Reflection

I| *What is the relation between your graduation project topic and your master programme?*

I was drawn to the urban architecture program because of its sensitive approach to the issue of redevelopment within urban contexts, with particular emphasis on integrating green spaces into the city. I'm keen on preserving the high ecological value of greenery and incorporating it into the industrial area. However, does this mean relocating the industrial zone? And if so, won't this lead to encroaching on green spaces at the city's edges, potentially causing biodiversity loss? While the industrial area is visibly aging, is it truly worthless and ripe for demolition?

Redevelopment and gentrification impact urban dynamics, where the loss of certain industrial spaces has contributed to the migration of educated individuals and a decline in economic potential. This informs my approach to the redevelopment project concerning Friche Josaphat, recognizing the complexity of preserving industrial areas while addressing housing shortages.

The proposed urban plan aims to retain and repurpose existing industrial buildings to address housing needs, balancing preservation with development. My focus lies in sensitively reimagining these industrial structures to reveal their inherent value and contribute to sustainable urban design.

II|*How did your research influence your design/recommendations and how did the design/recommendations influence your research?*

Finding Patterns
I believe that considering the needs of the people for whom you're building enhances the longevity of buildings. To better understand the community, I contributed to An Ode to Ordinary Life, a collaborative study examining the residents of Schaerbeek municipality. Through observation, the research explores community dynamics, public space usage, and the influence of context on daily life through photography and finding patterns. It highlights the subjective nature of belonging as a key factor in individual well-being and examines the relationship between identity and place, emphasizing the diverse communities within Brussels. This method led to a broad scope in my personal research.

Catalogue Material Research and Interviews
To inform design decisions for my project and the broader urban plan, I delved into material exploration and conducted interviews within the industrial area. Engaging in conversations with locals proved crucial in understanding their perspectives on the buildings' significance. However, I discovered that many users attached little value to the structures, primarily due to rental constraints or impending relocations, leading to neglect and dissatisfaction.

Reflecting on these insights prompted me to question whether I had romanticized the industrial area. If users themselves didn't value the buildings, what purpose would preservation serve? I grappled with the dilemma of choosing between structures with high social value for redevelopment or those with lower value for significant upgrades.
Then I identified a core theme centered on observing how people interact with and personalize the built environment, informing my subsequent research trajectory following the P2 reassessment.

Drawings
The research progressed with a focus on both the material composition and historical context, achieved through meticulous handmade drawings depicting the current state of the area. This approach provided valuable insights into the structural integrity of the buildings and their conditions. Simultaneously, historical research involved analyzing satellite imagery to understand the architectural layout. However, while this method offered clarity on the physical aspects, it didn't reveal significant historical value, prompting introspection about idealizing the area unnecessarily. Despite this, I extracted one notable element: an old concrete wall used for material storage, which became pivotal in my design concept.

I also encountered challenges in accurately measuring buildings for floor plans, often having to estimate dimensions due to limited access. This necessitated ongoing adjustments to ensure precision.

As the project progressed, detailing every building to the same level became impractical. Therefore, I made the decision to focus on one building for more comprehensive exploration, allowing for a more efficient and focused design process.

Incorporating Waste into Design
The essence of the project lies in exploring the nuances between existing and new construction. In pursuit of this, I delved into the realm of waste streams, aiming to harness discarded materials for my building. The idea was to experiment with waste materials, potentially creating a new sustainable building material. However, this endeavor proved to be overly technical and lacked the creative essence of design. Despite its limited practical application, it inspired me to focus on utilizing construction waste from buildings slated for demolition within our master plan. Thorough documentation of these buildings enabled me to identify potential materials for repurposing. Making the catalogue served its purpose by revealing the value people attribute to different buildings and the materials comprising them.

Additionally, I explored material banks such as Rova (on-site), Rotor, and In Limbo, which salvage materials destined for incineration, aligning with the ethos of sustainability.

Literature suggests a different approach from conventional methods. Instead of designing floor plans first and then choosing materials, I learned the value of assessing available materials first and designing accordingly. This shift challenged my usual workflow

Exploration of Micro Public Material Depots

The exploration of waste streams and visits to material banks played a pivotal role in shaping the function of my building. Rotor, an architectural firm doubling as a materials bank, initially seemed like an ideal match, yet I felt it lacked a crucial social aspect. Upon my tutor's recommendation, I listened to a podcast about micro public material depots, leading me to discover In Limbo, located in Schaarbeek. Here, materials are stored and sold at a very low cost to the social-cultural sector. During an interview with the facility manager, I learned that the sustainability of this concept was less than ideal. Many materials were used only once, often for art installations, rendering them unusable afterward. The focus here was on extending the material's life for a single use.

Contrastingly, Rova, situated in the industrial area, prioritizes longer product lifespans through repair and recycling, aiming to restore items to near-new condition. Additionally, I noticed the high social value within Rova, evidenced by the strong sense of community among its workers. Their communal outdoor space and gatherings stood in stark contrast to other functions within the industrial area, highlighting the importance of social interaction. This realization inspired me to envision a multifunctional design incorporating social, office, and materials bank aspects.

Moreover, this exploration led me to question the core purpose of my project. Should I aim to extend materials' lives by one use, or return them to their original raw state? What defines sustainability for me: longevity or minimizing emissions with a shorter lifespan? Perhaps establishing a concrete recycling facility would be a more sustainable endeavor. These considerations underscored the need to redefine my project's objectives and align them with my sustainability ethos.

Target audience

In conceptualizing the material bank, I delved into considerations regarding the individuals I aim to engage with through my project. I reached out to Chiara Pradel, a Ph.D. researcher specializing in material gardens—a fusion of industry and material production representation. Initially contemplating a facility for returning materials to their raw state, I ultimately gravitated towards establishing a material bank akin to Rotor, housing salvaged materials from demolition sites, offering them a chance for a new lease on life.

While we can't predict the future uses of these materials, providing them with an additional lifespan is inherently more sustainable than their current fate. Crucially, my project aims to prompt reflection on consumption behaviors and foster greater awareness among individuals. In my view, achieving this is more feasible through the establishment of a material bank with a retail-like concept, as opposed to a factory in the neighborhood.

I believe that appealing to the DIY community, prevalent in Belgium, is key. By providing accessible resources for sustainable home improvement, individuals can make more conscious choices about their consumption habits. Furthermore, engaging with materials directly fosters a deeper connection with their origins and encourages environmentally responsible decision-making. Thus, my target audience comprises DIY enthusiasts seeking to make eco-conscious choices for their homes while fostering a greater appreciation for materials and their origins.

Navigating Sustainability Challenges

Determining what constitutes sustainability in material selection proved to be a significant challenge for me. Despite my commitment to sustainable practices in function, the design process posed difficulties as I aimed to create using solely recycled materials. This aspiration clashed with the fresh and high-quality image I envisioned, leading to constraints imposed by the existing building and the dimensions of recycled materials sourced from the industrial zone and other material banks.

I ultimately concluded that creating a new building using partially recycled materials would afford me greater flexibility and creative freedom. This realization breathed new life into my design process, allowing me to break free from the constraints of recycled products and explore a wider array of possibilities.I came to understand that the essence of my narrative lies in embracing nuances—the harmonious integration of the old with the new. This realization liberated me from my design paralysis, enabling me to approach sustainability with a more holistic perspective while remaining true to my vision.

Embracing Nuance and Complexity

I've come to realize that the longer you spend on a project, the more nuanced it becomes. There's ample time for doubt, questioning assumptions, hearing different perspectives, and exploring numerous tangents. The freedom afforded in the studio ultimately allowed me to choose a topic I wholeheartedly believe in, but the initial selection was challenging.

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

I'm pleased with the cohesion of my process and methodologies. In particular, researching through pattern recognition provided a broad understanding of the context while allowing me to focus on details—an approach that aligns with my strengths.

Drawings and interviews were essential to my research and closely connected to my design concept. The detailed drawings reflect my interests, while interviews allowed me to engage with people and ensure their perspectives were heard.

I recall a moment when each tutor assigned similar tasks—research, design, and building technology—on the same day, reinforcing a clear and logical direction. While the initial emphasis was on research, I believe it ultimately contributed to a well-integrated design.

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

While I may not have created something groundbreaking in terms of sustainability, I believe my design serves as an inspiration, prompting reflection on our levels of material consumption, demolition, and their social and environmental impacts. Through my research, I discovered that innovative technology alone isn't the sole solution to sustainability; it also involves adapting our consumption habits. There simply isn't enough sustainable energy to meet our current consumption levels. This realization was truly eye-opening for me, emphasizing the significance of my role and the use of sustainable materials in my building design.

I see my role as an opportunity to set a positive example and influence behavior change. By prioritizing sustainable materials and practices in my design, I aim to inspire others and catalyze a shift in mindset. While my project is fictional, I hope it sparks contemplation and serves as a source of inspiration for individuals to reconsider their consumption patterns. Ultimately, I aspire to contribute to a more sustainable future by encouraging thoughtful decision-making and inspiring action.

X| *How do you assess the value of the transferability of your project results?*

The concept of a material bank with a social function is ripe for further exploration and research. While my design offers one possibility for storage, there are numerous avenues yet to be explored. I believe that future iterations could optimize space usage for storage more efficiently. While efficiency was considered in my design, the prominence of material storage is also intended to engage and inspire individuals to choose recycled building materials over new ones. As the use of recycled materials becomes more commonplace, it's plausible that material banks will need to expand. Therefore, investigating expansion possibilities through modular construction and enhancing storage efficiency are logical next steps. Additionally, automating processes within the recycling industry could be a valuable addition. However, retaining industry within urban areas is crucial to maintain connections with communities.

I hope this project contributes to a shift in perceptions, preventing architecture labeled as "worthless" from being hastily discarded. Instead, there should be a greater exploration of opportunities to add value rather than resorting to demolition. Thus, further research into reevaluating the "worthlessness" of materials could yield more valuable outcomes. Ultimately, by reimagining the role of material banks and challenging conventional notions of architectural value, we can create more sustainable and inclusive urban environments.