The tailored, project hackney

Making living in cities attainable again



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Architectural design crossovers | Heterogeneous City – London MSc3-4 Graduation Studio 2020-2021 **Abstract** - Housing prices in cities like London, New York, Paris and many others rise to a level which most people can't afford. Nowadays, it is not just the poor and less advantaged that are being priced out of the city, it is happening to the middle-class as well. Complete communities are stuck in poverty with little chance of upward mobility. In short, there is a social crisis in our cities manifesting itself in the increasing unattainability of living in these cities for most of the population. The central question addressed in this research is: what does the social imbalance in London look like and how can we create opportunities for those communities that are now being left behind? The conclusions and observations made in the research form the framework for the design assignment: creating a community based approach to improve the social balance in a neighbourhood through fashion. The design that follows is located in Hackney, London. It serves as a proof of concept that can be tailored to any currently unattainable city. The project combines manufacturing, education, fashion and reconnecting the community.

7 Introduction

10 RESEARCH

- 13 Reserach plan
- 19 Reserach essay

28 DESIGN ASSIGNMENT

- 32 Creating jobs
- 36 Creating opportunities for educaion
- 38 Being part of the social infrastructure
- 39 Feasibility of the program elements
- 41 The actors
- 44 Urban anchoring: formulation of the design framework

46 DESIGN PROPOSAL

- 49 Context
- 56 Organisation
- 80 Construction
- 82 Building technology
- 99 Climate design
- 103 Reversibility, flexibility and adaptability
- 110 Main entrance

116 REFLECTION

- 124 Bibliographical references
- 126 Personal glossary of terms
- 128 Appendix

Before you lies the graduation project *The tailored, project hackney*. The basis for this project stemmed from my worry about the social balance in our cities. Something that you see in western cities these days is that 'normal' people can't find affordable housing anymore. Not only people with low incomes are being displaced, cities have also become unattainable for people with middle incomes. Cities should be attainable for everyone, especially because they depend on the working class to function properly and to keep its dynamic.

The first time I dove deeper into the affordability of cities I focussed on the housing crisis. In an attempt to find out how we can make cities attainable for everyone again, I formulated three simple questions. What is going on, why is this happening and what can we do about it. Although the research was mostly focussed around Amsterdam and London, the problems that were addressed are patterns that can be found in cities worldwide. The housing crisis seems to have been caused by policy changes in the last decades of the twentieth century. Privatisation and deregulation led to more freedom for investors, project developers, landlords and platforms such as Airbnb to maximise their profits. Although governments and cities have many tools at their disposal to effect change, they seem to prioritise creating a good investment climate over good and safe living environments and ensuring that human rights are safeguarded. Therefore, the only way to really effect change, the thesis concluded, is through large urban movements, making the status quo untenable and forcing governments and cities to use their tools and make the living in cities attainable for everyone again.

For this graduation project, I shifted my focus towards some of the problems that are being caused by the increasing unafordability of living in the city. There has been a lot of attention for gentrification and its effects on the housing prices in big cities such as London, New York and Amsterdam. There are however many other problems that these cities face: growing inequality; polarisation; segregation; and distrust, and the disappearance of a sense of community and of civic pride. Left unattended, these problems could eventually lead to the disruption of our democratic society. Despite the severity of the situation, these problems are talked and written about much less than gentrification and the housing crisis. The literature that does address these problems focusses either only on the financial, or the political, or the social aspects. The solution, I would argue, lies in the middle of these disciplines. Therefore, the aim of this graduation project is to jump into that void and find a solution for upward mobility that is more substantial then just creating a strong community, pays more attention to the human aspect of the story than simply looking at the economics of the problem, and is faster than politics.

Firstly, you will read the research on the social imbalance in London and on possibilities for creating opportunities for those communities that are now being left behind. The research will be followed by the formulation of a design assignment. This is where the research is translated into a set of guidelines and suggestions and a design framework that can be applied in any city. The design assignment will be followed by a design proposal. This is were I show one possible way of applying the framework on a project in Hackney, London.

Fashion, architecture, and social issues seem to be three very separate themes. Still, all three of these interests have found a meaningful place within my graduation journey. I would like to express my gratitude towards my mentors, who helped my find a way to combine all these interests in one project. Joran, who identified my strengths and how to make them an asset for my presentation and design skills, even when I couldn't identify them as such. Thank you for helping me push the boundaries of my design. Alper, who helped me see the bigger picture every time I got 'design block' and nudged me in the right direction when I wasn't sure about the next step. And lastly Florian, thank you for your sharp criticism and for helping me recalibrate my design towards my fascinations.

I hope you enjoy your reading.

Amanda van den Burg

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RESEARCH how to make living in cities attainable again

Research Plan Introduction

Housing prices in cities like London, New York, Paris and many others rise to a level which most people can't afford. Nowadays, it is not just the poor and less advantaged that are being priced out of the city, it is happening to the middle-class as well. Complete communities are stuck in poverty with little chance of upward mobility. In short, there is a social crisis in our cities manifesting itself in the increasing unattainability of living in these cities for most of the population.

The general problem is that the urban clustering that drives innovation and economic growth — the clustering of industry, economic activity, and talented and ambitious people in cities — also carves deep divides in our cities and our society, resulting in rising housing prices, more inequality, economic and racial segregation and entrenched poverty (Florida, 2017). Florida (2017) noted that "inequality is not just an occasional bug of urban economies; it is a fundamental feature of them." Minton (2017) concluded that the problem nowadays is that it seems like the effects of gentrification are becoming more extreme, since even residents with middle incomes are being driven out of their neighbourhoods.

The specific problem is that the social imbalance that has emerged as a consequence of the aforementioned contradiction of urban clustering, is resulting in complete communities not just being left behind in the economic growth, but also in access to the city and opportunities for participating in society. Ideally, living in the city should be attainable for everyone. Especially the people with lower and middle incomes, since they are the people that build the city, the people who keep the city safe and healthy, who teach the city's future residents, the people who run the city. The city is a place where people without power can make their own culture and history (Sassen, 2015). In the ideal situation, those people without power should have the means to build strong and supportive communities in which they can develop a sense of civic pride. The impact of the crisis and the lack of balance is huge. The middle class is slowly disappearing. The wealthy are getting wealthier, and the poor are getting poorer and entire communities are being left behind. This development can be seen clearly when comparing the proportion of middle-class households in the UK in 1980 to the proportion today. Despite a constantly growing economy, the proportion has shrunk from two-thirds than to less then half today. Simultaneously, the proportion of poor households increased from 17 to 27 percent (Florida, 2017). Being left behind by economic growth can have major implications for your financial and social situation, your opportunities to participate in society, for your (civic) pride, and maybe most important of all, for you health. Therefore, this research aims to answer the following questions:

What does the social imbalance in London look like and how can we create opportunities for those communities that are now being left behind?

- 1. Which communities are being left behind in the economic growth?
- 2. What are the possible ways for creating upward mobility, and what are the pros and cons of those?
- 3. How can architecture attribute to a solution?

Definition of Theoretical Framework

Literature review

The New Urban Crisis by Richard Florida

This book focuses on what the emergence of the creative class, and the decline of the middle class, have done to cities and how the clustering that drives the economic growth of cities also creates great challenges, like gentrification, unaffordability, segregation, and inequality. An important footnote to his theories is that Florida has often been criticised for using the wrong kind of data, whitewashing the negative effects of creative city development and being elitist. "Florida's formula has proven to benefit the already rich, mostly white middle class; fuel rampant property speculation; displace the bohemians he so fetishised; and see the problems that once plagued the inner cities simply move out to the suburbs" (Wainwright, 2020). Despite all the all the allegations that can be made about Florida's bias, the book The New Urban Crisis gives a good description of the problems our cities are dealing with. It goes much deeper than just explaining how gentrification works and illustrates the complexity of how what gives cities their greatest strength, simultaneously creates their biggest weakness.

Palaces for the people by Eric Klinenberg

This book attempts to show the importance of social infrastructure and how it improves the life of communities and brings back crime. However, for a book dedicated to sociology; communities; and race, it jumps out that racism isn't mentioned. Furthermore, Klinenberg doesn't touch on the politics behind the absence of social infrastructure. At its core, Klinenbergs research is very insightful, but it is important to keep in mind that it is lacking the perspective of minorities. The most important section of this book is the chapter that described the importance of libraries.

Capital City: Gentrification and the Real Estate State by Samuel Stein

This book explains the function of planners in the Real Estate State and the power of planning in reclaiming urban life. Stein describes how life in cities has become expensive and segregated as a result of urban renewal. Contrary to many authors focussing on the social crisis in cities, Stein doesn't shy away from being specific when it comes to solutions. He calls for "large, disruptive mass movements organised not only to make demands of the state but also to make the status quo untenable" (Stein, 2019). In his theory, Stein ascribes too much power to planners, and too little to grassroots movements. The books focusses completely on New York.

Methodological positioning and description of research methods

The primary aim of this research is to determine what the social imbalance in London looks like and how to create opportunities for those communities that are now being left behind, therefore this is explanatory research. This research uses both qualitative and quantitative data, in the form of a literature review and case study; and demographic analysis respectively.

Research methods

Literature review

In order to gain a better insight into the processes that led to the social crisis in our cities today and what the consequences of the crisis are, a literature review was conducted. The review mainly consists of three books. The New Urban Crisis by Richard Florida, for a better understanding of the complexity of the urban crisis. This book wil give a more generic view on the problems. Palaces For The People by Eric Klinenberg, will give an insight into the importance of social infrastructure and provide ideas concerning possible bottom-up solutions. Lastly, Capital City by Samuel Stein helps to understand the role of urban planners in the process of urban renewal.

Demographic analysis

The aim of the demographic analysis, is to gain better insight into the differences between London's neighbourhoods. In order to give the best possible overview of which communities are being left behind, the most important data used in this research are the Ministry of Housing, Communities and Local Government's indices of deprivation. The main index that the ministry uses is the IMD (Index of Multiple Deprivation), which combines and appropriately weighs seven domains: income; employment; health deprivation and disability; education, skills training; crime; barriers to housing and services; and living environment (MHCLG, 2019).

Case Study

The clothing label Community Clothing will serve as a case study of a bottom up solution for creating upward mobility. The company provides a good example because its goals perfectly fit the theory behind Klinenberg's social infrastructure.

Validity

The used literature consists of subjective theories that derived from interpreting numbers, therefore the information is not very valid on its own. The validity of this part of the research is increased by taking into account this subjectiveness when using the theories and in some cases data triangulation. The used data for the demographic analysis is of high quality. Furthermore, the indices of deprivation provide a comprehensive representation of social imbalances, thus this part of the research is valid. The addition of a glossary prevents different interpretations of certain terms, and therefore adds to the validity.

Argument on relevance

There has been a lot of attention for gentrification and its effects on the housing prices in big cities such as London, New York and Amsterdam. There are however many other problems that these cities face: growing inequality; polarisation; segregation; and distrust, and the disappearance of a sense of community and of civic pride. Left unattended, these problems could eventually lead to the disruption of our democratic society. Despite the severity of the situation, these problems are talked and written about much less than gentrification and the housing crisis. The literature that does address these problems focusses either only on the financial, or the political, or the social aspects. The solution, however, lies in the middle of these disciplines. Therefore, the aim of this thesis is to jump into that void and find a solution for upward mobility that is more substantial then just creating a community, pays more attention to the human aspect of the story than simple looking at the economics of the problem, and is faster than politics.

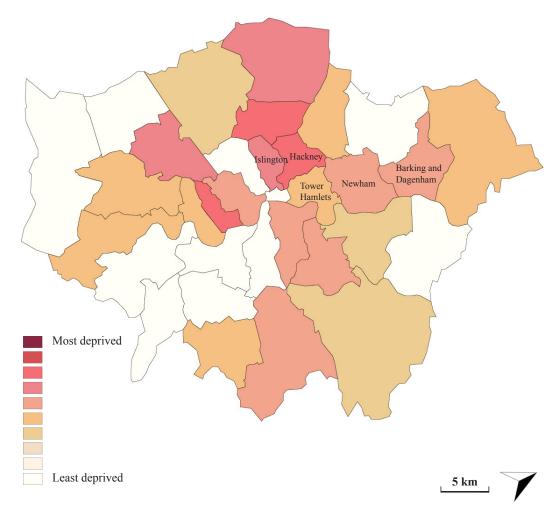
Research Essay

Which communities are being left behind in the economic growth?

In oder to determine which communities are being left behind by economic growth, the different neighbourhoods have to be compared to each other. The best way to compare the social situation in London's neighbourhoods is by using measures of deprivation. The Ministry of Housing, Communities and Local Government (MHCLG) has been measuring deprivation in England since the 1970s. The main index that the ministry uses is the IMD (Index of Multiple Deprivation) which combines and appropriately weighs seven domains: income; employment; health deprivation and disability; education, skills training; crime; barriers to housing and services; and living environment (MHCLG, 2019b). As of 2019, London's five most deprived boroughs are Barking and Dagenham, Hackney, Newham, Tower Hamlets, and Islington based on rank (MHCLG, 2019a). Barking and Dagenham and Hackney even find themselves among the 10 most deprived local authorities based on rank in England (MHCLG, 2019b).

The Greater London Authority (GLA) has created profiles for all wards in London. Part of this profile is the (ID2010) - Rank of average score, which is a measure of deprivation. See table 1 for the 10 most and least deprived wards based on these numbers, and table 2 for a comparison between the two groups of wards. Table 2 shows that there are a few significant differences between the two groups of wards in terms of, among others, the demographics.

Based on these numbers, a few conclusions can be drawn about the communities that are being left behing by economic growth. These communities are relatively young and for a big part consist of people with non-white ethnic backgrounds. This very big difference in proportion of BAME suggests that there is a significant racial threshold keeping these people from fully participating in society. The number of people with no qualifications is big, and there are many people who don't have a job. These communities face problems with crime, with the crime numbers being more than twice as high as in the least deprives wards, and the numbers concerning obese suggest that the left behind communities also experience problems with health and healthy living. Without jobs and education, and hindered by al the problem that were just listed, it is as good as impossible to keep up with the growing economy and the increasingly higher cost of living in the city.



Map 1. Distribution of the Index of Multiple Deprivation (IMD) 2019 by local authority based on the proportion of their neighbourhoods in the most deprived decile nationally (MHCLG, 2019b)

Top 10 most deprived wards in London	Top 10 least deprived wards in London
Top 10 most deprived wards in London	Top 10 least deprived wards in London
Haringey - Northumberland Park	Richmond upon Thames - Teddington
Haringey - Northumberland Park	Richmond upon Thames - Teddington
Tower Hamlets - East India and Lansbury	Merton - West Barnes
Tower Hamlets - East India and Lansbury	Merton - West Barnes
Newham - Canning Town North	Bromley - Hayes and Coney Hall
Newham - Canning Town North	Bromley - Hayes and Coney Hall
Brent - Stonebridge	Bromley - West Wickham
Brent - Stonebridge	Bromley - West Wickham
Hackney - Wick	Merton - Dundonald
Hackney - Wick	Merton - Dundonald
Newham - Canning Town South	Bromley - Shortlands
Newham - Canning Town South	Bromley - Shortlands
Haringey - White Hart Lane	Havering - Upminster
Haringey - White Hart Lane	Havering - Upminster
Hackney - Hoxton	Merton - Village
Hackney - Hoxton	Merton - Village
Westminster - Queen's Park	Bromley - Chelsfield and Pratts Bottom
Westminster - Queen's Park	Bromley - Chelsfield and Pratts Bottom
Hackney - Haggerston	Bromley - Petts Wood and Knoll
Hackney - Haggerston	Bromley - Petts Wood and Knoll

Table 1. The 10 most and least deprived wards based on the (ID2010) - Rank of average score (withinLondon) (Greater London Authority (GLA), 2001–2031).

	Average top 10 most deprived wards	Average top 10 least deprived wards
% All children aged 0 - 15	21,5	18,5
% All working-age (16 - 64)	71	62,5
% All older people aged 65+	7,5	19
6 BAME	56,5	13
6 English is first language of no one in household	18	4
ate of new registrations of migrant workers	64	12
children in reception year who are obese	15	6
children in year 6 who are obese	28	11,5
nployment rate (16 - 64)	59	77
with no qualifications	24,5	13
ime rate	104,5	44,5
edian house price	£ 340.395	£ 575.920
edian households income estimate	£ 30.556	£ 48.773
of households owned	20,5	79,5

Table 2. A comparison between the 10 most and least deprived wards on a few key subjects (Greater London Authority (GLA), 2001–2031).

What are the possible ways for creating upward mobility, and what are the pros and cons of those?

Possible ways for creating upward mobility can roughly be divided into two categories. On the one hand, there are top-down solutions which mostly include government interventions. Governments have a toolbox full of possible policy changes that could influence the housing market, tax policy and who receives benefit. These are just a few examples. Trying to create upward mobility top-down through the changing of government policies has the big advantage that it works for a large population at once. The downsides, however, are just as big: changing policies takes a lot of time and it is dependent on the political climate. Especially that last downside has resulted in the social crisis only growing over the last decades. On the other hand there are the bottom-up solutions, trying to tackle the social crisis through engaging a community. These type of solutions are what Eric Klinenberg would describe as creating a social infrastructure. Social infrastructure consists of the physical conditions that determine whether social capital develops (Klinenberg, 2018). "When social infrastructure is robust, it fosters contact, mutual support, and collaboration among friends and neighbours; when degraded, it inhibits social activity, leaving families and individuals to fend for themselves" (Klinenberg, 2018). According to Klinenberg this social infrastructure doesn't just help forge bonds between neighbours. Because the social network grows stronger, crime lowers, older and sick people are less isolated, younger people get less quickly addicted to drugs, distrust lowers and civic participation rises. Klinenberg even argues that it protects our democracy and contributes to economic growth (Klinenberg, 2018). Social infrastructure includes public institutions such as libraries, schools, playgrounds and athletic fields; as well as sidewalks, courtyards and community gardens; and community organisations like churches. Commercial establishments can also be part of the social infrastructure. Places like cafés, diners, barbershops, and bookstores could be called "third places": "places [...] where people are welcome to congregate and linger regardless of what they've purchased" (Klinenberg, 2018). The advantages of creating opportunities for upward mobility through bottom-up solutions, as opposed to top-down solution, are the much faster execution and the fact that result can be seen or felt much more directly. When there is a new park in the neighbourhood or if the side walk is well-maintained, you notice it directly. A change in housing policy on the other hand is much less tangible. These advantages of bottom-up solutions however also present its biggest disadvantage: a policy change affects everyone whereas a bottom up solution, such as a new library or park, only affects a relatively small group of people. Another disadvantage is that a stronger community doesn't help much if you're still poor.

The UK government, like most western governments, has had a market-led approach to policy since Margaret Thatcher implemented deregulations and

privatisations in the 1980s. "Key sectors of the economy were privatised with the belief that more competition would lead to better results" (van den Burg, 2019). The social crisis today proves that the reality is different and that a market-led approach doesn't lead to better results. Despite the crisis becoming more and more alarming, government stick to the market-led approach to this day. "Apparently governments prioritise creating a good investment climate and ensuring that the economy is doing well over good and safe living environments and ensuring that human rights are safeguarded. The right to adequate housing is, after all, a human right. As long as governments don't prioritise making cities attainable for everyone, nothing will change" (van den Burg, 2019). Furthermore, waiting for governments to change and adapt their policy is a very slow process, especially in a democracy where everyone has an opinion on, and a say in what to do. We don't have any time to waste, so while politicians figure out what to do policy-wise, we can start creating hands on solutions to make life easier and better for people now, not in 5 or 10 years. However, within the category of bottom-up solutions, there still are many options. And there are the disadvantages that were just listed. Therefore, the aim should be to find a bottom up solution that is scalable, and that helps in creating sustainable ways for upward mobility, for example by creating jobs or opportunities for education. There are two companies that serve as good examples of such an approach: Community Clothing, a British clothing label, and i-did, a Dutch social enterprise creating products out of recycled materials. Community clothing has a simple goal: to sell great quality affordable clothes and by doing so create great jobs and help restore economic prosperity in some of the UK's most deprived areas. The label was established in 2016 by Patrick Grant. It was designed to be a lifeline to the fashion manufacturing workforce in the UK, addressing and maximising the capacity of British factories. "We deliberately call it clothing because my opinion is that fashion has become a grim place. With everything we know about the badness of fast fashion, it's becoming difficult to wear things with any lasting joy (Conlon, 2019). Grant calls the label a "social enterprise" with three aims: 1) to make great clothes that are sustainable, affordable and well made, 2) to create and sustain quality jobs in towns that were once alive with clothing-manufacturing activity, and 3) to restore civic pride in communities and consumers. It is not just about existing workers, but future proofing, too. "There aren't the same number of people trained to do what we need, so we need to create a separate stream in schools that takes care of those who aren't naturally academically minded. If we make manufacturing cool and sexy, people will want to do it and for many it will be far more rewarding than struggling through a uni degree that doesn't really lead anywhere" (Conlon, 2019). I-did takes a slightly different approach. The social enterprise was funded in 2009 by Mireille Geijsen with the aim to create social inclusion through guiding people

to work. The idea behind the social enterprise i-did was that too many people are standing along the sideline. I-did creates opportunities for those who haven't worked in many years, or in some cases for those who have never worked at all. Reasons for the unemployment range from not speaking the language fluent enough, to sickness, injury and burnout, to prison. As a result of these personal situations, these participants usually end up at the bottom of the stack of job applications. Begin unemployed for a long period of time can cause a lower self image, resulting in even slimmer chances of finding a job. The aims is to make the participants selfsufficient through providing a course, consisting of coaching, guidance and work experience (i-did, 2020).

What both enterprises have in common is that they are not only businesses creating and selling products, they are also part of the social infrastructure of the neighbourhood. Community Clothing does it through creating sustainable jobs, and i-did through creating opportunities for education and work experience. These two examples also show how to minimise the disadvantages of the bottom-up approach. Both help in creating opportunities for those people that are now being left behind in economic growth, and these types of approaches are scalable. Community Clothing is now working in factories all over the United Kingdom.

How can architecture attribute to the solution?

Opinions are divided on the relationship between architectural interventions, gentrification and their affects on the affordability of a neighbourhood. This difference can clearly be seen when comparing Steins statements to those made by Florida. On the one hand Stein states that improving a living environment for the poor often results in the displacement of those as a result of gentrification. "Planners are allowed to do little that won't raise property values. Often they do so directly and intentionally, by initiating rezoning, targeting tax breaks or gutting protective regulations in order to stimulate development. Just as often, however, increased property values are the result of genuine, socially beneficial land improvements" (Stein, 2019).

On the other hand, Florida stated that communities are stuck in poverty as a result of the trickle down effects of gentrification, not as a result of gentrification itself. There is a flaw in his reasoning though. Florida cites a 2015 study that was tracing the impact of gentrification in Philadelphia between 2002 and 2014. "Residents of gentrifying neighbourhoods were not really much more likely to move out of them than the residents of non-gentrifying neighbourhoods were to move out of their own neighbourhoods. But the least advantaged and most economically vulnerable who, for one reason or another, did move out of gentrifying neighbourhoods ended up in higher-poverty neighbourhoods with more crime and worse schools" (Florida, 2018, p.81). The least advantaged don't just move out of a gentrifying - read improving - area to go to a poor neighbourhood just because they want to. They make such a move because they can't afford their old neighbourhood anymore. At the core, however, Florida is right. The reason some communities are stuck in poverty is because of the trickle-down effects of gentrification. There are neighbourhoods which are not gentrifying — there are no improvements to the buildings or roads, no new facilities, no better schools — and still houses in that area wil become more expensive. As a result, those in worse neighbourhoods either have to pay more leaving them less money for other necessities while seeing no improvement in their neighbourhood, or are being displaced. According to Florida, there can also be a significant racial threshold keeping those in poor black neighbourhoods from moving up in society. "Gentrification remains highly bounded, showing few signs of spilling over into black neighbourhoods even when the black neighbourhoods are in very close proximity to the gentrified (or gentrifying) neighbourhoods" (Florida, 2017).

Regardless of the side of the argument you are on, there is a paradox here. The architectural interventions that are associated with gentrification and thus are seen as the cause of displacement - whether directly or through trickle down effects - are often also the interventions that help build a stronger social infrastructure.

And as we just established, a social infrastructure can play an important role when creating opportunities for upward mobility for those communities that need it the most. "Rather than knee-jerk resistance to change or attacks on new urbanites, the more appropriate response is to assist those who are most vulnerable. It makes little sense to discourage investment in cities and urban neighbourhoods, especially in places that desperately need it" (Florida, 2017).

As was mentioned earlier, social infrastructure consists of the physical conditions that determine whether social capital develops. From this can be derived that the physical conditions - the architecture - play a vital part in the creation of such an infrastructure. The main reason why good social infrastructure helps civic participation and helps prevent isolation, distrust, addiction and crime is because it creates interaction between people. Architecture cannot force people to interact with each other. It can however facilitate such interactions, and it can do so on different scales. The takeaway from Klinenberg's book isn't that a neighbourhood needs a library, and well maintained green spaces and a church that puts a lot of effort into community building. The takeaway is that each neighbourhood needs some form of social infrastructure, and thus some form of physical conditions, that will facilitate its residents in forging and strengthening social bonds. And doing so without being obvious. "People usually do not volunteer in a community garden, teach children to read, attend a church picnic, or participate in a rally for better local air quality because they're trying to generate social cohesion. But, inevitably, the process of doing these activities creates of strengthens social bonds" (Klinenberg, 2018)

Conclusion

What does the social imbalance in London look like and how can we create opportunities for those communities that are now being left behind?

We now know that the social imbalance in London consists of many deprived communities, very often with a diverse ethnic background. These communities do not only have to deal with racial thresholds keeping them back, they also have problems with health and crime. Most important of all, many people in these communities are unemployed and undereducated, which means they can't keep up with the growing economy and increasing costs of living in the city.

Tackling these problems top-down by changing policy is a very effective way to approach this crisis, but it is also very slow approach and, more importantly, completely dependent on the political climate. Tackling the problem bottom-up on the other hand only affects relatively small groups of people, but at least it is an approach that works faster. Furthermore, its effects can be seen and felt more clearly. The idea behind a bottom-up approach is to strengthen the social infrastructure in a neighbourhood. A stronger social infrastructure in turn will help in growing a stronger social network, resulting in lower crime rates, people being less isolated, distrust lowering and civic participation rising. An important condition when opting for the bottom-up approach is the creation of sustainable opportunities. More specifically: the creation of jobs and opportunities for education.

Whether you believe that gentrification is directly displacing original communities, or whether you believe that gentrification is only displacing people through it's trickle down effects, in the end it has to be concluded that the architectural interventions that are associated with gentrification - and thus are seen as the cause of displacement - are often also the interventions that help build a stronger social infrastructure. The aforementioned condition when choosing a bottom-up approach will help in preventing this displacement. It is vital to choose the type of (architectural) interventions that not only 'upgrade' the neighbourhood, but simultaneously help the people in the communities to be part of the economic growth. Not only facilitating interactions between neighbours, but also creating ways for them to participate in society. Therefore, the best way to create opportunities for those communities that are now being left behind is through combining Klinenberg's theory on social infrastructure and Patrick Grants and Mireille Geijsen's way of running a company: by creating jobs and opportunities for education for those that need it the most.

formulation of the DESIGN ASSIGNMENT

The research concluded that a bottom up solution is the best way to quickly and effectively create opportunities for those communities that are now being left behind. More specifically, creating those opportunities by investing in a social infrastructure that will fosters contact, mutual support, and collaboration among friends and neighbours. A strong social infrastructure will help lower crime, lower distrust and increase civic participation. The research also concluded that there is an important condition to such a bottom up approach, namely to create sustainable opportunities for the left behind communities by creating jobs and opportunities for education. Therefore, the following three aims for the design assignment have been formulated:

- 1. creating jobs,
- 2. creating opportunities for education,
- 3. be part of the social infrastructure of a neighbourhood.

Creating opportunities through investing in social infrastructure can take many forms. This design assignment will focus on one specific form of creating jobs and opportunities for education, namely the manufacturing of clothing. A clothing manufacturing company will be combined with an education program. These two elements of the program will create opportunities for upward mobility by creating jobs and education. Additionally there will be a cafetaria, publicly accessible for everyone. This third element in the program is mostly geared towards the softer side of social infrastructure, it is purely creating a place for people to meet, eat together and host community related activities.

In short, the design assignment is:

Creating a community based approach to improve the social balance in a neighbourhood through fashion

This assignment will consist of a set guidelines and suggestions that, with some alteration, could be applied to any city. In this chapter we will go through the three aims one by one, and translate them into program elements. Furthermore, an overview of the different actors will be given and possible ways for financing the project will be explored. Lastly, a framework for the design will be formulated.

In the end, the aim of this assignment is more than just to create jobs and opportunities for upward mobility for those communities that are now being left behind in economic growth. It is also meant as an example of how to run a business in a more sustainable way. Move away from global mass production, and toward smaller production companies with more eye for people, product and planet.

Creating jobs

The clothing industry

The 'creating jobs' element of the program will take the form of a manufacturing company. Before going into the specifics of this manufacturing company, let's take a look at the clothing industry in general first. The process from first sketch to finished garment ready for shipping can be summarised in these few steps:

- designing
- creating a tech pack
- making patterns
- making samples
- production
- advertisement and marketing
- preparing for shipping

This process naturally differs greatly between different types of clothing companies. A very small label will combine some of the steps, and skip others. A big label with mass production on the other hand will most likely need more steps. Some labels do everything in-house, including creating the tech-packs and making the patterns, while others use other companies and freelancers for steps like these. Quite a few of the steps will overlap. Usually, a label will work on advertising and marketing while running production for the current collection. In the mean time, the label will also work on sampling for the next collection.

Very few labels have their own sewing atelier. Most companies will use separate manufacturers. These separate manufacturers can be divided into two categories: CMT (Cut Make Trim) and FPP (Full Package Production). As the name suggests, CMT only entails the cutting, making and trimming of the clothing. Trimming is the adding of the finishing touches and doing a thorough quality check. This type of production allows the designer to maintain full control over the process. With FPP, the manufacturer will do the cutting, making and trimming, as well as being a part of the design stage, defining the technical specifications and sourcing the fabrics. The manufacturing of clothing can also be divided in other categories based on the type of product, as different types of fabrics ask for different types of machines and techniques. These categories are: jeans, non-woven, woven and shirt. Jeans is a special category, because there is more to it than just cutting the fabric and sewing the pieces together. Jeans typically require processes including colouring and washing the garment in specific ways.

The manufacturing company

The fashion industry has earned itself a bad name through the mass production of bad quality clothing, the even worse treatment of manufacturers and the lack of a truly sustainable approach. Luckily, there are more and more brands approaching the design process differently, each trying to improve parts of the process and make it more sustainable. One of those brands is Community Clothing, the British clothing label that has been mentioned a few times by now. It will serve as the main example in shaping the idea behind the manufacturing company. The label does both designing and manufacturing. This new manufacturing company, however, will only focus on the manufacturing because it is more favourable to create one slightly bigger manufacturing company that can collaborate with all kinds of smaller clothing labels that cannot afford to have their own sewing atelier. This approach stimulates diversity and supports smaller local businesses.

Where Community Clothing mainly serves as an inspiration for bringing the production of clothing back into the city, Alohas, a brand mostly focussing on the production of shoes, serves as an example for the organisation of the production processes and timeline. Aside from producing locally in the coastal region of Alicante, Spain, the brand stands out for using an on-demand model in which they hold off production until customers order enough for them to know that the product will be liked. This way they minimise overproduction, and thus waste. First, they launch upcoming designs, available for pre-order at a 30% discount rate. After three weeks the discount drops to 15%. This is also when the production starts. Based on the pre-orders, Alohas can calculate exactly how many units of each new style should be produced. There is no traditional sales calendar involved. The earlier you buy, the higher the discount. Although the manufacturing company won't be designing the clothing, they can impose certain processes on the clothing labels they collaborate with, and by doing so ensure a more sustainable way of production. Diagram 1 depicts a timeline similar to the one of Alohas. Spreading out the production over the whole season has the additional benefit of creating a more or less evenly divided workload throughout the year, and thus steady jobs.

What both Community Clothing and Alohas have in common, is that they pay attention to each of the well-known three p's: people, planet and profit. They have found a way to affordably produce beautiful and good quality products in a sustainable fashion, while guaranteeing good working conditions. And all this while still being profitable companies. These companies, and the example they set, are the future of fashion.



Diagram 1. Timeline depicting the process from the first design stages to shipping the finished garment.



Creating opportunities for education

The education program is designed as an addition to the manufacturing company. This element of the program is based on Mireille Geijsen's i-did, the social enterprise that was mentioned in the research. Geijsen funded i-did in 2009 with the aim to create social inclusion through creating work. "We believe in a social and circular society. A society where everyone contributes and no one is excluded. That is why we guide people, who have not worked for a very long time or who have never worked, to work by making acoustic products" (i-did, 2020). The products the enterprise makes range from bags to acoustic interior elements, all made from recycled felt.

An interview has been conducted with i-did's production manager in Utrecht, Marieke Hendriks, in order to learn more about how the enterprise operates and what makes it successful. From the interview can be concluded that the most important thing is the coaching of the participants throughout the whole process. When a new participant starts with the program, different things that might influence the participant's ability to fully participate are discussed. Who is taking care of the children? How will the participant commute to work? How many hours a week can the participant come to work? According to Hendriks, participants should work at least 24 hours a week in order to make the most of the program. Second, the participant slowly learns new skills and tasks. They don't start right away with the sewing, but with ironing and doing the quality checks of the finished products. Then the participants slowly work their way up, step by step learning more difficult tasks. Furthermore, the key to succes doesn't only lie in how good the participants are guided in the actual work they do, but in everything else as well. No hierarchy, no offices, everyone sits at the same tables. Everyone eats together once a week and the meal they eat on that day is cooked by some of the participants. According to Hendriks, it is very important that the participants eat the same meal together instead of sitting next to each other with each their own lunchbox. Lastly, the managers help the participants with learning Dutch. A summary of the interview can be found in the appendix.

Structure of the education program

The target group for the education program is the unemployed inhabitant of a deprived neighbourhood. Someone who probably has no prior education, and maybe doesn't even speak English fluently. For these people, the best type of program will be an 'introduction to clothing manufacturing' course. This course will look a lot like the program offered by i-did, but with theory and sewing classes in addition to the work experience. After finishing the course there are a few options. The student could go on and work full time in the manufacturing hall, or continue their education. Diagram 2 shows an overview of the education program.

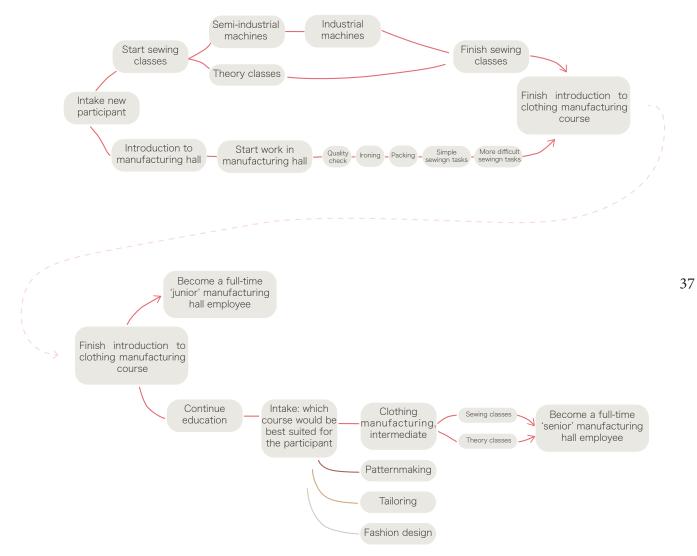


Diagram 2. Proposed education program.

Being part of the social infrastructure

Chicago was hit by a tropical heatwave in 1995. The mortality rate as a result of this natural phenomenon seemed strongly correletad with segregation and inequality. Yet, three of the ten neighbourhoods with the lowest mortality rate were poor, violent and predominantly African American. Data couldn't explain why some neighbourhoods suffered many more deaths than others. When Eric Klinenberg, then a recent graduate, decided to walk around the different neighbourhoods, he noticed a clear difference. The neighbourhoods with high mortality rates were the ones with empty lots, broken sidewalks, abandoned homes and shuttered storefronts. The neighbourhoods with the low mortality rates were densely peopled, busy with foot traffic and enlivened by commercial activity and well maintained parks. They were supported by strong community organisations. Klinenberg discovered that there are physical conditions that determine whether social capital develops. These conditions are what he calls social infrastructure (Klinenberg, 2018).

This third program element is the most variable one. It is completely dependent on the context. How much space is there on the location, what kind of neighbourhood is it, what do the neighbours need from their social infrastructure. At the core of this part of the program, regardless of what other forms of social infrastructure might be added, is a cafeteria. The goal for the cafeteria is not just creating a place for employees and students to eat affordable and healthy meals, it is also a place that will facilitate building connections and relationships between students, workers and residents from the neighbourhood, since the cafeteria will be publicly accessible. Some of the possibilities for expanding this part of the program are adding a library, small shops, a park, or a space for the community to host activities.

With the way social infrastructure works, the physical conditions are just there to facilitate the building of social capital. The real building of social capital starts when workers teach each other english during work. And when a neighbour learns about easy and affordable healthy meals in the cafeteria, and starts cooking them at home. And when people who dropped out of school when they were young, suddenly have an opportunity to educate themselves because there is this new accessible education program. The creating of jobs and opportunities for education are the base for making this assignment work. But the social infrastructure surrounding it, is what makes 1+1 add up to 3. There won't be jobs for everyone from the neighbourhood. Not everyone from the neighbourhood will be interested in learning about manufacturing. But by still creating a space for everyone to visit and use, somewhere they can gather, regardless of their ties to the manufacturing company, the meeting and bonding with different people is facilitated.

Feasibility of the program elements

The structure of the assignment is purposefully made flexible. There are three essential program elements, with many options to add on top of that. For one, the flexibility ensures that the assignment can be adapted to different locations and circumstances. It also provides possibilities for phasing, in order to spread out the initial investment.

THREE AIMS

Creating jobs

Creating opportunities for education Be part of the social infrastructure of a neighbourhood

ESSENTIAL PROGRAM ELEMENTS

Manufacturing company

Affordable education program

Publicly accessible cafetaria

FLEXIBILITY WITHIN THE ASSIGNMENT

Is there going to be an extra section equipt for the production of jeans, or knits, or embroidery? Are there going to be additional courses or only an introduction to clothing manufacturing? Additions might be a library, a vegetable garden, an auditorium, an exibition space or a park.

Diagram 3. Essential and flexible program elements.

Feasibility of the education program

The social enterprise i-did makes a point of being as self-sufficient as possible. They receive some government funding, but this is not something they can count on for the future. When politics change, this funding could easily go away. The same argument goes for other types of funding.

A financial model similar to the one followed by i-did will be applicable for the education program. The students don't pay for the education. The introduction to clothing manufacturing course would be a course offered by the manufacturing company in order to educate new employees. The costs for the education will be included in the price paid by the clothing labels for the production of their designs. The financial model for the follow up courses is slightly different. A part of the education is paid for through the revenue of the manufacturing hall - as is the case with the introduction course - the remainder of the costs will be paid for by the students in the form of a tuition fee. It will be essential that this tuition fee is affordable for someone working a manufacturing job.

Feasibility of the social infrastructure

The social infrastructure will rely heavily on volunteers. The only way this part of the program works is if the community itself decides what happens here. If they participate in the process of deciding what form the social infrastructure will take, they will be more invested and motivated to make it work. Where the manufacturing company is a private company, the cafeteria is not. Any money earned from the cafeteria, will be invested in the social infrastructure.

The actors

There are a few types of actors. Those who are connected to the project longterm the residents and the local government, the actors that are connected to the project for at least a few years - the students, the workers and the manufacturing company, and the actors that are only connected to the project during the initiation phase - the initiator and the investors.

Residents of the neighbourhood

These people won't necessarily work in the manufacturing hall or follow the education program, but they will notice a difference in their neighbourhood. Even if the third element of the program only consists of a cafetaria. For this actor, the social improvement is the most important objective. Since this is one of the two actors that will be connected to the project the longest, it is important to make sure this group of people has influence or, more concrete, a stake in the way the project is shaped. They have to be able to make the public space within the project - the social infrastructure - their own.

The local government

The local government will be involved in a number of ways. They will make sure the building meets local regulations such as zoning plans. Furthermore, the local government could try to increase the impact of the project by doing interventions and making changes outside the perimeters of the plot. For example changing public transport routes. The local government could also support the project on a financial level through subsidies and tax cuts.

Workers and students

These students come from all walks of life, similar to the participants of the i-did program. Some have children, some don't. Some have finished school, some haven't. Some have worked before, some haven't. Some might be passionate about the production of clothing, others might just be looking for a second chance on life. The student's objective is gaining experience in order to have a chance at finding a better, more rewarding job. The workers either already have experience in clothing manufacturing or they have finished the education program. Their biggest objective is improving their financial situation and having a rewarding job.

What is important to both is that the location has to be reachable easily by public transport. For some of them, having an affordable daycare option might enable them to go out and work, instead of staying home to take care of the children. A friendly and supportive working environment is important to make both the students and workers feel comfortable. Along that line, the availability of prayer or meditation rooms is appreciated.

The manufacturing company

The manufacturing company is a private company. Their objective is fair and good quality production. Their prices are higher than those of most competitors, but in exchange they offer a service that is sustainable, and that helps rebuilding communities.

Investors

The project should not become a playground for the international investment market. But it might be necessary to use investors for the first few big expenses necessary in order to start the project. Most notably, purchasing and renovating a building. It is key to pick investors very carefully and make sure their values are aligned with those of the project.

Diagram 4 gives an overview of the actors and where their objectives lie. Ideally, the local government sits right in the middle of the three objectives, striving for both social and financial improvement, while working towards a financially feasible plan. However, the more realistic assumption is that the local government would lean more heavily towards financial feasibility. For the manufacturing company, feasibility is the most important factor simply because it is a business. But the manufacturing company is not all the way in that corner because social and financial improvement for the workers share an important second place.

The initiator

This is the role that I fill within the project. I see myself as the entrepreneurial architect. The entrepreneurial architect formulates the design assignment, bring the actors together and balances on the point where the social, political and economic aspects come together. Despite feeling responsible for all these different aspects, the main focus lies on the design. The style of the architecture I use is humble and facilitating. The emphasis of the design should be on accommodating the community, not on creating interesting architecture. On finding a balance between practicality, feasibility and beauty, instead of placing my mark on the project. Making architecture that works for the community. All the work is in support of the assignment.

When a project like this is realised, there will be a team consisting of different specialists. As the designer, I will be part of that team. As the initiator and entrepreneurial architect, I will mostly be a part of the project in the beginning stages. But since a project like this one is never finished and always evolving, I'll always be available. Ready to step in when changes are necessary. My role will likely change throughout the process as well. Sometime I'll be more of an entrepreneur, other times the architect.

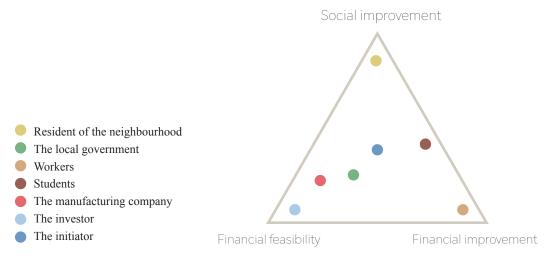


Diagram 4. The actors and their objectives.

Who are the stakeholders and who will be in charge?

The first four chapters of this assignment have shown how the three program elements will be self-sustaining in financial terms once they're up and running. But who will pay for, and thus own, the factory? Who will finance the renovation? In order for the community to have final say over the project, they would have to be the majority stakeholder. For this to work, the community should organise themselves and pick a few people to represent the rest. But that raises the question: isn't the local government already an organisation consisting of representatives of the community? Therefore, one possibility could be to put the local government in charge. This could prove difficult, however, since the community distrusts the government. That distrust is mostly aimed at the larger government, but that governmental body is very strongly connected to the local government. The funding of local government, for one, is determined by the larger governmental body.

Furthermore, this design assignment is distinctly designed as a bottom up approach. Putting the (local) government in charge seems contradictory to say the least. As was stated in the research, the actions of governments are dependent on the political climate and might change every election cycle. In order to create a project with a longterm vision, you need the largest stakeholder to be someone who truly understands the vision, has the right values, and is in it for the long term, not for just four years. For that reason, I don't think the local government should be in charge. It should be a foundation, working closely together with the local government. In terms of financing those big expanses, the use of investors seems inevitable. The manufacturing company will rent the building they use instead of buying it. This has two advantages. First, the foundation remains owner of the building, ensuring continuity. Second, through the rent, the foundation has a steady income that can be used for other purposes.

Urban anchoring: formulation of the design framework

Location

First and foremost, the site has to be suitable for housing a manufacturing company. Ideally, the project would be housed in already existing building that is vacant. This way the project brings life back into the city. Another very important condition when picking the location is the social situation in the neighbourhood and in the rest of the borough, as the workers and students probable won't live right next door. The project has to be realised in a neighbourhood that is deprived and that probably has a bad social infrastructure. Furthermore, it is important to place the project right in such a neighbourhood instead of on an industrial area along the outskirts of the city. Since the aim is to use the project as a vehicle to create better living circumstances for deprived inhabitants of the city, it is essential to pick a location as close to those people as possible. To summarise, the guideline is to look for large, existing, vacant buildings in deprived neighbourhoods in the middle of the city. Especially in former industrial cities like London, there might just be an old factory waiting to be renovated.

Heritage

In order to maintain the connection to the industrial heritage of an old factory, we have to honour the architectural characteristics of that history and minimise the additions and interventions. Furthermore, feasibility is, in the end, one of the most important factors in determining whether the initiation of the project will take place. Therefore, keeping the transformation feasible also asks for just a few selective interventions. The building will have to be examined in terms of structure and construction engineering. Taking the results of that examination into consideration, a few interventions will be selected. These will be aimed at making the building workable and maximising the potential of the program. The interventions will contrast the historic characteristics in order to draw more attention to them.

Flexibility, adaptability and reversibility

In order to make the building durable, these factors have to be taken into consideration. Each of these work on another level. Flexibility is the freedom to use the spaces in different ways, depending on the user's need at the time. Adaptability is the extent to which the program can be changed. The research and the context combined will result in a certain ratio between business, education and community related program elements. Bij ensuring that every space could be used for any of the three elements, the project can be made future proof. This way, multiple scenario's are possible: more business and less education. Or less business and more community. There will always be different needs in the neighbourhood, and the manufacturing company won't be a constant factor either. Businesses can grow shrink. The renovated factory

needs to be able to accommodate these changes. The project will forever be a work in progress. Therefore, it is essential to make the selective interventions in such a way that they maintain, or enhance the adaptability of the plan.

Lastly, since the objective is to use old factories for this plan, the reversibility could be an important factor to take into consideration. These factories, if well preserved, give character to a neighbourhood. Therefore, when making design decisions, the life of the building after the project has to be taken into account as well. Will it still be recognisable when the program and use of the building change?

Claiming a place in the city

The most obvious way to claim your place in the city, is through buying a piece of it. But even if the community as a whole, or a foundation in the name of the community, buys the property, how will individual residents of the neighbourhood claim their place in the new social infrastructure?

One factor contributing to making it easier for community members to claim their place, is through making the threshold as low as possible. For example, by creating clear and inviting entrances, and by using a material language they are familiar with. Another way to stimulate it is through flexibility. Designing the public places within the plan in such a way that they invite people to use them however they need or want to use them.

DESIGN PROPOSAL proof of concept

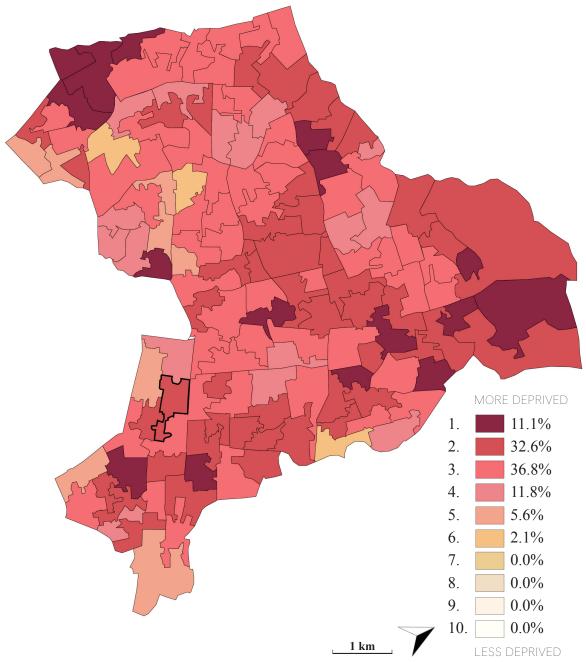


According to the design framework, a location has to meet three requirements: the building has to be suitable for manufacturing, vacant and located in a deprived neighbourhood. One of the most deprived boroughs in London is Hackney. In fact, it is one of the most deprives local authorities in the UK (MHCLG, 2019b).



Map 2. Greater London boroughs. Hackney is highlighted with a thicker border.

Within Hackney the deprivation is fairly widespread. There are very little neighbourhoods that are not deprived. The colours on map 3 indicate the national deprivation decile of each Lower Layer Super Output Area (LSOA). For example, De Beauvoir falls in the second national deprivation decile.



Map 3. Local deprication profile, Hackney (MHCLG, 2019c). De Beauvoir is highlighted with a thicker border.

The Boris Building

In De Beauvoir there is a vacant factory known as the Boris building. It consists of a mission hall, a main building, a manufacturing hall, and a few other building blocks. The building on the left is the mission hall. It was built in 1887 as an adjunct to the nearby church and could accommodate 400 people. The building was not only used for religious purposes, but also for amusement. For example concerts, addresses and lectures on history, biography and other subjects. It is unclear when the mission hall became part of the same property as the factory. The hall was apparently sold sometime after World War Two. The building has a strong gable end facing Hertford Road. Originally the building was entered via a wide porch that covered the whole width of the gable end with two doorways.

The building on the right is the main building. It was built in 1913 for an engineering company. The factory was used by Willys, Britain's biggest manufacturer of gas meters. During World War II the factory was turned over to war production. Later on, the building was used for the production of furniture. The main building is a two story warehouse-style structure. The facade is imposing, even though the building was only used for manufacturing.

The manufacturing hall, located behind the main building, has a sawtooth roof structure with glass panels on the northern side. These windows provided more than enough natural light in the hall, without the disadvantages of direct sunlight and heat.



Image 1. The Boris building (Bolding, 2019).



Image 2. The Boris building (Bolding, 2019).



Image 3. The main building (Boris Ltd, De Beauvoir).

Heritage

The main building and mission hall are two of the most significant non-residential buildings in the De Beauvoir Conservation Area. While the facade of the old mission hall might not be of national importance, it is of major local significance being associated with the nearby St Peters Church. Both buildings have significant character, and the factory is a rare survivor of the industrial heritage of the hinterlands of the Kingsland Basin and Regents Canal. The use of the premises to make furniture in the 1960s and 1970s is a direct link to the 19th and 20th century furniture trade in South Hackney.

The current owner has been trying to obtain a permit for transforming the building into luxury apartments for a little over a decade. The people of the community of Hackney are not in favour of the plan. According to them, what is planned by the developer is offering a sea of sameness to the area. The community argues that "there is so much preoccupation with development that it has begun to pollute the present with greed and blindingly misplaced ambition, and the past is becoming marginalised, erased, and replaced. Neither should the gentrification of East London continue, nor should the fabric the neighbourhood is built on be demolished" (Stamps, 2014). They wrote a all their arguments against the proposed transformation of the Boris building in a document called Hackney to Bloomsburry: Mapping the London Left. They also described why the building is of such importance to them. "Boris Limited is not an icon, no great architect conceived its structure, no famous author resided there, and no great political movement hatched from an embryo within its walls. But what it stands for, the historic web which emanates from it and what its face has subsequently witnessed is the narrative of the development of socialism and modernity in the post-Eurocentric city" (Stamps, 2014).

Value assesment

The available plans and photographs of the factory are limited. Aside from floorpans, elevations, photographs taken from Hertford Road and screenshots from google street view, there is no way in determining the state of the inside of the building. Except for one photo, taken inside the building that is situated behind the manufacturing hall. Therefore, assumptions are made concerning the construction based on two references. Both buildings were originally built around the same period and used for similar purposes.

Based on the limited available resources, the heritage assessment of the factory is the following: the mission hall and main building have historic importance, therefore the whole buildings are valued. They will remain in their original condition for the most part. Interventions will leave the rhythm of the buildings in tact. The

interventions will be limited, carefully selected and aimed at the maximisation of the potential of the program. The interventions will be carried out in a contrasting fashion in order to put an emphasis on the already existing structures with their historic characteristics. The rest of these two buildings will be restored to the original as much as possible, compliant with current regulation.

The shape of the sawtooth roof of the manufacturing hall is iconic and will therefore remain as an anchor in the plan. The column and beams holding the roof up and creating the shape will be restored to their original state. With additions to the structure, it will be adapted to house the new program. The remainder of the manufacturing hall doesn't have the same iconic character and is therefore valued less.

Based on the image from street view and the photo taken inside one of the remaining buildings can be concluded that the remaining buildings don't have the same historic value as the main building, mission hall and manufacturing hall. Based on these two assessments, these buildings have significantly less value.



Image 4. Inside one of the buildings (Patru, 2020).

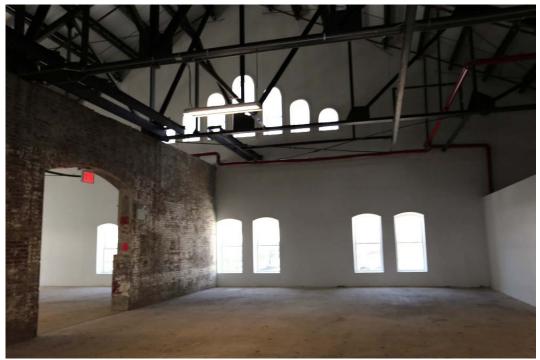


Image 5. Building 123, Brooklyn.

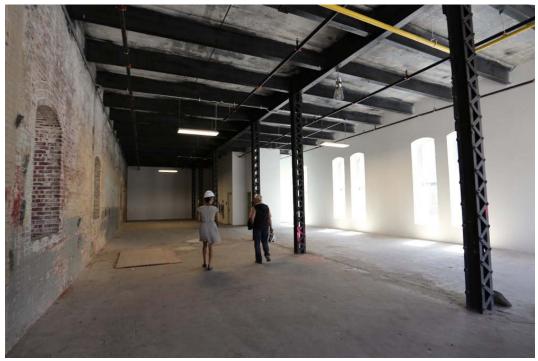


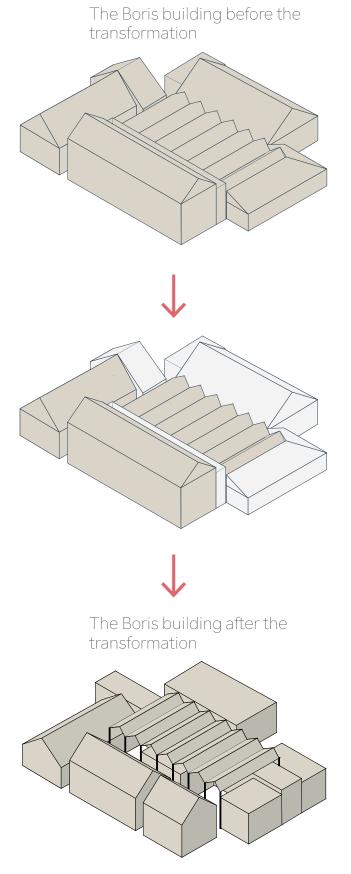
Image 6. Building 123, Broolyn



Image 7. Daoiz y velarde Cultural Centre, Madrid

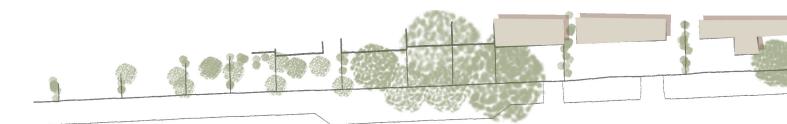
Organization The programme

The context allows for a more elaborate program consisting of additions to the three essential program elements that were established in the design assignment. The manufacturing company includes offices space, a pattern making section, a cutting section, a trimming section, and in terms of the actual manufacturing there is enough space to have machines for all the different fabric types as described in the assignment. The education facilities include two types of classrooms: those for theory classes, and those equipped with sewing machines. The section of the program with community related elements is the most elaborate. It includes a cafetaria, a vegetable garden and shop, a library, an exhibition space and a daycare. Lastly, there is a reception area, a clothing shop, and three officies available for smal clothing labels.



The transformation

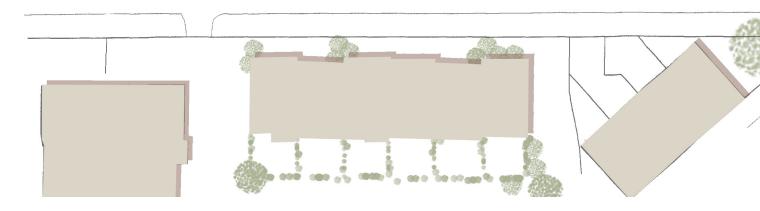
The Mission Hall and the main building will for the most part remain in their original condition. The biggest change is the cut through the main building to create an additional entrance to the area. Of the manufacturing hall, only the structural columns and trusses will remain. everything else underneath the structure will be removed. Including the walls. The remaining sawtooth roof structure will be an iconic reference to the industrial past of the location. Furthermore, it will visually tie the plan together, while still opening the are up through the removal of the walls. The buildings that are coloured lighter will be removed. As stated in the value assessment, it is likely these buildings are in bad condition. The removal of these buildings allows for a more open and inviting floorpan.



MORTIMER ROAD



HERTFORD ROAD



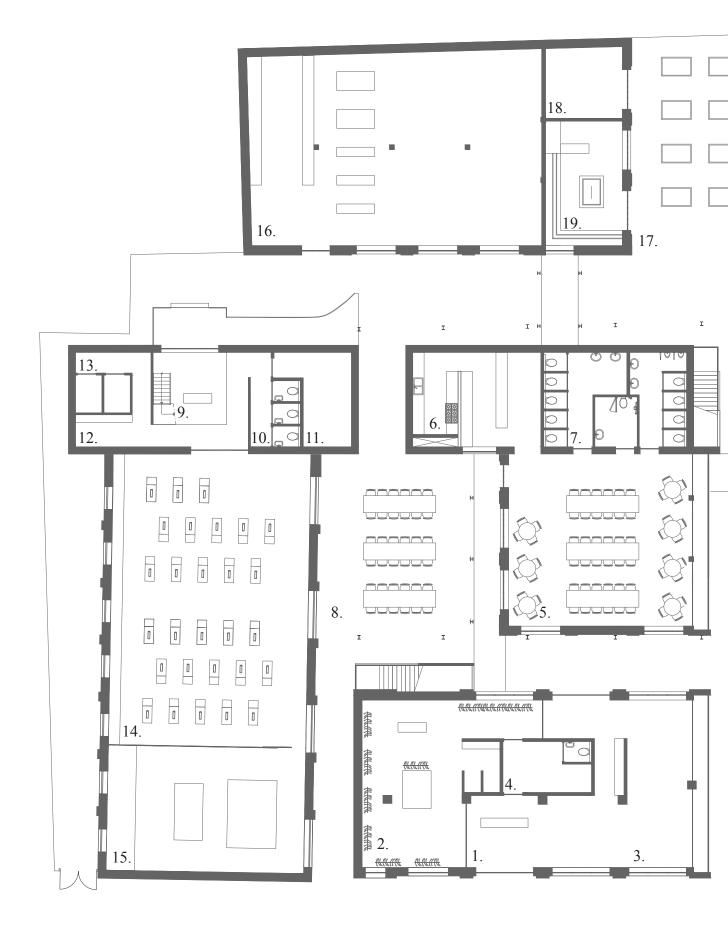


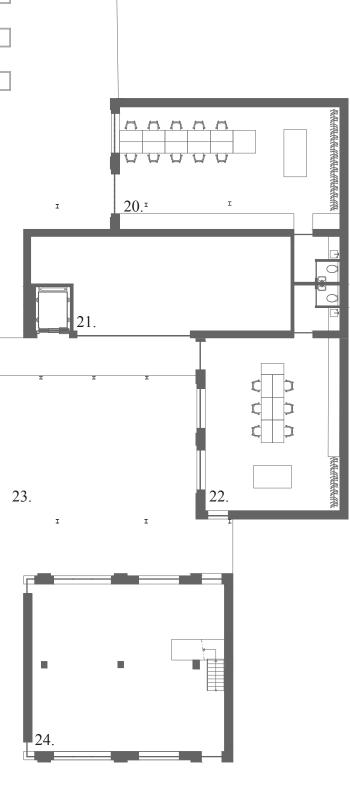
Site layout

The old factory is surrounded by dwellings with their gardens bordering the plot. In order to take the privacy of the neighbours into account, the plan is relatively closed off towards those neighbours with barely any windows on the outer walls.

The area already has two entrance points: the first is through a corridor between the mission hall and the main building, and the second is the path connecting the plot to Mortimer Road. This second entrance was previously used for transport. The cut through the main building creates a third entrance. These three entrances together will make the plan accessible and ensure that there is no apparent front or back side.

Scale 1:500

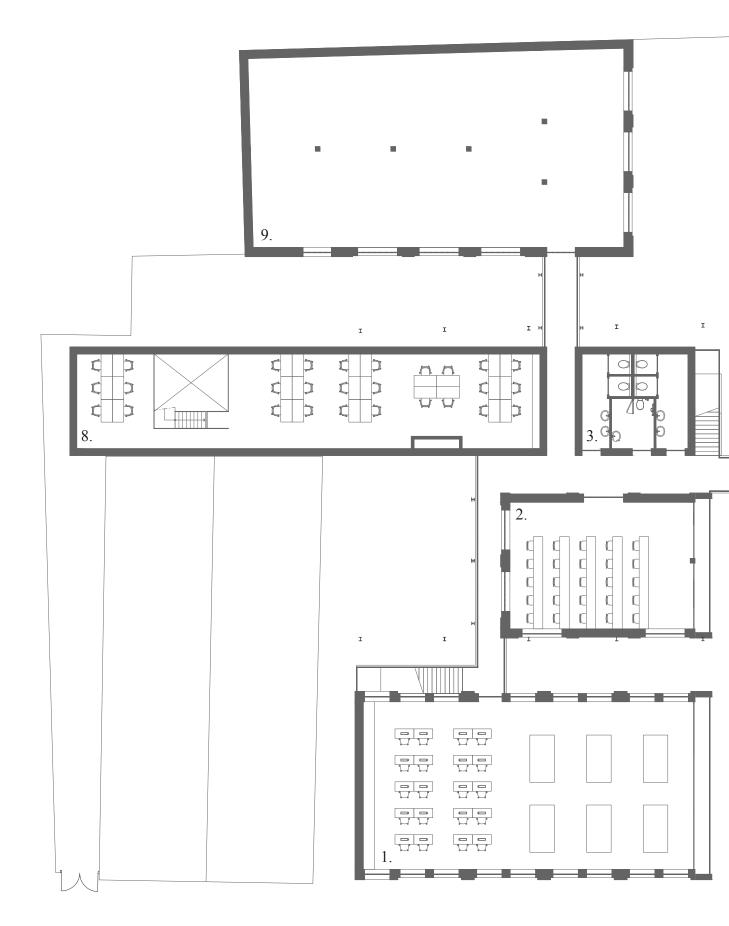


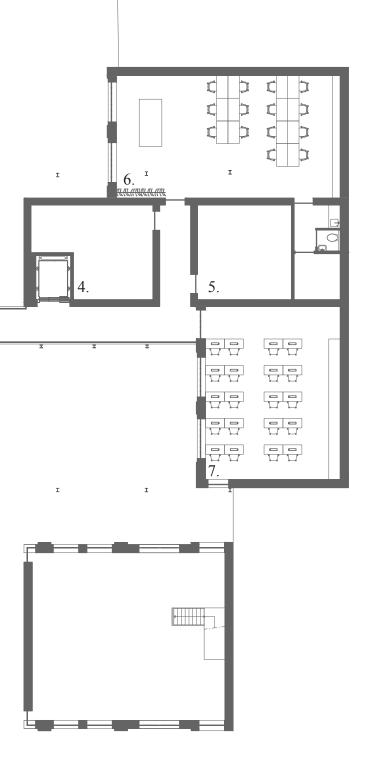


Ground floor plan

- 1. general reception area
- 2. clothing shop
- 3. exhibition space
- 4. storage space
- 5. cafeteria
- 6. kitchen
- 7. restrooms
- 8. terrace
- 9. reception area manufacturing company
- 10. restrooms
- 11. technical room
- 12. lockers for employees
- 13. meditation/prayer rooms
- 14. manufacturing hall
- 15. cutting room
- 16. manufacturing hall
- 17. vegetable garden
- 18. storage space
- 19. vegetable shop
- 20. clothing label
- 21. library
- 22. clothing label
- 23. culture square
- 24. daycare

Scale 1:200

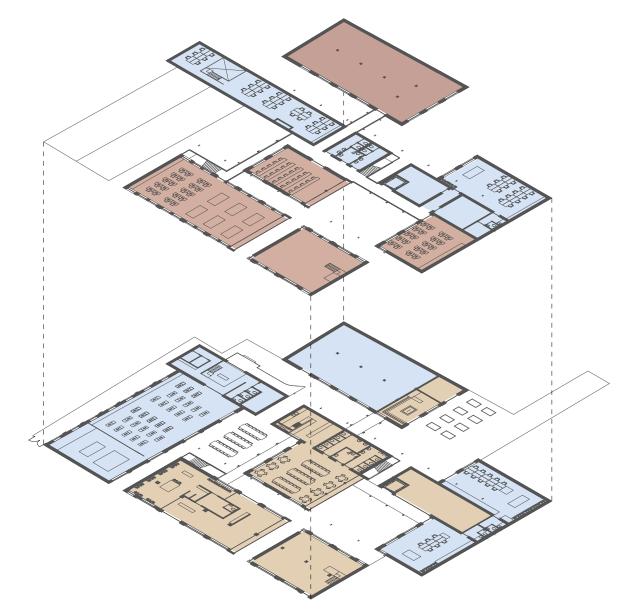




First floor plan

- 1. classroom
- 2. classroom
- 3. restrooms
- 4. storage space
- 5. storage space
- 6. clothing label
- 7. classroom
- 8. office space
- 9. free space

Scale 1:200



Activities

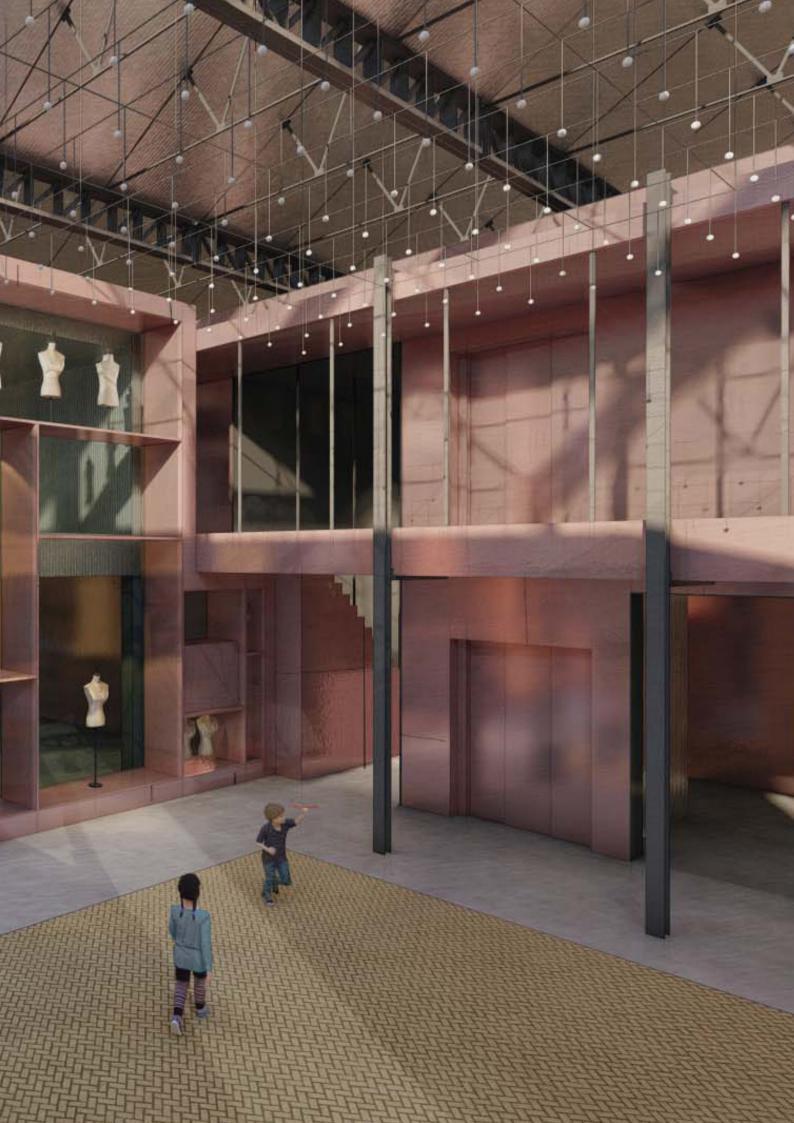
On the ground floor, all business related activities are situated towards the sides of the plan, making space for all the community related activities in the middle. The cafeteria is located right in the centre, matching its central role in the program. All classrooms are located on the first floor, easily accessible through two staircases and an elevator. Not all spaces have a designated use yet. Since this is a bottomup approach, there needs to be flexibility in the plan for the community to use the spaces however they feel is best. The restrooms, kitchen, technical room and storage spaces are all located in a strip running straight through the plan.

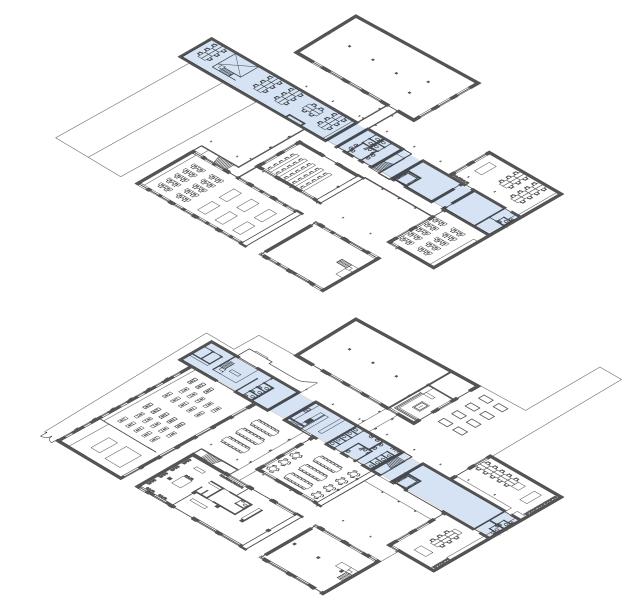


Squares

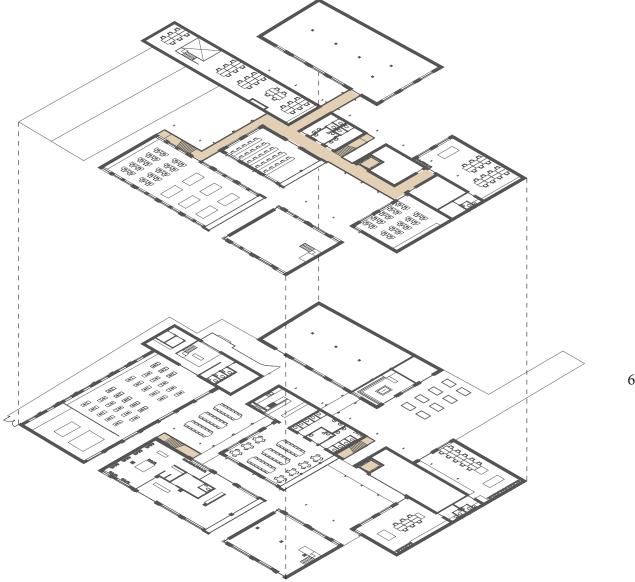
The first square is a terrace next to the cafeteria. If the weather allows for it, people can sit on this square and enjoy their lunch. The second square is more culturally themed. It is situated between the library, the exhibition space, the clothing labels and a big showcase. The use of this square isn't determined. As well as with the spaces on the first floor, the community is given the freedom to use this square however they see fit. The possible different types of uses are accommodated by have storage space nearby, easily reachable through an elevator. The theme of the third square is health. This is where the vegetable garden and vegetable shop are located.





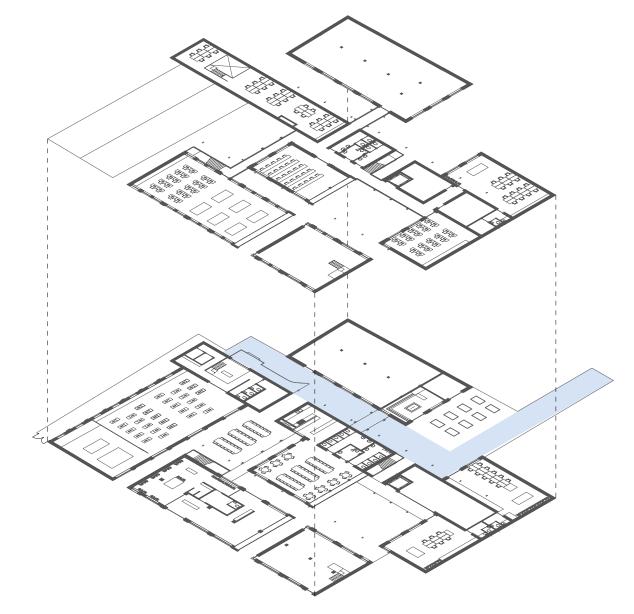


Service strip The restrooms, kitchen, technical room and storage spaces are all located in a strip running straight through the plan.



Tunnels

On the first floor there are tunnels connecting the classrooms with each other, and with the centrally placed restrooms. The first floor can be accessed through two staircases and an elevator.



Transport

The manufacturing company is situated in such a way that transport can easily reach it without causing too much hinder. The entrance from Mortimer Road will be used for transport, just as was the case in the past.



Gates

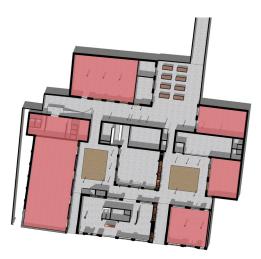
During the day, the area is publicly accessible for everyone through the three entrances. At night, there will be no one to keep an eye on everything. The relatively small entrances lend themselves to closing off the area easily using only three gates to prevent vandalism during the hours when no one is around.

Daily activity analysis

The use of the are will differ throughout the day and week. The following images and short descriptions will illustrate what a day in the week looks like.

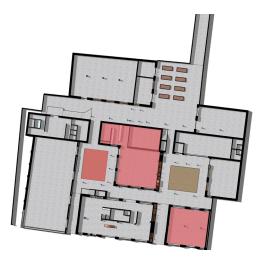
Week day, 9 AM -+

Workers drop their kids off at the daycare and go to work.



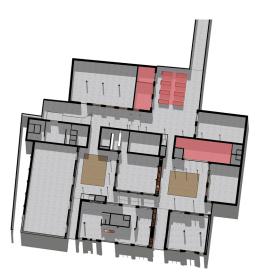
Week day, 1 PM . . . +

Workers, students, and residents of the neighbourhood all gather in the cafeteria to have lunch.

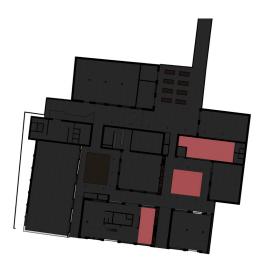




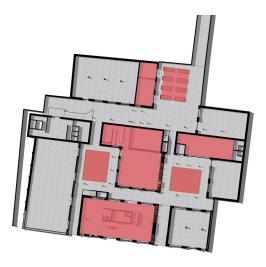
After the work day is over, students and workers make a quick stop at the vegetable shop before they go home. Children from the neighbourhood go to the library to study after school.



Someone from the community has organised a lecture in the library. The exhibition space is still open as well. In the summer, movie nights are organised on the square.

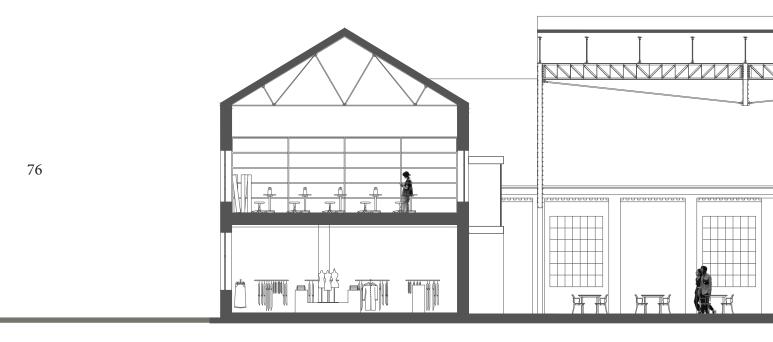


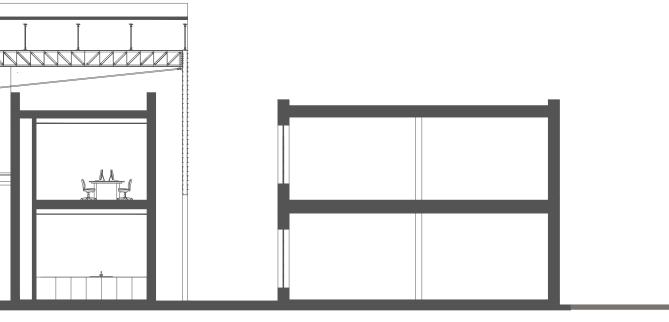
Residents have a cup of coffee in the cafeteria while their children play on the square. Other residents spend their Saturday gardening.



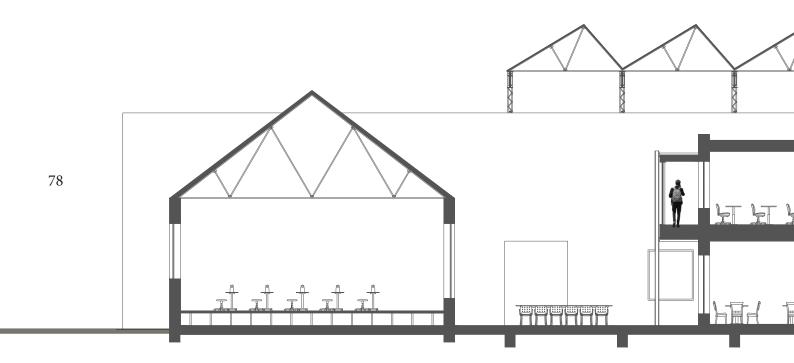


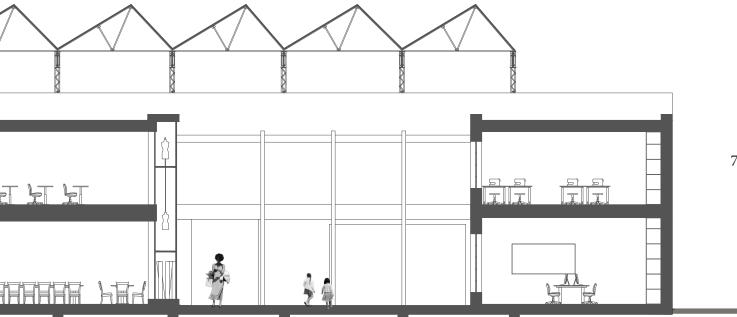






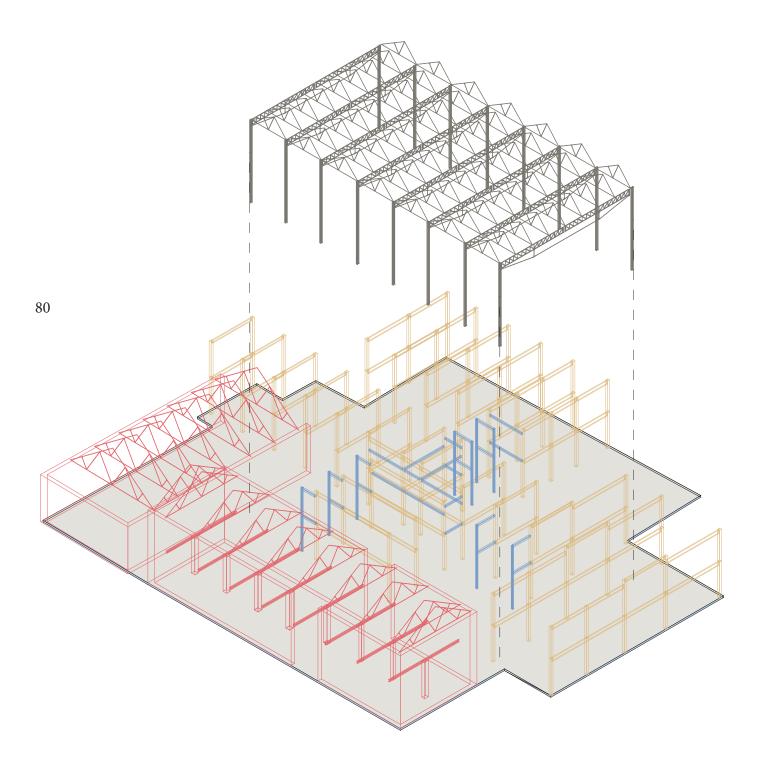








Section B Scale 1:150



Construction

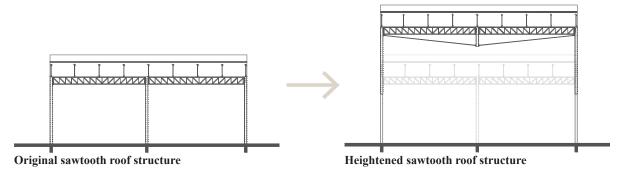
The original concrete floor and foundation will be kept in tact.

The mission hall and main building will for the most part remain in their original state. The brick walls are load baring, and the roof is carried by steal trusses. The first floor in the main building rests on truss columns and beams.

The new building blocks consist of a timber frame structure.

The construction of the tunnels is placed on the outside. The tunnels are carried by steal columns and beams.

In order to maximise the potential of the program, the original sawtooth roof structure has to be heightened. The columns are truss columns, and thus hollow. The entire structure will be detached from the concrete floor and lifted a little over two meters. Then, a new steel column is added underneath. This new column will be partly inserted into the original truss column to make sure it is stiff enough. Lastly, the middle column will be sawed off, and attached to the other two columns with tie rods.

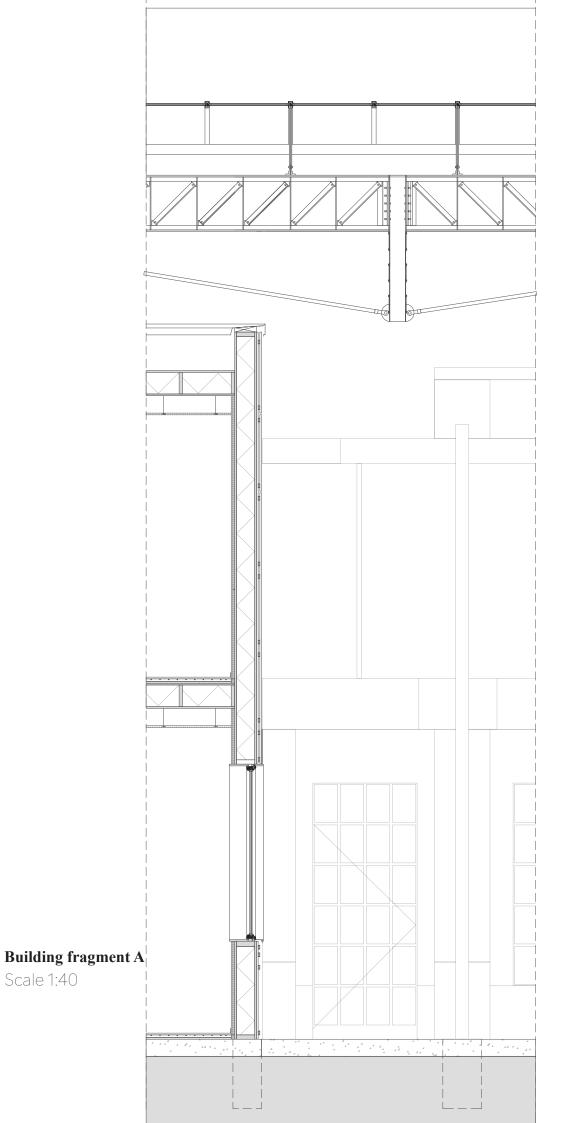


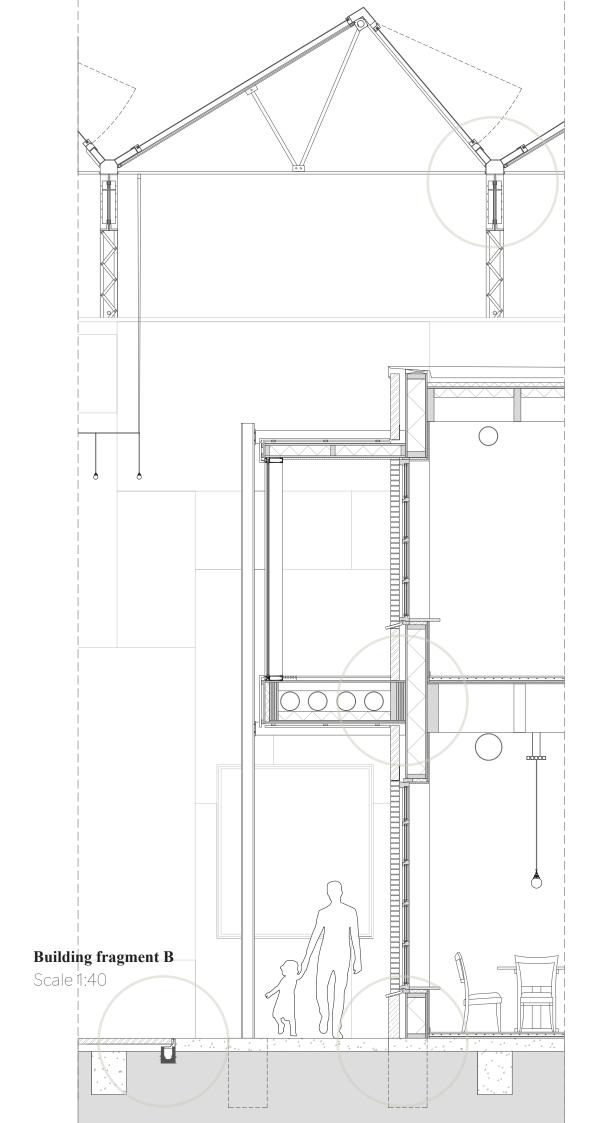


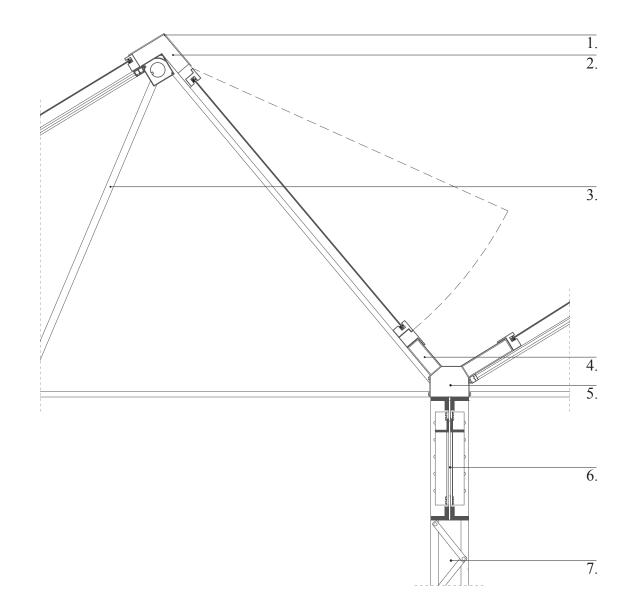


Building technology

In this section we will be focussing on one particular fragment of the building, namely the corner where the service strip and cafeteria come together. Both are new buildings. The material that is mainly used for the new buildings is yellow brick with red brick for accents. Many buildings in the neighbourhood, including the original Boris building, were made out of yellow brick with red for accents. The idea behind using a material language that the residents of the neighbourhood know and are familiar with, is trying to make the threshold for people to enter the project as low as possible. As you can see, there is a clear distinction between the service strip and the cafeteria. Contrary to the other buildings, the service strip is covered in panels with a reflective metal finish instead of yellow brick. The material is used as a way to hide the strip in plain sight and accentuate the visible steel structures surrounding it by reflecting them.







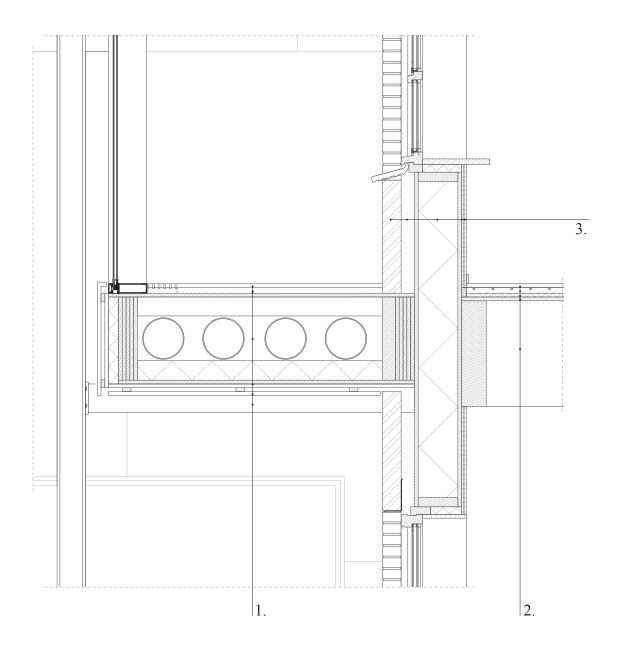
Scale 1:20

Detail 1: the sawtooth roof

The sawtooth roof structure will remain in tact in order to preserve the industrial atmosphere. Aside from being there for the ambience and reference to the past, the structure also ties all the different building blocks together.

The north facing panels are glass panels, to let a very consistent stream of light in without the negative effects of direct sunlight and heat. Above the terrace, there are also windows in the south facing panels. A sunscreen underneath the south facing window panels, combined with the possibility to open the north facing panels to let the heat out, will ensure a comfortable climate even on warm days.

- 1. Finishing hood
- 2. Steel frame structure
- 3. Sawtooth roof structure
- 4. Steel frame structure
- 5. Steel frame, supporting gutter
- 6. Truss
- 7. Truss column



Scale 1:20

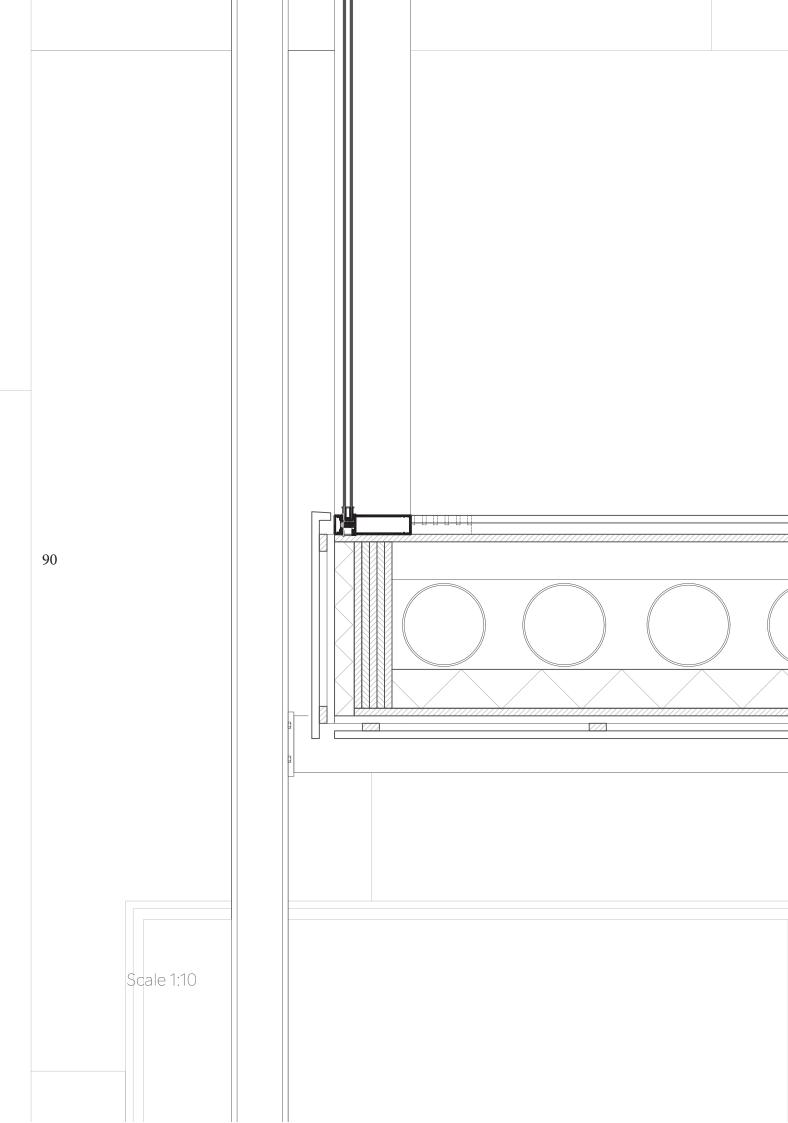
Detail 2: the tunnel

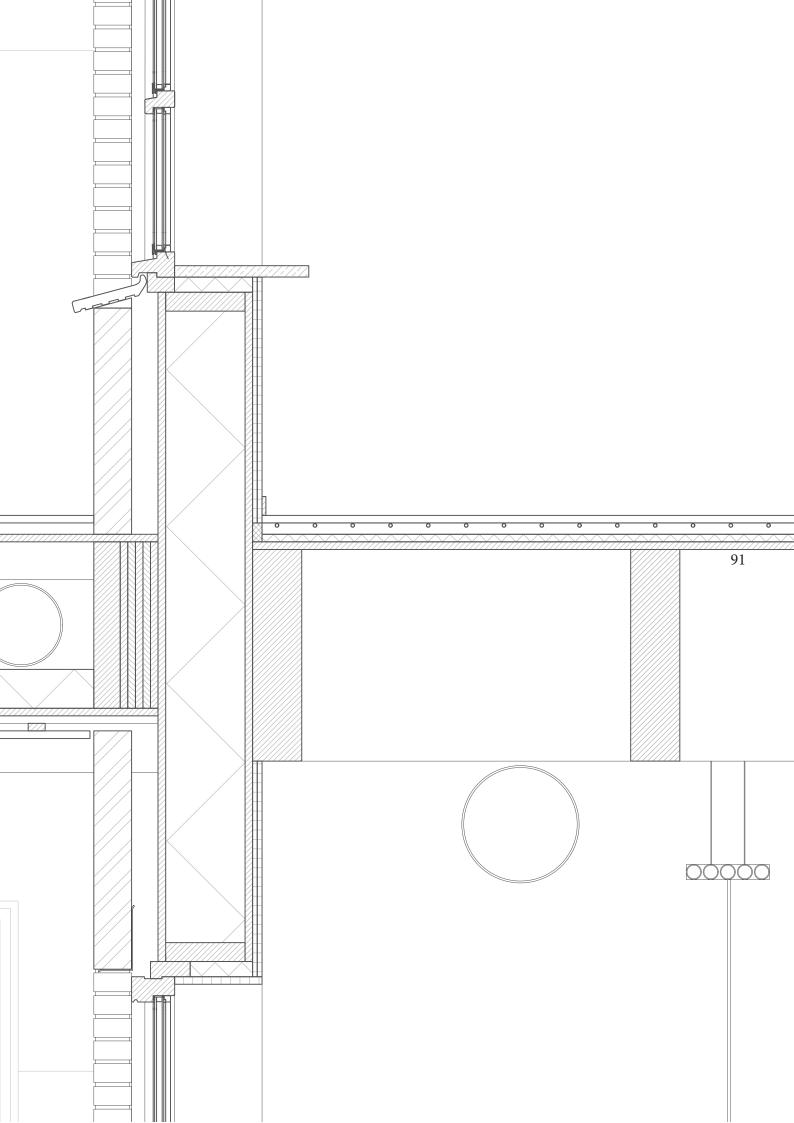
1

There is one technical room, located in the service strip. The tunnels carry the ducts and cables to all the other buildings. The floor and roof of the tunnel are constructed using a timber frame structure. The tunnel is insulated but not heated. There are ventilation grills in the floor. The columns and beams that carry the tunnel are visible for two reasons. The first is to minimise thermal bridges as much as possible. Second, for the visual effect. The columns and beams emphasise that this area was, and still is, used for manufacturing.

The facade continues even in the tunnel. Therefore, in order to avoid a wall that is varying in thickness, the insulation is used even when there is an insulated tunnel in front of the facade. Moreover, the tunnel is insulated but not heated, which could lead to a thermal bridge. The construction of the floor in the buildings is over calculated, and left visible. This is not only puts an emphasis on the idea of the buildings being used for industry, but it also makes the building more flexible. The spaces are heated and cooled through floor heating and cooling. The rooms are mechanically ventilated.

1.	
Floor finishing	20 mm
Underfloor	30 mm
Vapor barrier	
Timber frame structure with insulation	460 mm
Waterretaining foil	
Trespa cladding attached to a 20 x 20 mm timber frame	20 mm
Rectangular structural tube	150 mm
2.	
Floor finishing	20 mm
Underfloor with heating / cooling	30 mm
Insulation	20 mm
Timber frame structure	580 mm
Glulam beam	560 mm
3.	
Brickwork	100 mm
Cavity for ventilation	70 mm
Timber frame structure with mineral wool insulation	250 mm
Gypsum	12,5 mm
Plaster finish	12,5 mm





Detail 3: the square

The squares are clearly marked by clinkers in a yellow colour similar to the brick used on the facades, and a steel trim. Alongside the trim, there is a gutter to ensure that there won't be any big puddles of water on a rainy day. The squares are not only marked on the floor, but also on the ceiling through the use of lights. These lights will create a more intimate atmosphere when it's dark outside.

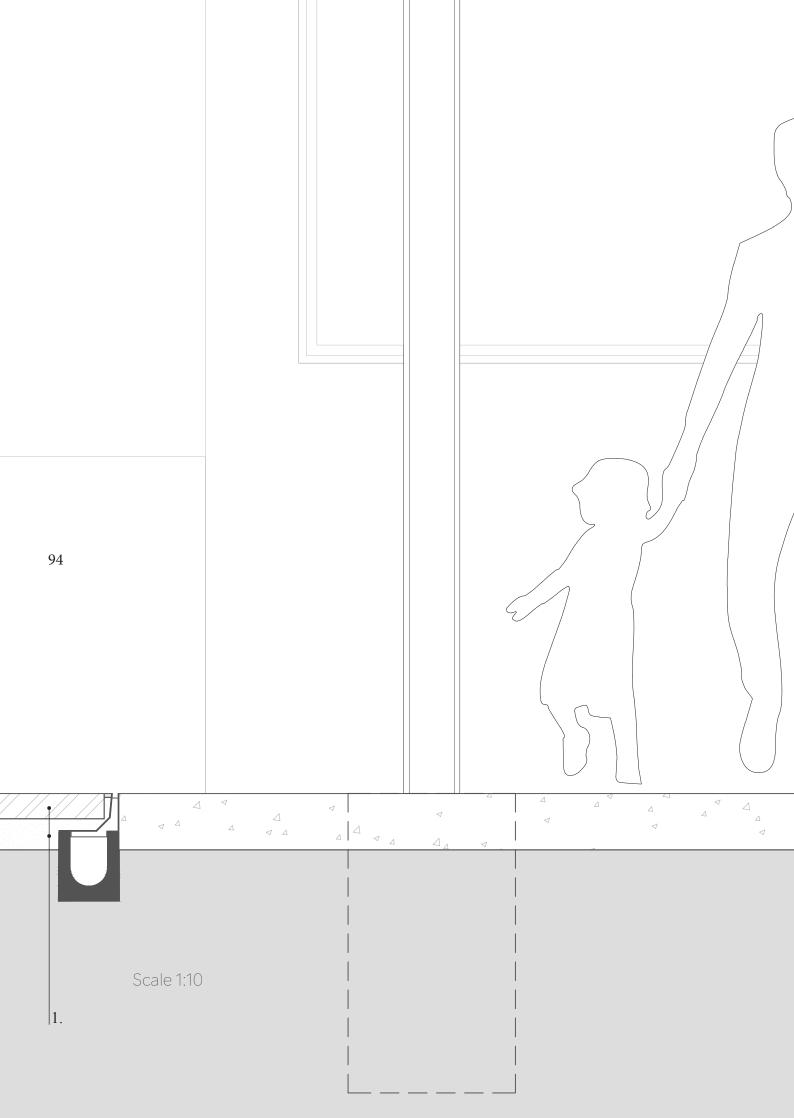
The vegetable garden is also marked, but in a slightly different way. The paving is more suitable for gardening, and instead of lights on the ceiling, there is green on the walls.

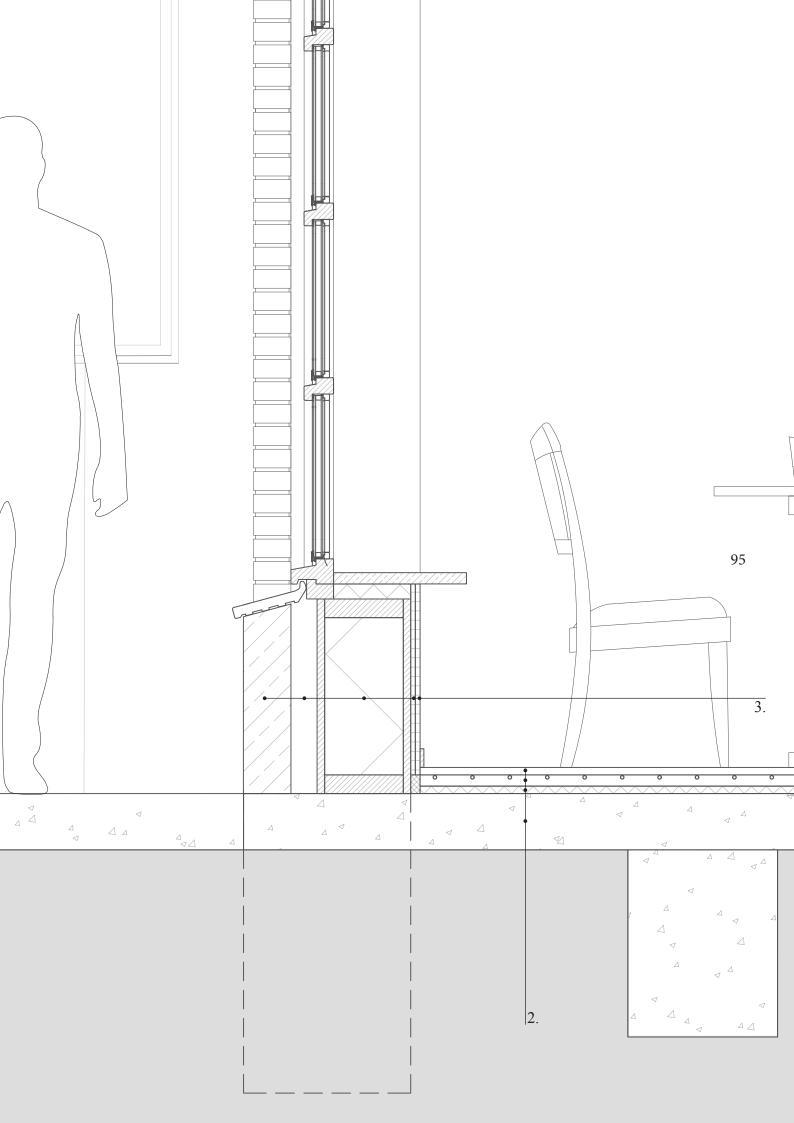
1.	
Dik format clinkers herringbone bandage	67 mm
Sand	133 mm

Detail 4: the foundation

The new building blocks don't follow the original foundation. The existing concrete floor is only removed underneath the new columns to make space for new foundation blocks. This way, the transformation is reversible because the original foundation and most of the concrete floor are left in tact.

2. Floor finishing Underfloor with heating / cooling Acoustic insulation Concrete floor	20 mm 30 mm 20 mm 200 mm
3.	
Natural stone	130 mm
Cavity for ventilation	70 mm
Waterretaining foil	
Timber frame structure with mineral wool insulation	250 mm
Vapor barrier	
Gypsum	12,5 mm
Plaster finish	12,5 mm

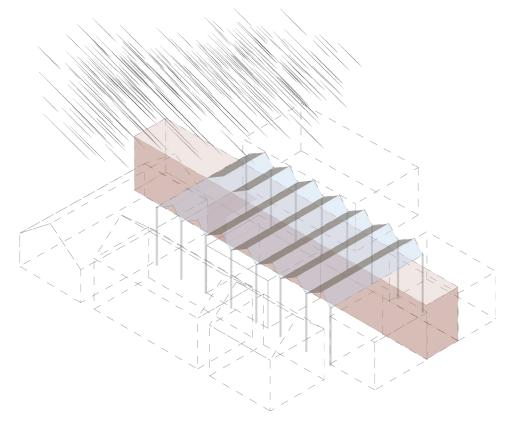






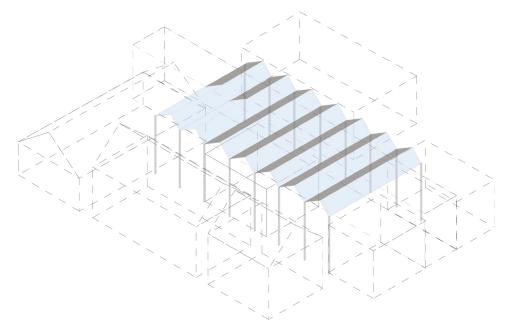


Climate design



Rainwater collection

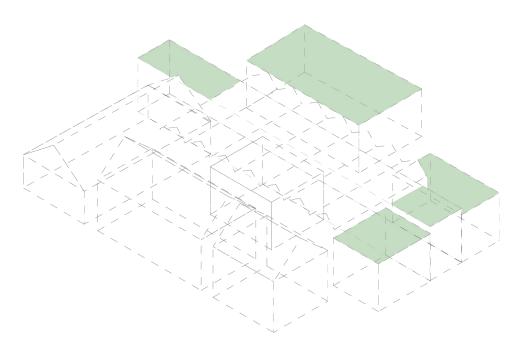
The rainwater that falls on the sawtooth roof is collected. In London there is an average of 690mm/m2 rainfall per year. This mean that 367.080 mm rainwater can be collected per year, which is equal to 367.080L per year. This water can be used to flush the toilets around 91.770 times.



Solar panels

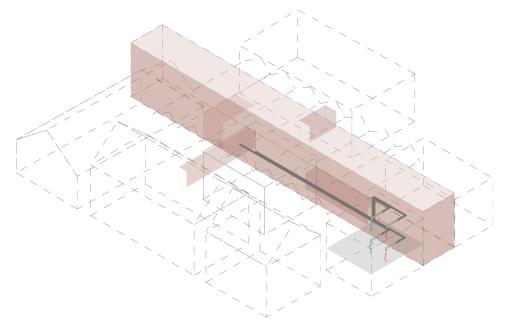
100

The majority of the south facing side of the sawtooth roof is covered in solar panels. The panels generate approximately 3,638 kWh/Year.



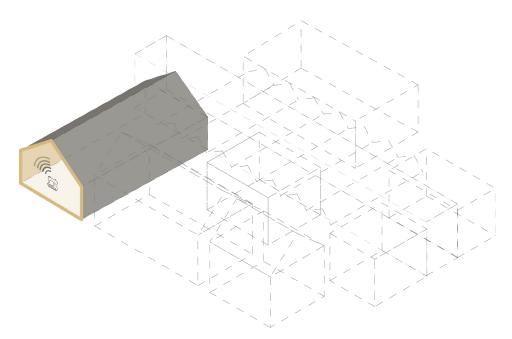
Green rooftops

All flat rooftops that are not covered by the sawtooth roof structure, are covered in sedum. These sedum rooftops work against the urban heat island effect and improve water retention.



Ventilation

The rooms are all mechanically ventilated. The ventilation ducts are carried from the main technical room to the different building blocks through the tunnels. In the technical room there is a heat recovery installation.



Acoustics

Since sewing machines make a lot of noise, the walls of the manufacturing spaces have to be insulated properly. Furthermore, there will be additional acoustic panels on te walls and ceiling to keep the working environment comfortable and reduce the disturbance for the neighbours and the adjacent cafeteria.

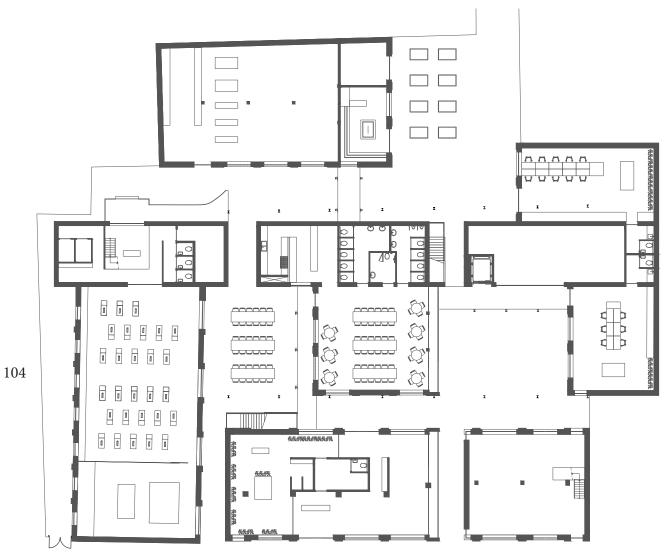
Reversibility, flexibility and adaptability

If in the future the desire were to arise to bring the building back to its original state, that is almost completely possible since most of the interventions are reversible. The foundation and most of the concrete floor are left in tact, so that the removed building blocks can be rebuilt. The sawtooth roof structure can be lowered again. However, the middle column would have to be replaced since it has been sawed off. Another non-reversible intervention is the cut through the main building.

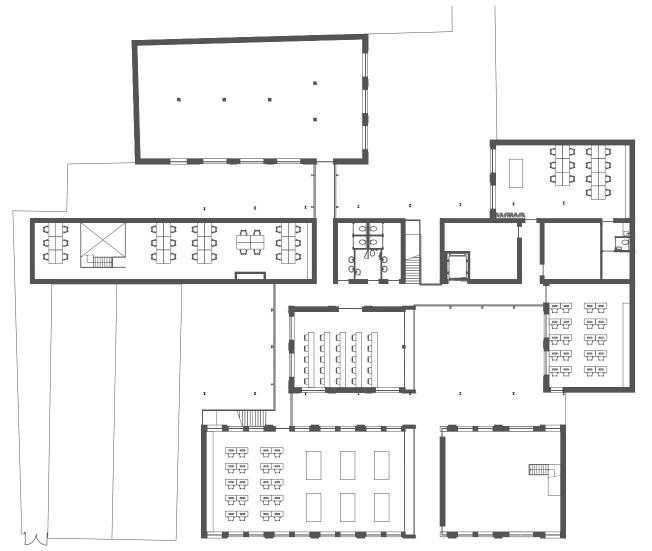
The walls aren't flexible because they are determined by the new foundation blocks, but there is a lot of flexibility between the buildings. Most notably on the squares. As was explained in the building technology section, the squares are clearly marked. Each square has been given a theme, but the community is free to determine how they want to use these public spaces.

Furthermore, the walls being inflexible doesn't mean that the program has to be inflexible as well. The building can adapt to new situations without having to make too many changes. This adaptability is just as important as flexibility and reversibility. To show the adaptability of the building, three scenario's have been created, each exploring a different set of circumstances and their corresponding spatial requirements.

The first scenario is the one following the design assignment. It consists of the floorpans you have been shown in this proposal. The second scenario explores what would happen is the assignment fails and the education program turns out to be unfeasible. The third and last scenario is an optimistic one. What if it takes off massively? Maybe production moves to another location and this location becomes completely focussed on education. The specifics of these scenario's is not what is important right now. These scenario's are merely used to illustrate that the walls don't have to change in order for the building to be adaptable.



Ground floor plan



First floor plan

Scenario 1

The program as it was described in the design assignment, with a more or less even distribution between business, education and community.

F	
Business	
⊢ Education	
H Community	1



Ground floor plan



First floor plan

Scenario 2

The design assignment fails, clothing manufacturing and education makes place for (flexible) work spaces.

F	
Business	
F	
Education	
F	
Community	



Ground floor plan



First floor plan

Scenario 3

The project thrives and the manufacturing company moves to another location. Now there is more space for education.

H	I
Business	
F	
Education	
Community	·



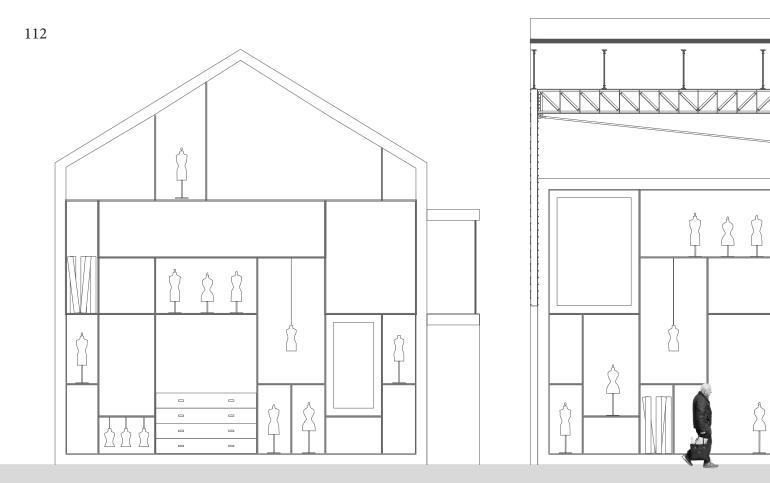




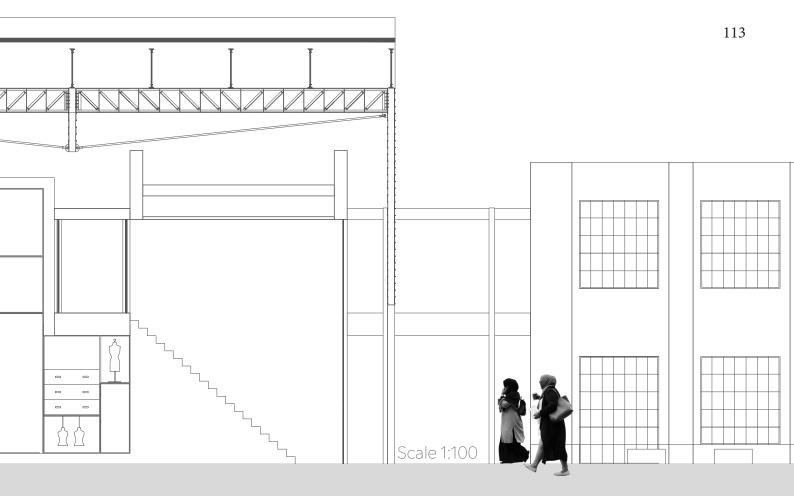
Main entrance Elevation Hertford Road

Although the idea was to create a building that doesn't have a front or back side, the most important entrance when it comes to luring people in is still on the side of Hertford Road. Currently, the area looks very closed off. In the new design, there are two clear pathways. There is also a big glass door with a canopy marking the entrance of the reception area. Alongside the cut made through the main building, there is a showcase. The framework of this showcase is made of the reflective material that is used on the service strip and tunnels. The sudden change in material will spark the interest of the passers-by. When they look around the corner, they will see the showcase telling the story of clothing manufacturing.

Scale 1:200











Reflection

Looking back at the initial aims, it is important to point out the potential improvements of the design. In this chapter I will list the observations made that could be seen as shortcomings of the design, and how they would be improved if I had more time to continue this project. The project is located in Hackney, London. Due to the pandemic and the associated restrictions, I havent been able to visit the location. The canvas I have been working on for the past year consisted of maps, photo's, plans, references and other data. These images gave me a clear image of the Boris building and the neighbourhood, but it would have been ideal to visit the location to get more of a grip on the atmosphere. The things that cannot be captured in a photo or floorpan. I didn't have the experience of walking around. I didn't get to see which old brick wall is actually to cool to demolish, or which column is standing in the way but actually really adds to the atmosphere. These are little things that can lead you to deviate from the plan and create unexpected corners where the history of the building shines through. Although they would have made the architecture more interesting, they would't necessarily have helped in supporting the narrative. This design is a proof of concept. It should be seen as a roadmap, or inspiration for future projects that will then be tailored to their specific location. It is not a blueprint. Talking to the residents of the neighbourhood could have helped in supporting the narrative. I believe in talking to people, instead of talking about them. You can do as much research as you want to, but you won't really know what the residents need until you talk to them. Without a predetermined idea of the plan, searching for confirmation of what you already think is true. Actually listening to what they have to say. Therefore, I'm disappointed that I didn't get to go to Hackney. Nevertheless, I purposefully made both the program and design flexible and adaptable. Not only because I didn't get to ask the residents of the neighbourhood what they need, but also because those needs could change over the years.

Another point of improvement had to do with the feasibility. Dealing with this type of community based approach and the financial situation that comes with it, it is crucial to consider the financial feasibility of the project. Initially, that has been done by not demolishing but reusing the building, by making minor interventions and maintaining or maximising the flexibility and adaptability. One other important feature is the facade material. The concept asked for the service strip to hide in plain sight, as it were. This could be done by using a reflective material, so that the strip could hide by reflecting its surroundings. Therefore, the initial choice of material for the facade of the service strip, the tunnels and the case, was coloured metal. Another reason was that the use of metal worked with the industrial past of the location. Metal, however, is an expensive material. Therefore, I made the decision to use trespa with a metal sheet as finish. Trespa as cladding for the facades is much cheaper, for the most part because it requires less labour. As a result of the

metal sheet as finish on the trespa panels, the material you see when looking at the building is the same reflective metal I wanted in the first place, meaning that this new material is still in line with the concept.

I believe in this project and the things you can accomplish with relatively small projects like these. The fact that it isn't as specific to the location as I would have wanted it to be means that it can only get better. I would love to see how the assignment could evolve through discussions with all the actors involved. The aim of this project was creating a community based approach to improve the social balance in a neighbourhood by creating jobs and opportunities for education, and by very intentionally being a part of the social infrastructure of the neighbourhood. I believe I succeeded in designing a proof of concept addressing these aspects. Of course, the design has its challenges, and looking back at them there is definitely room for improvement. I am excited to continue my journey with this topic, whether it is as an architect, an entrepreneur, or a little of both. I am curious about what the future will bring.

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Glossary

Social balance — within society, everyone comes from a different background. The idea of social balance is that, in the end, everyone has the same opportunities to create the life they want. It means that people from poor neighbourhoods aren't stuck in poverty but have the possibility for upward mobility.

Civic pride — pride is a sense of self-worth or self-respect. In a bigger sense it could be described as value or praise for your community. Pride also has an aspirational aspect. "It is aspirational to the extent that people with pride tend to place high value on self-improvement and achieving the best for oneself or for society" (Collins, 2016). The civic aspect adds a new dimension to the sense of pride. Civic pride is not just self-worth of self-respect, but having respect for, and aspiring to achieving the best for your neighbourhood, city or country.

Attainability — in the most simple terms, a city is attainable when people don't have to choose between basic necessities like housing, food, transportation, and health care. Therefore, attainability can only exist when households either earn enough to pay for all these necessities, or when the necessities are made available for everyone, for example by lowering the prices or increasing availability of affordable options.

Appendix

Summery Interview with Marieke Hendriks production manager i-did Utrecht

The idea behind the social enterprise i-did was that too many people are standing along the sideline. i-did creates opportunities for those who haven't worked in many years, or in some cases for those who have never worked at all. Reasons for the unemployment range from not speaking the language fluent enough, to sickness, injury and burnout, to prison. As a result of these personal situations, these participants usually end up at the bottom of the stack of job applications. Begin unemployed for a long period of time can cause a lower self image, resulting in even slimmer chances of finding a job. The aims is to make the participants selfsufficient. The most important thing to always keep in mind, according to Hendriks, is the following: the participant is central.

What i-did does is provide a course, consisting of coaching, guidance and work experience. The 'inflow coach' helps the with everything concerning the practicalities of showing up. How will you travel to the workplace, does the participant have a bike or wil he/she travel with public transport. Other subjects are day-care for the children and planning. How many hours a week will the participant be available for the course? According to Hendriks, the idea is for the participant to work a minimum of 24 hours a week.

Every participant comes into contact with every activity. A new participant will start with control work. This is a simple taks that will allow the participant to become used to the surroundings, the colleagues and the products. Then they will be asked to do some ironing. After some time the participants will start using the sewing machine. Since the stitch work on i-did's products is fairly simple, mostly straight lines, it usually isn't difficult to teach the participant to to these types of tasks.

Furthermore, there are activities involving laserprinting and packaging the products for the website.

A course can take 6 months, 9 months or even 2 years. This all depends on the participant. The most important thing here, according to Hendriks, is that the next step is clear. The participants shouldn't return to being unemployed and spending most of their time at home after finishing this program. Therefore, the participants are helped by an 'outflow coach'.

I-did does more than creating work experience for these people, there is a larger social aspect to it. A lot of attention is paid to helping people learn the language. According to Hendriks, employers often don't employ people who don't speak Dutch fluently. I-did's approach is that the participants need a basic level of fluency, namely level A2. People learn the Dutch much faster when they are surrounded by other people speaking Dutch. Therefore, the rule is that everyone working for i-did speaks Dutch in the workplace, although some exceptions are made. Furthermore, the participants are actively helped in learning the language step by step. Hendriks gave an example of how she lets all the participants write down 5 Dutch words with the translation to their own language in a notebook. It is important not to lose sight of the human aspect.

The creation of connections between the different participants is very important. Hendriks often sees how the new participants are being helped by those who have been there for a longer period of time. They also often help in translating when necessary. An important element in creating these connections is lunchtime. Once every week a few of the participants are chosen to cook lunch for everyone. According to Hendriks, there is a big difference between those lunches when everyone eats the same meal, compared to when everyone brings their own lunchbox.

In the workplace, transparency is very important. There are no real offices, instead there are tables right next to the work stations of the participants. There are some 'glass boxes' however, since talking on the phone can be difficult when you are surrounded by sewing machines. Another important aspect is the feeling of safety. This can be safeguarded by making the space 'gezellig' - which means something like cozy - and by creating an open structure. In order to respect each participant and their religion, there is a space to pray. According to Hendriks, you could also broaden this idea behind this space and call it a 'meditation space', which facilitates not only those who want to pray but also those who need a minute for themselves. Furthermore, there are some practicalities like making sure the light and sound are right. This last one can prove difficult in a manufacturing workplace. Therefore, noise reduction should definitely be taken into account. Then there are ergonomic matters. Making sure the chairs are right, the machines are on the right hight and making sure that the participants don't do all their tasks while sitting down. Many tasks can be done while standing. Lastly, Hendriks stated that it is important for participants to be able to look outside and go outside as well.