

The vertical city

A study of the extension of the city into the building

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AR3A010 RESEARCH PLAN

Introduction

Traditional public spaces are often perceived as vibrant by individuals. These places serve as corridors from the city to the individual residence. They not only connect the home to the outside environment, but also form a connection to the urban fabric. The public space is an integral part of the city, while everything behind the door is private, serving as a space where people meet and engage, thereby encouraging social interaction that contributes to a sense of community and connectedness (Bodnar, 2015).

Certain areas of the public realm possess specific qualities that promote social cohesion and spatial connectivity. What are the qualities of the public realm that enhance the interaction between individual residents and the city? Upon examining the characteristics of such spaces, it becomes apparent that residents tend to appropriate their front doors, adding personal touches to their entrances (Astuti et al., 2017). The prevalence of numerous front doors likely contributes to the vibrancy of the area.

The framework of life within a residential block presents a different scenario. Here, a group of individual units are clustered and stacked within a single building. This arrangement diminishes social interaction on the street, as the opportunities for encounter are significantly reduced (Kearns et al., 2012). The individual units are not directly connected to the street via their front door, but can only be reached via a communal entrance. Additionally, there is an issue wherein no one takes ownership of the building's entrance, as it is a communal space. Behind this door lies a long corridor with "front doors" leading to private apartments.

The corridor, where the individual units are connected, apparently does not have the same qualities as the public space. These communal spaces, which primarily function as circulation areas, seem to be lifeless zones. Whereas the traditional street is an integral part of the city, the corridor in the residential block is not part of the urban fabric. Although the buildings may appear to be part of the city, the shell and communal front door often serve as the delineation of the urban space. Why not consider the corridor of the residential complex as part of the urban fabric, similar to how we recognize the public realm? The private domain actually starts behind the front door within the communal corridor. Is there a possibility of activating the corridor, effectively extending the city into the building itself?

Problem statement

Social interaction is important for the sense of community, and it can increase the well-being of residents. The built environment can play a role in encouraging people to leave their private residences and engage in social interactions within public spaces (Holland et al., 2007). Urban growth has led to an increase in vertical development, and this led to a decrease in social interaction among residents, which negatively affects their well-being (Kearns et al., 2012). Therefore, it is important to create spaces and facilities

inside residential blocks to promote social interaction. Expanding the public space within the building and integrating public functions could contribute to this.

Research questions

The objective of this research is to identify and analyze strategies that can contribute to the activation of communal spaces within a residential building while at the same time promoting social interaction and respecting the privacy of residents. Central to the study is the exploration of how a public space can be created within the building, thereby transforming parts of the interior space into an extension of the city. The following research question therefore has been formulated to lead the research:

What strategies can be employed to integrate (semi-)public functions in a housing complex that encourage social interaction, while maintaining the privacy and well-being of the residents?

The answer to the main question will be found through several sub-questions.

- 1. What are the characteristics of spatial domains: private, communal, shared, and public space?*
- 2. What architectural and social elements contribute to the quality of vibrancy of the public realm?*
- 3. What role can the qualities of vibrancy in public spaces play in optimizing the internal space of a residential complex?*
- 4. To what extent does the expansion of public space within the residential complex contribute to the improvement of living quality for the residents?*
- 5. How should public spaces within a residential complex be addressed from a legal perspective?*

The research begins with an explanation of the spatial domains. The elements of private, communal, shared, and public space are discussed, along with the distinctions among them. The second sub-question focuses on the architectural and social qualities of public space that create vibrancy. In the third question, an attempt is made to apply the qualities discussed in the previous chapter, to the internal space of a residential complex, where vibrancy and social interaction often lack. The fourth sub-question builds on the third question by assessing the effects of a lively internal space of a residential block as part of the public space. The last question deals with the legal aspects of the integration of the public space into the complex.

Theoretical framework

For this study, several theories and terms are relevant, forming the foundation of the subject. The following overview of terminology provides clarity and insight into the research framework.

Public realm

It is the public space where people gather and interact. It shapes the social and cultural identity of an area and fosters a sense of community. The public realm is very broad, so this research focuses on the street, the square, and the alley. This delimitation is partly based on the human scale.

Human scale

It refers to designing spaces that align with the proportions and needs of people, making environments feel comfortable and inviting.

Territorial dynamics

This refers to the changes and interactions within a specific area, such as usage and control. It concerns how areas are formed and how certain groups claim space.

Spatial justice

This involves the fair distribution of spaces within the public realm through inclusive spatial planning. It emphasizes equal access to space and reduces spatial inequalities.

Design for permeability

This means designing the physical structure in a way that allows people to move easily through an area. It promotes connectivity between different parts and creates open and accessible spaces.

Transitional zones

These are areas that function as transitions between two different spaces or functions, such as from private to public. They strengthen the transition and reduce conflicts between different zones.

Methodological framework

This research aims to integrate the qualities of the public realm within a residential block to enhance social interaction. To achieve this, a comprehensive methodology will be employed, including a literature review, case study analysis, comparative analysis, spatial analysis, interviews, and an investigation of relevant legal and policy documents.

Literature review

For this research, it is crucial to clarify the definitions of public domains. To understand the elements of private, communal, shared, and public spaces and how they differ from each other, a literature review will be conducted. The qualities of the public realm will also be examined through a literature review, considering both the social and architectural dimensions, which have likely been documented in existing literature based on prior observations and case studies.

As a starting point, the book "The Death and Life of Great American Cities" by Jane Jacobs (1961) is taken. This book is the foundation of the approach to urban planning as

part of the social life of city residents. The book criticizes the monofunctional zones, and states that vibrancy depends on mixed-use areas. Although this book is over sixty years old, it remains a critical reference framework for urban development.

Case study and comparative analysis

Another methodology is conducting research through a case study. This case study will be conducted partially in a group setting and aims to outline the qualities of large residential blocks within the city. These residential blocks feature mixed functions and are considered progressive by contemporary standards. By investigating these case studies, the typology and scale of the project will become clearer. Additionally, there will be a case study that examines existing projects where public space extends into the building itself. By analyzing these projects with internal public spaces, valuable insights can be gained regarding the advantages and disadvantages of such blocks. Through comparative analysis, the projects from the case study will be examined in relation to one another to identify differences and similarities.

A project related to this topic is the Barbican Estate in London. This project was completed in 1976 and designed by Chamberlin Architects in the Brutalist style. The project features many walking routes, open spaces, gardens, and squares that are accessible to the public. These gathering spaces are designed to encourage social interaction. In addition to residential units, the complex also houses cultural institutions such as a concert hall, cinema, theater, and exhibition spaces (Bryant-Mole, 2016). In this way, the public space is integrated into the vertical city.

Spatial analysis

Spatial analysis is conducted to collect and visualize spatial data. This involves the execution of various techniques such as spatial clustering, hot spot analysis, and buffer zones among others to recognize patterns of human activity in relation to the built environment. In addition to the spatial features, attention is also given to design features, such as materiality, aesthetics and forms.

Interview

An interview can be utilized to investigate how residents of a large residential complex perceive the communal spaces within the building. Asking residents for their opinions regarding their perspectives on the activation of the communal space will assist in the development of the design.

Legal and policy documents

To contextualize the literature review within the research framework, an analysis of the existing adaptive strategies of the municipality of Amsterdam will be conducted. This involves a study of policy documents and urban development plans, including the 'Environmental Vision 2050'. The Environmental Vision 2050 provides insight into the municipality's approaches regarding urban development. By examining these documents, the project can align itself with the plans of the municipality of Amsterdam.

The legal documents will also be examined. It needs to be assessed whether the extension of the public realm within the building has legal implications, such as ownership rights and regulations concerning the layout of the public space.

Research aims

This research aims to identify and analyze strategies that can contribute to the activation of communal spaces within a residential building. A more inclusive approach to the design and management of public spaces is essential to foster a diversity of environments that accommodate various social interactions. Such an approach aims to create a vibrant and livable public sphere that supports the needs and interests of different communities.

According to Burgers and Oosterman (1992), urban public space should no longer be solely associated with participation in public life, because not all spaces and buildings within the city are equally relevant to the social fabric. Consequently, the creation of public spaces within residential complexes can serve multiple functions and serve different segments of the population without disturbing the residents.

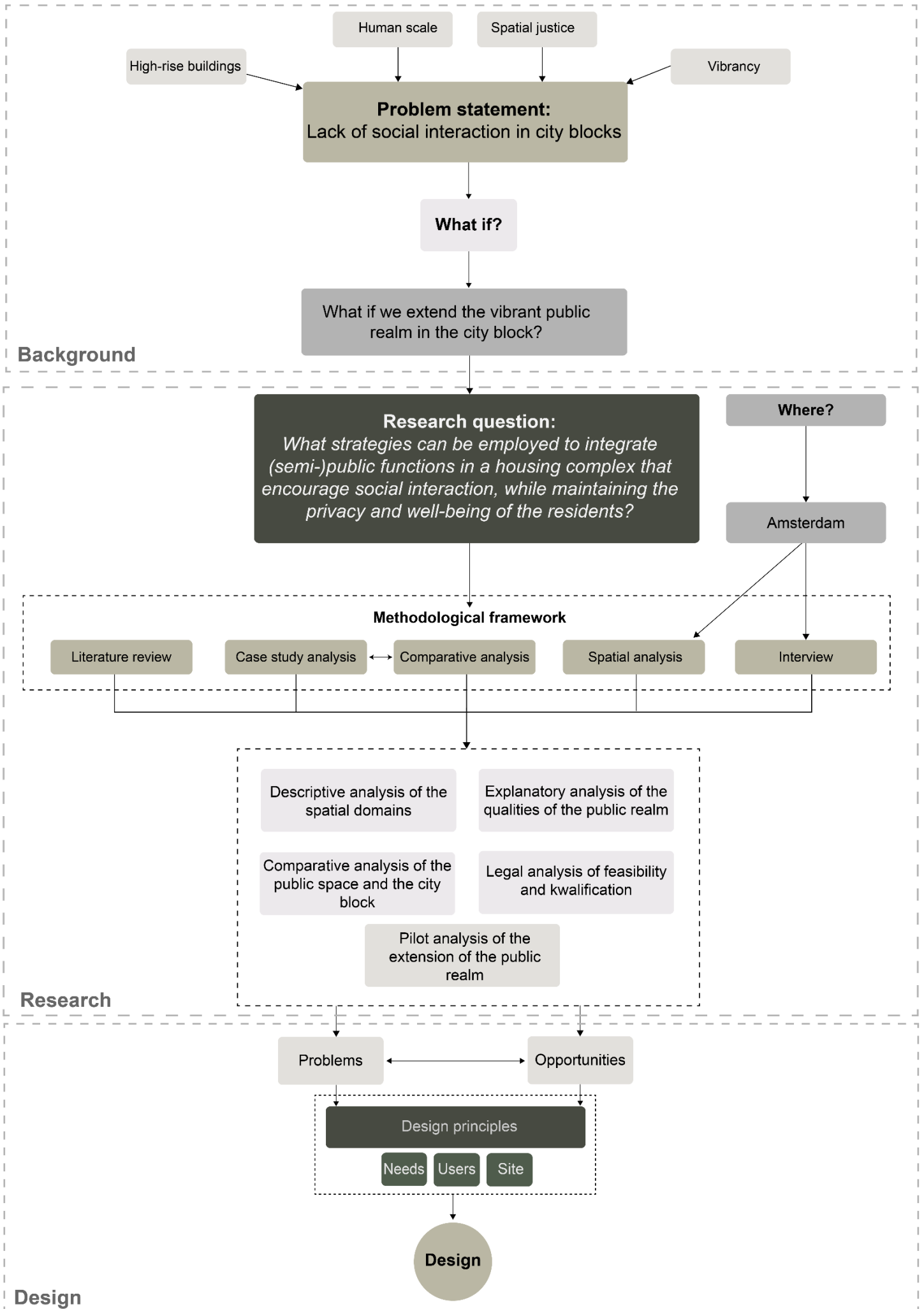
This research is a step closer to making the inside of residential blocks a part of the public space. The scale of these blocks is increasing, which creates the potential to activate the internal space. Consequently, it is essential to analyze the development of these residential blocks. This research aims to gather knowledge regarding the qualities of the public realm, so that these qualities be integrated into the project. Furthermore, this research may contribute to a renewed dynamic between private and public spaces, which will benefit social interaction within the city.

Relevance of research

Historically, public spaces and public life were closely connected, which resulted in urban planning being adapted to the demands of social interactions. However, public spaces do not automatically become vibrant (Gehl & Svarre, 2013). The municipality of Amsterdam has established goals for 2050, including the activation of various parts of the city and stimulating a mix of functions within existing residential areas (Municipality of Amsterdam, 2021). By not only focusing on the traditional use of public space but also exploring how communal areas within residential blocks can be integrated into the public space, an enrichment of the public space in Amsterdam can be achieved.

Although architects and urban planners design with the expectation of where people come together, human behavior doesn't always align with these predictions. Therefore, it is important to conduct research on public space and patterns of movement and areas where people tend to linger during the design process. Movement is influenced by location and accessibility. For example, a private area reduces interaction because it is not accessible to the public. Furthermore, the extent to which people can personalize their environment, for example through the placement of furniture, contributes to the overall vibrancy of space (Gehl & Svarre, 2013).

DIAGRAM RESEARCH PLAN
'THE VERTICAL CITY'



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