

# STANDARDISATION & INDIVIDUALITY

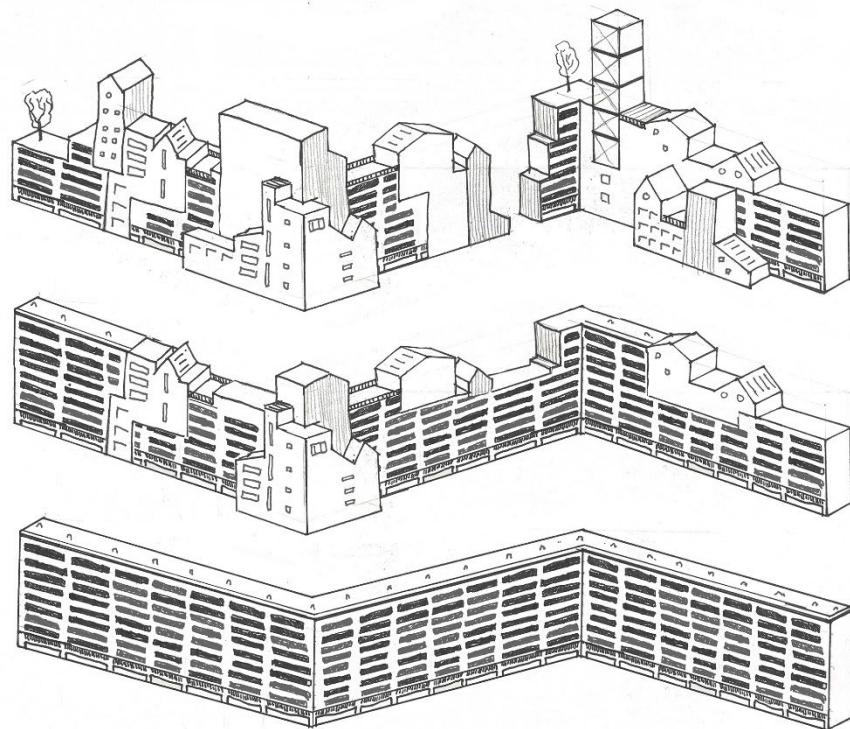
Non - Monotonous Living in Social Housing

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*Image 1: Individualisation of the Bijlmer.\* Drawing inspired by Simone & Lucien Kroll. Own work.*

*\*This drawing is meant as a thought experiment, not a design proposal*

## INTRODUCTION

Contemporary social housing development in the Netherlands often prioritises standardisation over progressive and imaginative design, resulting in a dulling urban environment.

This is a problem not only because it creates a boring urban landscape; standardised housing plans also impose a certain way of living onto residents, and conformity hinders progress in the architectural field.

This problem isn't new; in 1918 a small book was published consisting of two parts, a speech by engineer J. van der Waerden, and a response by architect H. P. Berlage.<sup>1</sup> In his speech, J. van der Waerden argues for strict measures for standardised housing to tackle the housing crisis of that time. The speech was received with much protest, both by workers and architects. In the second section of the book, H. P. Berlage recognises the necessity for standardisation but acknowledges and shares the concerns of the workers and architects. The main argument of the architects is the fear of creating a city lacking aesthetic satisfaction. Regarding the workers, Berlage writes: "The workers (...) see an attack on their personality, on their freedom, on their humanness in the dreaded monotony of the endless rows of the same houses; through this kind of habitation one becomes a herd animal, the slavish treated, the dependent one. (...) They fear the elimination of participation and initiative, which they had gradually conquered regarding their home."<sup>2</sup> This problem is still relevant today; even though the traditional working class of the early 20<sup>th</sup> century has disappeared, disregarding participation and initiative of individuals from lower-income groups can result in increased inequality in urban development.

So why is the problem of mundane housing still relevant when discussions about standardised housing have been going on for over a century? Among other things, there are two main reasons: a practical need for efficient land use in the Netherlands combined with rising housing demands, and the neoliberal housing policy implemented since the 1990s. The Netherlands is the second most densely populated country in the EU, with a density of 518 people per square kilometre. For comparison, the average population density in the EU is 109 people per square kilometre.<sup>3</sup> At the same time, the country is also expecting a growth of more than 1 million people in 2035.<sup>4</sup> The growth is estimated to be centred mostly in urban areas, hence the need for efficient densification of the housing stock.

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<sup>1</sup>Hendrik Petrus Berlage, *Normalisatie in Woningbouw* (Rotterdam: W. L. & J. Brusse's Uitgevers-Maatschappij, 1918).

<sup>2</sup>Berlage, *Normalisatie in Woningbouw*, 24.

<sup>3</sup>"Population density," Eurostat, data from 2022, accessed April 11, 2024.

[https://ec.europa.eu/eurostat/databrowser/view/tps00003/default/table?lang=en&category=t\\_demo.t\\_demo\\_ind](https://ec.europa.eu/eurostat/databrowser/view/tps00003/default/table?lang=en&category=t_demo_t_demo_ind)

<sup>4</sup>"Prognose: in 2035 vooral meer inwoners in en om grotere gemeenten," Centraal Bureau voor de Statistiek, July 6, 2022. <https://www.cbs.nl/nl-nl/nieuws/2022/27/prognose-in-2035-vooral-meer-inwoners-in-en-om-grotere-gemeenten>

The second reason is a political one. From 1989 onwards, policymakers in the Netherlands started changing the way the Dutch housing market functions. Before, the housing market was regulated by the social democratic government, with many subsidies for social housing. In the 90s the government started to become more neoliberal, and policymakers implemented a free market system to regulate housing. This forced housing associations to take the role of private developers.<sup>5</sup> This led to more standardised buildings because financial restrictions hinder the ability of developers to take risks and create diversity. Bernard Hulsman, editor at NRC Handelsblad, criticizes the housing architecture this produces in an article of a conversation between him and Fenna Haakma Wagenaar, head designer of Space and Sustainability of the municipality of Amsterdam.<sup>6</sup> The article shows that since the new policy, houses in Amsterdam have become more expensive, smaller and less fit for people to live in. Hulsman also argues that the architecture has become more standardised and monotone, with boring façades and interiors. They conclude their observations by terming the new housing developments as residential barracks.

There are also advantages to standardisation in the built environment. To mention a few, the Economic Institute for Construction (EIB) concludes the following main benefits of industrial housing development: reduction of design costs, quicker construction time on site, higher technical quality and potential for circularity/sustainability.<sup>7</sup> These are all relevant arguments, so housing development should try to strike a balance between standardization and individuality. To prevent future cities filled with the same houses, other forms of social housing complexes have to be explored. Buildings that support diverse living conditions for diverse inhabitants, that favour equitable housing over equal housing, with emphasis on the unicity of its users. Housing that invites people to explore their style of living, that evokes a feeling of freedom of style.

This study aims to explore the intersection of standardization and individuality in social housing. The research question is stated as the following:

"How can a large-scale social housing complex effectively combine aspects of standardisation and individuality?"

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<sup>5</sup> Justin Kadi, "Rechtvaardigheid op de Amsterdamse woningmarkt?" *Agora* 28, no. 1(2012): 16-19.

<sup>6</sup> Bernard Hulsman, "De opkomst van de woonkazerne: steeds kleinere nieuwbouwwoningen," NRC, August 2, 2023. <https://www.nrc.nl/nieuws/2023/08/02/de-opkomst-van-de-woonkazerne-communistische-architectuur-voor-de-neoliberale-mens-a4171082>

<sup>7</sup> "Industrieel bouwen en de bouwarbeidsmarkt - Het potentieel en de gevolgen van industriële woningbouw," Economisch Instituut voor de Bouw, published May 2023. [https://www.eib.nl/wp-content/uploads/2023/05/Industrieel\\_bouwen\\_en\\_de\\_bouwarbeidsmarkt\\_web.pdf](https://www.eib.nl/wp-content/uploads/2023/05/Industrieel_bouwen_en_de_bouwarbeidsmarkt_web.pdf)

From this main question, four sub-questions are stated:

1. "What are desirable elements of standardisation that support efficiency, functionality and sustainability of a large-scale social housing complex?"
2. "To what extent can a large-scale social housing complex create a cohesive, yet visually and spatially diverse environment that reflects the unique identities of its users?"
3. "To what extent can a large-scale social housing complex stimulate and accommodate individual styles of living?"
4. "To what extent oppose/strengthen aspects of standardisation and individuality each other in a design for a large-scale social housing complex?"

In the following methodology section, the methods to address the research questions stated in this introduction will be outlined.

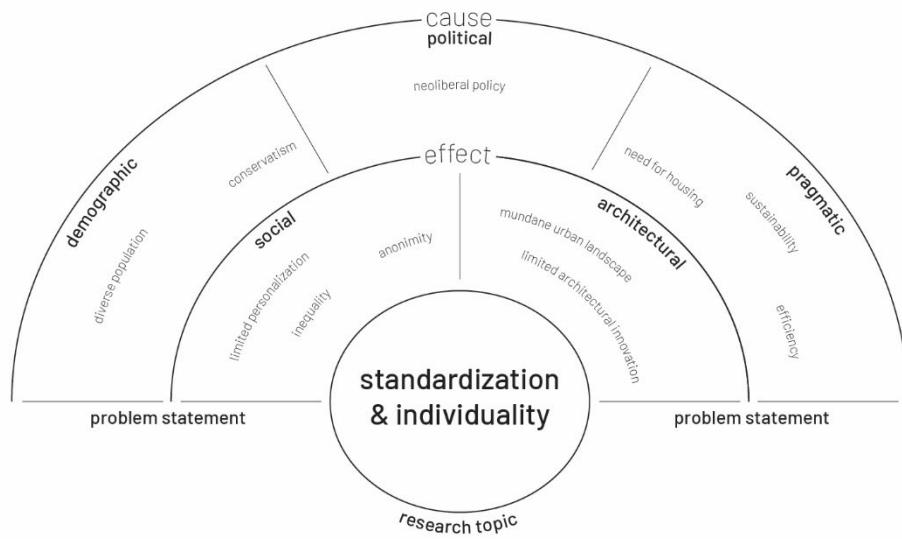


Diagram 1: Cause & Effect of the problem statement, leading to research topic. Own work.

## METHODOLOGICAL POSITIONING

In order to find new insights on the intersection of standardization and individuality, and to answer the research questions, multiple methods will be used. A mixed-method approach is used to be able to tackle both architecture and human related questions. The different nature of these questions calls for methods of different nature. Diagram 2 shows the relations between questions and methods, and how they lead to conclusions and a design proposal. The different methods used are literature study, case studies, concept analyses, research by design and a participatory experiment. The sequence of these methods is roughly placed in order, starting at the top. This sequence is not set in stone, because the methods used will take various amounts of time to prepare and carry out, and the methods may influence each other. Throughout the research process, new data, new ideas, and refinement of methods will change this sequence.

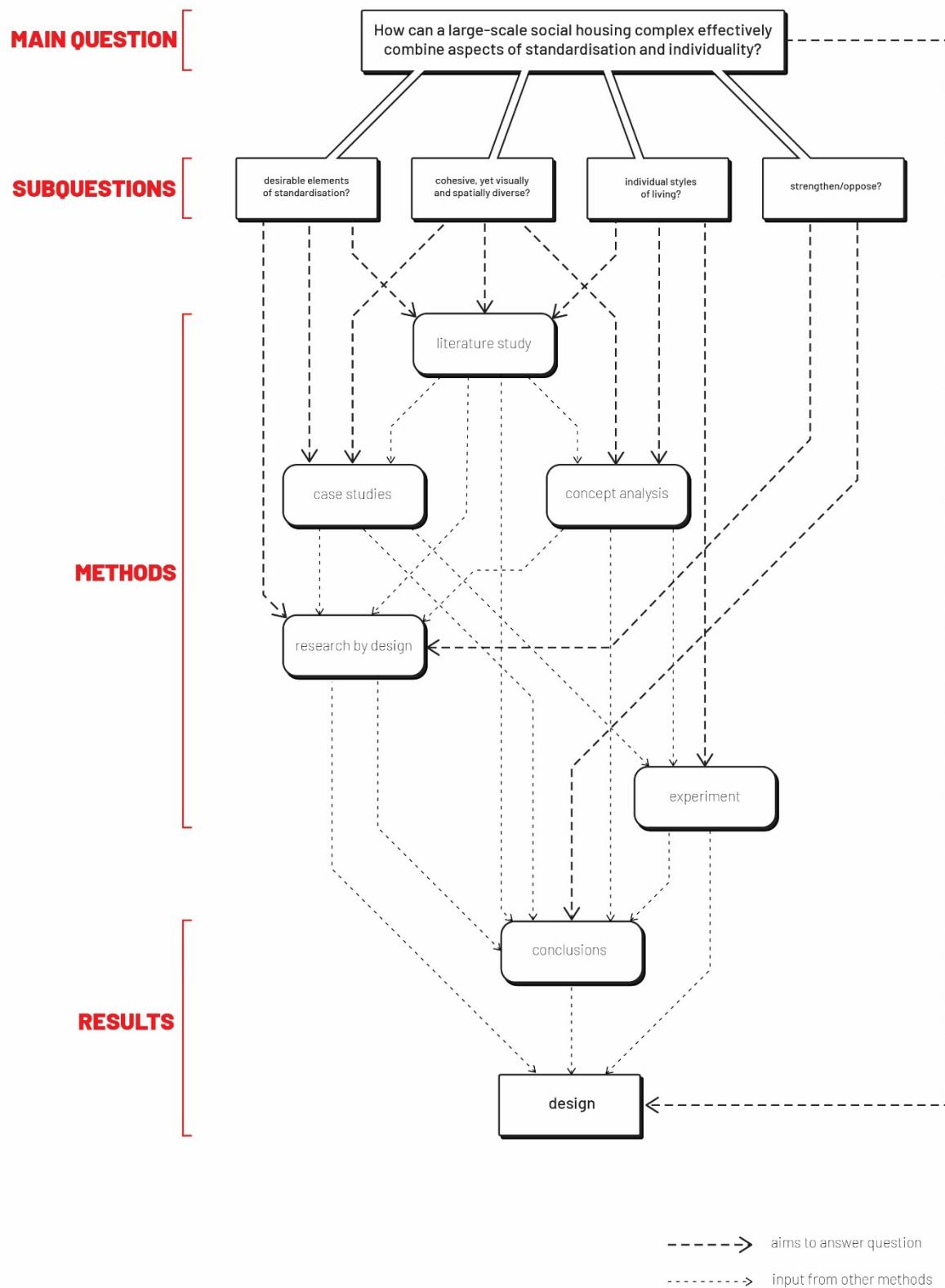


Diagram 2: Relations between questions, methods and results. Own work.

### *Literature study*

A literature study will start off the research to create a theoretical baseline, position the research in existing literature, and define concepts used throughout the research. The literature study aims to compare architectural theories regarding standardisation and individuality, to try and find answers to sub-questions 1, 2 and 3. Other topics that will come forward in the literature study are urban sociology, philosophy and housing policy. Together they will form the theoretical framework for the research. The literature study will create input for other methods; buildings or architects found in the literature study can lead to case studies to analyse, architectural theories can lead to architectural concepts to analyse and the insights gained from the literature study can stimulate ideas for research by design. To find relevant sources I will use online search engines, I will talk to people of the faculty (students, research staff), and I will use the library of the faculty. Sources that will be used in the literature study (to be expanded upon):

- De dragers en de mensen by Nicolaas John Habraken.<sup>8</sup> A manifesto proposing open construction for housing (built by society), in which individuals are free to create their own environment.
- Lucien Kroll: design, difference, everyday life by Richard Milgrom.<sup>9</sup> A chapter of a book about the ideas of philosopher Henri Lefebvre. The chapter considers the works of architect Lucien Kroll as an urban representation of Henri Lefebvre's ideas of abstract space of capitalism, a homogenous space that suppresses difference.
- Habitat: ecology thinking in architecture by Dirk van den Heuvel, Janno Martens and Víctor Muñoz Sanz.<sup>10</sup> This book consists of several essays regarding historical approaches to ecological thinking of human habitation in architecture.
- Visie op de stad: Álvaro Siza in de Schilderswijk by Dorien Boasson.<sup>11</sup> This book is about the participatory design process of the urban renewal project in the Schilderswijk of Den Haag by architect Álvaro Siza. The design of the housing complex embraces the different stages and styles of living of its inhabitants.
- Normalisatie in Woningbouw by Hendrik Petrus Berlage.<sup>12</sup> This book was already mentioned in the introduction, it is about a discussion in the 1920s regarding standardised housing. I will use this source to elaborate on the historical context of the research.

### *Case studies*

The second method used in the research is case study analysis. This method aims to analyse how theories found in the literature study can be/have been applied in social housing complexes. The case study aims to find answers to subquestions 1 and 2,

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<sup>8</sup> Nicolaas John Habraken, *De dragers en de mensen: het einde van de massawoningbouw*, Amsterdam: Scheltema & Holkema, 1961.

<sup>9</sup> Richard Milgrom, "Lucien Kroll: design, difference, everyday life," in *Space, Difference, Everyday Life*, ed. Kanishka Goonewardena, Stefan Kipfer, Richard Milgrom and Christian Schmid (New York: Routledge, 2008), 264-281.

<sup>10</sup> Dirk van den Heuvel, Janno Martens, Víctor Muñoz Sanz, *Habitat: ecology thinking in architecture*, Rotterdam: nai010 publishers, 2020.

<sup>11</sup> Dorien Boasson, *Visie op de stad: Álvaro Siza in de Schilderswijk*, Stadsvernieuwing Den Haag, 1988.

<sup>12</sup> Berlage, *Normalisatie in Woningbouw*.

focusing on the architectural qualities of a social housing complex. The case studies can serve as reference projects for research by design and will help with setting up the participatory experiment. To compare the case studies I will make analysis drawings in one coherent style, to be able to put drawings side by side for comparison. I also want to make a list of written comparison properties resulting from the literature study, like construction type and floor plan concepts as described in the book '*Floor Plan Manual*' by Friederike Schneider.<sup>13</sup> To select case studies I will talk to people of the faculty, and use case studies I find in the literature research. The case studies should be (social) housing complexes.

#### *Concept analyses*

The third method used in the research is concept analysis. This part of the research will compare different theoretical concepts regarding standardisation and individuality found in the literature study. This part aims to find answers to subquestions 2 and 3, focusing on the user qualities of the concepts. The architectural concepts that will be analysed can provide ideas for research by design and input for setting up the participatory experiment.

#### *Research by design*

The fourth method used in the research is research by design. This method will be carried out throughout the research process, aiding in developing both the design and research of my graduation. All parts of the research will influence the research by design process. The case of my graduation design assignment, designing a big social housing complex in Amsterdam, is a chance to apply the results of the research to the design process. This way I can test whether the outcomes of the research are valuable to the design process, and I can see what works and what doesn't. This will be a process of applying theories and concepts, and reflecting on their implementation and intended effect, to refine the research theory and the graduation design. The method aims to find answers to subquestions 2 and 4, focusing on effectively integrating standardisation and individuality. The method of research by design will help in refining the participatory experiment.

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<sup>13</sup> Friederike Schneider, *Floor Plan Manual*, Basel: Birkhäuser, 2011.

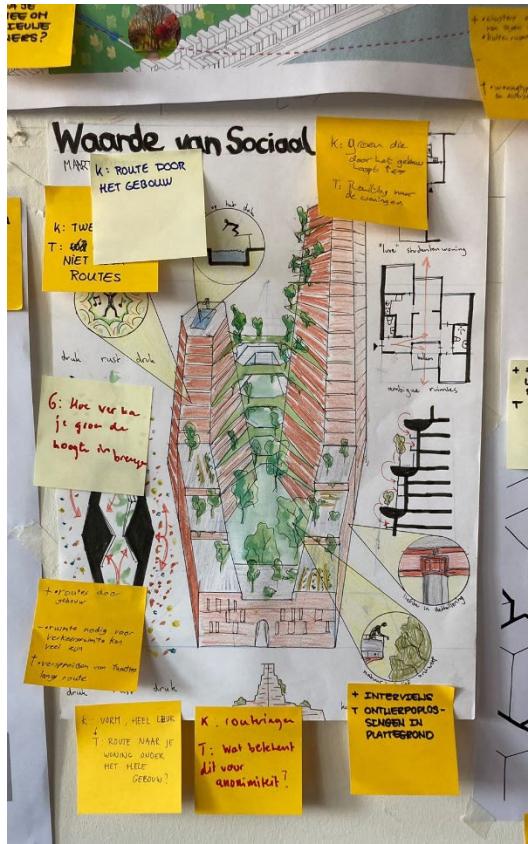


Image 2: Example of research by design. Own work.

### Participatory experiment

The final method used in the research is a participatory experiment. This method will be used to refine theories and designs that result from the previous research methods. The experiment will aim to seek answers to the third subquestion by asking a group of people to provide input regarding individual styles of living. The people partaking in the experiment will be asked to label different rooms in a simple 3D model of one or multiple floor plans. This way, I hope to test the adaptability of the floor plan and to examine to what extent the floor plan stimulates individual style of living. The floor plans will be designed based on information gathered by the previous research methods. The concept of this experiment is based on a participatory design process carried out by Álvaro Siza in the 1980s. Álvaro Siza is a Portuguese architect who emphasises the importance of participatory design. For the urban renewal plan of the Schilderswijk in Den Haag, he created a laboratory for testing different house plans. This led to a design that, according to Siza, supports different stages and ways of living.<sup>14</sup> I will try to find participants by visiting public buildings like libraries and asking people there to participate in the experiment. The participants of the experiment will remain anonymous in the research.

<sup>14</sup> Francien van Westrenen, "Architectuur die voorwaarden schept: Álvaro Siza in de Schilderswijk," Archined, April 8, 2016. <https://www.archined.nl/2016/04/architectuur-die-voorwaarden-schept-alvaro-siza-in-de-schilderswijk/>



Image 3: Van der Burg, Fred. Proefopstelling Keuken Siza. Photograph. No date.

Together the different methods will seek answers to the subquestions to be able to make conclusions for the main research question. These conclusions, the research by design process, and the experiment will have a direct influence on the design assignment for a large-scale social housing complex in Amsterdam. After carrying out the research and writing conclusions, reflections will be made on the research methods, results, and possible future enquiry.

The diagram on the next page shows the different products that I will produce (both individually and with group work), distributed on a timeline. The group work will result in a collaborative contribution to the booklet *Mooi Mokum*. *Mooi Mokum* is a book set up by the municipality of Amsterdam, consisting of “analysis, research by design, reflection and a debate” about the mass housing need in the city.<sup>15</sup> Our student group contribution will consist of our research on the history of sustainability, quality of living, ownership and beauty of Amsterdam, the research done on the different plan areas of Amsterdam, and a collection/evaluation of our different ideas and designs as a group. Along with the final research, I want to write a manifesto and a simple design manual I can use for my design process afterwards.

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<sup>15</sup> Flora Nycollaas et al., *Mooi Mokum*, Gemeente Amsterdam, concept version: March 19, 2023.

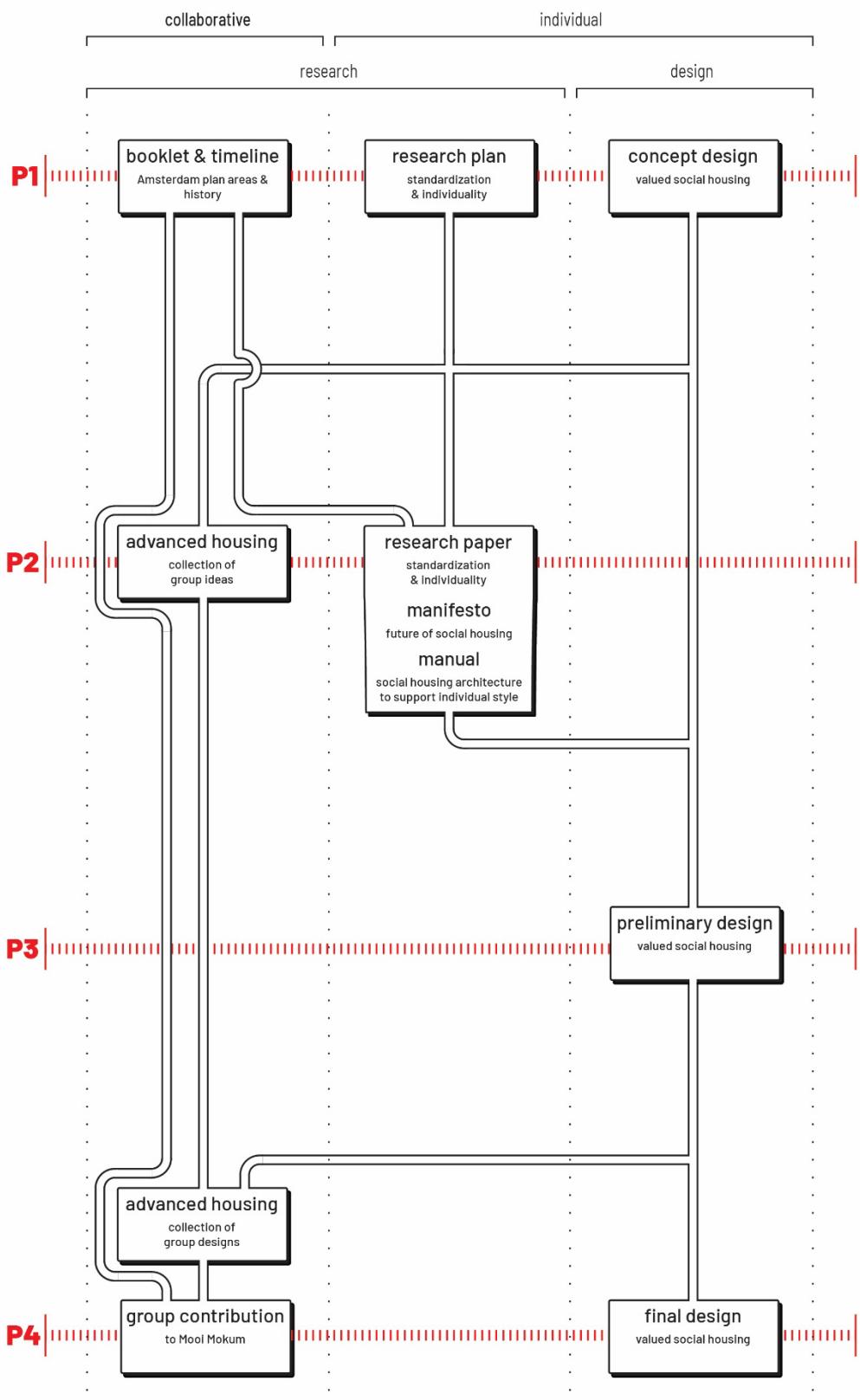


Diagram 3: Timeline of different products for graduation.

## SUMMARY

This research will investigate the intersection of standardisation and individuality in the design of a large-scale social housing complex. This intersection of two seemingly opposing concepts will be explored by looking at historical discussion regarding the topic, and relating them to contemporary challenges.

Four subquestions divide the topic into the following themes: desirable elements of standardization, design aspects for a cohesive, yet visually and spatially diverse environment, design aspects that stimulate individual style of living and the question of how standardization and individuality can strengthen or oppose each other.

A theoretical framework will be created based on architectural theories, urban sociology, philosophy and housing policy. The framework will guide the rest of the research, consisting of case studies, architectural concept analyses, and a participatory experiment.

The research will contribute to contemporary discussions of standardised housing in a time of housing need. Urban environments in the Netherlands will change drastically over the coming decades, due to population growth and diversification. The research advocates for a balanced approach that integrates standardised housing and individual freedom of housing. The purpose of this approach is to create future cities that are equitable, qualitative and livable.

To conclude, this research plan provides a basis for an investigation into the challenges and opportunities of future social housing design, with implications for both academic research and practical architectural application.

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