aE Graduation | Reflection

Marijn Soeterbroek || 4367626 || 10-05-2023

What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?

The relationship between my graduation project topic, master track, and master programme is well-aligned. My graduation project focuses on designing a passively thermally comfortable, rural, biobased dwelling for low-income self-builders. This topic directly relates to the architectural field, specifically addressing the needs of economically disadvantaged populations. In my MSc AUBS (Architecture, Urbanism, Building Sciences) programme, I am following the Architecture (Ar) track, which emphasizes sustainable and socially responsible design solutions.

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

My research played a pivotal role in shaping my design and recommendations. Through qualitative analysis of vernacular architecture in tropical regions, I derived five bioclimatic strategies as the foundation for my design. Additionally, I utilized the quantitative analysis tool developed during my research to assess my design iterations continually. This iterative process helped me refine my design to achieve optimal passive thermal comfort.

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

The value of my work methodology lies in its problem-solving approach. By identifying a global housing issue and developing five design criteria, I ensured that my final design effectively addressed the initial problem. Constantly revisiting these criteria throughout the design process allowed me to maintain focus and create a cohesive solution.

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

My graduation project holds both academic and societal value. Academically, it demonstrates the practical application of thermal tools in architectural design. Societally, it offers an affordable, sustainable housing solution for economically disadvantaged populations using innovative biobased materials. The ethical implications of my project involve providing a better quality of life for those with limited resources and promoting environmental sustainability.

5. How do you assess the value of the transferability of your project results?

The transferability of my project results lies in the application of thermal tools in the design process and the incorporation of a novel biobased material into rural contexts. While the specific design may not be universally applicable, the methodologies and principles utilized can be adapted to suit similar situations. Consequently, the project's value is transferable to contexts where passive thermal comfort, affordability, and sustainability are primary concerns.