses in Randstad in 2020 were sold to those who did not plan to live there. Almost 700,000 houses are now owned by big private investors who would rent out their houses. High percentages of housing sales went to private investors: 50% in the Hauge, 45% in Rotterdam, 40% in Utrecht, and 35% in Amsterdam (NOS Nieuws, 2021). For this reason, starters in the middle-income group are neither eligible for the social rented sector according to the Housing Act in 2015 nor owner-occupied housing.

Consequently, small investors such as starters depend on rental housing in the private sector. However, they fall into social poverty once they choose to live in the private rental housing because they spend most of their incomes on the rental fees (Hesselink, 2021). Figure 7 indicates that relatively smaller sizes

of houses are in the private rental sector because it is specifically targeted to the starters in the middle-income group who are single, young, and highly educated professionals. The graph also shows that it barely happens to buy smaller houses.

In that regard, post-war houses have been relatively affordable houses because the houses do not meet the current standards of building technology and regulations. However, redevelopment of the post-war housing projects, caused by 1M Homes, destroys these affordable living spaces and results in a critical increase in rental charges. In consequence, existing residents are pushed out of the neighborhood (Domschky et al, 2022).

2. Limited capacity facilitating changing qualitative demand for housing

In contrast to the 'household shrinkage' phenomenon, the living area per person in a household has increased significantly. In 2020, a person in a household has the living space of average 53m² whereas a person in a household had only 8m² in 1990. A person living alone, which takes up the largest part of the population growth, has the biggest living area of average 88m² (CBS, 2022c). Because the post-war housing projects are not designed for a single-person household, current main - and constantly growing - population lives in houses that are appropriated to the nuclear family. Accordingly, one- or two-person households end up living in four- or five-room apartments. The decrease of the average household size and the increase of the living space per person generates 'living too big' consequence (Domschky et al, 2022).

In addition to 'living too big' problem, new lifestyles, adapted by emerging target groups, require different qualitative demands for housing. Low-cost air travel and digital communication shorten physical distances and change our sense of proximity. This economic transformation combined with the shifting view on physical closeness has caused new lifestyles within the living experience of one- or two-persons households such as 'living apart together' couples (LAT), long-distance relationships, freelancers with nomadic lifestyle, working from home, et cetera. The target groups who choose to take these various lifestyles demand different quality of living from those who form a traditional lifestyle of nuclear family. Therefore, while the housing shortage after the war focused on the houses for nuclear families, more contemporary housing shortage seems to have different focuses towards more various demands from diverse target groups (Van der Klis & Karsten, 2009).

Figure 7. Increase of smaller houses in private rental sector. From "ABF," by Cushman & Wakefield, 2021 (<https://www.cushmanwakefield.com/en/netherlands/insights/de-randstad-loopt-lee-g#:~:text=For%20years%20there%20has%20been,330%2C000%20to%20419%2C000%20in%202025.>), adapted by author.

SPECIFIC PROBLEM

Changing Meaning of the Home

As observed from the general problems such as insufficient supply of inexpensive housing and limited capacity for qualitative demands, there is a discrepancy between what the current existing houses provide and how new target groups want to live in their dwellings. Because the meaning of home during the twentieth century, when many post-war residential projects were realized, does not match with the meaning of the home in the current housing situation, it is crucial to revise the understanding of the current meaning of the home (Bricocoli et al, 2020).





1. Dichotomy between home and work

By the twentieth century, 'house' became a place of repose and retreat: a place for cooking, eating, bathing, sleeping, giving birth, and nothing more. The meaning of home was grounded to this physical unit of a 'house' where 'home' implied the family life apart from social, public, and working life. The form of nuclear housing is a place where the nuclear family lives; a mother is the one who stays at home taking care of the economically non-profitable practices at home such as cooking and cleaning while a father takes responsibility for the working practices at office outside of the house. Therefore, the meaning of the home around the nuclear housing and the nuclear family itself has been strictly divided by the dichotomous logic between home and work and set as the default setting around majority of domestic architecture (DASH, 2018).

2. Ambiguity between home and work

As Airbnb depicts the changing meaning of home on their advertising billboard (Figure 9), people want to

be at home everywhere they go. Many of emerging target groups do not have to stay in one physically permanent place to be 'at home.' As the meaning of the home is less grounded in the physical space of a 'house,' - and thus space has become less significant - home does not always have to be defined by a fixed physical unit but can also be defined by emotions, memories, and rituals. The twentieth century's idea of home has lost its meaning from static status of home to an individual sense of home (Van der Klis & Karsten, 2009).

Also, the meaning of the home today has become more flexible and ambiguous, from where 'the house can and should also be a place to be productive,' said Janaina Tschape, a German artist (Aureli et al, 2022). Figure 10 illustrates how home has become a workspace. The home has turned into a new kind of integrated workspace where the kitchen and the balcony become improvised offices while they simultaneously serve the traditional domestic functions. These new forms of home life imply an indistinguishability between work and home.

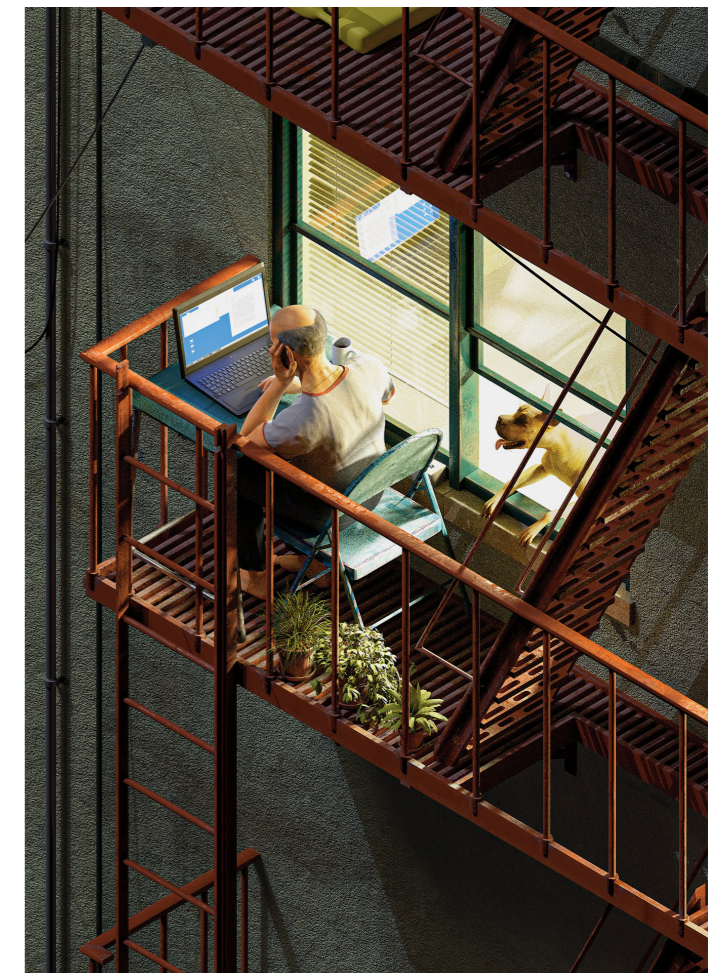


Figure 9. Airbnb advertising slogan. From "Swipefile.com" (<https://swipefile.com/airbnb-billboard/>).

Figure 10. Working From Home. From "The New York Times Magazine," by Max Guther, 2020 (<https://www.nytimes.com/interactive/2020/06/09/magazine/remote-work-covid.html>). Copyright by The New York Times Company.

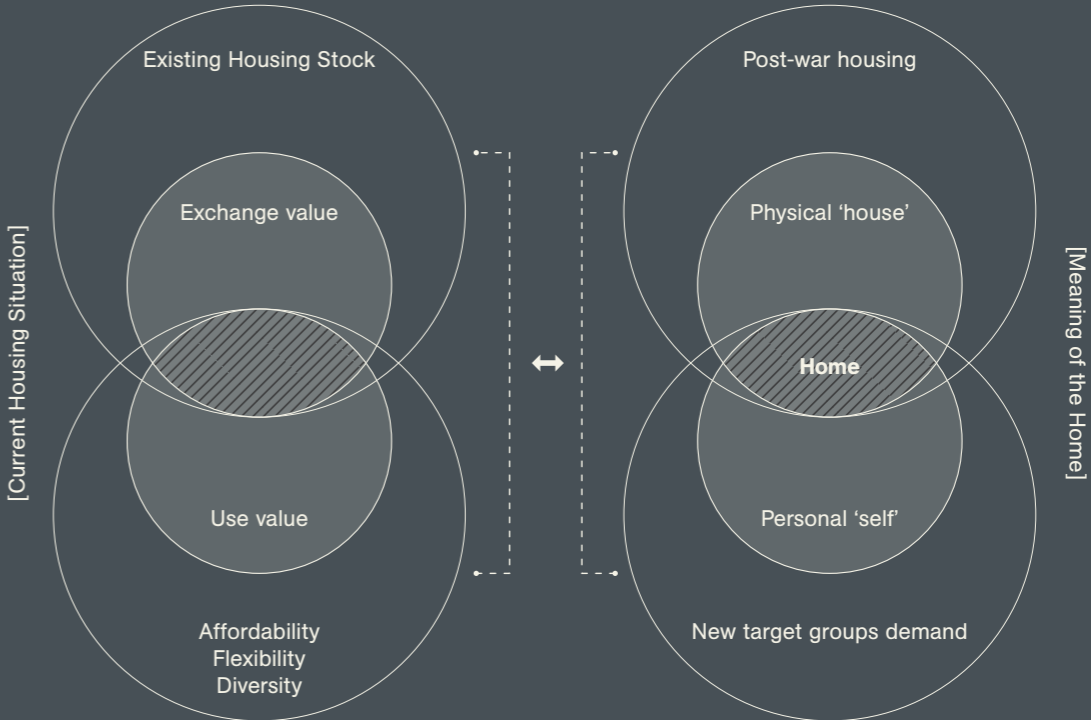
PROBLEM STATEMENT

Internal Conclusion

The general problems deal with how affordability and diverse demands are not supplied in the housing market, and why housing is seen as commodity by seeing a house as an exchange value rather than its use value. According to Pattillo (2013), although housing is more than simply the price of a consumer goods, housing units are seen as the exchange value by “owning its fixity in space and the prestige or stigma it can impart.” Simultaneously, he emphasizes that housing can be also seen as the use value because housing prices are the consequences of measurement of the demand for housing based on the characteristics of the house and its environment such as park, school, crime rates, neighbors, et cetera. Therefore, the grey area between exchange value (economically profitable and physically exchangeable) and use value (the needs of the emerging target groups) is in parallel with the idea of the grey area between the meaning of the home in a physical sense of ‘house’ and the meaning of the home in personal sense of ‘self.’

Despite these radical changes over the last fifty

years in the living society, the traditional form of the home is still the most prevalent idea. Because the architecture in the housing market still reproduces the existing parameters of which the home is traditionally conceptualized, the architecture perpetuates the tradition in its spatial organization, a home for nuclear family. In a bigger scale, as the ideological separation between the home in the house and the work in the city has become transcendent, it is significant not only domestically but also societally to examine how this shift has influenced the urban environment as it lost its initial characteristic as it had (Aureli et al, 2022).



3 Critical Topics

While the traditional meaning of the home is based on a space where a family can impose how a standardized home life looks like to a society, the more contemporary meaning of the home is 'personal.' 'Personal' implies not only heterogeneity of target groups' demands on habitation, but also variety activities that are expected to occur in the residential environment. Therefore, the research first tries

to define 'home' and study the diverse demands for home by the emerging target groups.

Then, the research also delves into adequate housing typologies and densification strategies that could reflect the value of the current meaning of the home in a wider range of society and infrastructure.

“How can the design of the living environment integrate a future mix in the post-war neighborhood towards times in which urban inhabitants *bring* diverse meanings of the home?”

Reinterpretation of the meaning of home

- How has the meaning of the home been reflected in the nineteenth and twentieth century?
- How can the activity at home be distinguished from the activity for work?
- How have the home activities changed?

Implementation of the contemporary home through design strategy

- How do different kinds of small households live at home now in terms of age, lifestyle, income?
- What are the new values of the home?
- What are the unchanged values?
- How do realized projects reflect the current demands through the productive home?

Enrichment of the post-war environment through densification strategy

- How do realized projects achieve inner-city densification?
- How can the changing demands and values be populated to the existing post-war neighborhood for the inner-city densification?

Dealing with Scarcity: How much vs. How to Live

According to Marja Elsinga, Professor of Housing institutions & Governance at TU Delft, from the interview “1M Homes: ‘More living space’ doesn’t mean ‘more building’” (n.d.), ‘1M Homes’ can be achieved not only by building new houses, but also by utilizing the existing housing stocks. She reminds that there are opportunities of utilizing existing housing stocks if achieving the numerical goal was not the only focus solving the current housing crisis.

The emphasis on the need of different approaches from the currently quantity-oriented solution implies that the current housing market is missing out on some critical opportunities to solve the housing crisis. As professor Elsinga mentioned, focusing on creating adequate homes for future users and including the existing houses into consideration are also important in terms of solving the problem more profoundly.

As post-war houses and new target groups play an important role in the current Dutch housing crisis, the approach of solving the previous housing shortage problem after the war is reflected in the

existing post-war houses in terms of differences and similarities from the point of perceiving home by the target groups now.

Therefore, researching the meaning of home will help understand how ‘1M Homes’ project can be delivered while reducing the discrepancy between the current target groups’ needs and what the existing post-war housings provide to them as home.



Figure 12. Colossal post-war housing block. From “Colossal Amsterdam housing block brought up to date with customisable apartments,” by L. Crook, 2017 (<https://www.dezeen.com/2017/03/11/colossal-amsterdam-housing-estate-up-to-date-customisable-apartments-architecture/>).

THEORETICAL FRAMEWORK

Home, Target Groups, Post-War Housing

Similar to the three main topics regarding the current Dutch housing situation, the research can be conducted with the three themes: home, target groups, and post-war housing, which are connected, intertwined, and overlapped to each other under the 'productivity.' Within these three topics, several studies can be done in the spectrum of the relationships between the three topics.

In the relationship between 'home' and 'target groups,' the history of Western domesticity until the contemporary time can be researched. The history of Western domesticity touches upon the home as a medium and the target group as an interpreter of the medium, explaining what kind of activities are referred to as home activities over time and how the idea has been reflected in architecture in the past. Contemporary home-life translates and interprets the meaning of home in a contemporary way. Different meanings of the home delineate the more diverse kinds of new activities emerged by target groups, and thus the study of contemporary home-life is focused more on the target groups' individual

lives. The relationship between 'target groups' and 'post-war housing' implicates the home as a mode of facilitating the more diverse contemporary meanings of the home in the existing housing typology. Studying different programs of activities by the target groups and post-war housing revitalization helps understand how different meanings of the home have been realized in practice. Finally, the design and densification strategy depict the relationship between the home on a relatively small scale and its effect on the larger urban post-war neighborhood.

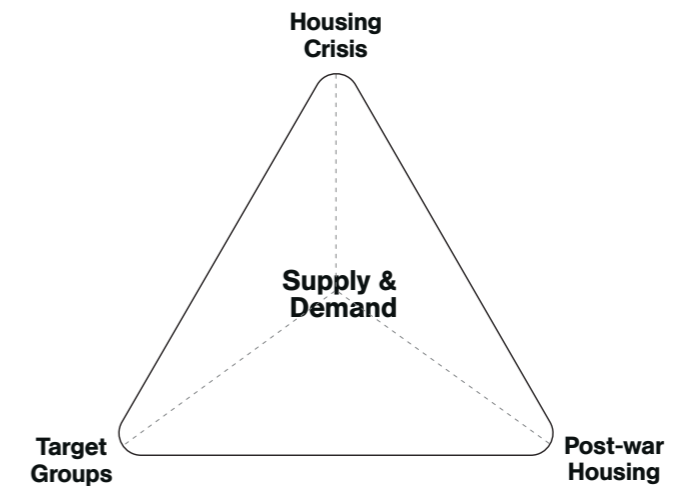


Figure 13. Dutch housing shortage by supply and demand. *by author*

Figure 14. Three key elements by productivity. *by author*

Home - Target Groups

Aureli, P. V., Tattara, M., & Dogma (Architectural office). (2022). Living and working. MIT Press.

Aureli et al (2022) argues against the ideology of the separation between work and live through the historical research of Western domesticity. The research doubts the dichotomous relationship between house and work, which indicates that work can be both defined as a reproductive and productive activity. Since the contemporary forms of production are no longer confined in the work outside of house, the essay suggests that the house can be interpreted as the place for both productive and reproductive activities. Overall, from the traces of archeology of Western domesticity, the argument tries to reinvent the architecture of housing from the perspective of productive and reproductive work, between living and working.

Design Museum (London, England). (2018). Home futures : living in yesterday's tomorrow. (E. Steierhoffer & J. McGuirk, Eds.). Design Museum Publishing.

Design Museum (2018) tries to find approaches to the current housing crisis in many western cities: "we must also ask what the home is and how we want to live." Design Museum (2018) finds the opportunity from the visions of the recent past that we imagined how we would be living in the future because people's needs do not change radically over space and time. This research tries to find new solutions for people's needs, struggles, and longings on an everyday basis.

Herwig, O. (2022). Home smart home : how we want to live. Birkhauser.

Herwig (2022) introduces the type of hybrid homes where a space is interpreted as a place for both productive and reproductive works by digital transformations and technological developments. As our homes have become a space that holds the non-distinctive activities between work, leisure, and rest, the author portrays several scenarios of the transformation of living in the residential environment. He says, "nothing quite fits anymore, yet everything must have its place," which he refers to as the hybrid home. By giving some analytical insights about

the desires that result in how home is transformed in relation to the digital change in our society, the book brings the ambiguity of home activities into more concrete form.

Target Groups - Post-War Housing

Delft Architectural Studies on Housing. (2018a). Huis werk stad : wonen en werken in het stedelijk bouwblok = home work city : living and working in the urban block. (D. van Gameren, Ed.) (Ser. Dash, [15]). Nai010 uitgevers.

DASH (2018a) closely looks at home-based work and what it can offer to the city. DASH (2018) provides 10 exemplary case studies that offer home-based work environments in the scale of the building block. With studies of both historical and contemporary work and live environment, it suggests new ways of living where variety of target groups accommodate a wide range of programs of living and working. Thus, it provides possible implementation through the historical and contemporary projects from pre-industrial revolution era to the current.

Delft Architectural Studies on Housing. (2018b). Van woning naar woning : radicale transformaties van woongebouwen = from dwelling to dwelling : radical housing transformations. (M. van Tol, Trans., D. van Gameren, Ed.) (Ser. Dash, [14]). nai010 uitgevers.

In the general problem, it is mentioned that the post-war neighborhood does not meet the current demand of the target groups and the building standards. DASH (2018b) exemplifies practical examples of how post-war houses have been transformed to the needs of the current.

Post-War Housing - Home

Domschky, A., Kurath, S., Muhlebach, S., Primas, U., Stoffler, J., & Hanak, M. (2022). Densification of Urban Landscapes: post-war housing developments between preservation and renewal. Triest Verlag.

Domschky et al (2022) analyses the current position of post-war houses and neighborhoods. Although apartments in post-war neighborhoods tend to be less suitable to the current needs, the author argues that re-planning the entire areas as a densification strategy does not solve the problem. Especially, the destruction of the post-war apartments will push the current inhabitants out of the neighborhood due to the increase of the rental charges. Consequently, the authors emphasize that the provision of inexpensive apartments should be the focus of preservation and renewal. By dealing with ample number of projects in Europe, the book explains not only how many more houses are added to the existing, but also how the densification strategy with preservation has added values to the existing social and economic history of the neighborhood.

Harnack, M., Heger, N., & Brunner, M. (Eds.). (2020). Adaptive re-use : strategies for post-war modernist housing. Jovis.

Harnack et al (2020) points out the general problem of many post-war housings in terms of low density and lack of ownership because post-war areas have many sparse spaces for parking and green, and only a few public housing associations own the estates. Also, the authors acknowledge that the post-war neighborhoods no longer meet the current needs and standards, but the densification and re-development of these neighborhoods are not done carefully, saying that "buildings and open spaces in post-war neighborhoods being casually sacrificed." The book is divided into two parts: issues around preserving post-war neighborhoods and lists of successful examples for preserving and developing neighborhoods.

Three Steps

The methodological approaches are done in three separate parts: reinterpretation, implementation, and enrichment. These three parts will be studied successively as they are formulated in such a way that the research examines what there exists already (*potestas*), what it does (*practices*), and what it influences (*potentia*).

Reinterpretation through literature study

Reinterpretation of the meaning of the home is conducted by the literature study in the three literary approaches: history, etymology, and typology. Even though the current prevalent idea of ‘being at home’ has spread worldwide with the emergence of modernism, its ideological roots are from the history of Western domesticity (Aureli et al, 2022). Thus, it is crucial to study the history of Western domesticity. Similarly, etymological study is done with an attempt to answer the historical relationships among languages as etymology is the study of the origins. Because the names are used in language to refer to a particular character or identity, it is worth of studying the linguistic relationship to the history (Hausner, n.d.). Lastly, The type is put into image showing how home-life is reflected into spatial architecture. The typology of homes in the history of Western domesticity translates diverse social aspects into a built form. All three literary approaches are in the end to find the relationship between home and its meaning in the past.

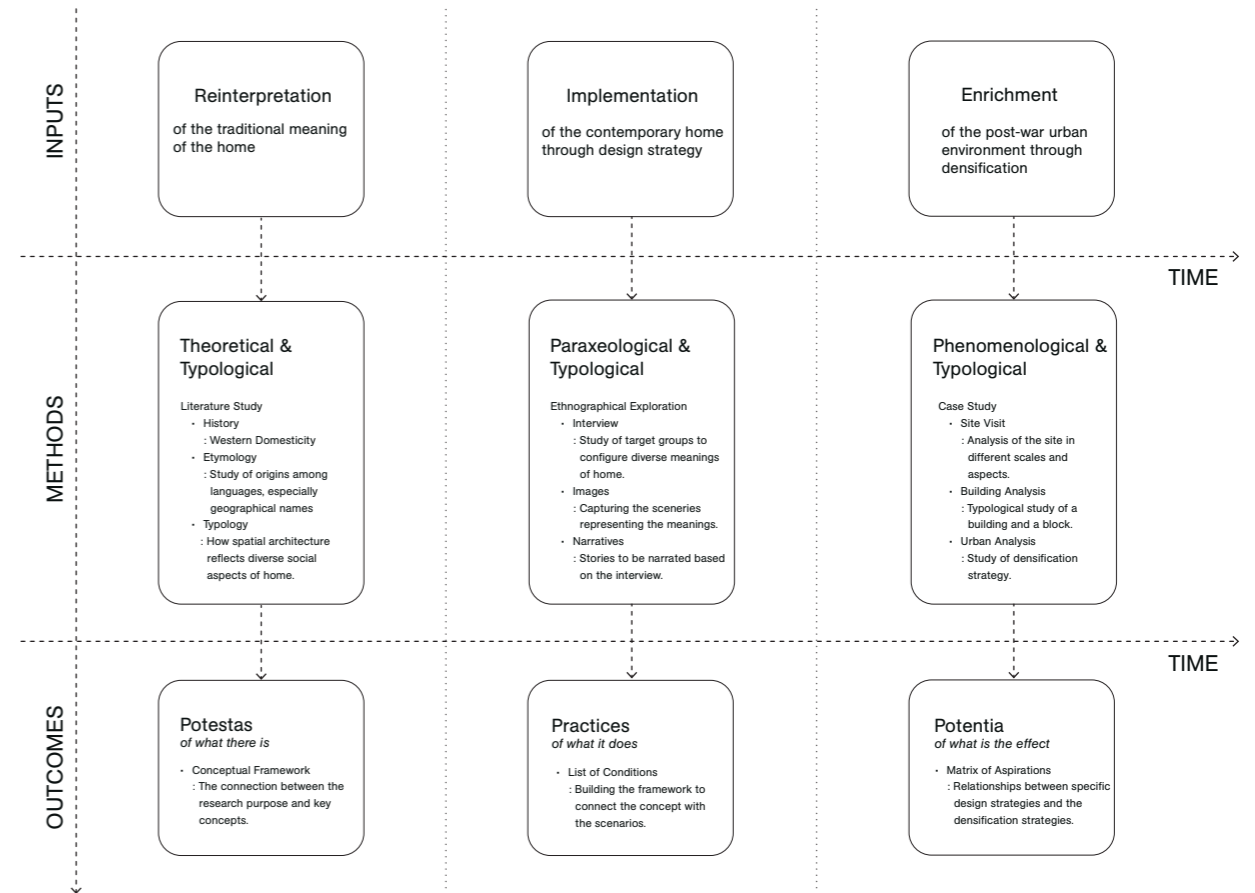
Implementation through ethnographical exploration

The research of the implementation of the mean-

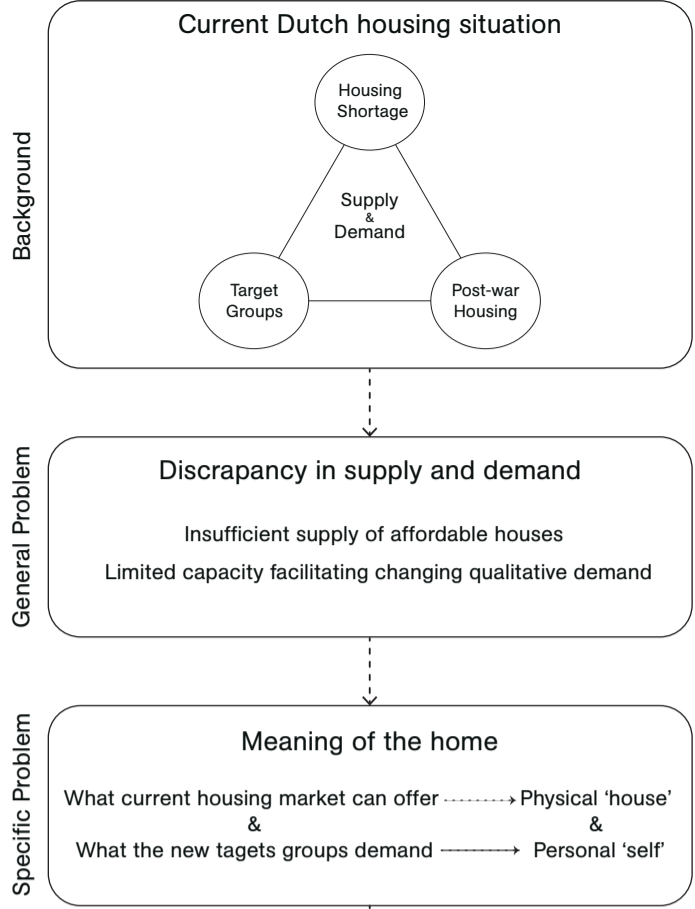
ings of the home is done by ethnographical explorations: interviews, images, and narratives. This implementation part is dedicated to defining the new meanings of the home and to figuring out the value of the home that the new agenda of target groups can introduce. Thus, based on the study of new trends of living and the matrix of target groups, several interviews will be conducted. The interviewees will be within the agenda of the set target groups. To create scenery, while visiting the interviewees, images will be photographed. The sceneries will be the kind of diary that I could take out and open anytime to reminisce each of homes. Lastly, the process of investigation of each interview will be described in narratives. How inhabitants find their own meanings of homes will be narrated in the form of storytelling.

Enrichment through case study

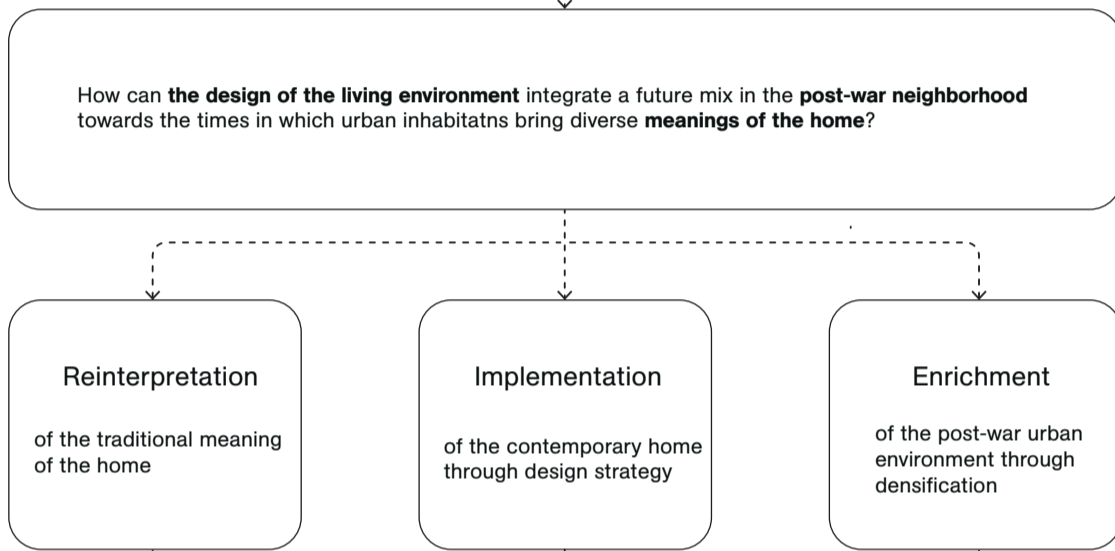
Finally, the enrichment of the post-war neighborhood for the purpose of bringing in the diverse meanings of the home is done by case study of the existing architectural and urban design projects in practice. The case study is composed of site visit and analysis as both an individual and a group. Since extensive design projects regarding the topic of the research have already been realized in the Netherlands, the case study will be actively done with site visits including ‘Groot-IJsselmonde’ in Rotterdam South. Then the site analysis is going to be done in different scales and aspects such as urban green, neighborhood green, collective green, and private green. This part of research aims to finding opportunities for densification.



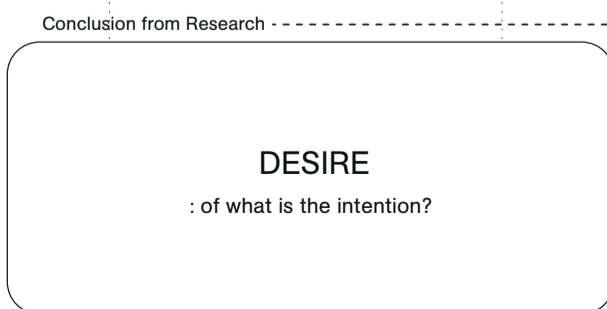
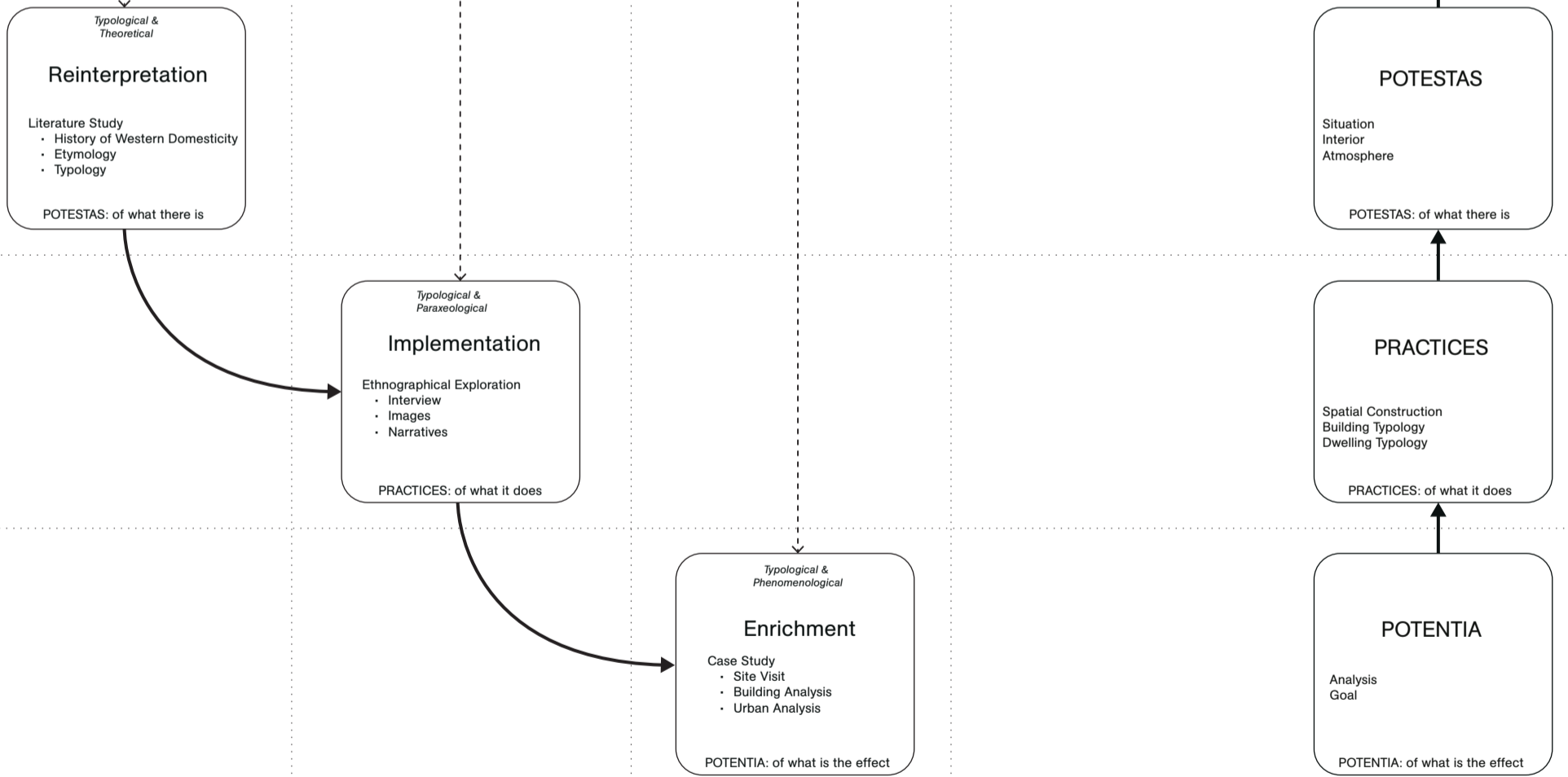
WHY?



WHAT?



HOW?



RESEARCH

DESIGN

Reflection

Problematization for Design

List of Reference

Aureli, P. V., Tattara, M., & Dogma (Architectural office). (2022). *Living and working*. MIT Press.

Boelhouwer, P. J., & van der Heijden, H. M. H. (2022). De woningcrisis in Nederland vanuit een bestuurlijk perspectief: achtergronden en oplossingen. *Bestuurskunde*, 31(1), 19-33. <https://doi.org/10.5553/Bk/092733872022031001002>

Bricocoli, M., Postiglione, G., & Sabatinelli, S. (2020). *Reloading Contemporary Dwelling*. GAM.

CBS. (2011). Dutch population set to grow substantially in Randstad region to 2025. <https://www.cbs.nl/en-gb/news/2011/41/dutch-population-set-to-grow-substantially-in-randstad-region-to-2025#:~:text=Randstad%20population%20to%20rise%20by,thousand%20between%202010%20and%202025.>

CBS. (2019). Forecast: 3.5 million single households in 2030. <https://www.cbs.nl/en-gb/news/2018/51/forecast-3-5-million-single-households-in-2030>

CBS. (2022a). Forecast: larger population due to migration. <https://www.cbs.nl/en-gb/news/2022/50/forecast-larger-population-due-to-migration>

CBS. (2022b). Households today. <https://www.cbs.nl/en-gb/visualisations/dashboard-population/households/households-today>

CBS. (2022c). Woonoppervlakte in Nederland. <https://www.cbs.nl/nl-nl/achtergrond/2018/22/woonoppervlakte-in-nederland>

noppervlakte-in-nederland

CBS. (2023a). Dwellings and non-residential stock; changes, utility function, regions. <https://www.cbs.nl/en-gb/figures/detail/81955eng?dl=6C573#short-TableDescription>

CBS. (2023b). Population growth almost doubled in 2022. <https://www.cbs.nl/en-gb/news/2023/01/population-growth-almost-doubled-in-2022>

Delft Architectural Studies on Housing. (2018a). *Huis werk stad : wonen en werken in het stedelijk bouwblok = home work city : living and working in the urban block*. (D. van Gameren, Ed.) (Ser. Dash, [15]). Nai010 uitgevers.

Delft Architectural Studies on Housing. (2018b). *Van woning naar woning : radicale transformaties van woongebouwen = from dwelling to dwelling : radical housing transformations*. (M. van Tol, Trans., D. van Gameren, Ed.) (Ser. Dash, [14]). nai010 uitgevers.

Domschky, A., Kurath, S., Muhlebach, S., Primas, U., Stoffler, J., & Hanak, M. (2022). *Densification of Urban Landscapes: post-war housing developments between preservation and renewal*. Triest Verlag.

Hausner, I. (n.d.). Etymology and the historic study of geographical names. United Nations, Department of Economic and Social Affairs. <https://unstats.un.org/unsd/geoinfo/ungegn/docs/CHAPTER%2026.pdf>

Hesselink, J. (2021) *Insight – De Randstad loopt leeg*. Cushman & Wakefield. <https://www.cushmanwakefield.com/en/netherlands/insights/de-randstad-loopt-leeg#:~:text=For%20years%20there%20has%20been,330%2C000%20to%20419%2C000%20in%202025.>

ICOMOS Netherlands. (2003). *The Netherlands: Post-war Housing Schemes*. *Heritage at Risk*, 147-148. <https://doi.org/10.11588/hr.2003.0.21179>

NL Times. (2022). Netherlands won't manage to build 1 million homes in 10 years. <https://nltimes.nl/2022/03/11/netherlands-wont-manage-build-1-million-homes-10-years>

NOS Nieuws. (2021, March 12). *Investeerd-ers kochten afgelopen jaar meeste woningen ooit*. NOS. <https://nos.nl/artikel/2372394-investeerd-ers-kochten-afgelopen-jaar-meeste-woningen-ooit>

Pattillo, M. (2013). *Housing: Commodity versus Right*. *Annual Review of Sociology*, 39, 509–531. <http://www.jstor.org/stable/43049647>

Primos. (2020). *Rapportage Primos 2020*. ABF Research. <https://abfresearch.nl/publicaties/primos-2020-rapportage/>

TU Delft. (n.d.). 1M Homes: 'meer woonruimte' betekent niet alleen 'meer bouwen.' <https://www.tudelft.nl/bk/onderzoek/research-stories/1m-homes-meer-woonruimte-betekent-niet-alleen-meer-bouwen>

Van der Klis, M. & Karsten, L. (2009). *Commuting partners, dual residences and the meaning of home*. *Journal of Environmental Psychology*, 29(2), 235-245. <https://doi.org/10.1016/j.jenvp.2008.11.002>.

Woningcorporaties. (2016). *Dutch social housing in a nutshell*. Aedes. <chrome-extension://efaidnbmn-nnibpcajpcglclefindmkaj/https://dkvvg750av2j6.cloudfront.net/m/6c2c81c93f5a9522/original/Brochure-Aedes-Dutch-social-housing-in-a-nutshell-examples-of-social-innovation-for-people-and-communities-2016.pdf>

Figures

Alonderyte, M. (2022). Middle incomers have nowhere to move [Illustration]. <https://www.eras-musmagazine.nl/en/2022/09/08/housing-shortage-continues-to-rise-dutch-cabinet-launches-action-plan/>

Baumeister, W. (1927). Poster: 'How Should We Live? The Dwelling [Poster]. <https://www.bgc.bard.edu/research-forum/articles/336/wie-wohnen-die-wohnung>

CBS. (2022). Growth in population and households. <https://www.cbs.nl/en-gb/visualisations/dashboard-population/households/households-today>

CBS. (2022). Population dynamics per year. <https://www.cbs.nl/en-gb/news/2022/50/forecast-larger-population-due-to-migration>

CBS & PBL. (2019). Regional population growth [map]. <https://www.cbs.nl/nl-nl/nieuws/2019/37/sterke-groei-in-steden-en-randgemeenten-verwacht>
Cushman & Wakefield. (2021). Increase of smaller houses in private rental sector [Graph]. <https://www.cushmanwakefield.com/en/netherlands/insights/de-randstad-loopt-leeg#:~:text=For%20years%20there%20has%20been,330%2C000%20to%20419%2C000%20in%202025.>

Crook, L. (2017). Colossal post-war housing block [Photograph]. <https://www.dezeen.com/2017/03/11/colossal-amsterdam-housing-estate-up-to-date-customisable-apartments-architecture/>

Girbovan, B. (2017). 10 different people customize identical apartments in the same building [Photograph]. <https://www.insider.com/photography-identical-apartments-2017-9>

Guther, M. (2020). Working From Home [Illustration]. <https://www.nytimes.com/interactive/2020/06/09/magazine/remote-work-covid.html>

Harper, P. (2019). Nuclear Family [Photograph]. <https://www.dezeen.com/2019/04/18/nuclear-family-home-tool-repression-phineas-harper/>

nrc. (n.d.) Post-war housing Bijlmermeer, Amsterdam [Photograph]. <https://www.nrc.nl/nieuws/2018/11/28/in-idealen-kun-je-niet-wonen-a2780208?epik=dj0yJnU9N-05MT1hSbWFOQXc3cHdVVzBDbTNSNEdwZy-05dIRCQm4mcD0wJm49S2tiZH5OW9VcF9hak-JQejYwMwVvZyZ0PUFBQUFBR1E2MC04>

Swipefile.com. (n.d.). Airbnb advertising slogan [Photograph]. <https://swipefile.com/airbnb-billboard/>

