



Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Personal information	
Name	Barten Jip Verschoor
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Studio		
Name / Theme	Urban Architecture	
Main mentor	Elsbeth Ronner	Architecture tutor
Second mentor	Chiara Pradel	Research tutor
Third mentor	Jos Lafeber	Building technology tutor
Argumentation of choice of the studio	Having followed both the second rendition of the Living City elective and the first rendition of the Material Lives MSc 2 studio, I had familiarized myself with some of the methods and the people behind Urban Architecture in the first year of my masters program. Most importantly, it is the critical and sensitive approach towards both the material and immaterial context of a given project that aligns closely with my personal beliefs. Furthermore the choice of a project site that is close enough to revisit repeatedly throughout the year, which allows for the aforementioned sensitivity, proved to be another important factor in my decision.	

Graduation project	
Title of the graduation project	title: Reconfiguring productivity subtitle: Towards a non-extractive building practice
Goal	
Location:	Lageweg 392, Antwerp, Belgium
The posed problem,	<p>The site of the Lageweg is situated on the meeting point of the Twentieth century belt of Antwerp and the formerly independent municipality of Hoboken. On the edge of the fine-grained urban fabric of Hoboken sits a large post-industrial plot; largely abandoned in recent years and awaiting its redevelopment as part of the cities' ongoing densification. In the concatenation of halls and workshops that steadily grew from the early 20th century onwards, different metallurgical industries produced a multitude of products, ranging from oil barrels for the neighbouring petroleum industry, to car rims for German manufacturers and to beautifully decorated tin boxes which have today become sought after collectables.</p> <p>The physical remnants of these industrial processes tell a story of a quickly industrialised country. A development that relied heavily on exploitative labour conditions and extractive practices both in Belgium and in its colonies. Yet, one that simultaneously resulted in a rapid growth of Hoboken's population and the emergence of a vivid community life, that subsequently suffered notably when the companies moved their production elsewhere to lower income countries (P1).</p> <p>How does one imagine a new future among these remnants of a past productivity? One in which a polluting extractive industry no longer has a place, but in which its productive nature is still valued. One in which a shared life of harsh working conditions no longer forms the basis of community life, but in which the site gains a certain porosity, where public space is given and where work, dwelling, education and play coexist as a starting point for a new community life.</p>

<p>research questions and</p>	<p>Relating to the above mentioned and starting from an interest in an ambition for a non-extractive architecture, in which the re-use of both buildings and building elements and a highly local material sourcing is key, the research focus lies in the production of our buildings and the actors and materials involved. More specifically, the research aim is to understand and create insight in the ways in which both construction and demolition knowledge are transferred in contemporary Belgian practice.</p> <p>Where and how does one learn how to build/demolish? What values are embedded in these moments of learning? Who teaches? Who learns? What is the agency of the material in these moments of learning?</p> <p>The aim is to observe and engage (through fieldwork) with both institutionalised learning and in- practice learning, to look at both the school and the construction site.</p>
<p>design assignment in which these result.</p>	<p>The proposed program is that of a vocational school, focussed on constructing in a non-extractive manner. Strongly embracing and simultaneously contrasting the sites former use. A place to share knowledge on and learn how to re-use, how to repair, and how to build with reclaimed building materials alongside regeneratively grown bio-based materials and earth. A supportive program is proposed in the form of a neighbourhood library that can both support the school and cater to a wider public.</p> <p>As a material starting point, the proposed project starts from the reuse of two existing buildings. Simultaneously, the ambition is to regard the site as a material garden, and specifically the halls which are proposed to be disassembled in our masterplan as harvesting grounds from which the main construction materials for the project can be sourced. Additionally, an exploration into the possibilities of the on-site cultivation of construction materials that can contribute to the decontamination of the heavily contaminated soil, is proposed.</p> <p>The two existing buildings that will house the program are situated at the heart of the post-industrial plot, bordering the thicket of the blikvelden. The structures were respectively constructed in 1924 and in 1960 for the company of Schippers Podevyn, that manufactured castings and hot pressings in both ferrous and nonferrous metals. The company was later bought by the Germany based Lemmerz company in 1987, leading to a change in direction with the manufacturing of aluminium car rims as its main output.</p> <p>Apart from the fact that the two buildings differ greatly in a material sense, both embodying the industrial construction method of their times, the two structures are characterised by their strong repetition, large open spans and sawtooth roofs, which provide ample natural light.</p>

Process

Method description

The collective work from the P1 exists of seven distinct thematic researches that are all grounded in on-site fieldwork investigations and which formed a basis for a shared understanding of the site.

Our group, consisting of Bérénice Demiddeleer, Lance Schroten, Merle Schmidt-Jürgensen and myself, worked with the theme of 'Find the river', which was later converted to 'A tidal river'. In this collective research, we were invited to meander through Hoboken and its adjacent territories, exploring its material, ecological and historical landscapes. In doing so, and through the creation of *travelogues* and the employment of *archival material*, *oral histories*, and *literature*, the research led us to a collection of five (hi)stories that had proven crucial in the historical development of Hoboken. These (hi)stories are viewed through the lens of a tidal river, providing a series of tides that bring in and take out, yet always leaving both material and immaterial remnants behind. All of the five tides take place both on/in Hoboken's soil, yet with far reaching implications, thus presenting themselves as localised global histories.

Departing from this research, we sought for a way to communicate it in both temporal and spatial scales in the P1 exhibition. In this search, our conclusive thought was that movement had become an integral part of our story and should therefore be at the core of the exhibition piece. Thus, we decided to re-enact the movements, presented as tides, ourselves, bringing in and taking out, whilst leaving what remains behind. Looking for a method to communicate beyond the spatial constraints of the map (on which the play takes place), it was decided to present a selection of the archival material that was found in the research alongside the play.

Following the P1 exhibition, new groups were formed for the design of the masterplan. Together with Sacha Oberski and Richard Múdry, we devised of a masterplan through the detailed study of the existing, again using *archival material* and a series of *site visits* to better understand the site and its challenges. The main ambitions of the plan can be summarised as (1); Work with the Lageweg and critically look at the potential of a second face and the widening of the profile, thereby 'completing' the street, (2); Opening up the concatenation of industrial halls through the disassembly of the structures that were least promising for a future use, or too severely damaged to re-use. Thereby creating a certain porosity in the large plot and providing new public space alongside the re-used existing buildings and some new buildings, and (3); Achieve a large surface of unpaved area through the formation of a linear park between the Lageweg and the train-tracks on the north of the site, thereby responding to the flood risks whilst also providing public green for the neighbourhood.

Simultaneously, I worked on my ongoing research on construction and demolition knowledge in contemporary Belgian practice. For this, I visited a vocational school, a demolition site and a construction site, observing practices and moments from which I can learn in my design process. These visits were recorded through *photography* and *semi structured interviews*. I intent to deepen this research by hopefully revisiting some of the sites whilst also visiting other cases. Additionally, I intend to study and collect cases of vocational schools with a specific focus on the teaching practice in relation to the architecture.

Literature and general practical references

Literature:

Ferro, S. (2024). ARCHITECTURE FROM BELOW: An Anthology.

This collection of ten essays by Sérgio Ferro strengthened my belief that the process of building and the people involved are often overlooked in architectural discourse. In that sense, it shaped the direction of the personal research.

Helle, A., & Lenherr, B. (2022). *Beyond concrete.: Strategien Für Eine Postfossile Baukultur Strategies for a Post-fossile Baukultur.*

As the title suggests, the book presents a multitude of strategies through which one could move towards a post-fossil construction industry and culture. It has helped me think on this matter in a more tangible manner.

Lefebvre, P., Neuwels, J., & Possoz, J.-P. (2021). *Penser-faire: quand les architectes se mêlent de construction ; Thinking-making : when architects engage in construction.*

Before switching direction, the research started with a focus on architectural practices that are directly engaged in construction, thereby attempting to 'practice differently'. This book by Lefebvre helped me to situate this phenomenon in a wider context.

Lefebvre, P. (2018). *BC Architects & Studies. The Act of Building. Biennale Architettura 2018.*

The act of building was written for the Architecture Biennale in Venice and presents the work that BC has undertaken as a studio along the framework of the tools that are frequently used in their practice. Among others, it helped me to better understand the challenges that might present themselves when working with labour intensive construction methods and materials such as unfired bricks, rammed earth and hempcrete.

Material Cultures. (2022). *Material reform: Building for a Post-carbon Future.*

This small book by the Material Cultures collective serves as a dictionary of the things that are critical to understand when looking at our contemporary construction processes. Although UK specific, much of the content is applicable to a wider context.

non-extractive architecture(s), a directory of design without depletion. (n.d.). <https://directory.nonextractivearchitecture.org/>

As defined by the initiators of the platform, "*Non-Extractive Architecture is a form of architectural practice which considers the full chain of building's consequences, taking all possible externalities into consideration*". Despite the fact that such a statement may seem to all-encompassing to work with, the directory offers a myriad of practices with a non-extractive approach that has inspired me throughout this process.

Pietsch, S., Schreurs, E., Mandias, S., & Broekhuizen, D. (2018). *The new Craft School.* Japsam.

The new craft school presents case studies of different vocational schools and their role in society. Apart from the fact that it shows some interesting cases, it offers ways to think about my proposed program and what role it could play in the neighbourhood.

Visits:

Don Bosco Hoboken, vocational school.

Academic Hoboken, demolition site.

Woodstock BC, construction site.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

As part of the rich variety of studios that the master track of architecture offers, the Urban Architecture studio specifically studies cases in which the conventional tools of urbanism might fall short, and where an architectural project can be seen as a starting point in the re-design of a larger given site. The ex-industrial site of this year's studio is a good example of a case in which a sensitive approach that walks the line between architecture and urbanism, where the private, public and collective realms are treated with a similar care, can yield interesting and novel results. The main questions as posed by the studio are as follows; "How to make Low Town last as a downtown? How can we envision an urban district that incorporates, rather than displaces, the social networks and material spaces of emerging creative industries?" In our collective approach to the masterplan, the design deals directly with these questions on an almost architectural level. The plan incorporates nearly all current inhabitants whilst simultaneously creating a certain porosity in the built up fabric of the existing industrial architecture. Thereby providing new public space alongside the reuse of the remaining buildings and some new buildings. The proposed educational program of the vocational school at the heart of the site is key in a series of public programming such as a theatre and library that, alongside the introduction of spaces for work and dwelling, return the site to the city and her inhabitants.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework?

The larger question of what to do with the physical remains of the industrial production in our cities is one that we have been trying to answer as soon as we started to push these industries further outside of our cities, countries and continents. In an effort to clean up our cities and in a search for lower production costs that could be found elsewhere, the true consequences of these extractive practices to the local populations and natural landscapes (both today and in the future) have become invisible to us, the western consumer.

Through the proposal of the vocational school, a scheme is offered through which we can reconsider what production in our cities could entail and how education might play a role in the attainment of a wider collective support of this culture. One in which our dependence on hidden extraction is minimised and where a culture of repair, reuse and the sourcing of local material becomes the starting point.