

Reflection Architectural Engineering Graduation Studio

“The Salt Project” by Eric Geboers

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The relationship between research and design

The research started off with a fascination for biomimetic design. By researching what this means exactly I came upon things like designing with purely local materials and harnessing the sun’s energy to grow. The idea of building with seawater came from this input. The research itself was quite broad and followed three paths: the first path was figuring out a production method for salt as a building material. The second path is logically connected to the first path and was about finding the material properties of this salt building block. Thirdly, the integration of the building material in a seawater based infrastructure in the desert was researched. At the P2 the idea was to develop several typologies made from salt that fulfilled key positions within this seawater based infrastructure.

Ultimately only one key typology was picked to be developed further: the salt building material factory, which plays a crucial role in the seawater infrastructure. In this design the three paths of research come together: the building houses the production method, utilizes the material’s properties and sits in the middle of the designed seawater infrastructure. It is meant to ‘show off’ the material by working as a public factory showcasing various possibilities of the salt material within the grand scheme of the masterplan. I feel the typology and design question came from the research in a very organic way and I’m happy with that.

The relationship between the graduation studio and the subject chosen by the student within this framework

In the studio three ‘themes’ are defined (Make, Flow, Stock) and several locations are suggested. Initially my interest was drawn to the ‘Make’ side of things and the Dutch coast piqued my interest. As I started researching it became clear quite quickly that my interest was more with the ‘Flow’ side of things and I also quickly ditched the suggested location and picked a new one more suited to the research. I do feel now looking back that the research is about both Flow and Make. On one hand it is very much about Making a material (how to create it, how to build it) and it is also very much about a Flow of energy (how to create a closed loop with no waste running on seawater and solar energy). The topic itself is not the most conventional one but I do feel it fits quite comfortably within the AE studio which by definition seems to be quite broad.

The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework

Due to the very personal fascinations are very broad scope of subjects within the graduation studio I haven’t really been able to distill a methodical line of approach of the AE studio as a whole so I will

focus instead on my personal method chosen. My method was a little 'freestyle' in the beginning, I went on a journey and didn't quite know where the journey would end, both in terms of research result or design question. At the P1 I had a few scenarios as to where I would end up based on the different possible outcomes of the research: one positive where everything would fall into place, one severely toned down (the realistic approach in case results would be less positive than expected) and an 'academic' scenario in case the results would be negative – in this case I would do assumptions that were not necessarily based on reality.

I'm happy to say now that most pieces of the puzzle fell into place and I'm basically on track for the first scenario. Whether this was a little bit lucky or to be expected I don't know.

The relationship between the project and the wider social context

A goal of mine at the beginning of the graduation studio was to deal with topics that can make a big impact and with pressing social issues. As I said I started with biomimicry and from that developed an idea of combating desertification with architecture. In the architecture itself I tried to take lessons from traditional desert architecture to deal with the harsh context and minimize climatization energy demands. I think the project itself can be seen as a vision, a quite conceptual idea of how to deal with a growing population, an increasing demand for food and housing and a planet that is facing desertification on a massive scale.