Reverting social atomization

Cooperative living to combat urban loneliness

Research plan
Advanced Housing Design
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Preface

Unfortunately, the past few years have been exemplary of the fragility of our society. The COVID-19 pandemic has undeniably been the largest disruptor we have witnessed in recent times. We may also not ignore the influence of geopolitics and war, and the digitalization of our everyday lives. All of these have, at least in my eyes, contributed to the further hardening and polarization of society, and perhaps the further isolation of (many) individuals. Although I do worry, I try to take comfort in the fact architecture will, surely for a long time, remain a discipline that aims *and* succeeds to affect the ways we live positively. My interest is, and will hopefully always continue to be, improving lives through architecture. For this reason, I have been interested to research how architecture can influence (mental) health, and, preferably, influence this positively. The specific aim within my graduation project is to mitigating a very pronounced mental health issue, loneliness, which has become increasingly evident as a result of the developments mentioned at the beginning of this preface.

"Architecture is about people"
- Francis Kère

Summary

In the Dutch context, loneliness is a public health issue that disproportionately affects those with a lower socioeconomic status. This same group is also disproportionally affected by the country's housing crisis. Simultaneously, there is a new form of housing emerging in the Netherlands, cooperative housing, that has shown to be a possible solution to offering more affordable housing. Could this form of housing not only help offer more affordable housing, but also help alleviate perceived problems with loneliness?

General introduction

In recent times, loneliness has become increasingly evident for many. A major contributor to this has undeniably been the COVID-19 pandemic. In the Dutch context however, we may also see the influence of aspects like the ageing demographic, digitization and the polarization of society in the increase of loneliness around us (Ministerie van Volksgezondheid, Welzijn en Sport, 2018). In 2022, an estimated 49% of Dutch adults endured feelings of loneliness (CBS, 2022). In November of 2023, the World Health Organization declared loneliness to be a pressing global threat to public health, arguing that loneliness can influence people of all backgrounds and ages, and that it has the potential to pose 'serious consequences for health and well-being' (WHO, 2023).

There are several health issues that can be attributed to loneliness. Induced stress levels as a result of loneliness can increase the risk for heart disease (Paul et al., 2021). There may also be a relationship between loneliness and dementia, where a higher degree of loneliness is associated with poorer cognitive function (Lara er al., 2019; Yin et al., 2019). Furthermore, loneliness may pose additional risk to distress in the form of anxiety or depression, and it may even lead to ideation of suicide (Beutel et al., 2017). In addition to this and - although loneliness can affect all people - it disproportionally affects those with a lower socioeconomic status in Dutch society, including those with a lower level of education or income, the elderly, and people with a migratory background (Beutel et al., 2017; CBS, 2022; Volksgezondheid en Zorg, n.d.)

Relation to the broader scope

The health risks associated to loneliness further strain the Dutch healthcare system, which is already under pressure currently (Wetenschappelijke Raad voor het Regeringsbeleid, 2021). Because of rising costs, limited personnel and the ageing demographic, healthcare is currently a major topic in Dutch politics, and as result, in 2024, a new governmental agreement has been made to restructure parts of the healthcare system (Rijksoverheid, 2024). However, the current pressure on the system asks not only for adjustments to the system itself, but also asks to alleviate the system through prevention (Leensen, 2023; Möhlmann, 2022; Rijksoverheid, 2024). Hence, we may argue that preventing health issues related to loneliness – or preventing loneliness itself – will contribute to alleviating the Dutch health system as well.

Problem statement

Connection to the field of Architecture

What is then the relation between loneliness and architecture? Well, there is evidence that links loneliness with the built environment. Multiple aspects related to the built environment, like neighborhood walkability, urban program, areas designated for social interaction, and available means of transportation, influence perceived feeling of loneliness in some way (Bower et al., 2023; Domènech-Abella et al., 2019; van den Berg et al., 2015). However, not all evidence is conclusive about a definitive causation. In addition, architecture is only one - albeit very important - component of the built environment, so more direct research between architecture and loneliness is warranted.

Within the context of Dutch housing

Concurrent with the pressure on the Dutch healthcare system, the Netherlands is suffering from immense pressure on its housing market – which has now led to a visible housing crisis (Hilhorst & Kellij, 2023). In addition to this, the limitations on the housing market disproportionally affect those with a lower socioeconomic status (BNNVARA, 2024), as was also evident within health issues related to loneliness. There is a significant need for affordable housing, specifically suitable for this group. One form of housing that tries to accommodate this, is called cooperative housing.

Within a housing cooperative, an association of individuals try to meet, among other things, their joint economic and social goals (Delz et al., 2020). This means that, in terms of economy, this association aims to develop housing in its own interest, and therefore aims to do so cost efficiently and without market speculation. This type of housing is seen in countries like Germany, Switzerland and Austria, but is currently fairly uncommon in the Netherlands. Nonetheless, it has the potential to open up the Dutch housing market and make it more inclusive and affordable (Lengkeek & Kuenzli, 2022, p. 17). In relation to the posed issues with lonelinesss, this raises the question: how could housing cooperatives work to combat loneliness, potentially killing two birds with one stone within the necessity to mitigate the Dutch housing crisis? This will be the main focus of the research.

Aim of the research

The aim of this research is to investigate if – and which forms of – cooperative housing developments may contribute to reducing loneliness and health issues related to loneliness. To achieve this, further research must be done, for which the following objectives have been formulated:

1. To understand what loneliness constitutes, and which types of loneliness affect health negatively.
2. To understand the concept of housing cooperatives, and to analyze housing cooperatives both in and outside of the Netherlands.
3. To explore the relationship between loneliness and the architecture of housing cooperatives.

Research question

These aims have brought forth the following main research question:

*In what ways can the architecture of **cooperative housing** contribute to reducing negative health effects related to **loneliness**?*

Research subquestions

To answer the main research question, several subquestions have been formulated.

Loneliness
1. What constitutes loneliness?
This questions aims to answer what loneliness entails, what kind of types of loneliness there may be, and what negative effects are related to it to underline the relevance of this health issue, all through literary research.

2. How is loneliness related to the built environment?
This questions aims to answer, through literary research, how urban development and architecture (also in relation to social influences like pandemics or the rise of digitalization) may play a role in the increase of loneliness related health issues in recent times.

Cooperative housing
3. What is cooperative housing?
This question aims to understand, through literary research, how cooperative housing works and which types of cooperative housing there are.

4. What examples of cooperative housing are there?
This questions aims to investigate, through case study analyses, a number of specific cases of cooperative housing projects to understand how real life examples of cooperative housing function.

5. How is the architecture of cooperative housing related to loneliness?
This question aims to investigate, through (ethnographic) field research, how in the case studies that have been investigated, loneliness may be remedied. This will primarily be achieved through interviews.

Theoretical framework

Loneliness

One of the premises in this research is that the built environment, or architecture specifically, is able to influence loneliness, whether it to be positively or negatively. Underlying to this must be that the built environment is able to influence (mental) health in general. Preliminary research shows that there is extensive evidence that this is true, and that the built environment, which we could define as all the human-made space that is used for living, working and recreating, influences both physical and mental health aspects like obesity, fitness, and depression (Renalds et al., 2010; Roa et al., 2007). This will be further substantiated through additional research.

Less information is available on the role of the built environment on loneliness and health issues related to loneliness. Nonetheless, there is evidence that also links these together, as mentioned in the problem statement. Typically, these sources (Bower et al., 2023; Domènech-Abella et al., 2019; van den Berg et al., 2015) investigated the relationship between loneliness and issues related to loneliness and the built environment cross-sectionally, which means that results were observed from one point in time (Wang and Cheng, 2020). Because of this, although relationships were found between both, it has been difficult to find causation. Further theoretical research will be done to see if this relationship can be considered causal.

Cooperative housing

In the Netherlands, cooperative housing is not necessarily a new practice: the first forms of cooperation originate from the 1860s (Time To Access, n.d.). However, this practice is currently still very uncommon. Additionally, the housing cooperative can take several legal forms (Wooninfo, n.d.), and because of this, it could refer to both a legal construction, or an actual physical housing development (and through this, an architectural entity). Further research will aim to clarify these differences. From there, with the help of Lengkeek & Kuenzli's *Operatie Wooncoöperatie* (2022) among other sources, I expect to gain an extensive understanding of the working of housing cooperatives in and outside of the Netherlands.

Methodology

Summary of research subquestions and proposed research methods:

1. What constitutes loneliness?
2. How is loneliness related to the built environment?
3. What is cooperative housing?
4. What examples of cooperative housing are there?
5. How is the architecture of cooperative housing related to loneliness?

The first goal within the research is to obtain an extensive theoretical basis on loneliness and cooperative housing. Without understanding how loneliness is categorized and what kinds of loneliness have either positive or negative health effects, we can simply not connect loneliness to the built environment and architecture, and, in addition to this, without understanding how housing cooperatives are set up, we can not connect housing cooperatives to the built environment and architecture.

Once the concept of the housing cooperative has been researched, the next step will be to dive deeper into specific projects through a case study analysis. This will be done with the specific intention to achieve ethnographic fieldwork later on, by interviewing inhabitants of these case study projects. Preliminary research has brought forth a number of projects that may be interesting for the case study analysis, but the exact projects will be decided upon at a later time. Projects in the Netherlands that have been deeemd to be interesting are:

1. De Warren, Amsterdam
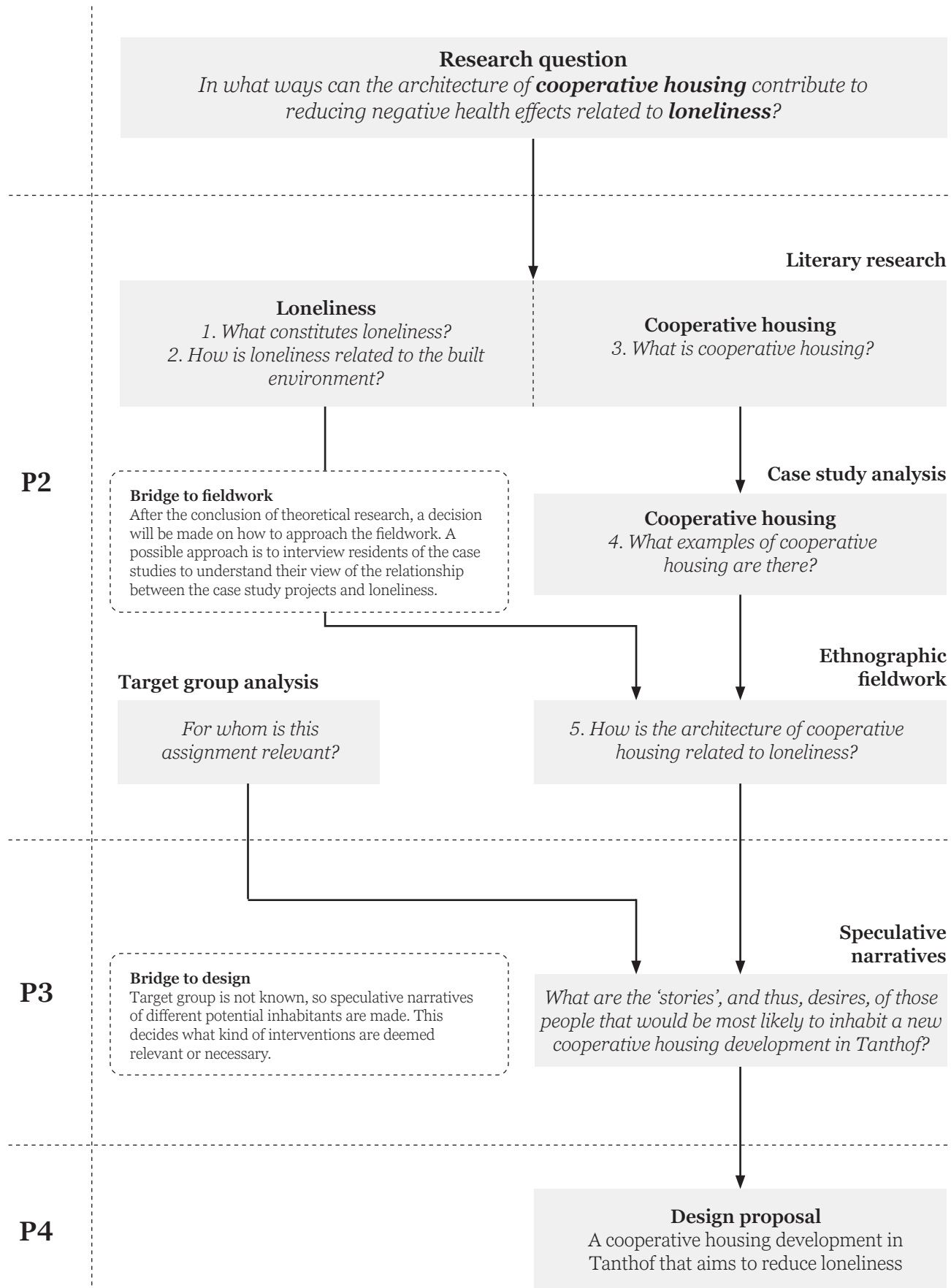2. Boschpolder, Den Bosch
3. Ecodorp Boekel, Boekel

Outside of the Netherlands, there are many more examples to explore, like Kalkbreite in Zürich, Switzerland or Spreefeld in Berlin, Germany. Further research will determine which projects are most interesting.

Ideally, all Dutch projects will be visited after the case study analysis, and during these visits several residents of the projects will be interviewed. These interviews may be held one on one, and be semi-structured with questions based on how these inhabitants experience loneliness and how their living situation influences this. From prior knowledge I have already realized that it will be important not to be too biased in formulating questions on loneliness, as this can be seen as a stigma. Furthermore, I am not yet sure if targeted interviews are the best strategy here, as information may be limited when only interviewing a few people. Perhaps hosting a survey will offer a wider range of insights.

After gathering this information, the aim will be to bridge the research towards design. In a cooperative housing project that is self-developed, the eventual residents have a large say into what the project looks like. This means that in this situation - a graduation project - the largest influence for the eventual brief is missing. To compensate for this, the last part of the research will be focused on investigating the target group that is expected to be interested in the fictional project.

      The aim of this graduation project is to design a housing development on the boundary of the municipalities of Midden-Delfland and Delft, in a neighborhood called Tanthof. Therefore, a target group analysis may be focused on the current demographics of the neighborhood and the surrounding urban areas, and, in addition, there may be research on future trends in terms of demographics. This may be cross-examined with possibly known demographics of the case study projects. From this, several speculative narratives (or portraits) will be made that simulate the group of residents that may inhabit the project, and their demands will be used to support design decisions.

Methodological framework

Research question
*In what ways can the architecture of **cooperative housing** contribute to reducing negative health effects related to **loneliness**?*

Literary research

Loneliness
1. What constitutes loneliness?
2. How is loneliness related to the built environment?

Cooperative housing
3. What is cooperative housing?

Case study analysis

P2

Bridge to fieldwork
After the conclusion of theoretical research, a decision will be made on how to approach the fieldwork. A possible approach is to interview residents of the case studies to understand their view of the relationship between the case study projects and loneliness.

Cooperative housing
4. What examples of cooperative housing are there?

Ethnographic fieldwork

Target group analysis

For whom is this assignment relevant?

5. How is the architecture of cooperative housing related to loneliness?

Speculative narratives

P3

Bridge to design
Target group is not known, so speculative narratives of different potential inhabitants are made. This decides what kind of interventions are deemed relevant or necessary.

What are the 'stories', and thus, desires, of those people that would be most likely to inhabit a new cooperative housing development in Tanthof?

P4

Design proposal
A cooperative housing development in Tanthof that aims to reduce loneliness

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