



Foreword

When I stroll down the street and spot something left as garbage or placed on the sidewalk, I am always seeing the potential of what it could be if it was given a little love and care. Then I think: why did somebody throw it away? Sometimes take it home and try to make something out of it. It does not always succeed, but sometimes it does.

My research will focus on how we can ensure that more value can be attributed to existing buildings 'as found', by being able to recognize their true character, both good and bad, and then being able to respond accordingly. Hopefully, this will provide insight into the quality of existing structures and help reduce the culture of demolition.

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The site

The design location in Brussels, known as the Friche Josaphat, is a marshaling yard with an outdated industrial area on one side of the tracks and a wasteland that has turned into a wild and one of the most biodiverse spots in the city on the other side. There is a redevelopment plan ready for this piece of land, but it is a complex issue with various interests, pitting the residents of Brussels against the government. The usual approach of the Brussels government to buildings in need of renovations and a complex urban context is simply to forget about them, demolish the area, and replace it with new construction.

Our graduation studio will focus on the question: How do you deal with the last green spaces in the city? To get a concrete answer to this, research must first be conducted on the site and its context.

The Friche Josaphat, a former marshalling yard turned wild field in Brussels, is the subject of political disputes regarding its future development. Plans range from preserving biodiversity to creating mixed-use urban spaces, with debates centering on environmental conservation versus urban expansion. Biologists advocate for nature preservation, while others push for low-income housing initiatives. These conflicts have caused delays in development approval, highlighting tensions between ecological and social priorities (syllabus).



Methods

The initial phase of the graduation process involved group collaboration. In teams of 5 students, seven themes were devised to investigate the friche and its surroundings, aiming to paint a comprehensive picture of the site. Subsequently, smaller groups of 3 students formulated an urban development plan for the friche, incorporating key findings from the earlier group work conducted at the beginning of the year. Simultaneously, individual research projects began to take shape, which will culminate in the final design.

Finding patterns | context research

Through photography and video-making, an attempt was made to capture and understand the context of the friche as accurately as possible. By collecting visual material, an analysis was then conducted, revealing patterns in the environment. These patterns were subsequently investigated further to uncover the underlying rationale or theory.

Catalogue | cultural and emotional value

To gain a thorough understanding of the values attributed to the buildings on the friche on the industrial side, further depth was sought in the research through conducting interviews.

In addition to exploring emotional and cultural value, research was conducted to assess the material and functional worth by gathering as much information as possible about the buildings. This information was compiled into a catalogue and then utilized to select my design location.

Drawing | historical, functional and material value

After a thorough site survey, six buildings were selected for analysis based on their proximity and distinct values. Handmade drawings were created to map out every detail, supplemented by available floor plans. Historical research was conducted using satellite imagery and literature to inform the drawings and aid in decision-making regarding retention or removal of elements. Expanding on the qualities of existing materials, new ones are explored to complement without overshadowing them. This is achieved by taking a typical fragment, offering a conceptual view of the renovation.

Sustainable building materials | adding value

There has been research conducted on sustainable materials to provide an addition for existing buildings.



I | Finding Patterns

The theme of the group research into the context was 'Schaerbeek, living the multicultural city'. Schaerbeek is the municipality where the friche is located, and the focus was on addressing the following questions: How do social lives unfold in the spaces of the city? What are the habits, rhythms, rituals, and routines that structure daily life? Where do migrants meet and mingle? How do different national and ethnic identities coexist in metropolitan Brussels? (syllabus) This research is a plunge into Schaerbeek's neighbourhoods, uncovering patterns of community dynamics, use of public space and daily routines, questioning the inherent influence of the context on the Friche.

The most crucial aspect of approaching this research in an appropriate manner is to remain as unbiased and unprejudiced as possible in a new and unfamiliar setting. Consequently, our team ventured through Schaerbeek in a group of five, intentionally devoid of any prior knowledge and preconceived ideas. We wandered through the streets of Schaerbeek, sometimes aimlessly and at other times with the guidance of a local resident. (compendium Schaarbeek). Our goal was to immerse ourselves in the life of the municipality, closely observe its residents, and understand how they collectively shape the essence of Schaerbeek. To capture this essence, we assumed an observational role, using photography and video. In addition to this passive observational approach, we also attempted to engage with the local residents by posing questions and initiating conversations. However, this venture presented challenges, primarily due to language barriers, as well as certain levels of mistrust and defensiveness from the community members. As a result, our attempts to seamlessly integrate into the community and engage in casual conversations were met with limited success. Therefore, we opted to keep a more passive observational role, respecting the residents' boundaries and preferences.

Analyses

The extensive assortment of observations from the fieldwork was then collected and examined to identify (dis)similarities and possible patterns. Mapping all our findings gave us a more complete and comprehensive understanding of their origins in relation to the community. Our firsthand experiences along these streets provided valuable insights into the diverse atmospheres within Schaerbeek.





I continued this method of pattern recognition through photography to better understand the context in my own individual research. In this book, I will briefly discuss the group work from the initial period and explain the key conclusions that have influenced my individual study. However, the focus of this book lies on my own findings and interests in the patterns discovered both in the group work and throughout the rest of the year that I spent individually getting to know La Friche and its context.

Interviews

To add depth and personalize my approach, I scheduled a conversation with my uncle who lives in Brussels. Although not in Schaerbeek, he resides in the city center and could provide insights into life in Brussels. Meanwhile, I began practicing my French and ventured out on my own to interact with people at the friche. This was important to me because I wanted to accurately assess the value that people attach to the existing buildings. By asking them specific questions I had prepared, I aimed to understand their relationship with the building, their experiences, and whether they had any desires for improving the space.

Photography

By engaging in conversations and entering the buildings, I was also able to take photos of the existing structures. By capturing both the interior and exterior of the entire friche, I could assess the materials and their condition effectively. I evaluated how long the buildings had been standing, whether they were in need of renovation, and if they still functioned as originally intended or had been altered over time.

I.I| The scrapped urban plan

Meanwhile on the friche the natural, undeveloped areas thrive and gain more value, the industrial section continues to depreciate as it ages, with very limited efforts made for improvement. The buildings in the industrial area are outdated, and the streetscape is unattractive. It is in need of an upgrade, prompting the municipality to devise an urban plan for the friche. However, this plan has been poorly received and met with disapproval.

The political disputes surrounding the Friche Josaphat primarily revolve around conflicting visions for its development (syllabus). On one side, there are arguments for ecological conservation, with some advocating for the site to be preserved as a nature reserve. Biologists and ecologists argue for the protection of the area's diverse flora and fauna, while others dream of transforming it into a woodland or urban forest.

On the other side, there are calls for human occupation and urban development. The socialist party, for example, emphasizes the need for low-income housing in Brussels, suggesting that the site could be used to meet this demand. However, this stance appears to clash with the ecologist vision for preserving the friche.

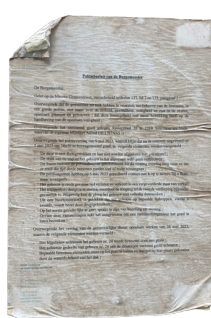
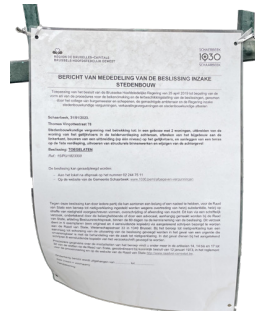
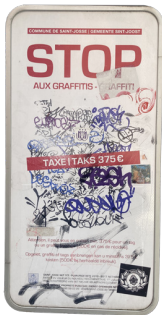
These political disputes have led to delays in the approval of development plans for the site. The proposed mixed-use development, which includes a train station, housing, shops, and workplaces, has sparked debate about the balance between environmental conservation and urban expansion. As a result, the future of the Friche Josaphat remains uncertain, with competing interests vying for control over its fate.

To begin with, the void of the friche are not an exception to the rule in Brussels. It is part of a pattern found throughout the city, they are merely voids that are smaller in size and intertwined within the urban fabric. How do these voids actually arise, and why does it seem like no one is doing anything about them?









I.II| Dissapproving attitude of Bruxellois

‘Let the friche bee’ is a sticker that can be seen all around the friche Josaphat. A way of protesting against this urban plan, but it is certainly not the only problem and way of protesting against the government of Brussels.

Bills and banners advocating a certain stance or seeking help, are posted all over Schaerbeek. These calls underscore the significance of collaborative endeavours and collective action in driving change and fostering a vibrant and thriving Brussels.

The activist spirit is ingrained in the residents of Brussels, a mindset born out of the municipality’s slow and intricate political system under Belgium’s governance. This intricacy leads to prolonged decision-making processes, as various interest groups express their views and wield significant influence.

Some bills are posted by the municipality, like eviction notices for squatters in empty properties, as is common in southwestern Schaerbeek. But more common are the calls for action by the residents themselves. Everywhere in Schaerbeek hang notices and stickers with dates for protests.

One of the most discussed topics at the moment is “Good Move”, an initiative by the Brussels government aiming to create greener and more bicycle-friendly streets across the city. This initiative comes at the expense of parking spaces, which is not welcomed by everyone, particularly in the western part of Schaerbeek. Here, many residents often inhabit older, underfunded housing in need of renovation, and they face bigger issues than living near greenery – it becomes a tug-of-war between public good and private interests.

Additionally, concerns about potential gentrification leading to increased house prices play a significant role in the debates surrounding street improvements. The residents of Brussels are scared for this gentrification and displacement by the government.

II.I| Brussels Demographic Scope

The disapproving and withdrawn attitude of the people of Brussels stems from the lack of involvement in the redevelopment process but also a cultural clash. The affluent eastern part, including Josaphat Park and the Diamant and Fleurs Quarter, reflects a suburban landscape with a large middle-class population. Near the North Station lies a multicultural mix.

The Good Move initiative, for example, serves as a clear example of this lack of participation, as few people in the neighborhood actually support it. They would rather see the funds invested in renovating and repairing houses, as many are in a dire state.

The supporters of initiative 'Good Move' primarily consist of native Belgians who value green spaces and cycling lanes, while opponents, a diverse group of immigrants, prioritize convenient parking. Traveling from North Station to the south of the Josaphat site reveals a diverse mix of social classes and cultural communities. This clash of opinions, driven by cultural differences and divergent values, fuels friction between Belgians and immigrants. While longstanding residents fear displacement and perceive a housing shortage, less job opportunities and safety concerns, immigrants experience discrimination. This individualism undermines solidarity, hindering the city's development and improvement process.

Belgium's intricate history of cultural diversity, from Roman, Anglo-Saxon, and Germanic influences to modern-day immigration, offers an opportunity to embrace eclecticism and unite people rather than divide them (as found). Can we strive to bring people together and celebrate our diverse cultural heritage?

II.II| Political role of the architect

The fact that everyone echoes their own opinions out of fear of being overlooked speaks volumes about how the residents of Brussels are listened to and their issues addressed. However, this is not a problem easily solved. Nonetheless, it is crucial to prioritize listening to people and incorporating their culture as much as possible into the design process. Jeremy Till, in his book "Architecture Depends" (2009), challenges conventional perspectives on architecture, advocating for a broader consideration of its social, political, and environmental implications. He emphasizes architects' and builders' moral responsibility to promote social justice, environmental sustainability, and cultural heritage in their work. This ethical approach to architecture prioritizes community well-being, fosters equity and inclusivity, and reduces harm to the environment. As Paul Vermeulen mentioned during the lecture, achieving simplicity in architecture becomes more challenging, requiring a deeper understanding of the architect's role.





II.III| Brussalisation

Another reason for the sensitive reaction to development plans arises from a earlier instance of inadequate participation that occurred in the 1960s when the working-class neighborhood of Noordwijk was completely demolished to make way for a Manhattan-style business district, aimed at boosting Brussels' economy. The homes and social structures that were destroyed were deemed less valuable by the government than developing an office area. Residents were forced to find new homes and were traumatized by this, giving rise to the term 'Brussalisation'.

Brussalisation is a term used by urban planners to describe the chaotic urban development in an old and historic city. The term originates from the developments that the city of Brussels underwent in the 1960s and 1970s. Brussalisation is often attributed to the lack of spatial planning regulations at the time and the laissez-faire attitude of the city government towards urban planning. An example of a construction project that was abandoned due to resistance from local residents was the headquarters of the Council of the European Union. This site was transformed into a park, namely the Maalbeek Valley Court.

The term is sometimes also used to describe the way developers deliberately let old buildings decay, so that they deteriorate and eventually demolition becomes the only option.

The idea of replacing complex and cumbersome multifunctional cities with efficient, monofunctional neighborhoods that operate like well-oiled machines was a prevalent trend in the 19th and 20th centuries. This led to the birth of business districts and the North Station, among others. However, time has shown that designing a city is not as straightforward as initially thought. The area becomes deserted at night, creating a sense of insecurity due to a lack of social control.

The same applies to the Friche Josaphat, which is a monofunctional industrial zone without adequate lighting in the evening, leading to its abandonment. Action needs to be taken to address this issue.

Simply demolishing existing neighborhoods to make way for something entirely new has profound effects on people, which are still evident today. The culture of demolition simultaneously erodes social structures among people and their relationships with the built environment.

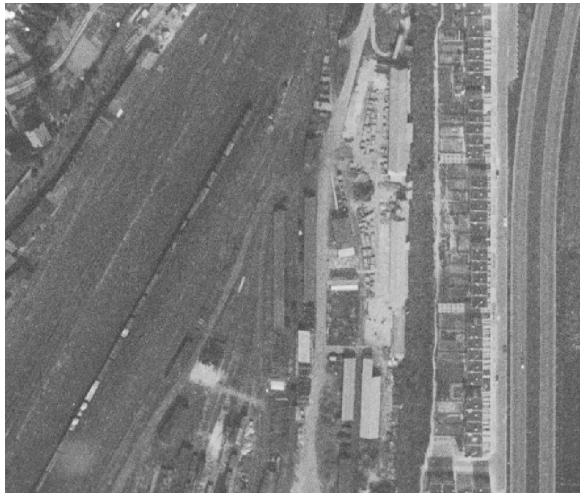
III | Demolition culture

The constant changes and rapid pace at which the environment in Brussels is changing have led to humans placing less value on a building. It takes time for a person to become attached to an environment and its buildings and to create a sustainable neighborhood. The demolition culture has several effects on society, with a overarching theme of disconnect between humans and the material world.

As seen in the city of Brussels, the industrial zone of Friche Josaphat reflects a similar pattern. A short lifespan of buildings is evident here as well. Industries are often constructed temporarily, leading to a short lifespan. It is now clear that having functions so dispersed is not sustainable. Why do buildings that are in need of renovation or industries always have to be demolished and relocated? Why not build in a way that allows a

building to stand indefinitely? How and when did this culture of demolition emerge and became so normal for redevelopment projects and since when have we placed so little value on existing buildings in this vibrant city?







III.I | Labour

The demolition culture has emerged due to the convenience nowadays in obtaining building materials and the efficient construction process. In 1853, John Ruskin an influential English writer, art critic, social thinker, and philanthropist of the Victorian era, said at the time that it would have a negative impact on purpose & agency of human beings (Stones of Venice | John Ruskin 1853). Ruskin observed that industrialization often led to the dehumanization of labor. Workers became mere cogs in the machinery of production, devoid of individual agency and dignity. This loss of personal connection to one's work could lead to a sense of alienation and diminished moral purpose.

Nowadays, machines have almost completely taken over from humans. This is due to technological innovation in the manufacturing of machines and the extraction of fossil fuels. These fossil fuels contain so much energy that we can hardly comprehend it as humans. "A barrel of fossil fuels is roughly equivalent to the amount of work a person can do in 5 years and costs only 70 euros," says Nate in The Great Simplification with Nate Hagens | November 2023. Because machines are much more efficient and cheaper than human labor, we have developed a lack of understanding for the actual product and the effort and energy that went into it. Industrialization has created immense complexity in society and led to the devaluation of the final product due to the ease and affordability of replacing it.

Additionally, the fact that the manufacturing process is located on the fringes of the city or in more distant industrial areas also makes it more difficult to understand how a product is made and how much effort is put into it. Sometimes it can even be produced on the other side of the world. However, in the future, it will become increasingly important to produce locally because

fuels will become more expensive and thus so will the transportation of products.

We are skipping the craftsman and immediately going to the producer, which makes the producer the craftsman Pauline Lefebvre. We need to become our own craftsmen again. There must be a way for people to understand the process again and to work together with machines without it being boring and repetitive work. Pauline Lefebvre emphasizes the importance of involving the community when constructing a building. If they themselves contribute to the building process, they will better understand how a building comes together, and in the future, if something breaks, they will be quicker to repair it. Easier to understand, means reducing the complexity.

In short, there is a lack of ability to relate to the materials and the architecture it creates. We need to understand what went into the material making process and we need to reduce the complexity behind the manufacturing process by transitioning to local production, which will result in lower transportation costs and thus be more future-proof. Also, the more humans reconnect with the materials and manufacturing process, the easier it is to understand how a material is obtained, narrowing the gap between humans and materials, said in The Sympathy of Things | Two-part radio documentary by Assemble 2018.



III.II| Recreating a image

During the industrialization process, we replaced the human labor invested in a product with machines, making it cheaper, but that's not the only change. Over time, more and more materials have become available due to industrial processes, such as plastic and concrete. What stands out is that the industrial zone in the Friche mainly consists of these materials, as does the surrounding environment. However, it appears differently, as we have become very good at imitating materials.

With inexpensive materials like plastic and concrete, we try to give a building in the city a certain status by making it appear as if it is made of a expensive material, something that required a lot of human labor or actually had a different original function. In the pattern around Schaerbeek, for example, there are French balconies, which in reality are just small balconies where you can barely stand, concrete or plaster Beaux-Arts ornaments that are not made of marble or have a load-bearing function, or art-deco ornamentation painted gold, which already has a history of imitating the real thing. Because in many cases, these ornaments were made of gilded metal, where a thin layer of gold was applied over another material such as brass or bronze. These gilded ornaments gave a more luxurious appearance. Plastic greenery instead of real greenery is also common in Schaerbeek, plastic wood facade cladding, brick claddings that are also not loadbearing, or sometimes even facades with painted bricks and windows.

In the industrial area, there is less such ornamentation and it is more about the facade cladding used, such as brick cladding and concrete slabs that are not loadbearing.

This only leads to more complexity and makes it all less understandable for humans to understand the actual material. We are now moving further away from the ability to relate (The Sympathy of Things | Two-part radio documentary by Assemble 2018)

There was once a trend where people actually did not want to see human labor in it, a good example of this is the Barbican in London. There, the builders worked very hard, but all traces of it are covered up to make it look as industrialized as possible.

Today, we have no choice but to industrialize processes, and we have to work with machines because human labor has become too expensive for us.



III.III | Waste

However, imitating something with a different material doesn't always mean it turns out to be advantageous when it comes to durability.

Characteristics

The materials from which the objects originally consisted have determined the specific form and function associated with them. By working with the characteristics of the material, the material lasts the longest. If something is made with cheap materials, it is likely to last less long than the original product with its material characteristics would have done. For example, think of brick slabs that are hung on a facade and probably need to be replaced every 10 years because they crack due to their thinness. It would have been more advantageous if the characteristics of the material had been used, such as its load-bearing capacity and the pressure it can withstand. A plastic stone pattern glued to the facade is another example.

Massiveness

In addition to the honesty of the material, massiveness plays a role. The product is intentionally made less massive in terms of volume, or during production, materials are mixed with something else, making them the same volume but less strong. Aerated concrete, also known as cellular concrete or gas concrete, is generally less strong than traditional concrete. It is a lightweight concrete made by mixing cement, sand, and fine porous aggregates with water and a gas-forming agent. During the production process, numerous small air bubbles form in the material, giving it a lightweight and insulating character. Its lifespan is the same, but the characteristics of normal concrete and aerated concrete are different. While aerated concrete is less strong than traditional concrete, it offers other advantages such as reduced weight, improved thermal insulation properties, and easier workability. It is often used in construction where weight reduction and insulation are more important than extreme strength, such as in interior walls, partition walls, and insulating claddings.

Due to economic limitations and raw materials, it is logical that it cannot always be as massive as it used to be. The role of the architect is therefore to thoroughly investigate what those characteristics are and where the material comes from, so that they last as long as possible and the building can remain standing for as long as possible without having to invest money again to maintain it. This way, people can get used to it and incorporate it into their community, and it can gain more appreciation.







III.IV | Plinth

Where cheap building materials are often found is in the western part of Schaerbeek, often on the plinth. This concerns the cheap renovation of a building, and because the plinth is something pedestrians are most confronted with. The desire to keep up with a trend and to make the house look good from the outside is important for status.

Another place where we see the importance of the plinth is in the shopping street Rue Brabant in the west of Schaerbeek, near the North Station. Here, the sidewalk and the shop window are used to attract passersby to come in and buy their products. They attract these passersby with cheap prices by placing brightly colored signs outside and displaying their products as beautifully as possible. They cater to the consumer and their need to follow the latest trends, buy a replica of a very expensive brand, or buy a handy household tool.

By shops that display themselves in a certain way, this creates a colorful and lively street scene. The way of displaying may be more important than meeting the temporary need of a building's plinth?

In the industrial area, this is very different. Here, it is not made to be attractive to passersby, and they are often closed with only a single entrance. As a result, the buildings feel more impersonal, and you can clearly see that they operate on a larger scale. The industrial area in the Friche Josaphat is mainly made for cars and large trucks that will export the products. Because of this unattractiveness, we as humans also feel little connection with them, and they are easier to demolish, besides the fact that they are often built to be mobile and temporary. But this needs to change, says Nina Ropoport. We need to open up the industries to humans and involve them in the city to create a well-functioning and sustainable city.

Taking the way shopkeepers display their products and attract people and create liveliness into account in the design for the Friche Josaphat site. The lifeless streets and closed, unattractive plinths lead to a loss of connection with people. Using the consumer mindset to attract people to the area is a possibility. However, promoting consumerism is not desirable, but then it will mainly be about the products they sell and not necessarily about the architecture and its buildings.





III.V | The backside

The shopping street Rue Brabant is incredibly lively and attracts many people. This liveliness gives a certain quality to the street. However, the backs of the shops look like this. The beautiful picture of the lively shopping street mainly gives a nice image from the front. Similar to the products they sell there, something that seems good but if you know how it got there and how it really is, it's a lot less romantic.

The amount of effort that shopkeepers and residents put into looking good at the front and the lack of effort to do the same at the back is not reflected in the industrial area. Here, little effort is made to make the buildings look good at all. It feels like the friche is a kind of backside of a shop, the temporary storage where the products are transported to the shops to be nicely displayed there. How can we ensure that the friche is more than just the backside of a shop?

If we go back to the truthfulness of buildings and their material characteristics, however, the industrial area is actually an example. The materials often do what they are supposed to do (with some exceptions), and it's all without fuss. But then you see that the buildings may need to speak more on a human scale if they are to work.

The lively cityscape that is portrayed also has another side. As soon as the shops close and the street is littered with trash from just-consumed food in plastic food wrappers or other packaging. A feeling of insecurity creeps in because all the shops are closed and the people who live above the shops are comfortably at home. The nearby location of the North Station also does not help to create a feeling of safety. Due to the monofunctional office district with little liveliness after 6 pm, there is also little social security, which drags down this part of Schaerbeek.

The industrial area is also an unpleasant area to walk in after closing time due to its monofunctional character. On the edge of the industrial area, there is only one tennis court that is open after working hours, but that is not enough to make the rest of the area feel safe. The neighborhoods around the friche are quiet and don't have many other functions than living, which makes the environment even quieter in the evening.

It is desirable to incorporate functions in the final design that ensure social control also in the evening. Mixing functions and considering when and where each person is present is important to take into account in the plan as an architect and urban designer.



II.VI | Brussels ornamentation

The industrialization of construction processes and associated materials has stripped buildings of their human touch. As seen in the industrial area with the closed facades and the monotonous repetitive nature of the facade elements, as well as in the canal district in Brussels, the same repetition applies. Is this repetitiveness of the facade perhaps something that doesn't stimulate the human spirit? Just like working in industry? The advantage is that it becomes a whole, and in the rhythm, there can be beauty. However, when it happens on such a scale, it feels more inhuman. The Brussels North area is a classic example of the industrialization of the construction process and urban planning. Because of the demolition of the working-class neighborhood Noordwijk, it has caused trauma, and the current poor situation there has made the residents and politicians of Brussels fearful of industrialization says Pauline Lefevre in her lecture. This has become the example of what will happen if you do anything with a machine, we become afraid.

Sustainability

It is also associated with an unsustainable way of building due to the choice of material and the short lifespan. However, it is not always the material that causes the buildings to have a shorter lifespan. It also depends on the lack of value that a person can attach to such a building because it does not appeal to us. This is due to the loss of human touch in the process, but also the way the plinths and facades no longer have a human touch, making it difficult to understand and appreciate them.

It is noticeable that sustainable projects often remain small-scale because there is a fear of industrializing a process. But for the current demand for housing and developments, it is not economically feasible to build a sustainable building solely with human labor. We must collaborate with machines in order to meet the demand but not lose sight of the human aspect.

Beaux Arts

On the opposite side are the neogothic villas around the Josaphat park, the Beaux Arts houses in the east, and the garden city houses on the west side of the friche. These are decorated with expensive handmade or cheap industrial ornaments, respectively. While the Beaux Arts and neogothic styles give more status to the building, the villas in the garden city focus on the human scale and coziness.

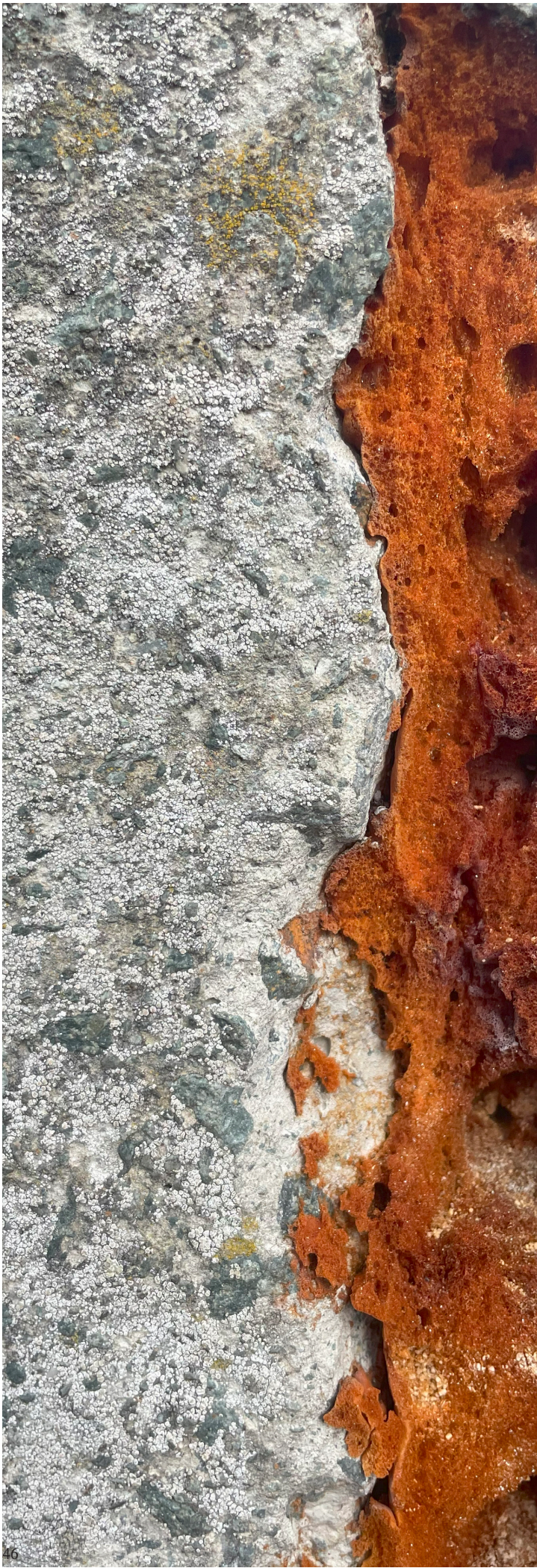
Garden city

A bit the opposite of what is seen on the other side of the friche, namely the industrial zone with the high-rise buildings (garden city copendium). Nothing may happen to the facade here; it must remain as it was originally made. This ensures that the

building is well maintained and the original materials last a long time. This is thanks to the massive way of building and the regulations for preserving the buildings as they are. We see that they have high value around people and are highly appreciated. This shows how important political regulations are for making the street scene pleasant. But there is also something to be said for individual expression as a resident, as is more done in the west of Schaerbeek, however, these types of ornaments have a much shorter lifespan than the simple design of the ornamentation and materialization of the garden city houses.

How can we industrialize the construction process but involve humans in it and make ornamentation in such a way that it will not cost too much money but will humanize the strict rhythm of the buildings in the industry? Working with sustainable products and the speed of industrialized processes to bring back peace, intimacy, and humanity to the industrial zone.





III.VII| Lack of maintenance

As mentioned before, the buildings around the derelict site in Schaerbeek and the industrial area are in need of renovation. However, both the residents of Schaerbeek and the users of the industrial site do not focus on maintaining the buildings they use. For residents, this is mainly due to a lack of capital, leading to frustration directed towards the government. Additionally, the rental situation discourages people from investing in and taking ownership of their homes. This is also evident in the industrial area of the Friche, where workers in the buildings mention that due to renting, awareness of the urban planning and the prevalent demolition culture, everyone knows they will eventually have to move outside the city. All of this has resulted in the streetscape of Schaerbeek and the Friche looking dismal, with buildings in need of renovation but often ending up demolished.

Beaux Arts houses often have many temporary fixes. It is often complicated to renovate them, and they have a complexity, as do, for example, the Gothic houses. Are the houses too complex to understand, or have we simply become accustomed to not making an effort to maintain our homes? Has the convenience of buying something new become too great because the production of products seems so easy because we have no idea how much energy it takes?

On the other hand, there are the modern post-war buildings of the office district and the industrial area. These are made of materials that require as little maintenance as possible. Think, for example, of panels as facade cladding that are easy to replace and clean. This can be advantageous, but it does not mean that you do not have to pay any attention to maintenance at all. In the industrial zone, you can see that both the cheap and poor quality of the materials and the lack of attention and maintenance by humans cause them to deteriorate quickly. Do these low-maintenance buildings perhaps make us even lazier?

Can we appreciate our buildings and their facade materials more and therefore sometimes put effort into them? And if so, how should we do that? Or have we become too accustomed to the comfort of replacement?



III.VIII | Comfort

When it comes to maintaining our buildings, we are very accustomed to the comfort of demolition and replacement. A design should radiate normalcy, consistency, and stability, and with the push of a button, it should be warm inside. We do this while the outside is getting warmer and warmer due to our consumption behavior (After comfort - Daniel Barber). We can adapt well to our surroundings, just look at the lofts in New York, the townhouses where one family used to live and now house three, or the industrial buildings that are transformed into food courts and businesses. We need to step out of our comfort zone and appreciate our buildings more, even if they sometimes seem worthless.

The short lifespan of materials results in a lot of waste materials and dismantles social structures. To tackle this problem, we need to know what social structures are attached to the buildings in the industrial zone, and we need to not only rely on technical solutions because we do not have enough renewable energies for our consumption, and we need to change our behavior. (The Great Simplification with Nate Hagens | November 2023).



Catalogue | *The buildings on the industrial zone of the Friche*

The documentation of the buildings helped to assess their material value, particularly from the outside. Additionally, research was conducted on the historical context of each building over the past 10 years to gain more insight.

However, to add depth to the research and emphasize the importance of participation, it is crucial to take on a more active role beyond observation.

Interviews were conducted with users of the buildings to understand their emotional and functional value. These conversations were collected in a catalog. Armed with a list of questions on my iPad, I walked through the friche, often prompting curious on-lookers to ask what I was doing. It was important to explain that it was a fictitious project, and I was just a student eager to hear their opinions and represent them in my project. They usually responded enthusiastically and were willing to participate.

The questionnaire looked like this:

- What value does this building have for you? / your relationship to it?
- What function does the building have for the surrounding area?
- What kind of building would be a good addition/improvement to this area?

The result of the interviews revealed that many users are dissatisfied with the place because they cannot make it their own. This is because they do not own the buildings but rent them. Moreover, due to the redevelopment plan and the prevalent demolition culture in Brussels, the owners of the buildings do not feel the need to invest in maintenance, as it would seem like wasted money. However, tenants also do not want to maintain the buildings because it would be a financial loss for them as well, leading to dissatisfaction. The buildings are in dire need of renovation, with limited opportunities for expansion. This has prompted many users to plan to move elsewhere. Another overarching theme is the feeling of insecurity later in the day and the prevalence of car break-ins and thefts.

In the future, users of the industrial buildings would appreciate an upgrade if they had access to a park or if there were closer café options for lunch. Notably, Rova, a company that gives new life to items, has created a sort of community where they make the place more their own and stay later on the premises.

The need for growth, making a place one's own, and safety emerged as key desires. Furthermore, people place less value on the buildings than initially thought and are aware that they will have to leave soon, which prevents them from attaching more value in the future.

Conclusion of context research:

The social value of the buildings is lower than expected, and the buildings are in urgent need of renovation. These findings have been taken into account in the urban plan to determine which buildings will remain standing and which have too low a value to remain. This has also led to the selection of the design location for the individual design. These are multiple buildings attached to each other, each with a different social value and materialization. It reflects the eclectic culture and architecture of Brussels, but it is currently a disjointed whole and is in need of renovation. I will delve further into this, but first, there will be a brief explanation of the urban plan that has been developed.



The results of the research into patterns, both from P1 and further individual research, have all been incorporated into the design.

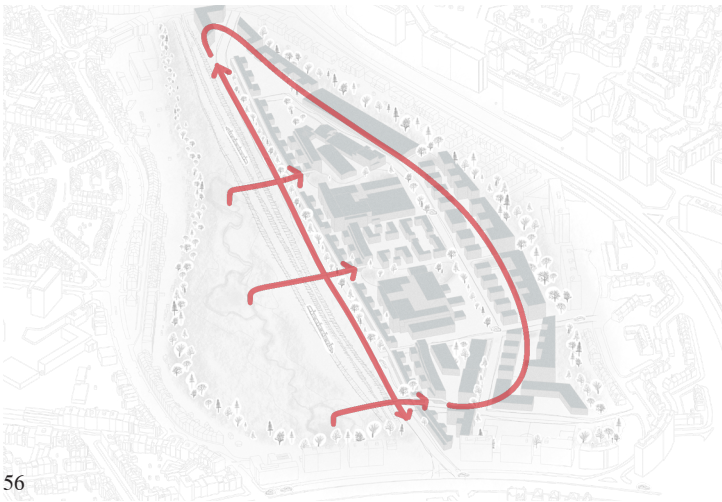
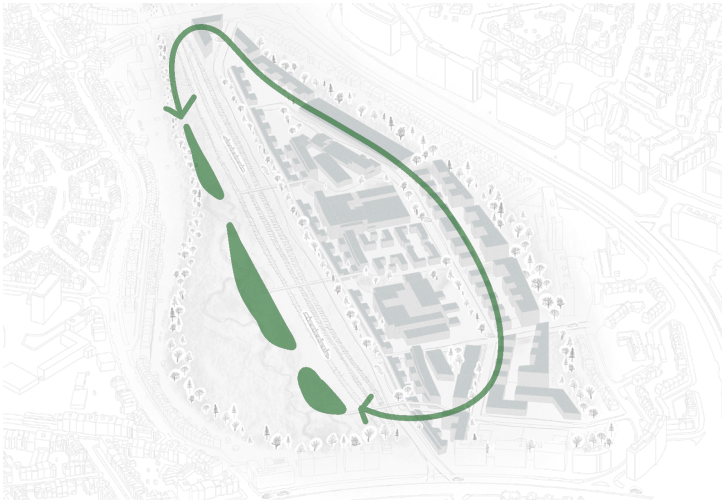
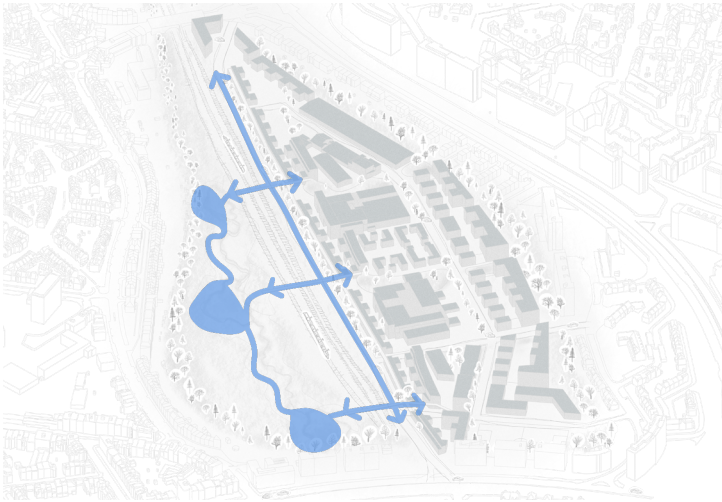
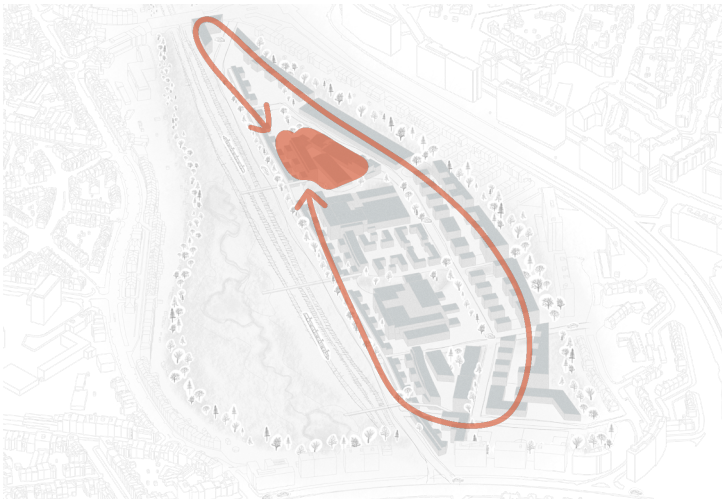
Identity

For example, the importance of meeting places such as cafes, brightening up the streetscape with shops, space for personalizing one's home, and more. These threshold spaces have been integrated into the urban plan by allocating plenty of space in the form of 'pockets'. These are small areas between buildings where individuals can express themselves and where temporariness is included in the plan. It's a design where the buildings are solid and of good quality, intended to stand as permanently as possible, but where there is also room left for personal expression and needs. Thus, it is not entirely top-down designed but rather the residents shape the neighborhood. This approach contrasts with the idea of the 'Smooth city' – a homogenized and sanitized urban environment prioritizing efficiency, control, and consumerism over diversity, spontaneity, and authenticity.

Bringing Individuals Together

The location where certain patterns occur says a lot about a neighborhood. Therefore, it's important to reduce the stark contrast between the poorer area near Brussels North station and the affluent area around Josaphat Park and bring residents of Schaerbeek more into contact with each other, with meeting places such as a café potentially helping in this regard. The vibrancy of the streetscape also differs between the west (near Brussels North) and the east (near Josaphat Park and Friche). While there are many people on the streets in the west, the east is much less lively. It's important to increase vibrancy in the friche to create a variety of functions with the surrounding residential areas and create a gathering place. Therefore, in addition to the necessary housing, attention is also paid to sports, education, workshops for offices, a large market square, and, not to forget, industry.

By being forced to build only on one side of the friche and preserving the industry, there is a high density that will generate a lot of liveliness on the streets. And by preserving the industry, the area already has character and can build upon that. When approaching the friche, it's about adding value, not starting from scratch. No tabula rasa but working with a tabula scripta, and the role of an architect has become a true representative of the people.



Green

Furthermore, access to green spaces is crucial. In the east, the more affluent part, there are green avenues, gardens, and Josophat Park nearby. Conversely, green spaces are scarcely found in the west, as the streets are paved, and gardens are filled with extensions because shops use them for storage. However, the fuss surrounding the Good Movement indicates the desire to integrate greenery into the design and make it accessible to everyone, creating a less stark contrast between the greenery of the friche and the industrial zone and making it a more cohesive whole.

It's the voids, often found in the city, that add some greenery in the west, and we incorporate this into our design by integrating these pockets into the fabric where occasional greenery can be found and where there's less contrast between the buildings and the greenery.

Productive Urban Landscapes

The friche is part of an ecosystem and is an important stepping stone for animals in the city, boasting high biodiversity. It's important to protect it from human activities, but designing with no connection between humans and this green space will eventually lead to building again in the future. Therefore, in our plan, the industry is integrated into the design. Hence, it was important in the urban planning to involve not only the surrounding neighborhoods in the design but also to connect the greenery and the industry.

The friche becomes a productive landscape that provides natural water filtering, utilizes geothermal energy for heating homes, and includes local farming. Continuous Productive Urban Landscapes (CPUL) is a concept in urban planning and design that focuses on integrating food production into the fabric of cities in a continuous and sustainable manner.

CPUL seeks to create interconnected networks of green spaces, such as parks, gardens, and allotments, throughout urban areas where food can be grown, harvested, and distributed locally. These landscapes are designed to be productive, providing not only food but also opportunities for recreation, biodiversity, and community engagement.

In this way, we incorporate it into the development plan while preserving it as much as possible, and by creating small ponds for water filtering, it will also be beneficial for biodiversity. Nature is often seen as a contrast to industry, but we also try to break this contrast by connecting with the friche and creating space for greenery on the industrial side, a form of urban rewilding.

VI | Micro public material depots

After researching the neighborhood and creating an urban plan, it's time to choose a design location and function for the design. Based on the research, it was decided to take 6 buildings that are close to each other as the design location. The reason for this is because they represent the eclectic nature of Brussels well, as they are all made of different materials and are in varying conditions. This somewhat reflects the complexity of the built environment that must be worked with, as if building in the urban context.

Café and Event Venue

As mentioned earlier, an ideal place to bring people together. It provides social security in the evening and during the day. In addition to this, it's important to represent the creative music and film industry that exists there. However, these are currently mainly distribution centers, shops, or studios with closed-off plinths from the outside world. It's important to open these up to the outside world and create a connection with their surroundings.

Industry

Combining industry with a social function, as mentioned above, is important to create a lively and pleasant neighborhood. Now the question is what kind of industry would best fit the design. By conducting interviews, it was noted that smaller companies like Javry and Rova attach a lot of value to the place. Rova is the only company that also creates a pleasant atmosphere in the area, and after working hours, employees are still there, creating a sort of community. In addition to this, the function and work they do are inspiring, namely, reusing materials and making something functional out of them again. Thus, the idea arose that such a recycling industry for materials is a desired function for the design. But what form this will exactly take and also the relationship with the social aspect needs to be further explored.

Material Banks

There are two forms of recycling: one where you return the materials to their raw form and one where you give them an extra life. The most sustainable option is, of course, to return them completely to their raw material, or at least as far as possible. Would a factory for the reuse of concrete, for example, be something, à la New Horizon? However, by considering such a factory, it became difficult in terms of space on the plot, and I wanted it to really appeal to people and reduce their consumption behavior.

Therefore, a way of combining industry and material production and its representation was considered. After considering a factory for returning materials to raw materials, I ultimately

decided to create a materials bank where, like Rotor, materials are taken from demolition sites and can still have a life. We cannot predict what life they will have afterwards, but the fact that they get an extra one is already more sustainable than what is happening now. It is important to me in the project that people are addressed about their consumption behavior and to create more awareness. This, in my opinion, happens more if there is a materials bank and a sort of store concept than if a factory comes into the neighborhood. Namely, addressing the DIYer, of which there are so many in Belgium. This way, they can make more sustainable choices for their homes more quickly and are more in touch with the material and its origin. And perhaps create a trend, just like the one that emerged with vintage clothing, but for building materials.



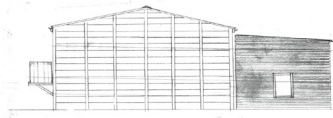
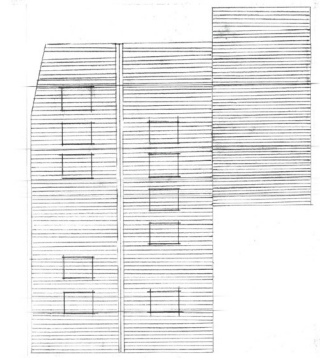
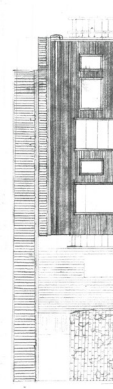
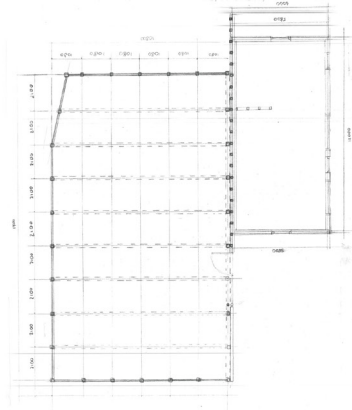
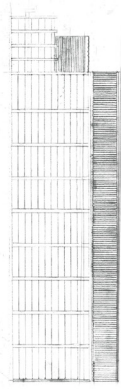
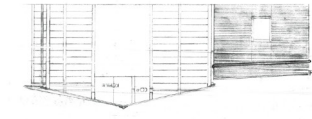
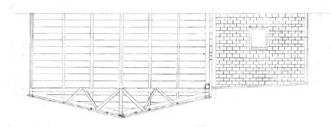




VII | Inspiration of the industrial buildings of Gent

Ghent was a valuable destination due to its many old industrial buildings and successful renovation projects. Exploring these transformations revealed the beauty in the raw and untouched elements of industrial architecture.





VIII | Drawings

With the photos from the catalog and regular visits to the buildings, it was decided to create hand-drawn floor plans, elevations, and sections of the existing situation. The research moves to a smaller scale, namely that of 1:100 of the design location consisting of 6 different buildings located next to each other. It is now important to know the buildings in detail in order to make choices for the design. Drawing methods like those of the Neues Museum by David Chipperfield or Venice Emotional Heritage by Flores and Prats were used as references to capture both the physical and historical value in floor plans, elevations, and sections.

Physical State

Fire evacuation floor plans were available for two of the six buildings and were used as a reference point. For the other buildings, their assessment relied heavily on material analyses to estimate the dimensions. Utilizing the 3D file, where the volumes of the industrial buildings could roughly be measured, formed the basis for the drawings. By making the drawings by hand and always on the same scale, the intention was to gain a good understanding of the existing situation and to know everything in detail. In what condition are the buildings regarding materials, and what needs to be preserved, renovated, or demolished? Later in the research, sustainable materials were considered for potential new parts of the buildings. You can find more information about this under the heading ‘Sustainability.’

Storytelling

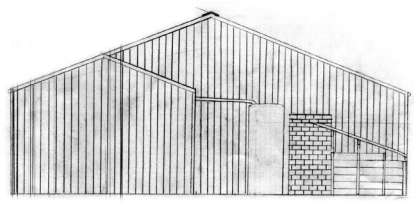
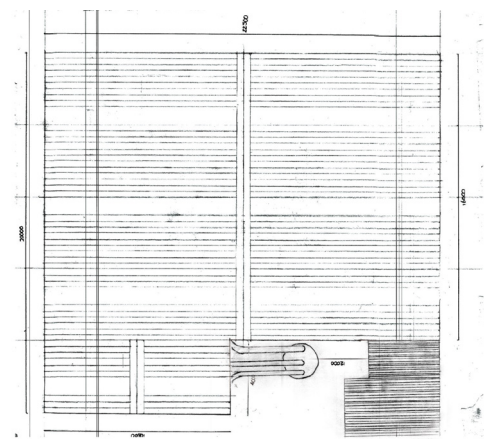
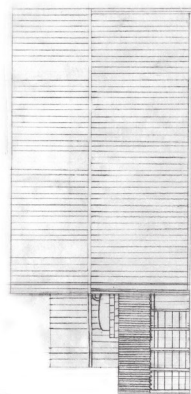
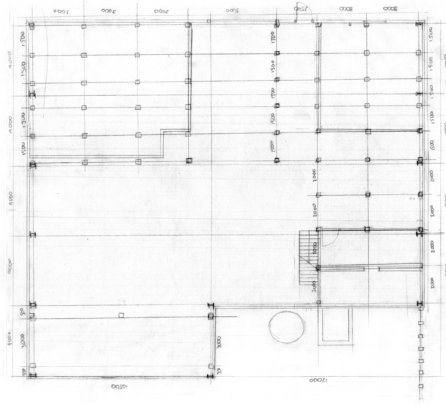
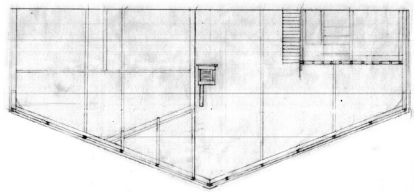
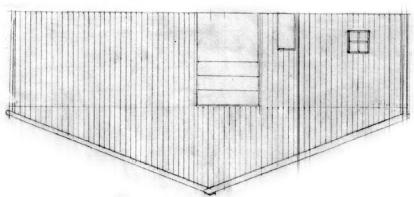
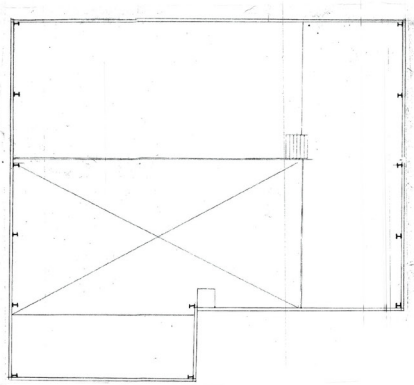
Furthermore, the history of the site was explored through satellite imagery, interviews, and literature research, and the findings are incorporated into the drawings.

Rova Part I

This is one of the oldest buildings in the entire industrial zone because it can be seen in satellite images from 1961. The building was a train arrival station and a place for loading and unloading materials, as evidenced by the elongated shape of the building and the track next to it. The elongated building was cut up somewhere between 2012 and 2023 and has taken on the form it still has now. The original materials it is made of are a concrete fence with a roof of corrugated sheets and a wooden skeleton on the side of the track, to facilitate easy loading and unloading. Since it was cut up, the wooden skeleton has been replaced by concrete blocks as walls with wooden cladding attached to them and a new corrugated sheet roof. The original concrete fence still exists. It has a somewhat chaotic layout and is an incoherent whole. The building is part of Rova, the company that gives materials a second life. So, the function of this part of Rova is a place where radiators are refurbished and sprayed.

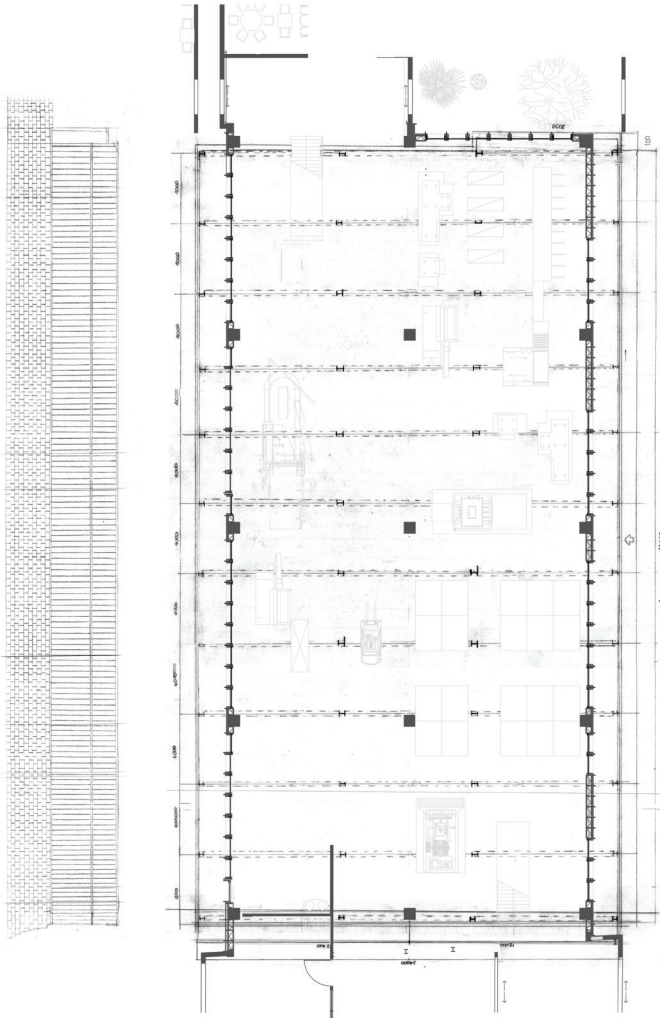
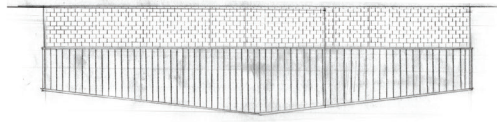
Rova Part II

This building first appears in satellite images in 1971 and is built directly against the arrival station. It consists of the same materials: a concrete fence, wooden truss roof, corrugated sheets on top, and wooden columns on one side to support the roof. On the outside, it is painted red, and ‘coal’ is written large on it. It is clear that nothing has happened to it since it was built, judging by its poor condition. The building is used as storage for drying radiators and other items. Around 1971, you can see that a wall was built against the building. It has the function of temporarily storing coal. The wall stretches as far as possible between the tracks and has taken on a trapezoidal shape. The wall, made of concrete blocks, is still used in the following years to store materials, but no longer for coal. Around 1987, a building is erected on the site where the materials were previously stored, and part of the wall is demolished. In the years that follow, the wall is gradually further demolished, but part of it remains intact.



Rova Part III

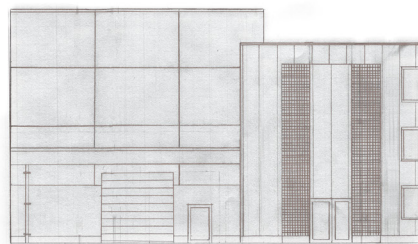
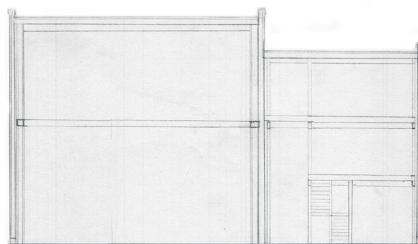
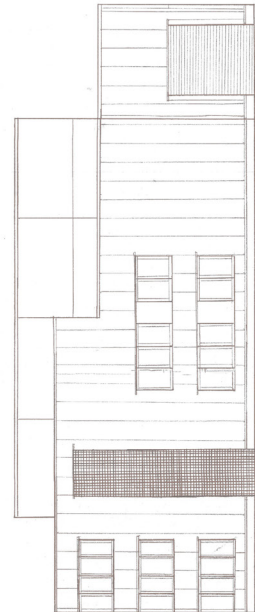
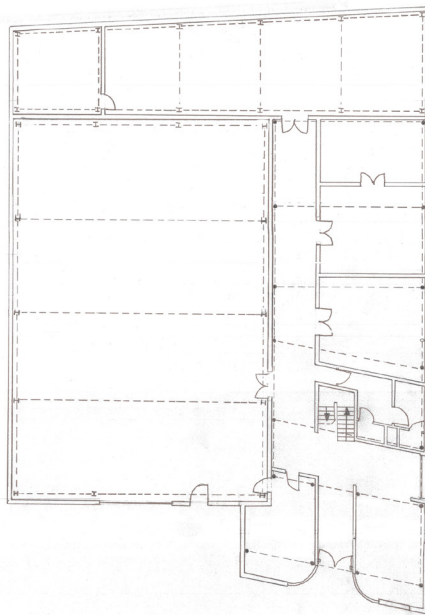
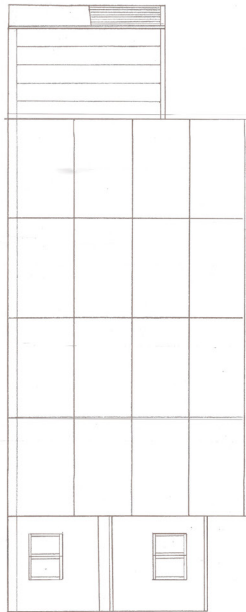
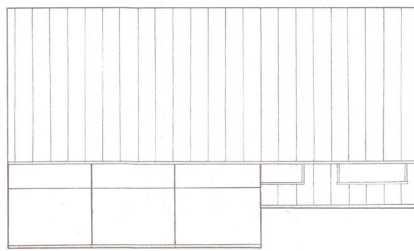
Around 2003, this part of Rova was built. Part of the arrival station (Rova Part 1) and the track are demolished to make way for this building. It is a building consisting of a steel structure with metal sandwich panels as facade and roof cladding. Inside, floors are made of wood and concrete blocks. Since the beginning, it has had the same function as a wood workshop and storage of refurbished products. There is also a small office on the ground floor near the entrance. The condition of the facade cladding and main support structure is good. The wooden skeleton on the inside is less so. It is a fairly closed building, but a lot of light still comes in through the skylights. There is nothing left inside the building from the track or the arrival station.



Delivco

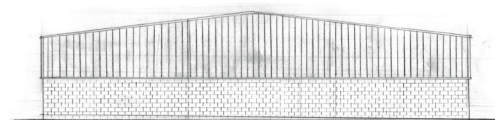
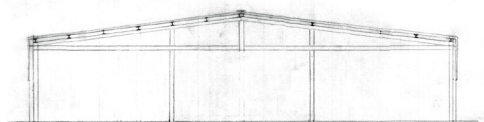
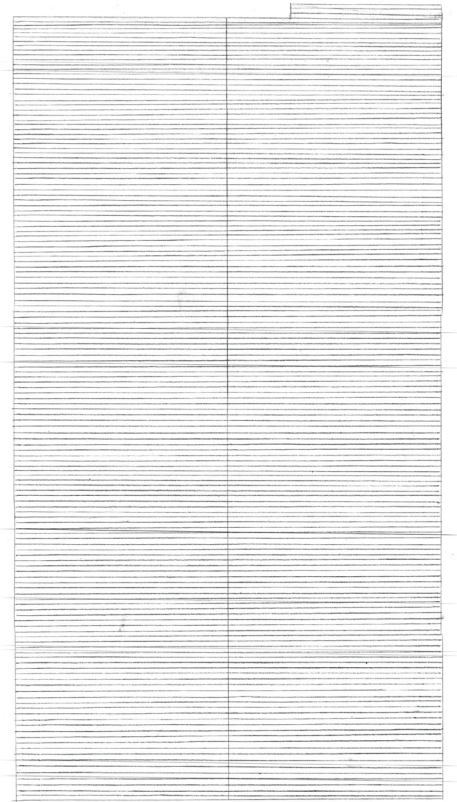
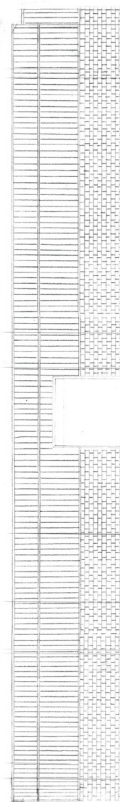
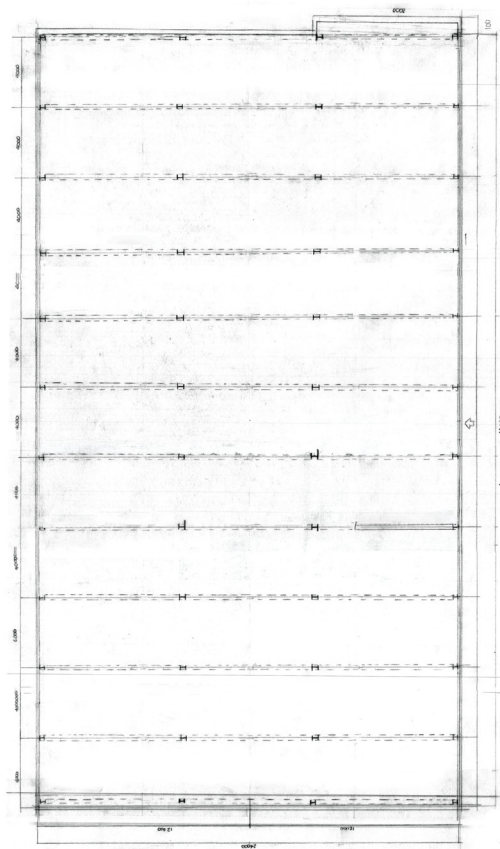
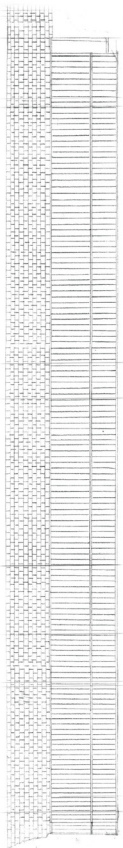
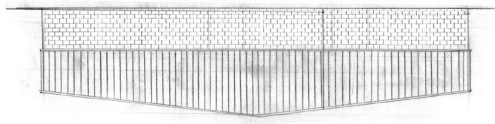
The wall built around 1971 is the cornerstone for this building. Where the track continues further than the arrival station did, a small building is erected next to this wall on the other side of the track. This building is soon demolished, leaving behind a wall made of the same concrete blocks as the wall where materials were stored. In 1987, a brown metal roof is added to these walls, and the track is shortened to this building. It likely became a sort of terminal and a place for storing and loading and unloading materials. Over time, the function of storage has not changed, and the construction, at least from the outside, has not changed either. It was not possible to enter, but it is clear that the walls are about 4 meters high, and the metal roof is most likely supported by steel trusses because of the large span of 24 meters it covers. However, it remains speculative, making it difficult to estimate the exact construction. Based on other buildings on the industrial site from the same period, an assumption was made about the steel support structure and its shape.

The users of the building are employees of Delivco, a company that supplies drinks to the hospitality industry in Brussels. There is beer, wine, and soft drinks stored inside. The employees have said in an interview that they want to move because the storage has become too small, and the building is in too poor condition. The roof is particularly in poor condition, according to the employee speaking in French. However, he finds it a very pleasant location to work because it is so close to the city, and his children go to school nearby.



BFC

This building was built around 2012 and is the newest of all six. Here, too, the track used to run through, and there was a small building on the plot from about 1971 to 1997, used for storing materials. The wall that had been there since 1971 plays a role in the shape that the BFC building eventually took on, but before construction began sometime between 2002 and 2012, this wall had already been demolished. The new building is for the creative industry and has two studio spaces that can be rented. It is a solid-looking building and consists of a steel skeleton with concrete facade cladding, polystyrene sandwich panels, bricks, and building glass blocks. The building is in good condition, although the plaster smeared over the bricks is crumbling, and the sandwich panels are dented. It was not possible to enter, but it was possible to obtain a floor plan, although this did not correspond well to reality.



Parking

This building has been there since about 1987, where the materials storage, first for coal and then for other products, had to give up a large part of the space for this building. The building lies on the sides of the trapez

oidal storage area. It consists of a concrete skeleton with concrete facade elements and a steel corrugated sheet roof. Inside, an office was built with concrete blocks and wood, but it is now abandoned. The building used to be a workshop where playground elements were put together, but due to the high labor costs in Belgium, the company moved to Poland. As a result, it is abandoned and now functions as a parking lot and sleeping place for homeless people. The roof insulation is falling off, and the wooden skeleton inside is in poor condition. The owner says it will be demolished soon because of its poor condition, although looking at the concrete supporting structure, facade, and roof cladding, it seems to be in much better condition.

Conclusion

Rova Part 1 and Part 2 are in need of strong renovation and have little physical and functional value left, so it is not realistic to include them in the urban plan. However, they do have a certain historical value because they are the oldest buildings in the industrial area.

Rova Part 3 is a well-functioning building for its current function. However, it is very closed off from the surroundings because it only has one opening, which is the entrance.

The walls of Delivco are still sturdy, but the roof is in urgent need of repair. The condition of the building is too poor for the users of the building, so they will move out soon, also to be able to expand.

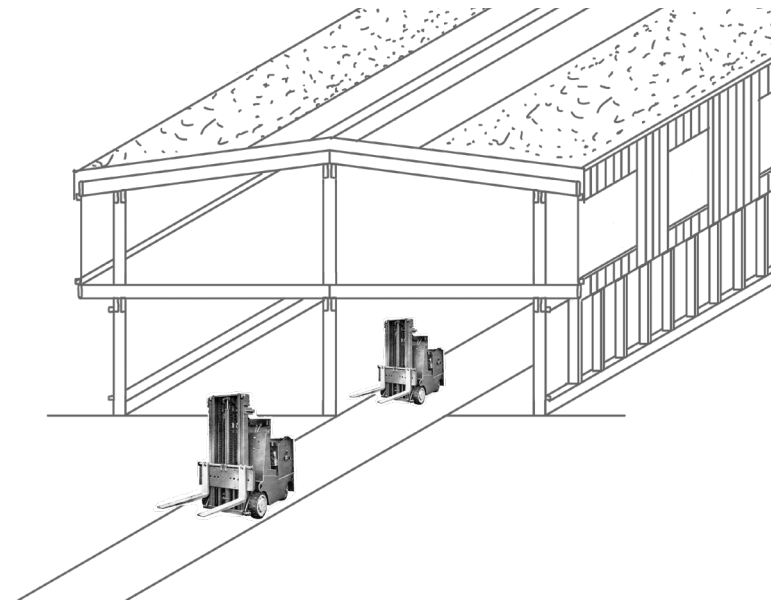
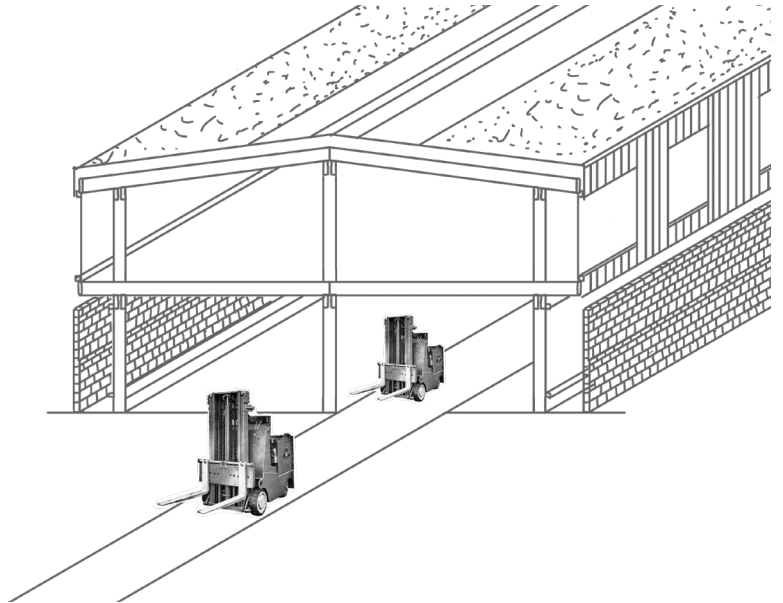
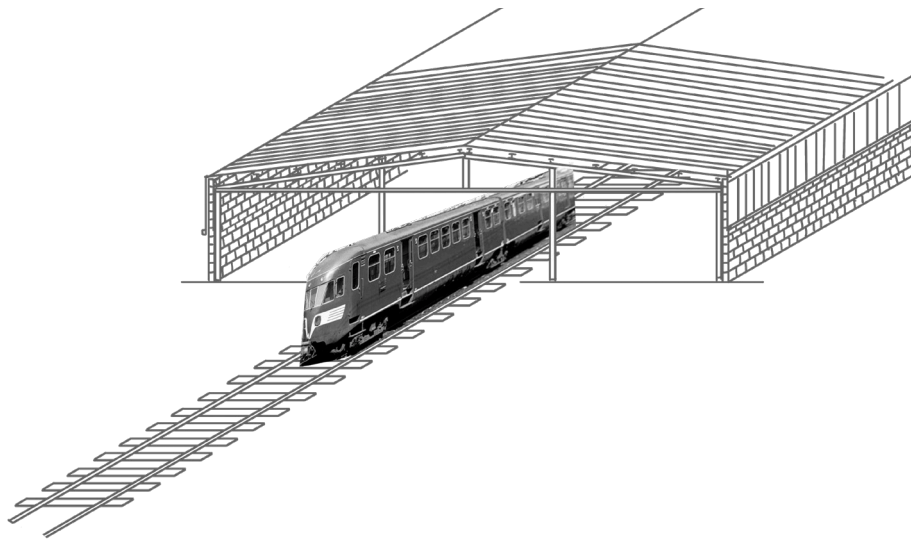
BFC is in good condition, but due to its closed plinth, it is also, like Rova Part 3, very closed off from its surroundings.

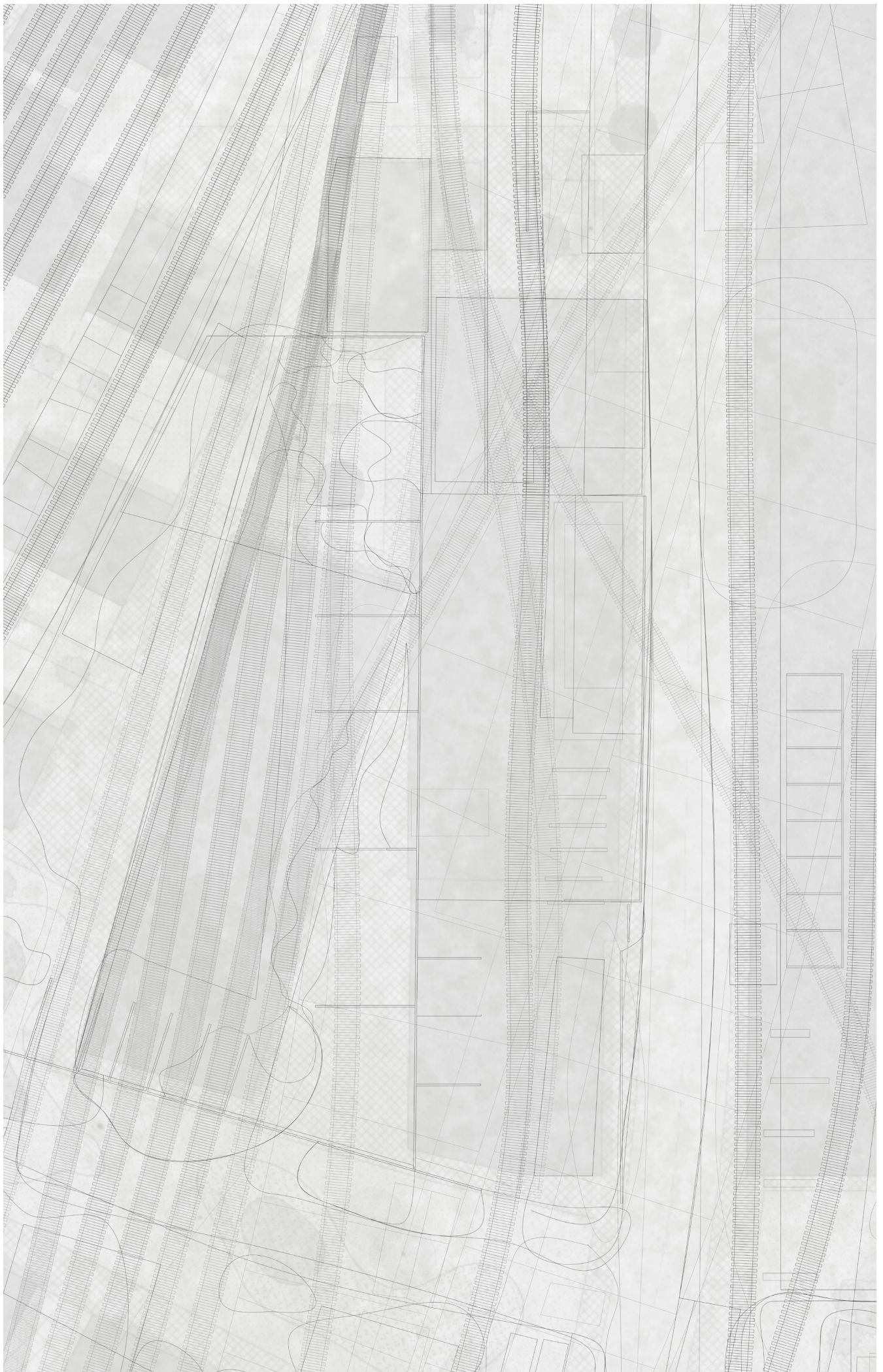
The parking building has not been in real use for a long time and is only a parking lot. Despite the lack of maintenance in recent years, the building is still in good condition due to its solid and massive concrete construction. It does not have any particular historical value.

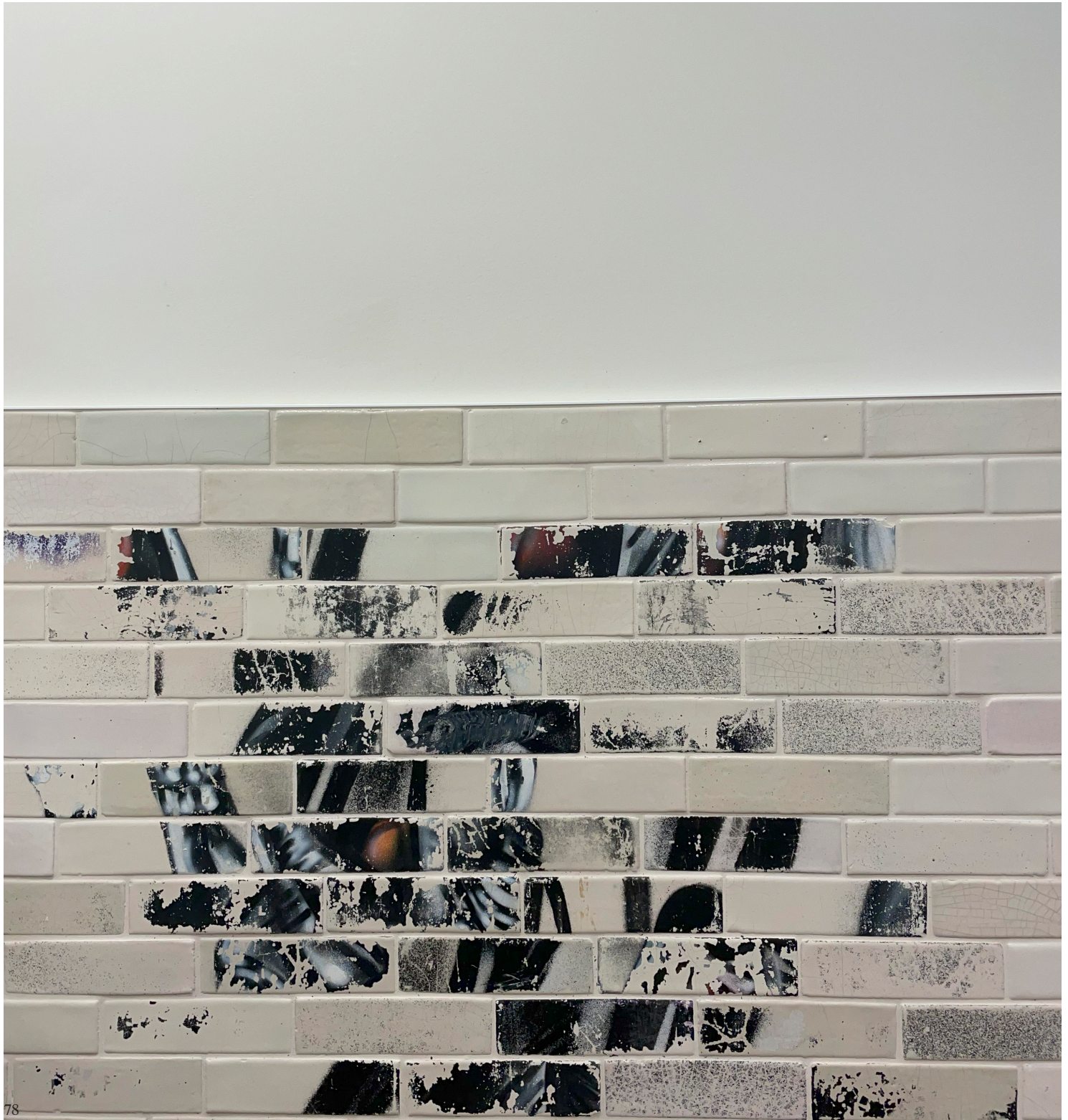
The next step is how best to integrate the new functions into the buildings now that we know the social, emotional, historical, and functional context of the building. The research into a nuanced balance between necessary pragmatic renovation and telling a story and the history of the building.

IX | History drawings

Drawings were created to deepen my understanding of the site's history by analyzing photos and satellite images. This process provided insights into the value of the industrial buildings and their former functions.





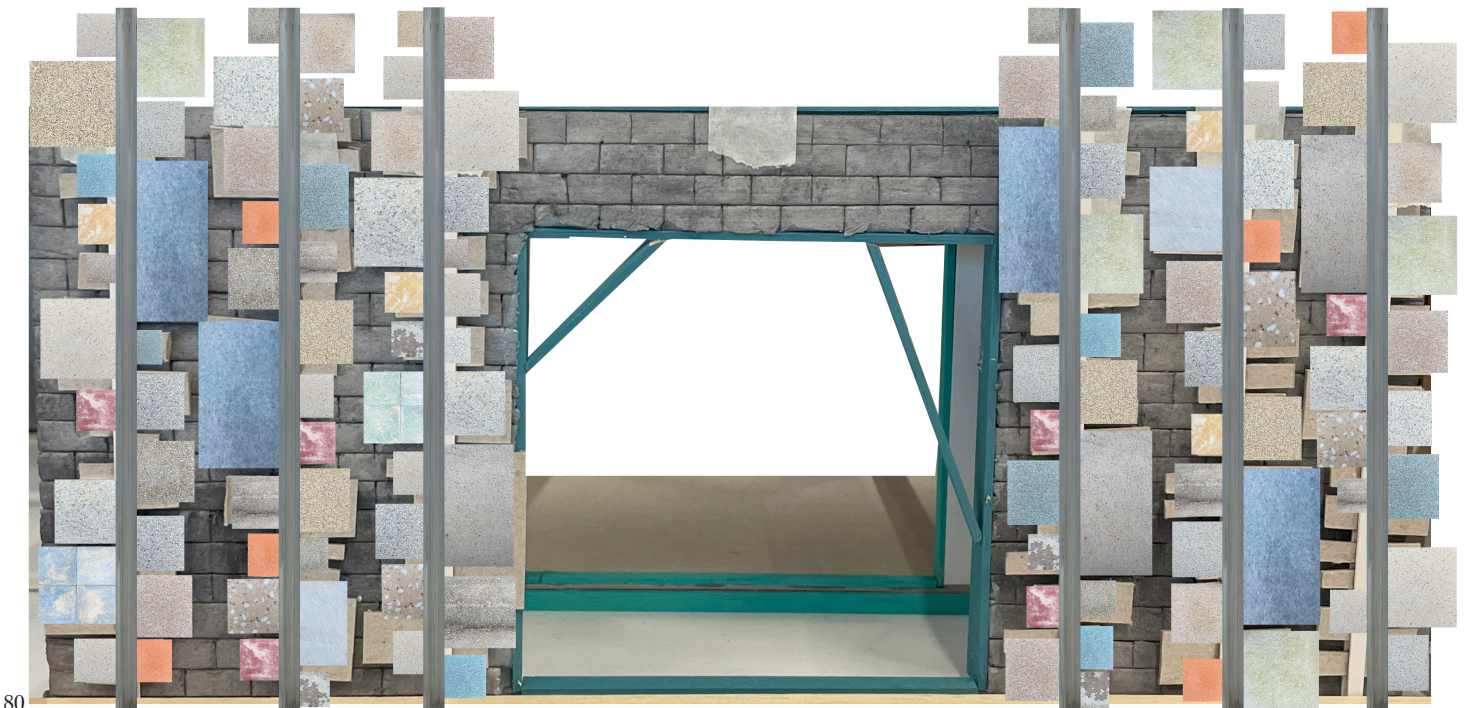
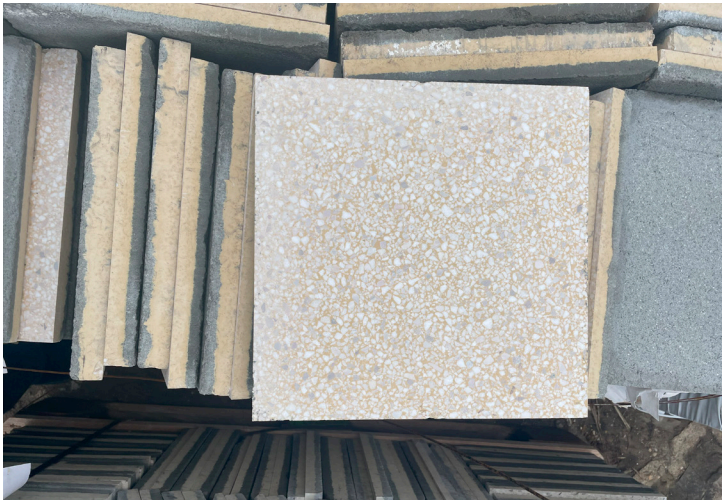


Building upon the characteristics and qualities of existing materials, consideration is given to new materials that can enhance without disregarding the existing ones. This involves creating a harmonious blend of past and future.

To be as environmentally friendly as possible, research is being conducted on sustainable building materials that will complement what is already in place. The current structures are chaotic in design, so we aim for a simple and honest presentation of materials.

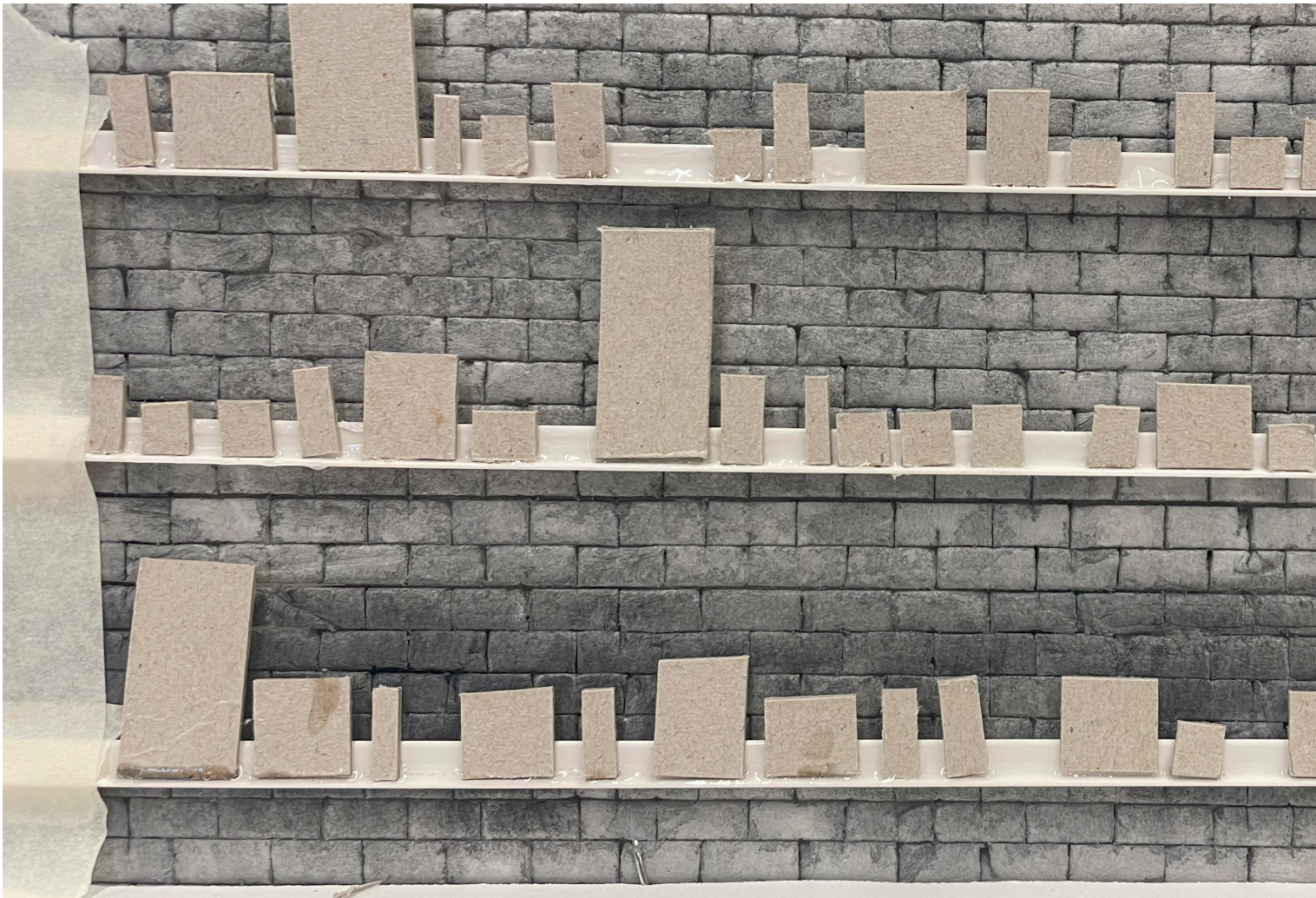
In the context of Bruno Latour's work, "hairy objects" is a metaphorical term he uses to describe complex entities that defy easy categorization or definition. These entities may have multiple layers of meaning, connections, and interactions that are not immediately apparent. Latour uses the concept of hairy objects to emphasize the intricacies and nuances of the social and material world, highlighting how things are entangled with various networks of humans, technologies, and environments. Essentially, hairy objects are those that resist simple classification or analysis, requiring a more nuanced understanding of their context and relationships.

"After Comfort" by Daniel Barber is a poem that explores the theme of finding solace and meaning in life beyond comfort and familiarity. It suggests that growth and self-discovery often occur when one steps out of their comfort zone and confronts challenges. The poem encourages readers to embrace discomfort as a catalyst for personal development and to seek fulfillment through exploration and resilience. Ultimately, it advocates for the idea that true fulfillment and growth come from facing adversity and embracing the unknown rather than staying within the confines of comfort and familiarity.



X.II | Temporality

Research in sustainable building materials and temporal ornamentation by visiting material depots and see what is available and trying to make ornamentation of these materials o the facade.





X.III| Truthfulness

The exploration of “poor materials” reveals a trend towards exposing rather than cladding them, reminiscent of the principles of New Brutalism, as articulated by Smithson in 1957. This style embraces unfinished materials and expressive sculptures, often lacking ornamentation, inviting questions about the labor invested in a building and its “as found” condition.

The philosophy of Louis Kahn, especially his inquiry, “What do you want, brick?” highlights the dialogue between architect intentions and material capabilities. The detailing of a building, such as rounded edges to resist erosion, illustrates this interaction. The work of Oest and Rotor in Brussels emphasizes designing with reclaimed materials, showcasing the narrative embedded in facades.

Engaging with materials invites experimentation and presence, while reflecting on time’s impact on architecture. As Bruno Latour posits, buildings are objects in motion, reinforcing the need to acknowledge material properties and sensitivities.

Architect Pauline Lefebvre notes a trend towards strict and rational design contrasting with organic, biobased materials. This begs the question: how can we make sustainability more appealing? The work of Sarah Wigglesworth in London, where the building itself becomes a collage of materials, challenges conventions and promotes expressive architecture.

Ultimately, as Lefebvre suggests, aesthetic choices should convey the story of a building’s creation. Simplicity can emerge from a singular material, presenting the notion that effective design often draws from existing resources rather than pursuing novelty.



