REFLECTION PAPER

Liminality of s p a c e:

reconnecting materiality and embodiment in the design of the swimming pool.

The director Andrei Tarkovsky once said, "The image is not a certain meaning, expressed by director, but an entire world reflected in a drop of water." Different memories, experiences, and imaginary world influence perception. Therefore, interpretations of a drop of water can differ significantly. The project is a finite work, which left the space for its interpretation; experiencing liminality in various individual ways due to one's movement through the building and the site.

Manifesto

Kenneth Frampton, in a book: "Studies in Tectonic Culture" argues that tectonic and tactility in a modernistic turn was omitted. The author formulated the idea that emphasised the importance of tectonics, together with topos (the site) and typos (the meaning). In a modern discourse of architecture, not only was tectonic to be ignored, the importance of embodiment as an essential factor in designing was equally overlooked. The focus put on the form and function was so strong that architects seem to forget about the articulation of the senses and a human body in architecture, which undoubtedly are the base of experience of being in the world, and interaction with that world. Moreover, ignoring the fact that people vary considerably: have different memories, experiences, bodies, needs, and imaginary world, they were designing unified spaces, where everyone is the same and lives the same way. The project stays in the opposition to that approach bringing back the importance of tectonic, topos, and typos emphasises how one experiences space. The Public Baths would be a place where time is emphasised with its agentship, and people are exposed to a variety of experiences in this space. The place, where his or her sense of subjectivity is strengthened. Space acts on the subject, and the subject interprets it with all his existential experiences, memories, and the world of imagination. Actor of water emphasises a passing time, reflects the space, atmospheres, thoughts[1]; tectonics empowers the experiencing reconnecting materiality and embodiment.

In a time of pending obsolescence and a novelty regime, an issue of the lack of identity that haunts modern spaces came forth. Even though in the past re-use of materials or objects was present, today it is getting more popular and gained theoretical background. Not without reason, the topic of Mies van der Rohe prize 2019 was "What's old, what's new". The question, posed by the chair: "what is worth keeping?", and a research question: "what has a potential to be used as a spolia?" refer to the same problem in a current discourse in the field of architecture. Approaching the topic *of spolia* as the cultural continuum phenomena results in a deeper understanding of context and its relations thus could be a good remedy in the space with an utter lack of genius loci. Gottfried Semper, in the Stoffwechsel term, emphasised the cultural continuum in the material culture providing proof that nothing is an invention ex novo, and a spolia itself is not as obvious as division into old and new objects. Architectural language and tectonic developed on this base and on an appreciation of human senses create a very strong spatial identity of a place.

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[1] inspired by Tarkovsky. A,; "Water is a substance that is very much alive, that changes all the time, that moves. It is a very cinematic element, and through it, I have tried to express the idea of passing time. Water conveys depth, a sense of transformation and reflection. It is one of the most beautiful things in the world, and I cannot imagine a film without water."

Design and its Relation to the Research

Belgian backyards create very original atmosphere; jumping extensions of introverted sheds together with their ad hoc character, the impression of temporality, narrow and shabby spaces give those backyards a peculiar authenticity. The designing building composes into this kind of unusual setting in the shape of a low horizontal elegant building. Two energies that act upon the design — the described character of backyards, and nature on the opposite side — influence the building. The project does not try to alter the spirit of the place. Interacting with the ambiguous topos, it accepts and deliberately emphasised those contradictions; space of the noble body culture as opposed to the playground in a sunken plaza with colourful lines of pitches and graffiti. Space of respite, which aims to have an emancipatory quality, has been composed into the popular culture. Far from the modern sterility, the building is an intervention in the urban fabric, which was made with an appreciation of the complexity of context — an urban spoliation.

In my research, I focused on materiality (material culture) in connection to practice, time, and embodiment. An extensive survey about the Belgian Blue Limestone helped me to understand the material prevailing in Belgium more. It is very durable and presents a high resistance to the water, harsh weather conditions, and different temperatures. 340 million years ago, a fossil of marine organisms in a tropical sea, entrenched in the microcrystalline mass, was transformed in a process of sedimentation into the Belgian Blue Limestone. Truly fascinating and influential for my project was the limestone surface with visible crinoids; a membrane between the world of the living and the ghosts; a spolia of the past world. This very characteristic feature that those organisms are visible in the surface was incorporated into the design of the terrazzo floor and a swimming pool shell. Therefore, in a poetic way, the submersion in the swimming pool gives those marine animals back to life and guests an access to that prehistoric world. Nevertheless, the spolia has been introduced to the design on a few different levels that can be qualified in the tripartite division; re-use elements (neighbouring buildings structure, lintels, windowsills, sinks made of limestone pots, old metal taps, limestone steps, and small pink tiles), recycled materials (concrete production from limestone waste and by-products of exploitation) materials that are taking material from nature (crinoids).

Inspired by Roman and Turkish traditional baths, a sequence of cold, warm and hot rooms is to be designed in the interior. Here it is worth mentioning that Turkish hammam has totally reversed sequence of rooms than the Roman baths. It starts in a warm room, then a hot room, after which they wash in cold water. After performing a full body wash bathers finally go to the cooling-room for a period of relaxation. Therefore, it is a temperature differentiation that measures time, catharsis, and the meaning of space. In a public bath, the corridors next to semi-open rooms and hammam enable guests to experience changing temperatures during the transition; experience the liminality. Occasionally, the view of the swimming pool is introduced during that passage. In the swimming pool the focus was put on how users experience the space; how they experience the passage from an inside aisle through a swimming pool to an outside garden; how they experience the sequence of gradually lighten and darken rooms, how he or she experiences the transition through different temperature: are they Roman or Turkish in a taste?

The Research and Methodology

Deep analysis of the prevailing material, Belgian Blue Limestone, on the base of a material biography has been conducted. Both, Marxism and phenomenology positions on material culture were incorporated, simultaneously limiting the structuralist and semiotic perspective. The aim was to understand the surveyed material fully, and answer a research question: what has the potential to be a spolia? Therefore, the research was carried out on the two levels that the findings can interact with each other, hence allowing a deeper analysis. Both parts gather the data that could help to understand the material properties, tectonic, weight, sound, haptic qualities, the relationship between the body and material, psycho-psychical impact, and historical and social values it has. Nevertheless, when the first part puts focus on the material origin, sedimentation, and extraction, the second surveys the processing, and the construction technique.

SEDIMENTATION | EXTRACTION
In the first part, I was collecting the data on sedimentation, and extraction of local material, the Belgian Blue Limestone. To experience the situated craftsman practice, I visited the quarry (Carrieres du Hainaut) and the Documentation Centre of Blue Limestone (Le centre de documentation de la pierre bleue Durée) in Soignies. Not only did I purchase precious samples from that trip but also, using a comparison, I learned to recognise a particular fossil animal type inside the surface of a limestone sample.

DETAILS | CONSTRUCTION
In the second part, analyses through a case study — elements made from the Blue Belgian Limestone — were conducted by analytic writing. Photographing and phenomenological evaluation were to help the investigation of characteristic details and construction technique. Gathering all those data helped in understanding a limestone building tradition and enabled to use that knowledge in the later design phase. Because it is a precious material, Rotor — actor available in the surveyed site of Anderlecht — would always take limestone elements during their inspection. Therefore, it has a high potential to be re-used as a spolia. Taking that into consideration, and thinking about the building as a repository of spolias, I decided that making a bricolage of elevations (plinths, portals) as a plaster cast (model making) would be a great tool. That could help to answer the research question: “What has a potential to be used as a spolia?”, and to emphasise limestone as a spolia in-se and in-re. Plaster casting would help to find out the construction technology logic. It also helps to understand the proportion and sizes, in a very haptic way, what could influence the design as well (thinking by making). In that part of the research, I also visited a professional stonemason from Delft, who helped me to prepare additional samples of limestone. During that visit, I recognise this kind of enterprise as a great and affordable sources of materials waiting for re-uses — spolias.

The cultural logic of the limestone building technique was transformed to the project to ensure the cultural continuity. Characteristic limestone elements were implemented into the concrete masonry walls. The knowledge gained in the research were also used in a different material — concrete. In the limestone, a straight correlation can be seen between extraction technique to processing and even ornamentation. In the past, a chisel was used to extract the natural stone. Then, that knowledge was transformed to different tools. Quarryman using a pneumatic drill bores holes to split a massive block. In material, parallel concave holes, traces of that process, are visible. That cultural logic is then transformed to finishing touch of Belgian Blue Limestone. Can it be either a surface sawing in the right direction, by special equipment or a surface dressed by axe in a way to acquire the stripes ornamentation characteristic for stone. In that way, a reminiscence of the extraction process and a human agency is visible in a product on all stages. In the project that typical stripes ornamentation was implemented to the concrete beams exposed in the floor.

Fig. 1 | Samples of Belgian Blue Limestone.

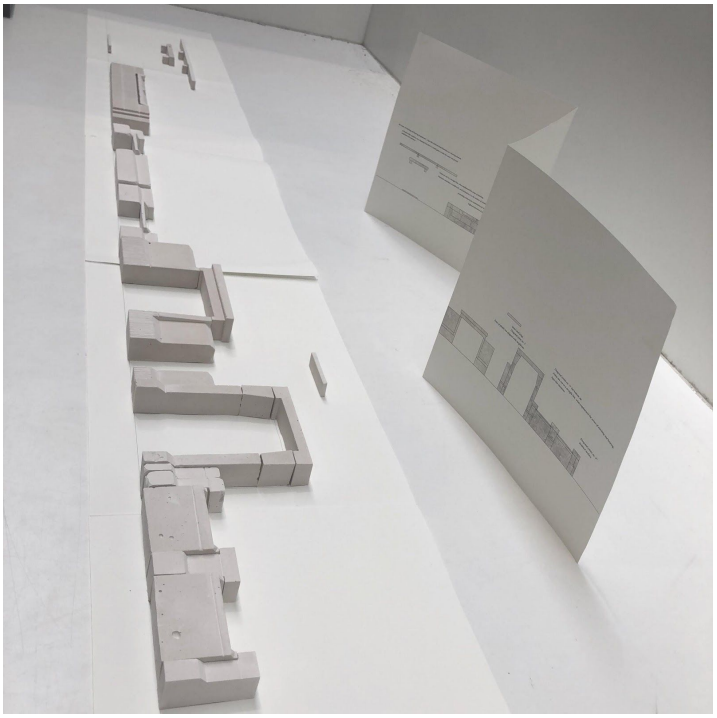

Fig. 2 | Bricolage of spolias prepared in the first part of the research (plaster cast).

Fig. 3 and 4 | Swimming pool space.

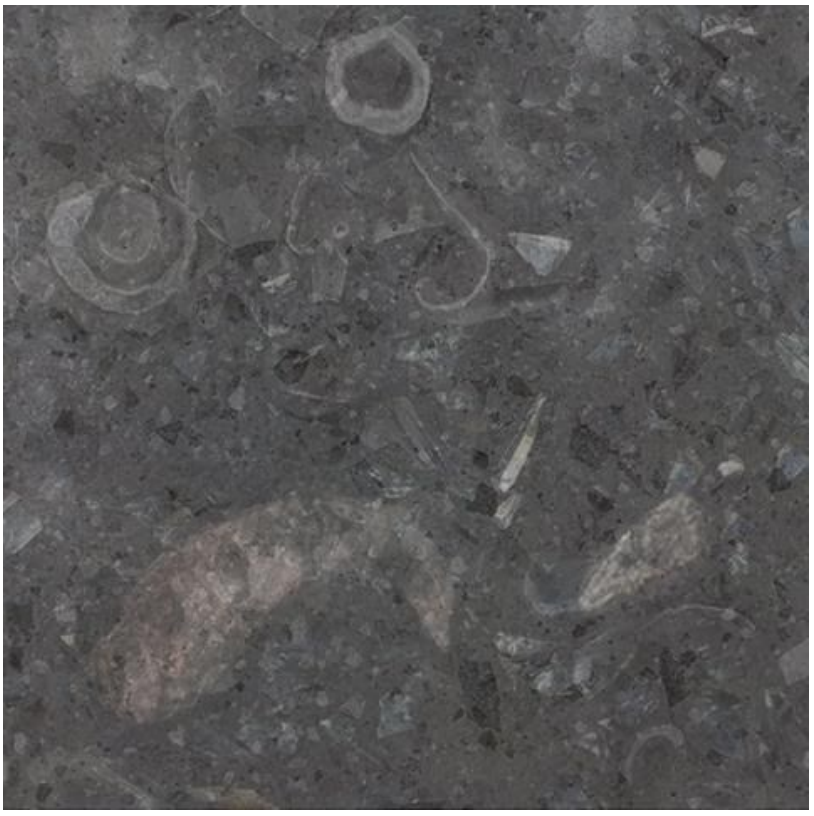

Fig. 5 | Visualisation of terrazzo with RE-USED OFFCUTS OF LIMESTONE with big crinoids visible in the surface. The crinoids were cut out from the limestone block, and implemented.

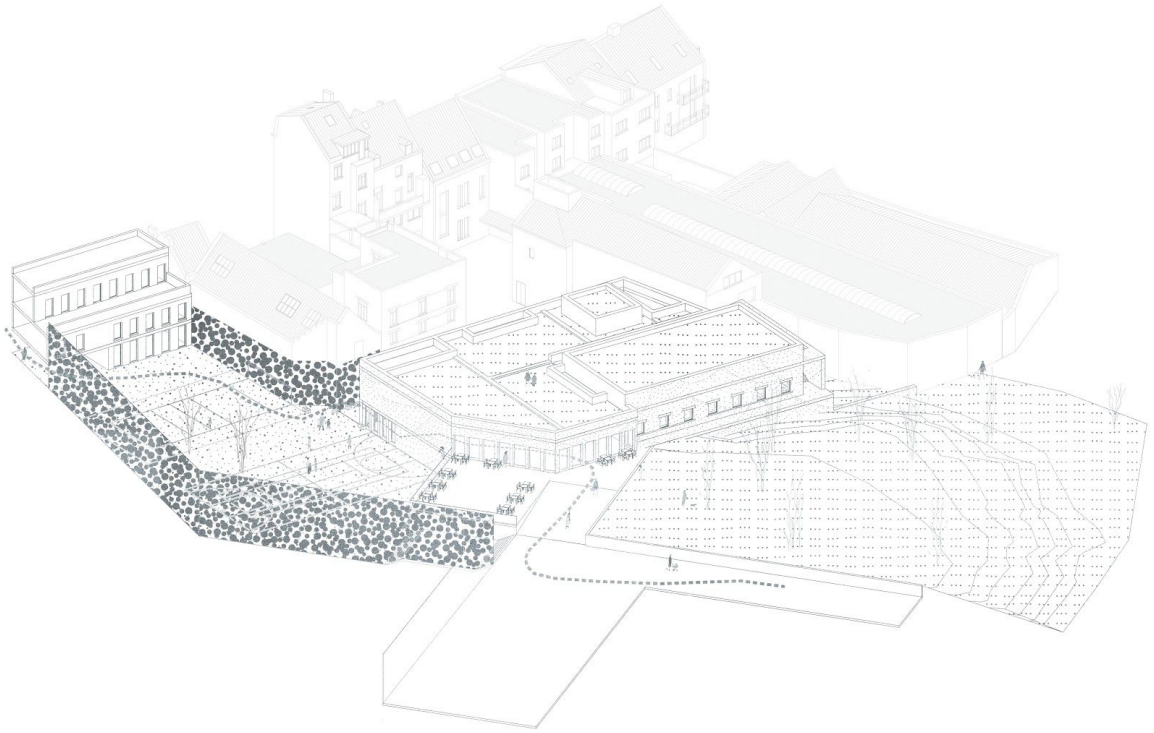

Fig. 6 | Swimming pool space.