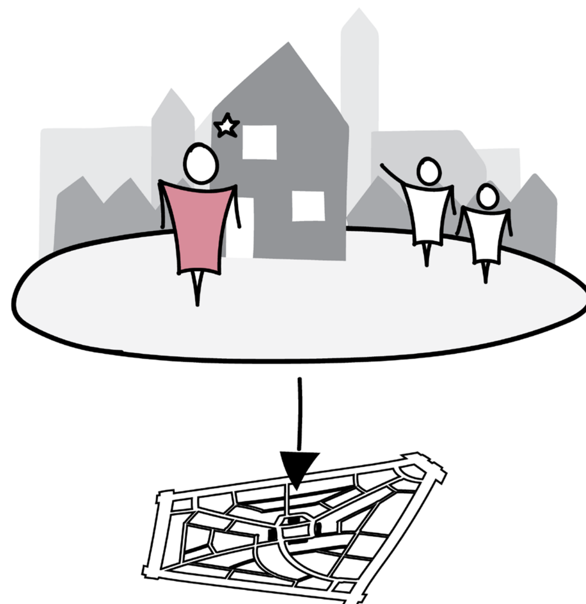
Preparing for home in the neighbourhood

About the gap between mental health care & society and how the built environment can promote reintegration into society for (former) mental health patients in protected living.

Research plan msc3 AR3AD110 Designing for Health & Care

November 7th, 2023



Key words | Mental health patients, supported living, architecture, reintegration, neighbourhood

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1. Introduction & problem statement

Unavailability of after-care and the gap between mental health care and back to home

In a recent personal situation, someone could not be taken into mental healthcare because there were no facilities available. Therefore, she was sent home. It became clear that availability of mental health care is a problem in the Netherlands. Moreover, around 84.000 people are awaiting treatment for care at GGZ institutions, 51% is currently waiting longer than 14 weeks (Inspectie Gezondheidszorg en Jeugd, 2023). Waiting times for other programs like protected and guided living are estimated to be an average of 35 weeks in 2019 (KPMG, 2020). According to a GGZ spokesman to the Algemeen Dagblad, the waiting times have negative effects on patients because their problems can multiply and get worse (Houwelingen & Wildenborg, 2016). One of the reasons for these waiting lists is the unavailability of after-care facilities that aim at making the patients independent and self-sustainable again (KPMG, 2018). Since 2015, organization of these facilities was decentralized in the Netherlands and is now the responsibility of municipalities, according to the social support act *Wmo*. Municipalities need to provide daytime activities, ambulant care, protected living environments and shelter for their citizens (Rijksoverheid, n.d.). There is also a shift in the focus of mental health care, it is currently more on balancing psychiatric hospitals and ambulant care (McDaid & Thornicroft, 2005). For ambulant care, social housing is used for (ex)patients. However, many (ex)patients cannot get into social housing since there is a shortage of 250.000 dwellings (Ministerie Binnenlandse zaken en Koninkrijkrelaties, 2022), leaving a lot of patients in need of dwelling.

The shift in focus from psychiatric hospitals to community care (McDaid & Thornicroft, 2005), causes a gap between more intensive mental health care and ambulant care, also because of the previously stated unavailability of ambulant care. Some patients do not feel like they can live independently again, afraid of not being able to reach extra care when they need it (Ernala et al., 2022). In 2019 in the Netherlands, around 4245 out of 5975 former inhabitants of protective living received additional care in the 24 months after leaving (CBS, 2021). In interviews done by Verplanke & Duyvendak (2010) it became clear that (ex)patients who live independently do not integrate well into society because their daily activities are not in the neighbourhood but at mental health care facilities. Adding to the gap and resulting in patients having no connection to the community they live in. However, this community can provide valuable increase in the quality of life of patients (Rössler, 2006).

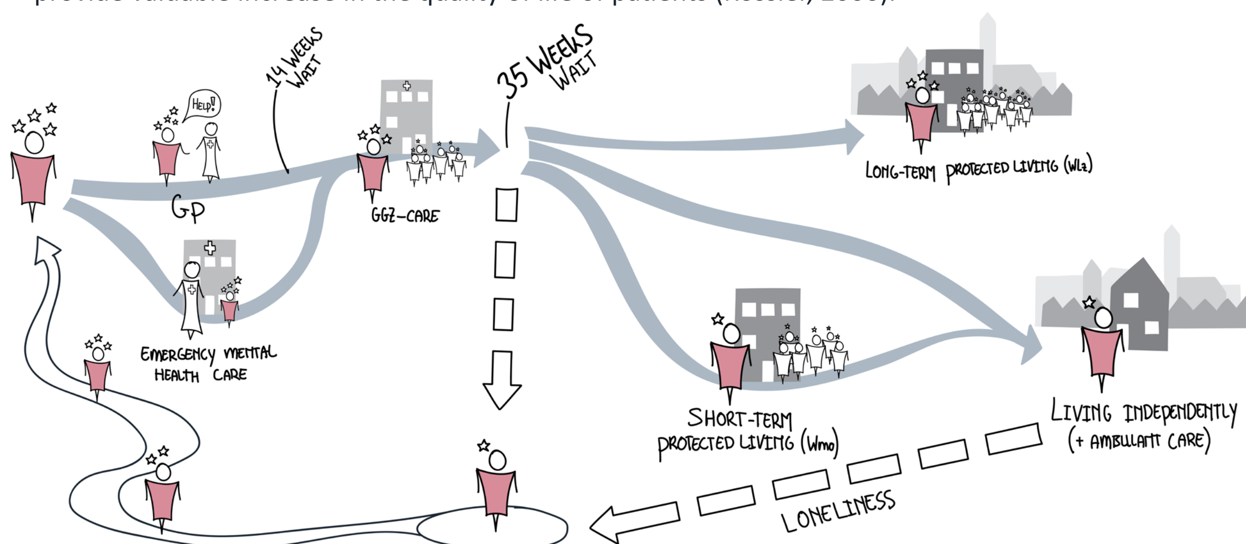


Figure 1. Interpretation of the current problems in the Dutch mental health care process of patients: after long waiting for care, the patients often get back into problems when after-up care is unavailable or when integration in the neighbourhood is unsuccessful and loneliness strikes. (Author, 2023).

2. Theoretical framework

When finding literature about the gap between protected living and living independently and how architecture could close this gap, there are three main themes: (1) the neighbourhood or community, (2) recovery and rehabilitation and (3) Healthy and healing architecture. In figure 2, the themes relevant to the research are shown together with the most important literature related to each theme. Most literature overlaps with (at least) two of the three themes.

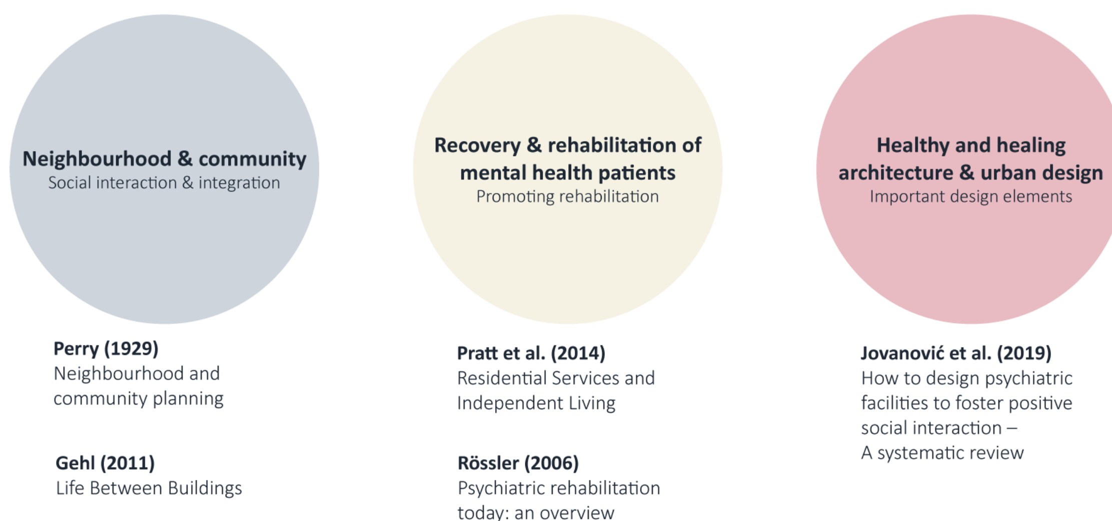


Figure 2. Key topics in the research and the most important literature. Author, 2023

2.1 Neighbourhood = community = society

To reintegrate mental health patients into society, it is important to know how society is should be understood. In 1929, Perry already wrote about community and how the neighbourhood is or should be community: *the neighbourhood unit.* Schools, community, and religious facilities are in walking range of residents, in the centre of neighbourhoods so no bigger roads must be crossed. Noticeably, Perry mostly bases his neighbourhood unit on the reach of elementary schools and community functions and saw the residents as a homogenous group. However, society also includes vulnerable individuals. Geyl (1947) added to the neighbourhood unit in the Netherlands: it should enhance the development of *every* human being.

A next step would be to integrate patients in the neighbourhood. According to the OSCE (n.d.) "Integration facilitates effective participation by all members of a diverse society in economic, political, social and cultural life, and fosters a shared sense of belonging at national and local levels." Jan Gehl (2011) wrote in his book *Life between buildings* about several strategies to design the city through different scales to promote stimulation between different people and events: (1) to assemble or to disperse, (2) to integrate or to separate, (3) to invite or to repel and (4) to open up or to close in. Along this, integration. Gehl means more with integration than putting buildings with different functions together but rather mix various events and different people on a small scale, so people stimulate each other. Thus, Gehl is building upon the established idea of Perry of the *neighbourhood unit*.

2.2 Community = care

In the same century, a shift in designing psychiatric care facilities occurred: shifting from the *architecture of madness* to *healing architecture*. Deinstitutionalization of mental health patients into small-scale, multifunctional units was completed in the 1990s (Mens & Wagenaar, 2010, pp.286). In line with this trend, the Wmo Social Act was launched in 2015, which now makes municipalities

responsible, decentralizes mental health care and increases the importance of local care. Therefore, cooperation between the municipalities and its citizens is key in the success of this local care, giving the neighbourhood a larger role in the rehabilitation of (ex) mental health patients (Raap et al., 2022). This coincides with the previously mentioned ideas of Perry (1929), Gehl (2011) and Geyl (1947) that the neighbourhood is the community and provides for its citizens and promotes stimulation between different people. Pratt et al (2014) describe how different typologies of mental health care facilities influence the rehabilitation of mental health patients. This also includes how moving affects their rehabilitation.

2.3 Designing for the recovery & rehabilitation of mental health patients

Despite this current idea about the neighbourhood providing for its citizens and therefore (ex)mental health patients and smaller local care, there is little research on how to design mental health buildings that promote integration of (ex)mental health patients into the neighbourhood. Jovanović et al. (2019) did a systemic review on literature about promoting social interaction in a psychiatric hospital. They researched six elements within architecture that could promote social interaction, these will be used as guidelines during the research:

1. **Location of psychiatric facilities |** Jovanović et al. (2019) mentions that research shows that placing a facility next to community functions, show that patients will use the facilities, however social interaction was not yet fully achieved. This could be done by overlapping territories for example. Gehl's strategies (2011) could be useful to achieve this goal.

2. **Architectural typology and external image |** Stigmatization is a big issue for (former) mental health patients. Pratt et al. (2014) found that (perceived) stigmatization prevents reintegration and decreases chances of recovery of (former) patients. However, better integrated (former) patients seem to have a better quality of life. A sense of belonging and purpose reinforces recovery, rehabilitation, and reintegration (Rössler, 2006). In addition, the typology is important for the recovery. Pratt et al. (2014) also describe effective and ineffective typologies for the rehabilitation of mental health patients.

3. **Interior design interventions |** According to the found literature by Jovanović et al. (2019), making small changes in interior design promotes conversations, such as waist-high partitions.

4. **Specific spaces within psychiatric facilities |** Jovanović et al. (2019) mentions that the balance between communal and private spaces is important. Moreover, more private space causes more social activity. Independence and autonomy have a positive connection to the quality of life of patients (Simonsen, 2017; Marlow & Walker, 2015; Perry et al., 2011). Jovanović et al. (2019) adds that personalization of rooms provided subjects for interaction.

5. **Ambient features |** Although there is almost no research on this, stimuli could reduce stress, anger, and anxiety. Additionally, the room provided a sense of community (Jovanović et al., 2019).

6. **The relationship between physical environment, positive and negative social interactions |** Certain spaces in a psychiatric facility can have a negative effect like seclusion of patients. However, the studies mentioned in point four (Simonsen, 2017; Marlow & Walker, 2015; Perry et al., 2011) show that relocation to purpose-build facilities or more freedom within a ward has a positive effect on the quality of life of patients. The design of spaces (like size and outdoor space) influences this positive and negative social interaction. Jovanović et al. (2019) do mention that research on this is not conclusive.

2.4 Position of the research and hypothesis

In conclusion, there are three main themes apparent in this research: (1) neighbourhood & community, (2) recovery, rehabilitation, and rehabilitation of mental health patients, and (3) architecture and urban design. Most of the found studies are about two of these topics as seen in figure 3, however almost none of them combine all three of the topics, except – albeit briefly – the literature review by Jovanović et al. (2019). The study fills the research gap by bringing together all the studies on the three themes and adding field research and practical approaches. By designing a building that promotes recovery, rehabilitation, and social interaction, (ex)patients are prepared to live independently and reintegrate into the neighbourhood.

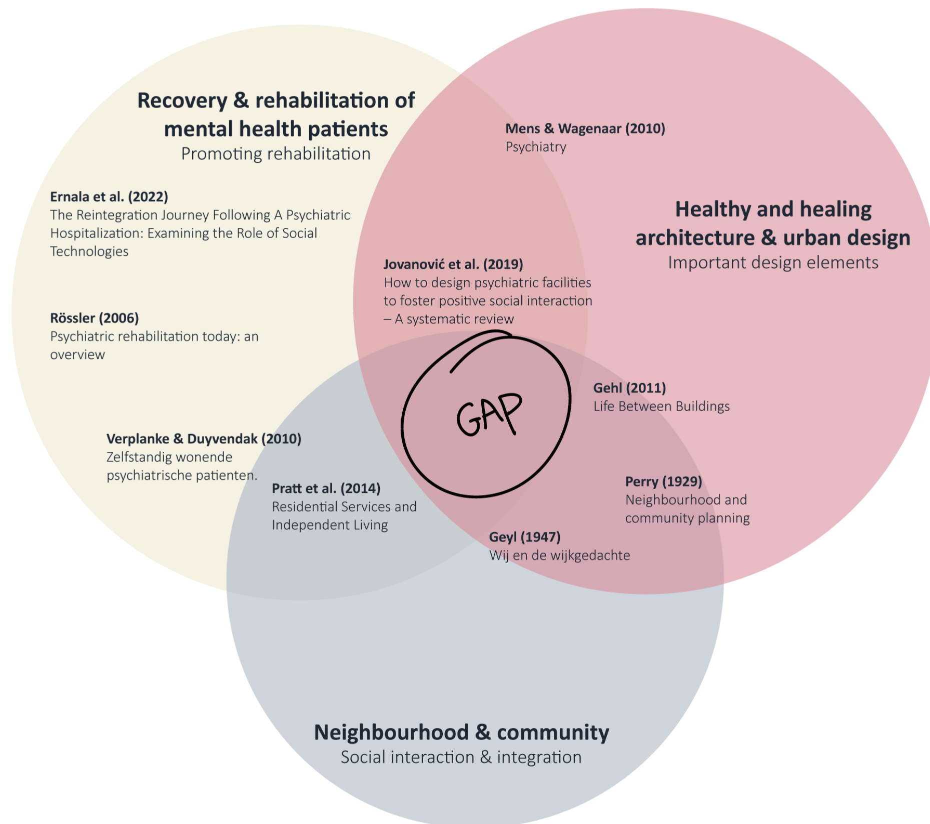


Figure 3. Position and gap of this research in the existing fields of research. (author, 2023).

3. Objective and question of the research

3.1 Objective and question

The aim of this research is to develop architectural guidelines that can increase the integration of inhabitants of protected living. The focus is on facilities that aim to make inhabitants self-sustainable again. This includes designing a safe living space and finding the right building typologies, with the aim on self-dependence and integration into neighbourhoods. This could increase the effectiveness of said facilities, decreasing workload on caregivers and chances on relapse of ex-patients and therefore, decrease unavailability of after-care and cross the gap between psychiatric hospitals and ambulant care. The main research question is:

How can architecture & built environment features and location conditions promote the integration into the neighbourhood, individuality, and independence of inhabitants in protected living?

And the following sub questions:

1. *How are protected living/rehabilitation facilities currently being integrated in their environment and neighbourhoods?*
2. *What is the background of inhabitants in protected living with the aim at reintegrating into society?*
3. *What kind of care do inhabitants in protected living use for their independence, individuality, and integration? Is there a difference between 'Neighbourhood care' and/or health care?*
4. *What are the architectural and environmental needs of inhabitants of protected living?*
5. *What are the shortcomings of neighbourhoods in providing self-sustainability and integration of inhabitants of protected living?*

3.2 Definitions and restricting the research

Architecture and built environment and location conditions | The placement of such a building/complex or space and what does it looks, feels, smells, and sounds like. The location conditions are relevant since the role of the neighbourhood in mental health care is one of the main themes of the research.

Promoting integration and independence | Promoting self-sustainability of inhabitants and independence from care. Additionally, integrating them into the neighbourhood and therefore enhance their participation back into society and feeling at home in the neighbourhood. In the Netherlands, there are a lot of post-war neighbourhoods in the cities. To limit the research, the focus will be on post-war neighbourhoods in big cities, limited to the Dutch G4 and G32 cities (CBS n.d.).

Inhabitants of protected living | (Former) mental health patients that are in the process of becoming self-sustainable again. This is a diverse group with different mental problems and can also differ per neighbourhood. Therefore, the categorization 'zorgprofielen' of the GGZ will be used. The focus will be ZZP GGZ 1-C. These inhabitants need (limited) help with social sustainability and have the capability to (albeit with help) sustain a (collective) household (GGZ, 2019). To further restrict the research, only inhabitants with Wmo (temporary stay) and a GGZ-indication are included. However, the research does not exclude that outcomes could be applied to other target groups in protected living. Additionally, this group is still quite diverse, therefore there are some excluded groups: refugees and people with dementia.

Protected living | The research focuses on a specific form of after-care in mental health care: Protected Living (Beschermd Wonen or BW) program. To define this, the definition by Begeleid Wonen Nederland (n.d.) is used. BW is not a treating facility, but only focuses on the primary needs in living such as shelter, finance, mental and physical health and care, daily activities, socializing and participation in society. The research focuses on 'Beschermd Thuis plus': inhabitants temporarily live in clusters where care is close and can be acquired 24/7, but care is separated from living; this is not intramural care, inhabitants can go where they want (DWO, 2021).

4. Methods

4.1 Applied methodologies

Literature study | Literature will be relevant for sub question 1 to gain a better understanding of *healing architecture* and the architectural elements that contribute to the recovery of mental health patients and on the integration of protected living environments in neighbourhoods.

Case studies | Currently, several new buildings for BW are being made with different approaches to integrate mental patients into neighbourhoods. To research these approaches, several case studies will be conducted. The program of requirements plans and transitions from public to more private areas will be studied. Four projects are selected, chosen for their different approach or lack of integration of neighbourhood residents:

1. Psychiatrische zorg Rivierduinen by EGM architecten
2. Psychiatric centre Bolzano by MoDus architects
3. Woonzorgcentrum Hof van Egmont by EGM architecten
4. Stavorenstraat in Lelystad (architects unknown)

All these projects have very different approaches on the neighbourhood integration through their positioning and floorplan, the typology, the appearance, Program of Requirements (PoR) and available facilities.

Interviews | Experts In addition to the case studies, different experts, like architects, will be interviewed on their approaches to formulate a PoR for the integration of (ex)mental patients in neighbourhoods and how this translates to spatial qualities. These interviews will consist of mostly qualitative questions.

Interviews | Inhabitants & Staff During field research, inhabitants and their caregivers will be interviewed on how they use certain spaces and their connections to the environment /neighbourhoods. The main objective is to find the (outside) spaces where inhabitants like to find social interactions or get more privacy. This will be both qualitative as well as quantitative questions. It is important to find out what patients like or dislike (qualitative) and how often they use certain spaces or interact with others (quantitative).

Observation | Inhabitants & Staff To see what care inhabitants use and what could be provided by the neighbourhood, their daily routine will be observed. Most notably, it will be observed where they find the transition from their private areas to areas with more social interaction. This will be done by using routing drawings where activities will be mapped. Additionally, photographs will be taken that will be retraced in such a way that the participants and spaces remain unknown. Next to this, it will be observed where the inhabitants go in the neighbourhood and/or environment, this will be done by mapping and monitoring participants outside of the complex.

Neighbourhood Analysis | Netherlands A neighbourhood of the research location will be analysed, to find out what the neighbourhood's shortcomings are. This will be an analysis on community features, amenities, mapping protected and guided living locations and researching the psychiatric problems in neighbourhoods.

4.2 Outcomes from the research

As discussed in paragraph 3.1, the objective of the research is to develop architectural guidelines for designing a protected living environment focussed on the rehabilitation and reintegration of (ex) mental health patients. For example: the location conditions of the facility as shown in figure 4.

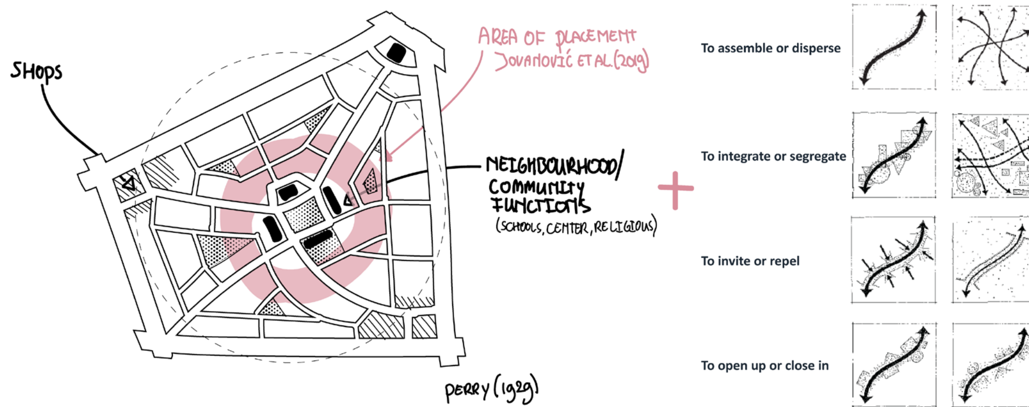
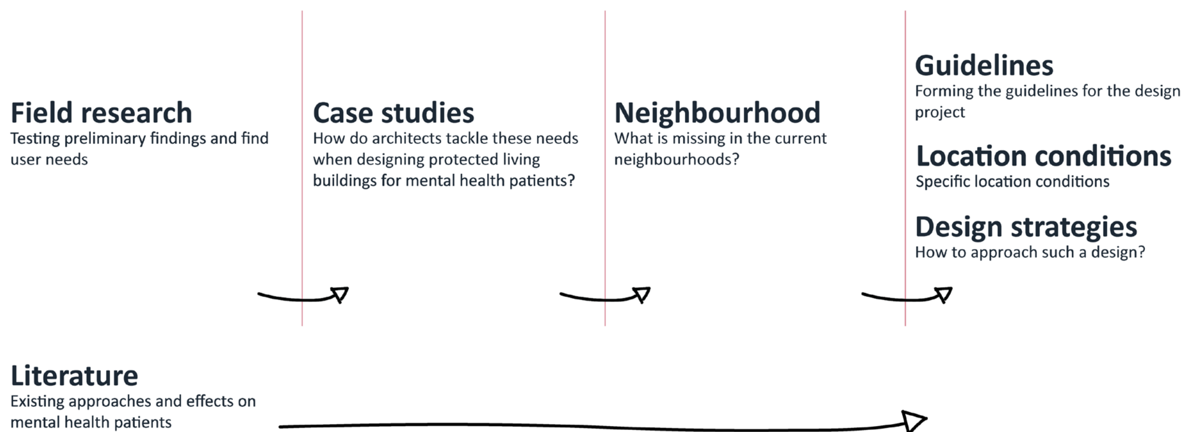


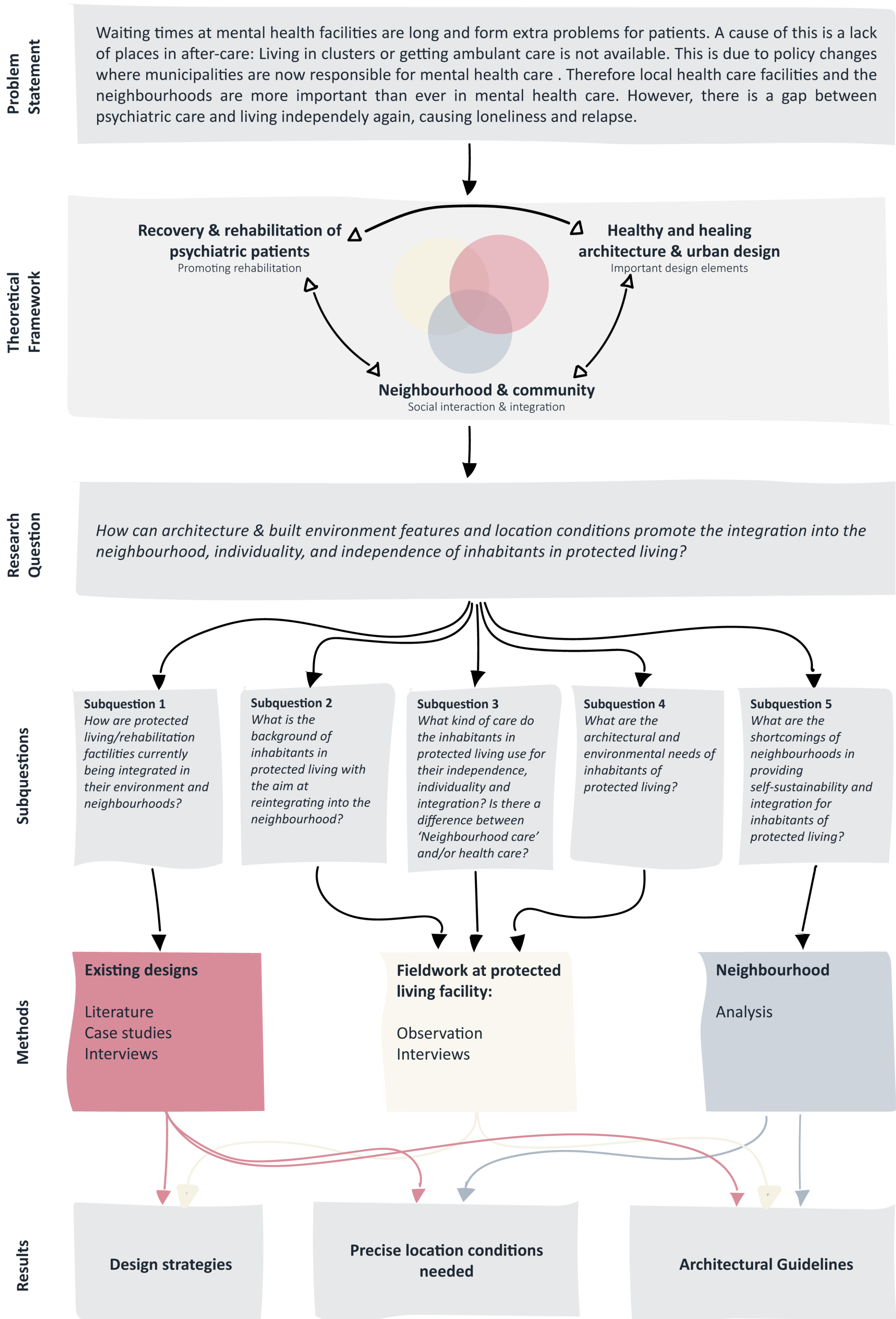
Figure 4. Example of how found strategies could be visualized and used during the design face. In this case, Perry (1929) shapes the base of the neighbourhood, Jovanovic et al. (2019) provide some location conditions for a psychiatric facility. This together with the strategies from Jan Gehl (2011) and field research, provides requirements for the location. (Author, 2023).

5. Research flow

The research will consist of the following phases:



Finally, the inputs and outputs from the different parts in the research are shown in the following diagram:


Problem Statement
Waiting times at mental health facilities are long and form extra problems for patients. A cause of this is a lack of places in after-care: Living in clusters or getting ambulant care is not available. This is due to policy changes where municipalities are now responsible for mental health care . Therefore local health care facilities and the neighbourhoods are more important than ever in mental health care. However, there is a gap between psychiatric care and living indepenedly again, causing loneliness and relapse.
Theoretical Framework
Recovery & rehabilitation of psychiatric patients
Promoting rehabilitation
Healthy and healing architecture & urban design
Important design elements
Neighbourhood & community
Social interaction & integration
Research Question
How can architecture & built environment features and location conditions promote the integration into the neighbourhood, individuality, and independence of inhabitants in protected living?
Subquestions
Subquestion 1
How are protected living/rehabilitation factilities currently being integrated in their environment and neighbourhoods?
Subquestion 2
What is the background of inhabitants in protected living with the aim at reintegrating into the neighbourhood?
Subquestion 3
What kind of care do the inhabitants in protected living use for their independence, individuality and integration? Is there a difference between 'Neighbourhood care' and/or health care?
Subquestion 4
What are the architectural and environmental needs of inhabitants of protected living?
Subquestion 5
What are the shortcomings of neighbourhoods in providing self-sustainability and integration for inhabitants of protected living?
Methods
Existing designs
Literature
Case studies
Interviews
Fieldwork at protected living facility:
Observation
Interviews
Neighbourhood
Analysis
Results
Design strategies
Precise location conditions needed
Architectural Guidelines

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