REFLECTION

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GLOBAL HOUSING

Introduction and Motivation
The motivation for my graduation project stems from the urgent need to address the climate-related vulnerabilities faced by rural communities in Bangladesh, particularly in Sylhet. As the country faces recurring floods and environmental instability, there is an increasing reliance on unsustainable building materials like concrete, which, while perceived as resilient, often disregard the adaptability and cultural relevance of vernacular practices. My choice of the Global Housing Studio was based on its dual emphasis on environmental context and socio-cultural relevance, values that align with my architectural aspirations and which guided the direction of my graduation project titled "SUSTAINING SYLHET: Bridging Tradition and Growth."

Research and Design Interrelation
My research process began with a deep dive into the cultural and environmental dynamics of Shonatola, Sylhet. Through literature review, case study analysis, and interviews with local residents, I identified core values and techniques embedded in Bangladeshi vernacular architecture. These insights directly shaped the conceptual framework of my design process. The reciprocal relationship between research and design became evident when field findings on local perceptions of housing resilience prompted a re-evaluation of initially proposed materials and spatial layouts.

For example, while my preliminary design approach included hybrid housing models combining traditional and modern elements, the feedback from residents about material performance during floods influenced a shift toward more integrated vernacular typologies. Conversely, the limitations encountered in spatial configurations during design iterations encouraged me to revisit and expand my research on adaptive use of stilts, elevated plinths, and natural ventilation systems.

Methodology and Process Reflection
The structure of the graduation program at TU Delft is designed to begin with a research phase, followed by a design phase informed by the insights gained. In my own process, these phases were not strictly separated, they often overlapped and informed one another, but looking back, I now realize that a more integrated and simultaneous development of research, fieldwork, and design would have benefited the project significantly.

At the start of the studio, my understanding of the context—particularly the socio-cultural and environmental realities of the Global South—was still developing. This limited perspective made it difficult to frame my research in a way that directly aligned with the design challenges ahead. As a result, much of the initial research felt disconnected from the real needs of the site and community. It lacked the specificity and grounded insight that only emerged later, once my design direction began to crystallize and the project's contextual demands became clearer. As a result, much of the initial

research lacked direction and had to be revisited during the design phase. This created extra pressure and reduced the time I could devote to developing the design itself. A more integrated approach, where research and design evolve together, would have helped me set clearer priorities and build a stronger foundation early on.

My approach combined qualitative and comparative methods: field interviews, photographic documentation, literature analysis, and case study evaluation. This mixed-method strategy proved largely effective, particularly in forming a grounded understanding of local socio-environmental dynamics.

One of the strengths of my method was its adaptability, it allowed a flexible transition between abstract research themes and tangible design solutions. The process was iterative; research informed design, and design outcomes led to refinement in research focus. Nonetheless, I recognize that an earlier integration of design ideation during the research phase could have improved the cohesion and fluency of the final proposal.

Response to Feedback and Personal Learning
Throughout the graduation process, feedback from my mentors, Nelson Mota and Ludovica Cassina, was pivotal. Early critique

emphasized the need for clarity in framing vernacular knowledge not merely as aesthetic reference but as a climate-responsive system. In response, I deepened my exploration of thermal comfort, material performance, and spatial hierarchy in traditional dwellings. Later feedback encouraged me to critically assess the scalability and structural logic of my design.

This project taught me the importance of cultural humility in design and the value of local wisdom in shaping climate-resilient architecture. It challenged my assumptions about modernity and made me more sensitive to the socio-political dimensions of architectural practice. Engaging with local narratives not only grounded the design but also broadened my perspective on sustainability and ethical responsibility.

Academic and Societal Relevance
Academically, this thesis contributes to ongoing discussions on climate-adaptive architecture and the reintegration of vernacular strategies into contemporary design. It also adds to the body of knowledge exploring how bottom-up, community-based solutions can inform resilient planning in the Global South. Societally, the project advocates for inclusive housing that respects cultural identity and empowers communities to co-create their built environment. It highlights the ethical imperative of designing **with** rather than **for** vulnerable populations.

Transferability of Results
While rooted in the specific context of Sylhet, the principles derived

from this research, modularity, participatory design, use of local materials, and responsiveness to climatic conditions, are transferable to other flood-prone or culturally sensitive regions worldwide. The strategies could be adapted in similar contexts across South and Southeast Asia, sub-Saharan Africa, or Latin America where climate adaptation and cultural preservation are critical.

Self-Developed Reflection Questions

How can vernacular architectural knowledge be systematically translated into contemporary architectural language without losing its cultural significance or environmental effectiveness?

This question arises from the challenge I encountered in bridging traditional building practices with modern design expectations. The concern is not only technical but also cultural, *how to maintain the symbolic and community-based value of vernacular housing while adapting it for new construction methods, regulations, and material availability*. I hope to explore mechanisms through which this translation process can be codified in future research or policy, possibly through guidelines, community toolkits, or adaptable building systems.

In what ways can climate-resilient housing systems developed for rural Bangladesh be adapted to support displaced populations or informal settlements in other regions facing environmental stress?

This question examines the scalability and applicability of my design research to global contexts. It acknowledges that while rooted in Sylhet, the architectural strategies, particularly those focusing on flood resilience, modular growth, and cultural adaptability, may serve as foundational models for other vulnerable or transitional housing environments around the world.

How do we balance the need for architectural innovation with the ethical imperative to preserve and respect deeply rooted cultural traditions in vulnerable communities?

This question is born from the ethical dilemmas encountered throughout my project, particularly in proposing design changes that alter traditional lifestyles or aesthetics. The reflection underscores the responsibility of architects to act not only as designers but also as cultural mediators who must tread carefully between progress and preservation. This question is born from the ethical dilemmas encountered throughout my project, particularly in proposing design changes that alter traditional lifestyles or aesthetics. The reflection underscores the responsibility of architects to act not only as designers but also as cultural mediators who must tread carefully between progress and preservation.

Looking Back

Looking back on the development of my thesis project, I'm deeply appreciative of the experiences and insights I gained throughout the process. The impressions gathered during our fieldwork had a significant influence, not only on the direction of my project, but also on me personally. They helped root the work in reality and gave weight to the design challenges I was addressing.

The design process itself was demanding, especially since I could no longer rely on the familiar references and experiences that had guided my previous academic projects. Working within the unfamiliar context of the Global South required me to shift my perspective, confront assumptions, and approach architecture through a different cultural and environmental lens.

This change was challenging but hopefully ultimately rewarding. It expanded my thinking, deepened my sense of responsibility as a designer, and fundamentally changed how I see the role of architecture in diverse global contexts. The lessons I've learned extend beyond this project and will continue to inform both my professional development and how I engage with the built environment in the future.