

REFLECTION

Demology

Szymon Jan Lapaj

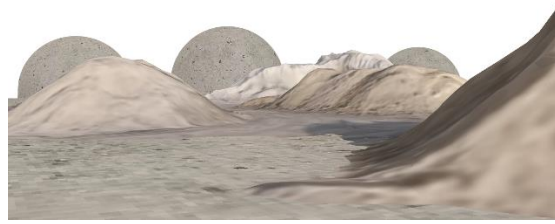
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1. Demolition has become a forming force of my graduation project. It all started from personal fascination in all the processes that appear a radical opposition. Working with all those oppositions is the most rewarding, challenging and stimulating exercise. It is vital especially in academic industry to test out reversed scenarios of things and experiment with the outcomes of it. Being immersed with construction oversaturates with additive approach. There is a pressure to add. There is a need for new. However my personal belief is constructed around the notion of obsolete in reverse, as Vladimir Nabokov calls the future.

The relation between research and design in my case is literal. At the beginning I was captivated by the concept of typology as a forming principle throughout the history of architecture. Typology is a main theme of my research paper. First step was to trace a definition of typology in history. Then I brought it to the context of Parkstad. Working with Re-use Recycling Company in Heerlen I was able to Make a list of current demolition cases within the region. It was a base of material approximation; of how much recycled concrete comes from obsolete typologies. It allow me to get a general context of recycled material landscape. I was then able to pick a site. My site is in Eyselshoven, where in a material cluster the post post-mining industry overlaps with new companies of sand extraction, steel manufacturers and other construction materials. This particular location within Parkstad offers an overview of true typological variety. Residential units are separated with natural reservoirs and agricultural lands that further mixes with old and new industries coming to the region and leaving its marks significantly. I did not wanted my design to offer yet another new typology, but rather be a fusion of existing ones. I envisioned local material industries opening up for the communities, creating cross border stimulation and insight. It is very important especially now, when the region of Parkstad is becoming more and more separated with fences and borders of material industries.



I realised typologies can coexist. Typology of material production or storage can be a visitor centre. It can offer a space for rent in order for industries to gain financial profit. By opening to local communities not only it has a chance to finally contribute to long gone local identity, but also gain a ways of marketing, new economical benefits and targets. Demology – typology from demolition – becomes a hybrid, merger of interests and creates new culture. It offers a typology constructed (compacted/rammed/compressed) from locally stored demolition materials. The dome is a symbolic take on archetypal forms. It not only uses design principles of compression based structure. It is a traditional architectural element rooted in prehistory. The variety of materials used for construction together with its open plan contribute to versatility of this structure. Its symbolism has been developing over the course of centuries. The sylouethe of the dome resembles a material pile. It blends with a sorounding material landscape.



2. Harvest is the principle both of Architectural Engineering Design Studio and the Demology. The site of Demology is overtaken by the local harvest company – Vossenbergh. It specializes in demolition waste transport, processing and recycling. The relationship of the construction principle is to build with rammed rubble, that is available on site. My research paper investigates where the demolition material is coming from. Then I found out it is harvested by Vossenbergh company. Demology arises from all the secondary materials that are being stored and there is no real architectural purpose for them. Mostly they are being downcycled for road construction. Demology offers an innovative methods of prefabricating demolition waste into architectural products and how to incorporate them within the design.

3. What I find the most stimulating within the Architectural Engineering Graduation Studio is working on real problems within present time and context. We were encouraged to collaborate with regional stakeholders on numerous occasions. I decided to take this encouragement seriously. Within this context, where there is a strong domination of material industries taking over Parkstad and not including society. I decided to stimulate this situation with a vision that creates a real regional impact. My approach is very pragmatic. It tries to tell a story, using a vocabulary of its place. It alters a reality, but this alteration is more than possible. In depth research of context and available means of architectural expression translate to a project rooted in the discourse of Harvest logic.

I applied innovative methods of 3D modelling, using a drone imagery to create point cloud model of a terrain on site. I find this method extremely helpful and valuable. It is surprising how no one among my colleagues uses it, especially among landscape students. It was introduced to me by the lecture from Ilmar Hurkkens on Robotic Landscapes: “Forming a terrain with granular material”. He is a TU Delft graduate, now working on his PhD at ETH Zurich. I believe extensive scientific dialogue between universities can contribute to exchange of techniques used for architectural or landscape expression. When it comes to materialization of my project, I am in dialogue with Toen Verkerk from Science Centre TU Delft. This collaboration allows me to use tools for upcoming physical model production. His enthusiasm about Demology allows me to exhibit my project further. The aspect of materialization (both in academia and real context) together with stakeholders involvement I find the true essence of relevance nowadays.

4. I believe in transferability of Demology towards the interplay between society and professional industry. Its lost link is something very disturbing in urban space of contemporary cities. Fenced companies, secluded industries, segregated zones, forbidden access are affecting us subconsciously. Freedom and transparency should be enhanced within architectural visions.

When it comes to transformability of scientific knowledge about demolition, it was introduced to me during my MSc 2 Studio Making when I designed and prototyped a precast concrete products from secondary aggregates. The studio ended up with presentations of our products at the European Union SeRaMCo Conference about precast concrete products, hosted by TU Delft and Henri van Bennekom. It was an official gathering of academia, concrete precast stakeholders and marketing specialists. This event was an eye opener for me, revealing the power of interdisciplinary encounter. Our products were rated by participants in terms of their true marketing potential by all the SeRaMCo participants. My proposal of Rammed Rubble was chosen for further development. Right now it is being tested towards the right cement content and its physical properties at the University of Kaiserslautern in Germany. SeRaMCo proved a vital ground for experimentation with secondary raw materials. For me the missing link was a lack of architectural projects talking strictly with demolition precast concrete language. That is the reason for the choice of graduation studio and my thematic research. I believe Demology contributes to yet final implementation phase of upcycled demolition concrete aggregate into new typology – typology from demolition. I would like to present it for SeRaMCo.

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Demology is built with elements that are possible to be multiplied within the region. Its approach can become a strategy. Domes from recycled aggregate, together with its thermal mass and open plan are extremely versatile structures. Bernard Tschumi proposed to distribute elements scattered across the whole surface of the La Villette park in 1982. Like his Folies, Demologies are predicted to be scaled up and down, moved, adjusted with openings freely, repurposed, reimaged and recreated.

5. During the process, since the very beginning, I tried to be critical towards my actions. Apart from contextual relevance, I tried to relate my work with the proposal of artists working in the field of demolition and their outlook. From the beginning I was amazed by the cultural, historical, philosophical and ethical meanings of tearing the building down and the repercussions of this action. Furthermore, as an architect, I was drawn by the potential of taking it a step further.



Cyprien Gaillard. Disquieting Landscapes

The work of French born artist Cyprien Gaillard was particularly provoking on multiple levels. He made me look into anachronism as a way of fighting nostalgia. Since then I strive for creating anachronic landscape that offers a fully new experience. Demology appears placeless, moonlike, raw, constantly changing over the course of time. It is never the same. Excavators push the granular material all around, influencing the outlook of landscape, architecture. This change is vital for the community around. They will become active participants. From now on they will be included. "The future is the obsolete in reverse" and domes of Demology stands for that. They resemble medieval monument structures. The visitors of Demology are overwhelmed by the theater of materiality. Everything around is made from particles, that the origin becomes vague at certain point. You are not able to distinguish what is primary and what is secondary. Rubble aggregates sneaks into the social consciousness and gain its presence. Entire Demology composition recalls XVIII century gardens and parks of ruins all the way to classical archeological site of Stonehenge.



As a last part of graduation I would like to push boundary of architectural model with its rawness and expressionism. Demology reminds me of models made by Peter Zumthor for Venice Biennale. I am concerned about the creating overall experience for both workers of Vossenberg company as well as the visitors. I find the potential in textures, properties, colours of recycled aggregate and how it becomes a main actor. Also the fusion of low tech landscape in contrast with high tech interior has to be underlined.



Peter Zumthor model for Venice Biennale