Motivation & Introduction

I believe that solving social problems through architecture is important. I have worked on various affordable housing design projects with the intention of addressing such issues. The Global Housing Studio places a strong emphasis on addressing critical global housing challenges through architectural interventions. This socially responsive approach to architecture deeply resonated with my academic and professional interests. Consequently, I chose to develop my graduation thesis within the framework of the Global Housing Studio, aiming to explore architecture as a tool for confronting pressing social and spatial inequalities.

Bangladesh, an emerging country in the Global South, is currently facing rapid urbanization along with severe issues related to slums. Amid these challenges, children from poor urban communities have been largely overlooked in the context of urban planning. Through my design, I sought to confront these issues and provide practical architectural solutions, using architecture as a tool to address pressing social problems.

Understanding the How and Why?

Rapid urbanization in Bangladesh has led to a massive influx of people into cities, resulting in the formation of extensive informal settlements. Within these slums, children are among the most vulnerable populations. They often face limited access to basic infrastructure, live in unsanitary environments that pose severe health risks, and are exposed to malnutrition and crime due to poverty and lack of safety. Considering these challenges, child-centered housing development emerges as a rational and necessary solution.

Children in slum areas suffer from inadequate housing conditions and a lack of safety. By designing child-centered housing typologies, architecture can offer secure and nurturing neighborhoods where parents can easily supervise their children and where children can safely play, explore, and grow. These spatial interventions have the potential to significantly enhance children's physical and mental well-being.

Therefore, the focus of my graduation project was to propose a healthy residential neighborhood and safe play environments for children living in urban poverty. My aim was to contribute to their development and help create pathways toward a better future. This research seeks to provide forgotten urban poor children with safe, high-quality living environments that acknowledge and support their potential. Recognizing that the conditions of childhood have lasting effects on adulthood, I explored a community focused child-centric housing typology to foster long-term social impact.

Response to Feedback and Personal Learning

The feedback I received throughout the design process from my research, design, and building engineering mentors significantly enriched and advanced my project. In particular, the guidance from

my research mentor deepened my understanding of safety considerations in child-centered design and emphasized the importance of creating age-specific spatial configurations. This insight added substantial depth to my approach.

Under the supervision of my design mentor, I was able to develop a stronger ability to explore diverse housing typologies and address complex design challenges. Additionally, the support from my engineering tutor enabled me to translate conceptual ideas into practical, buildable solutions. As a result of this holistic feedback, I was able to adopt a more integrated design approach and substantially enhance the quality and feasibility of my research.

Continued Learning

While I studied architecture in Korea and participated in various design competitions, I often felt that my understanding of technical aspects was limited. However, my education at TU Delft has allowed me to develop a more integrated and holistic perspective on design. Through this studio, I gained valuable experience in designing for diverse contexts such as those found in the Global South, and I had the opportunity to explore architecture from multiple dimensions.

This comprehensive learning experience has provided me with the foundation to grow as an architect who can better understand and address global challenges. It has strengthened my ability to approach architecture with greater sensitivity to cultural, environmental, and technical contexts, enabling me to engage with international issues more effectively than before.

Relationship between Graduation Topic and Master Track

My graduation topic focuses on designing a housing typology for impoverished children in Bangladesh. This project represents one of the ways in which architecture can be used to address and resolve pressing social issues, and it aligns closely with the holistic design approach emphasized in my master's track.

Through the formulation of a detailed research plan, I was able to refine the scope and direction of my study. Subsequently, by directly engaging with local communities in Bangladesh, I gained firsthand insights into the social dynamics of the problem. This experience allowed me to develop a socially informed perspective, which I later integrated into the design and engineering phases of the project.

By combining research, community interaction, architectural design, and technical implementation, I learned how to approach social issues from multiple dimensions. This process has brought me closer to achieving the integrated architectural design objectives set by the master's program, particularly in advancing a child-friendly housing approach grounded in integrated approach.

Academic and Social Value

Many people believe that urban children enjoy a higher quality of life than their rural counterparts. Paradoxically, impoverished urban children often face more severe living conditions and lower standards of living than rural children. Bangladesh has recently experienced rapid urbanization, with increasing numbers of families migrating from rural areas to cities. As a result, many poor urban children end up living in slums, where they are among the most vulnerable, directly affected by the harsh realities of slum life. These challenges not only impact their childhood but also limit their future

opportunities as they grow older.

While many studies have addressed these problems from various perspectives, there has been little discussion about solutions, especially architectural ones. Additionally, most research has focused on Dhaka's slums, even though cities like Sylhet face equally severe slum issues. Consequently, children in Sylhet's slums suffer from dangerous living conditions, which have been largely overlooked.

Therefore, this study on child-centered housing typologies for impoverished urban children aims to explore these issues in depth and propose practical solutions. Through this, the thesis demonstrates how architectural intervention can provide a meaningful approach to addressing complex social challenges and improving the living conditions of vulnerable communities.

Transferability of Results

Although this thesis focuses on the Keane Bridge area in Sylhet, its approach can be adapted to various slum areas across Bangladesh. Many countries in the Global South are currently facing similar challenges. While the solutions may not be universally applicable in a one-size-fits-all manner, with adjustments in material choices and minor design modifications based on local contexts, the proposed strategies have the potential to be implemented in slum redevelopment projects throughout the Global South.

Self-Developed Reflection Questions

- How can we design safe play environments for children within affordable housing?
- How can we realistically provide housing for low-income families while also ensuring access to educational opportunities for their children?

These were the central questions I continuously engaged with throughout my design process. Addressing the needs of low-income communities within limited resources, especially when trying to carve out child-friendly spaces in affordable housing was a challenging task. To tackle these issues, I conducted in-depth analyses of diverse case studies and synthesized their insights into an integrated design approach. Through this process, I was able to propose solutions that respond to the demand for safe and accessible environments in low-income housing, while remaining grounded in the sociocultural realities of Bangladesh.

Looking Back

I have long held a strong interest in architectural practices beyond East Asia, particularly in how design responds to different climatic and cultural contexts. Through the course of this project, I was able to engage in an environment entirely distinct from those I had previously encountered, which enabled me to cultivate a deeper understanding of diverse cultural and environmental conditions. This rare opportunity proved to be both intellectually and personally enriching.

The individuals I met in Bangladesh, along with the tutors and classmates I worked with in the studio, were instrumental in shaping this experience. Their insights and perspectives contributed significantly to my growth as an aspiring architect, both in terms of design thinking and cross-cultural awareness.

Based on these experiences, I will continue to strive to become a more international and open architect in my future career.