

The Pavilion

The studio presented a myriad of compelling topics and issues to explore. With my pavilion project, I aimed to address multiple facets simultaneously. Particularly, the challenges of housing shortages and the potential of prefabrication resonated deeply with me. Convinced of its future relevance, I sought to investigate how industrial techniques could shape architectural solutions. Additionally, my personal interest led me to incorporate a sub-theme of 'flood-proof' construction. However, during this period, this aspect proved to be more of a hindrance than an enhancement. Attempting to integrate disparate issues at this stage and draft a coherent research proposal proved challenging. In hindsight, prioritizing my main theme earlier and temporarily setting aside the sub-themes for later design tasks would have been prudent.

Eventually, I had a breakthrough moment where I synthesized my interests into a cohesive research and design task: urban densification through prefab solutions.

Research

My research proposal eventually honed in on one of the key challenges in prefab housing construction: corner buildings. Reflecting on my initial hypotheses, I realized that I had been overcomplicating matters. My focus was on finding solutions for corners that mirrored the aesthetics and layouts of traditional construction, albeit using prefab methods.

With this objective in mind, I endeavored to explore every facet of prefab methodology and address every possible corner scenario. Looking back, I recognize that I could have approached this differently. Seeking more feedback on my research findings could have helped me maintain focus. Nevertheless, this research approach equipped me with a broad knowledge base, much of which informed my design. I delved from one 'relevant' topic to another, resulting in a shifting focus. I took on too much by attempting to write three separate research papers simultaneously.

However, throughout P2, my ambition remained steadfast: to provide solutions for the three prefab methods—1D, 2D, and 3D—in corner situations. I studied the principles of good corner architecture, the advantages of prefab, and the relationship between corners and regular building components.

The envisioned outcome proved more challenging to materialize than anticipated, prompting a last-minute shift in my research focus. Initially, I proposed analyzing three well-executed traditionally designed corners from a specific period to establish criteria and weigh them against the properties of different prefab methods. This seemed like a viable approach. However, I should have approached this more pragmatically, acknowledging that the outcome would likely favor 1D prefab. Comparing this against the advantages of 3D prefab could have provided valuable insights.

The culmination of this process informed the focus of my design: how to create a quality corner using 3D prefab methodology. By leveraging the strengths of this construction method, I sought to explore what was achievable, rather than attempting to keep all options open.

Location

During P2, I also scouted locations for my corner project. I sought an inner-city environment primed for development, aiming to address multiple issues simultaneously. Initially, I settled on the Charlois neighborhood, which I had read about in the book *Rotterdam*. It was conveniently located and ripe for rejuvenation. Rather than displacing residents and offering them inadequate replacements after major demolition projects, I envisioned filling the remaining spaces and attracting a diverse mix of occupants. However, despite my initial satisfaction with this choice, I continued to explore alternative locations, eventually settling on the Esch neighborhood on the other side of the Maas. This decision significantly impacted the project, underscoring the importance of thorough site selection.

Architecture:

In my P2 project, I initially crafted a design concept for the corner, drawing from my research findings. However, feedback rightly pointed out that rushing toward a final product in this manner was premature. Subsequently, post-P2, I embarked on exploring various solutions for the prefab corner. These included a prefab module enabling a 45-degree corner, an exoskeleton approach, and traditional infill methods, among others. Each solution was sketched and rigorously tested against predefined criteria. This process unfolded smoothly, aligning well with my design-oriented research approach. After thorough evaluation, I opted for a "volume" corner solution supplemented by outdoor spaces, which effectively disguised the facade and allowed for greater customization.

By incorporating two modifications to the classic prefab stack construction, I uncovered compelling corner solutions that met the requirements derived from my research. Subsequently, the design evolved through an iterative process, where I endeavored to consider all aspects simultaneously to achieve a holistic design. This involved addressing factors such as routing, green spaces, privacy, and parking at the urban level. While I acknowledge that occasionally delving too deeply into specific issues can lead to temporary tunnel vision, this iterative process allowed me to maintain a comprehensive perspective.

For instance, during discussions regarding parking integration with Anne, I explored its feasibility. However, subsequent research revealed its disproportionate impact on the project and the established conditions. Rather than accepting that parking integration was not feasible, I invested considerable time in developing a transformable parking space. In hindsight, maintaining closer alignment with the assignment could have propelled the project further, focusing on addressing specific issues more effectively.

Reflection on the Product:

The resulting product addresses the overarching question: how can urban densification with prefab homes be seamlessly integrated? Embracing the existing urban network often necessitates grappling with challenging corner configurations. My design offers a viable approach to addressing this complexity. While the project encompasses a broad scope, the principles applied to tackle awkward corners are equally applicable on a smaller scale. The design embodies the essential need to preserve breathing space within the city fabric. By omitting homes and creating engaging public spaces, the corner is accentuated, fostering a sense of community.

However, this approach may yield a less cohesive housing block. In contexts where architectural cohesion is paramount, alternative methods such as 2D or 1D prefab approaches may be more suitable, albeit requiring a slower construction pace and extended design phase. Moreover, my design does not attempt to conceal its prefab origins. Instead, it fully embraces this construction method, seeking to highlight its inherent beauty and value. While this approach may not align with traditional architectural aesthetics, reconsidering facade treatments and gallery designs could yield a markedly different outcome.

Self-Reflection

Through introspection, I recognize parallels between the research and design phases. Moving forward, I aim to maintain focus on the core objectives of my projects, resisting the temptation to delve too deeply into tangential topics. Additionally, my experiences have reinforced my belief in the potential of prefab methods to address contemporary challenges in architecture. While my journey has been marked by challenges and pivots, I remain committed to pushing the boundaries of architectural practice and contributing positively to the built environment.