SOCIAL ACTS AT HEIGHT

Liberated from the loneliness and
social isolation in high-rise buildings

Reflection

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General

The reflection is an integral part of the graduation process, where the research conducted is reviewed in line with the corresponding architectural master's track, to assess whether the expected outcomes and results have been achieved as the student had hoped. Additionally, attention is given to the progress the student has made during the graduation period, and how these theoretical and practical skills have been applied in the final architectural product.

Reflecting on my entire graduation process, I realize that graduation was a significant challenge, from where I have learned a lot, both theoretically and practically. The research process has evoked various emotions and insights in me, making me realize that architecture and the built environment are very broad, perhaps even broader than we can ever imagine. Humans interact with the built environment daily and are constantly confronted and influenced on various scales, even if we as users may not always be aware of it.

Architecture influences many aspects of society, including the economy, politics, culture, education, technology, environment, health, and social justice. Therefore, architects, urban planners, and engineers strive to shape the built environment in a way that benefits humanity with the right expertise. However, despite the significant impact buildings can have and the opportunities and new possibilities they often provide for individuals and society as a whole, I realize that not everything created in the built environment can solve all problems as a whole, even though we as designers often have ambitions for that.

I started on my research focused on the social and mental health, including the feeling of social loneliness in residential high-rise buildings and the communities that can emerge from them. I have enjoyed conducting this research, incorporating various perspectives from high-rise residents, researchers, architects, urban planners, and I, to translating this into a new proposal for high-rise towers in dense cities, with a focus on social cohesion and living community.

Although this does not fully solve the loneliness problem actively, as this social issue extends beyond just the built environment. But I hope that with this research, I can advocate for the revision and redesign of the standard high-rise structure that we currently know in Dutch cities with a focus on the mental health of residents. This implies introducing new spaces in this urban housing typology, recognizing social interactions and the sense of belonging as primary human needs in the living environment.

1. Mastertrack and topic

The City of the Future studio offers a broad perspective on the future and how the built environment can respond to it, with a strong emphasis on integrated design. The research focuses on the growing problem of social loneliness in large cities, where anonymity is becoming more common due to densification challenges, with high-rise buildings being one of the causes. The increase in urban population has led to the need to build vertically, but often not enough attention has been paid to the social aspects of high-rise residents.

The design aligns well with the City of the Future studio because it not only aims to leverage the economic benefits of high-rise buildings to accommodate the growing urban population, but also to promote the mental health of city dwellers. Cities and buildings should not only be functional and efficiently, but also contribute to human connection and liveability.

In addition to the design studio, the studio also has the opportunity to conduct broader research into the problem and looks at multiple scales beyond just the building level. The research focuses on three different scales, examining the urban context, street level, and the interior spaces of high-rise buildings.

2. Rsearch and outcomes

How did the research influence the design / recommendations and how did the design / recommendations influence the research?

The research I conducted has made me realize that literature and practice have many similarities but also significant differences. Moreover, I learned that design does not always have a direct impact on human behaviour. Loneliness is a social problem, and each individual deals with it differently or has different needs when it comes to social well-being. Therefore, it is not always possible to fully design buildings for social cohesion to reduce social loneliness. Some people simply do not want to engage and being forced social interactions. Therefore, we cannot introduce extra narrow corridors to increase the chance of social contact, or orient apartments fully towards each other to maintain continuous visibility of our neighbours. This can backfire and cause other social problems such as privacy infringement, feelings of discomfort, and a sense of insecurity.

From practical and reference studies, I discovered that people are sometimes very capable of devising solutions and creating social connectivity and communities themselves, as long as they have this opportunity. Designers do not always need to give specific spaces a specific characteristic, function, or program beforehand to make them functional. Better yet, if we design specifically for everyone's needs, we will create buildings with overprogramming. The essence of this is to leave certain spaces 'open' to accommodate future changes or unforeseen events, or to support various users' needs. As long as these spaces have primary qualities such as flexibility, accessibility, and the right facilities, users can personalize them for their own use. If there are different groups interested in using them, this also encourages residents how to share, communicate, and respect each other within a community.

3. Research and methods

How do you assess the value of your way of working (your approach, your used methods, used methodology)?

For this research, various research methods were used, including literature review, fieldwork, case studies, interviews, and data analysis. These varied methods contributed to obtaining a wide range of results and information about the influences of high-rise structures on the human's social behaviour. They also helped identify missing architectural aspects and qualities, as well as establish the needs and desires of high-rise residents.

The methods used, especially fieldwork and (un)structured interviews, have led me as a designer to not only rely on literature, even though it consists of a wealth of qualitative or quantitative studies. Every architectural research deals with different influences, locations, urban structures, and target groups, making it essential for researchers and designers to first delve into these aspects in the best interest of the user and the city. This is best achieved by directly engaging with the user themselves.

In addition to my interest in how buildings influence human behaviour, this experience has broadened my perspective. I have never lived in a large city like Rotterdam or in a high-rise building, and thus, I have always had a very different view than high-rise residents. Conducting this research has also broadened my general knowledge and perception. As a designer in the built environment, it is essential to understand and appreciate the user's perspective so that you can respond appropriately.

Therefore, I selected four case studies for this research, which provided me with a better understanding of the experiences of high-rise residents in Rotterdam. Surveys and interviews supported and confirmed my findings, assuring me of the identified problems and some similarities between the literature and practice.

Furthermore, these methods have contributed to my overall development, such as improved communication skills and expanding my social network. I have met many friendly people and had the opportunity to have a look at their work and living environment, gaining positive experiences. Additionally, my supervisors have taught me how to approach people purposefully to obtain the right answers and how to formulate survey questions so that they actually address what I was looking for.

On the other hand, there are also areas for improvement, such as the fact that the four residential towers that were chosen for the research were relatively recently built. At this point, they still have a high-quality status and are not yet fully finished, which means that the perception of some residents is still positive. Moreover, the selected case studies pertain to specific sociological target groups, making it challenging to identify loneliness and social isolation. Additionally, the research topic is very sensitive, making it inappropriate to directly ask about someone's loneliness.

To conduct this research more qualitatively, sociological research should also be conducted on demographic data, socioeconomic statuses, cultural backgrounds, lifestyles, values, and norms. By conducting such research, an even better understanding could be gained of the behaviour, needs, and preferences of the residents.

4. Academic & Societal value

How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

For some time now, high-rise towers have been associated with poor mental health and liveability. Although this may not always be the case for everyone, high-rise structure somehow evoke limitations and anxiety among non-residents of high-rise buildings. Additionally, the topic of loneliness and social isolation in relation to the built environment has been a subject of discussion for quite some time. Various studies have shown that loneliness indeed occurs more frequently in high-rise buildings than in other typologies. However, because this social issue can be influenced by multiple factors, sociological and demographic research has mainly been conducted among high-rise residents, particularly in countries such as China, Vietnam, India, Canada, and the United States. Specific studies or literature focusing on the architectural aspects and structures in high-rise buildings, specifically aimed in the Netherlands and Rotterdam, are still lacking.

However, the high-rise structures, population, and density in Dutch cities cannot be compared with other countries. As Rotterdam is the high-rise city of the Netherlands and is rapidly developing into a high-rise city in the coming years, It is essential to propose alternatives to high-rise buildings and introduce new spaces, making more room for social connectivity among high-rise residents.

Additionally, from conversations with high-rise residents, I noticed that social loneliness is not readily recognized, and they often settle for minimal social interaction and community currently permitted; they actually ,do not know any better. Straight corridors and elevators are seen as social interaction points, and some engage in social activities outside the residential tower around the city. However, this is not equally easy or accessible for everyone. Social loneliness can affect anyone, and not everyone deals with it in the same way. Therefore, with this research, I aim to propose interventions that are accessible and reachable for everyone, offering public/collective spaces that stimulate social interaction and participation to somewhat alleviate loneliness, not only for high-rise residents but for all residents in the city.

5. Transferability value

My project can be transferred to many aspects, not only at the building level but also on various scales. Designing for social connectivity and community is essential for residents and users, regardless of the typology. Engaging in and building social relationships is a primary need. It helps individuals distinguish themselves from others, reducing anonymity and allowing them to connect more with a particular community, whether at floor level, building level, neighbourhood level, or city level. Therefore, this project has devised interventions at various scales to ensure social connectivity, allowing the architectural aspects contributing to it to be applied at different levels. Certain proposed spaces, functions, and programs can also be introduced in other residential buildings or complexes. Additionally, certain design aspects and qualities, such as good daylighting, appropriate dimensions, and greenery can be applied to make spaces more hospitable for gatherings or activities. The design principles are intended to improve the quality of high-rise buildings in particular, and to provide residents in the big city with the opportunity to feel more engaged on a smaller scale within a familiar community.

6. Translation into design

The design emerged from various perspectives derived from the conducted research. Initially, the focus was on major issues, such as the lack of social and communal spaces for the residents. These necessary functions were subsequently incorporated into my design. These functions play a significant role in promoting social interactions in a vertical manner, encouraging the development of an extensive social network among residents and visitors. For instance, the case studies revealed that while high-rise buildings with mixed-use functions provide diversity within the building, the functions do not always meet the daily needs of the residents, resulting in suboptimal use of these spaces.

The design is therefore based on the clustering and staggering of vertical residential blocks, creating new ground planes that can function as indoor or outdoor streets, making the communal spaces more accessible to residents. This fosters the development of small, close-knit communities within the tower. The clusters also disrupt the homogeneous form of standard high-rise structures, allowing for greater spatial diversity. This aspect enhances the legibility of the different residential blocks, enabling residents to better identify with their own living space.

Moreover, high-rise buildings offer the potential for pursuing new sustainable developments, such as the use of natural and sustainable building materials like wood. Although wood is currently limited in its application for high-rise buildings, it certainly holds potential for sustainable urban developments. For this design, a hybrid construction was chosen to maximize use of wood in achieving greater heights.

Finally, I am aware that my interventions entail considerable costs and that in practice, there are often budget constraints, with high-rise models typically focused on efficiency. Nevertheless, I believe that the social and mental well-being of residents and the liveability of the environment should be central. These aspects are so important that they can justify the higher costs and even provide financial benefits in the long term.

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