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Studio Name: Designing for Care – Towards an Inclusive Living Environment

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Reflection

Question 1 | What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?

The selected topic of my graduation project relates to the overall Studio topic in that it moves to address one specific area (mental health and wellness) of the broader “Designing for Care in an Inclusive Environment” field. The general focus of the studio inquires into “What is the influence of new health and care perspectives on designing buildings for networks of health and care?” and to this, my personal research topic presents a more focused proposal in which the addressed “problem” can be applied towards designing and promoting community structures that are supportive of mental wellness. The problem in this case hopes to address the high demand on psychiatric services in modern-day society, by re-allocating the responsibility and burden of care from the clinical setting to a shared community infrastructure.

This in turn, is further related to the larger Master Track and overarching Master Programme of Architecture and the Built Environment, as future efforts towards solving this defined problem will include the design and integration of a building (or a complex of buildings) within an urban environment. It relates to the multiple techniques of circularity, inclusivity, and accessibility that will be investigated and applied towards realizing a future construction or renovation in an already existing and developed context.

Question 2 | How did your research influence your design/ recommendations and how did the design/ recommendations influence your research?

The research completed thus far has focused on the potentials of decentralizing psychiatric caregiving within a community setting, and more specifically, a shared natural environment. Subjects investigated within this study include universal accessibility in both built/natural settings, health promoting design techniques that assign a building the potential to provide users with a comfortable experience that supports, if not, improves their well-being, and designing with engagement techniques in mind that brings closer access to health services within a community, but also

encourages the community to get out and willingly seek health services and support in a proactive way.

This research has revealed a comprehensive guideline that has been crucial in defining all scales of this Design development process, to name a few:

- in guiding the site selection,
- in defining a possible circulation through the selected natural and under-utilized environment,
- in defining a suitable proposed building typology, and its spatial and aesthetic requirements,
- in defining the necessary rooms and supportive facilities (i.e., kitchen, bathrooms, rest area, lockers, etc.) required within each building,
- in guiding the selection of materials, textures and colours proposed within the design, etc.

In turn, the design process has itself guided several avenues of research development. Specifically, in choosing a natural site (the 5-hectare Buitenhof Park) as the project location, and in opting to design a complex of independent and interconnected pavilions throughout the landscape. As a direct result, there arose a need to investigate methods of including and promoting biodiversity, circular, renewable, and demountable materials, and practices of nature regeneration – all techniques that not only support human health but also go beyond it by addressing and sustaining the health of the flora and fauna of the architecture's surroundings.

Question 3 | How do you assess the value of your way of working (your approach, your used methods, used methodology)?

My approach thus far has been equally rewarding and challenging at times. The key 2-part decision of designing small pavilions (independent 200 m² buildings) within a vast natural landscape demands investigation at various scales at all times – the building must respond to the natural elements of the site without causing too much damage, and yet the site is malleable and must be shaped in some degree to work with the buildings strategically placed within it.

My approach originally began with an in-depth analysis of the landscape and its various needs and potentials, which informed the decision to work with the Dutch houseboat building typology as a means of placing small buildings with low-impact floating foundations within the waterlogged 'biesbosch' terrain. Key viewpoints, access to daylight, and control of winds, environmental noise, and solar glare, are several aspects which have informed the dispersal of the various buildings and their orientations within the landscape, along with the central pathway that enables visitors access to each independent function.

Once made, these decisions then called for a shift towards investigating the architecture of the houseboat itself to determine appropriate scales, climate techniques, and programmatic functions within them. By choosing a work methodology that is *small and spread out*, it becomes possible to

define a set of rules – essentially a ‘kit of parts’ – that are usable in varying applications but applied within a consistent set of constraints. This is where the key concepts of circularity, modularity, passive design, and de-mountability become crucial, and are investigated and applied from the very beginning of the design process to work together within the building, and beyond it, extending to the building’s interaction with its surrounding site.

Model-making and form studies in early phases of the design process were important to achieve this, though an exact method has not yet been discovered. Building forms are rather generic and similar in plan, material composition and scale, though it is in their three-dimensional realization that they begin to display unique and individual qualities. It is here that the inherent flexibility and multitude of approaches using a standardized kit of parts becomes apparent.

Question 4 | How do you assess the academic and societal value, scope, and implication of your graduation project, including ethical aspects?

This thesis project has, as its core tenet, the desire to design according to natural, passive, and environmentally-sound techniques that ensure future buildings strive to aid/benefit their natural surroundings, rather than causing waste and destruction in their construction and ensuing lifetime. Ethically, the project aims to respond to the well-being of various parties:

- social well-being: in promoting communal gathering and support by providing an activity-based community centre accessible to all and organized by neighbours for neighbours.
- environmental well-being: the design investigates and utilizes construction methods that involve low-carbon and renewable materials, demountable and reusable parts, and affordable construction methods. The idea being that the constructions featured within this project may be disassembled and repurposed in 50 years, leaving behind a site that is regenerated and reinvigorated. Additionally, the houseboat-type construction is responsive to the flooding predictions expected in the Netherlands, and worldwide within the next 50 years, providing a solution to a problem that has not yet become a critical issue, but is projected to be.
- architectural well-being: designing spaces that are multi-purpose and transformative, in that they can fit and serve a wide demographic of bodies, abilities, and maturities at any given time, and that they may be adapted as needed by the community, on a day-to-day or more long-term basis.

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

This project aims to present a case study of a reproducible building typology that can be applied to any given park within any given neighbourhood, with the sole requirement that it be water-based. The small pavilion ‘kit-of-parts’ may be used independently (like in this project) or inter-

dependently in various settings and ensures a self-sustaining system that promises not to overload current infrastructures.

Question 6 | How has the selection of building typology impacted upon your research and design process, and in hindsight, could this have been different?

The main factor which adds to the unique character and challenges of this particular project stands in the nature of its pavilion-like building typology. In a maritime climate like that of the Netherlands, where residents are subject to unpredictable and generally wet conditions, it might seem an impractical decision to decompose the various programs that might otherwise compose a single structure, into a series of smaller and independently functioning buildings. Going a step further, it might seem even more impractical to separate these buildings and choose not to connect them with some form of conditioned hallway.

That said, in reflecting on the research and design process that has brought me this far, I can say without hesitation, that this approach, while one of many possible solutions, is the most appropriate to meet the needs of the vast natural site, and to embody the philosophy of a health-promoting mental care centre. In designing a series of pavilions or 'follies' within an existing park landscape, this approach leaves room for playfulness and long-term evolution within the site. The small-scale buildings, intended to serve as *neighbourhood living rooms*, are designed to match a comfortable human-scale, using honest materials and construction techniques that offers control and flexibility to users regarding repairs and/or future adaptations to the internal building functions. As such, users and community members are offered a variety of choice in selecting their desired safe space, and the experience within, and all the while, are encouraged to engage with the natural environment, and the various health-promoting qualities it promises. Additionally, the approach of embedding smaller temporary buildings within an existing and widespread landscape moves to re-activate the hidden qualities of an under-valued park by encouraging greater use and foot traffic of local residents, without sacrificing the natural environment to the costs of construction. By touching lightly on the land, this approach allows the landscape to evolve and renew itself around the pavilions, as opposed to being artificially designed around the programmatic and circulatory needs of a larger structure. Greater flexibility and ownership are ensured through the design of 'home-like' spaces, and the hope is that this, in turn, will move towards fostering greater community involvement, intervention, and connection.

A final note to add – while I feel committed to the selected approach it has proven quite challenging in terms of producing presentation material. The design of multiple small buildings is an enormous amount of work for a single semester, and at times this calls for an unorthodox presentation technique, as the focus is less on the specific details of each individual building, and moreso on the general approach to designing with this specific toolbox.

Question 7 | What, if anything, is missing?

Due to the time constraints of the semester, I feel satisfied with the degree to which I was able to resolve the technical aspects of the proposed building functions and constructions, though this resulted in less time being dedicated to resolving the landscaping concept. Working with a park area of 5 hectares, there is lots of room to explore techniques for rejuvenating biodiversity and incorporating universal accessibility solutions into outdoor spaces. While these were both guiding principles in the overall design process, they have regrettably not currently been explored to their fullest potential. As such, this would entail the focus of the next phase.

As it stands, the proposed design concept addresses the universal accessibility needs of users within each building, and within the extent of the outdoor pathways connecting them, with a focus on high-functioning mental health conditions. Further elaboration would investigate anthropometric and ergonomic guidelines for all body types and abilities, and how to meet them to ensure universal comfort for all users of the space.