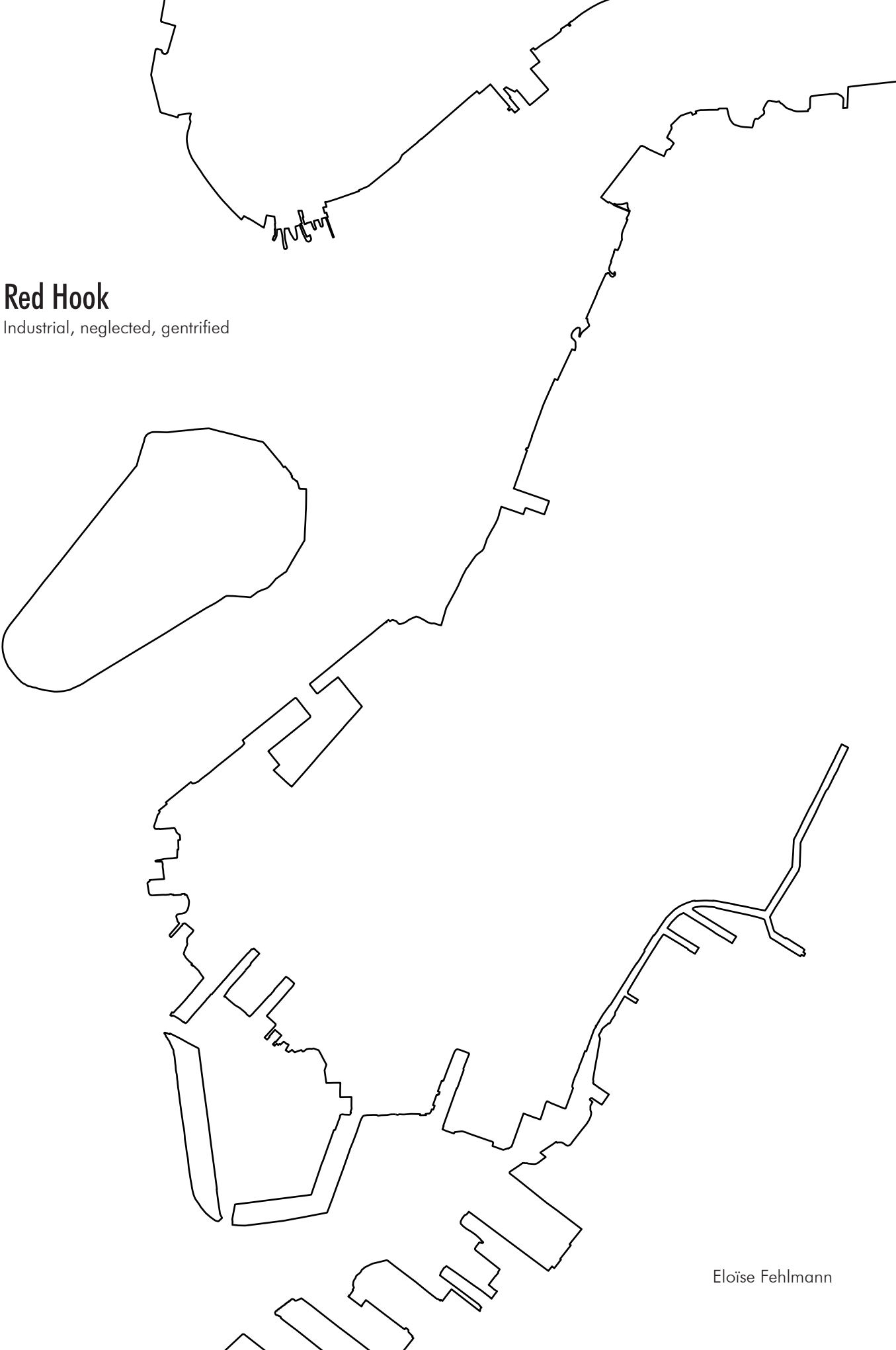


# Red Hook

Industrial, neglected, gentrified



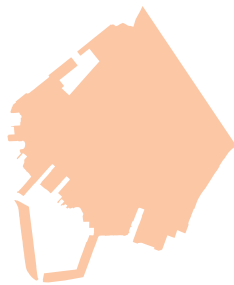




An urban study of Red Hook, Brooklyn, New York

# Red Hook

Industrial, neglected, gentrified



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13/01/20



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## INTRODUCTION

Discovering Red Hook, a small neighbourhood on the waterfront of Brooklyn, is not something that happens by accident. This place is a hidden gem that people must have heard about to undertake a trip to visit it. It does not have the same popularity as other rising areas of Brooklyn such as Williamsburg and Bushwick. It is therefore still protected from tourists.

I will introduce this neighbourhood as I first discovered it two years ago, through the attentive eyes of a wanderer.

The wanderer coming down from the north along the water instantly feels the transition from Brooklyn Heights to Red Hook. In fact, he moves from a green and luxurious waterfront to an area occupied by shipping ports, industrial buildings, abandoned plots and empty streets. Continuing further down into the neighbourhood, the visitor loses sight of the waterfront, since industrial facilities block the view.

Eventually, if the wanderer perseveres, he ends up in the former industrial port of Red Hook, where he is surprised by the historical Dutch warehouses proudly standing on the shore. These storehouses have survived the evolution of the neighbourhood and are now its symbol.

If the wanderer reaches the few waterfront access points that are still reachable, he will be standing directly in front of the gaze of the Statue of Liberty. This part of Brooklyn is one of the only places directly facing the monument, making it a special place to visit. Furthermore, people can also enjoy views of Manhattan's skyline from here.

The visitor, unaware of the history of the area, might think that Red Hook is mainly defined by its unusual red brick buildings and its industrial ports. Those people could not be more wrong. On the contrary, if he pushes further in his investigations, the visitor will see that Red Hook does not look like any other place in Brooklyn. If he pays attention, he will notice that there are no skyscrapers on the banks of the river, no tourists and very few people in the streets. The neighbourhood seems quite empty during the day and in some places nearly abandoned.

Further investigation reveals that Red Hook used to be home to an international shipping port—one of the world’s biggest, in fact, in its glory days. It was a place full of workers, ships and activity. One can still go past some of its historical industrial buildings, like its brick storehouses, which are witnesses of the neighbourhood’s evolution.

The visitor then leaves the waterfront to stroll down the streets of Red Hook, where he might come across Brooklyn’s largest social housing project arising from the rest of the urban fabric. It used to accommodate the port’s workers and was built just before the decline of the neighbourhood in 1960.

If the wanderer visits the inhabitants’ most cherished bar, Sunny’s, he will quickly understand that the neighbourhood is composed of a strong community, which has been forged through difficult times.

Continuing his journey, the tourist may notice some scars in the urban fabric of Red Hook. Some of the plots which formerly hosted industrial buildings are now empty, some are half demolished, some are abandoned. They all have one common point: they are all located on the banks of the river. One might also notice some other types of constructions, including some newer buildings like an IKEA.

All those scars, old and new, built and transformed, are part of a bigger process: the gentrification process. Red Hook started to change with the arrival of the blue and yellow furniture shop and has since be transforming piece by piece.

At first sight, this phenomenon seems to be one that people cannot resist. It is directed by politics and profits. But would it be possible to work with the ongoing gentrification of Red Hook in order to develop the neighbourhood and help to improve the community’s situation?

Gentrification has become a common urban phenomenon in the United States, reshaping many metropolitan areas such as New York City. This topic will be further investigated in the first chapter of this essay. It is crucial to understand where the notion of gentrification comes from, how it has evolved through time and if it is engrained in the American culture. The term community will also be investigated since it can be tightly linked to the gentrification phenomenon. Indeed, throughout this paper we will see that the communities are generally the first victims of the ongoing gentrification of a neighbourhood.

In the second chapter, gentrification will be further investigated with the case of New York City. Jane Jacobs’ book *The Death and Life of Great American Cities* is an effective tool to understand the components that a city needs in order to be effective and welcoming. Furthermore, the study of the neighbourhood of Williamsburg will give us a solid base to study Red Hook in the third chapter.

To conclude, the knowledge of the gentrification issues developed in the first two chapters will enable the analysis of the Red Hook district in the third and last chapter. I will examine its history, its issues, its current state and its position towards gentrification. In the end, we will propose some key points that might point toward a better future development of this gentrified neighbourhood.









# 1. GENTRIFICATION: A PHENOMENON ROOTED IN AMERICAN CULTURE

The last chapter will present a thoroughgoing analysis of the neighbourhood of Red Hook. As mentioned earlier, Red Hook is facing the phenomenon of gentrification. To be able to study this area as precisely as possible, one should first understand what gentrification is, where it comes from and its consequences.

Therefore, in this first chapter the paper will discuss the opinions of different thinkers who have reflected on this concept, starting from the term's earliest appearance in the writings of the sociologist Ruth Glass. Then, we will examine more deeply where gentrification comes from, its main triggers and what social conditions are needed to produce it. We will see that most people who have thought about this issue have drawn the same conclusions regarding the series of events that lead to the apparition of gentrified areas. Only one, the geographer Neil Smith, has a different approach to the phenomenon.

I will next reflect on how gentrification may be inked into the American culture. With roots perhaps going back to the moment settlers arrived from Europe on the new continent, gentrification could be possibly defined as a new type of colonization.

Finally, we will examine another concept which is widely present in the American culture: the idea of communities. These associations of people are currently shaping cities. This is again a concept that we could perhaps link to time of the settlers. We will also see in this chapter and in the third chapter that communities are entities that have the potential to resist or work with the gentrification phenomenon.

## 1.1. Emergence of the notion of gentrification

In order to understand the struggle Red Hook is facing as it becomes more gentrified, we first must understand the apparition and definition of the term 'gentrification'.

Ruth Glass, a British sociologist, was the first to put a name on this phenomenon in 1964 in the introduction of the book *London: Aspects of Change*:

One by one, many of the working class quarters of London have been invaded by the middle classes—upper and lower. (...) Once this process of 'gentrification' starts in a district it goes on rapidly until all or most of the original working class occupiers are displaced and the whole social character of the district is changed.<sup>1</sup>

<sup>1</sup>Glass Ruth. 1964. *London: aspects of change*. London: MacGibbon & Kee. p.xviii

As she states, gentrification happens when middle-class inhabitants, after having left the city centre for the suburban area, return and settle in the now working-class neighbourhood. They are, consequently, forcing out the legitimate inhabitants of their neighbourhood.

According to Glass, the act of gentrifying means improving the existing housing stock for the new social class coming in, passing from a renting policy to an owning policy which will finally induce an urban displacement of the poorer local population. This return of the upper class to the inner-city is in effect a movement back to the city. It comes from a desire by the upper class to live closer to their places of work.

It is difficult to have one general definition of gentrification, as the term can be used in many ways and has no specific and official definition. This means that everyone is free to have their own interpretation and their own opinion on the phenomenon. However, some definitions and ideas regarding the notion of gentrification are more interesting and relevant than others.

For example, in the definition given by Chris Hamnett, a geographer from King's College London, in an article called 'Gentrification and the Middle-class Remaking of Inner London, 1961-2001', he highlights the role that industrialisation plays in the gentrification process:

Gentrification is the social and spatial manifestation of the transition from an industrial to a post-industrial urban economy based on financial, business and creative services, with associated changes in the nature and location of work, in occupational class structure, earnings and incomes, life styles and the structure of the housing market.<sup>2</sup>

<sup>2</sup>Hamnett, Chris. *Gentrification and the Middle-Class Remaking of Inner London, 1961-2001.* "Urban Studies 40, no. 12 (November 2003): p.2402.

This definition suggests that gentrification is not occurring everywhere: it generally takes place in large metropolitan areas such as New York which went through industrial development and which have a sizeable middle class waiting to return to the inner city. For this purpose, the city also needs to have a generous housing stock waiting to be renovated or converted into liveable spaces.

This migration from the suburbs to the city may also be generated by a transformation of

<sup>1</sup>Hamnett, Chris. *Gentrification and the Middle-Class Remaking of Inner London, 1961-2001.* Urban Studies 40, no. 12 (November 2003): p.2402.

the industry from 'a manufacturing industry to a service-based industry'<sup>1</sup> and, therefore, from one employing manual workers to one of white-collar workers. Changes in social class composition also impact the preferences of the people belonging to it. For example, suburban inhabitants tend to go back to the inner-city to reduce their commuting time. In brief, their preferences change, and their cultural orientation does, too.

In resume, we have seen that most individuals who reflect on the term 'gentrification' define it as a movement back to the city by a new middle class which has just faced a cultural transformation. This is a new social class that used to live in the suburban area and whose work status has recently changed, for example because of a salary increase. Because of these social improvements, their cultural values and preferences evolve accordingly.

<sup>2</sup>Smith Neil. 1979. *Toward a Theory of Gentrification A Back to the City Movement by Capital, not People.* Journal of the American Planning Association, 45:4, p.547

However, the geographer Neil Smith has a different view on the phenomenon of gentrification. At first, his definition seems to be the same as the ones discussed earlier: 'Gentrification is the process of converting working class areas into middle-class neighborhoods through the rehabilitation of the neighborhood's housing stock'.<sup>2</sup> The difference in his theory lies in his view that gentrification is not only the result of a cultural shift in the general behaviour of the inhabitants of a city. It is not just about a 'back to the city movement'<sup>3</sup> by suburban inhabitants and young adults who stay in the city after their studies. In his opinion, an economical aspect must be considered. Profits are at the centre of many mechanisms, and in Smith's thinking they are at the centre of the gentrification process. Consumption is shaping cities, and the economy is more stimulating to people and cities than are cultural concerns.

<sup>3</sup>Ibid. p.539

<sup>4</sup>Three methods developers used in order to decreased the possibility people had to buy a properties, in consequence the land's values would diminish.

The act of gentrification is a consequence of investors leaving the inner city to invest in the suburbs because of a general desire to build private houses outside of the city. Hence, inner-cities fall into decay. Noticing the state of those habitations, real estate agents have used strategies such as the redlining, blow-out and blockbusting<sup>4</sup> to devalue the property.

<sup>5</sup>Ibid. p.545

The result of these strategies is the creation of a rent gap. Neil Smith explains, 'The rent gap is the disparity between the potential ground rent level and the actual ground rent capitalized under the present land use'.<sup>5</sup> Once the rent gap is reached, developers can buy the properties at a very low price and restore them, thus leading to gentrification:

<sup>6</sup>Ibid. p.545

Gentrification occurs when the gap is wide enough that developers can purchase shells cheaply, can pay the builders' costs and profit for rehabilitation, can pay interest on mortgage and construction loans, and can then sell the end product for a sale price that leaves a satisfactory return to the developer.<sup>6</sup>

At the end of his paper, Smith summarises his general theory and thoughts with the following sentences:

<sup>7</sup>Ibid. p.546

To summarise the theory, gentrification is a structural product of the land and housing markets. Capital flows where the rate of return is highest, and the movement of capital to the suburbs along with the continual depreciation of inner-city capital, eventually produces the rent gap. When this gap grows sufficiently large, rehabilitation (or for that matter, renewal) can begin to challenge the rates of return available elsewhere, and capital flows back.<sup>7</sup>

What one should remember, and what is different between the Glass and Hamnett theories on gentrification, is that it is the assets that are coming back to the city and not only the people. The individuals who are making profits from this comeback are not from outside the city but from within.

As mentioned previously, each person may define gentrification differently. Some may believe that a sign of gentrification is the appearance of chain stores in a neighbourhood that used to be free of them. For others, a sign may be a larger influx of tourists as a consequence of social media buzz. Gentrification also can be felt when ethnicities shift in a neighbourhood, or with the appearance of new architectural projects which transform the face of a neighbourhood with new types of dwelling.

Gentrification may be viewed in many ways. It can be beneficial in some respects as it eases the development of an area. Often, however, the process becomes too pervasive and overtakes the neighbourhood, changing its very essence and impacting its inhabitants. One major impact of gentrification is the displacement of the original inhabitants, who are unable to pay the increased rents. For this reason, many communities move to another neighbourhood which is still affordable for their social class.

## 1.2. The conquest principle in American culture

Since the beginning of their history, Americans have been settlers and conquerors. When Europeans arrived on the East coast of the United States and decided to settle there, they did not take into account the native populations occupying the continent. Those European settlers simply seized the land they wanted and needed from its original occupants.

The pioneers believed that they were intellectually more developed and that this was a sufficient reason to take whatever they wanted from the local population. It was established in their culture that they could become the owners of a place simply by robbing the locals of their lands. One need only to look at the United States of America's history to see how Indians were treated and chased to finally end up in protected reservations.

<sup>1</sup>Harjo, Susan Shown .2014. «Nation to Nation: Treaties Between the United States & American Indians». Washington, DC: National Museum of the American Indian. p. 15–16.

The behaviour of these settlers comes from the ideas of the discovery doctrine, which was a concept born around 1500 stating that 'European representatives had the right to take ownerships of lands that were originally occupied by natives under the guise of discovery'.<sup>1</sup> Today, we can still find some signs of this culture of conquest. There are some changes in the method, but the result is generally about the same: the weaker party loses. In fact, the settlers' conquest of land is echoed in the gentrification of today. Only the weapons are different. Before, armed forces were used to conquer; today, financial authority and economic power have replaced arms.

An ordinary person has little means to battle powerful entities like politicians or wealthy individuals. Today's society tends to respect first and foremost individuals with large amount of money. Therefore, if a powerful firm wants to establish its headquarters or wants to spread its brand all around the city, greed is likely to drive the owner of the sought-after space to sell its grounds, buildings or spaces. An example is seen in the process by which powerful brands are spread across New York City: lands are bought and then transformed. If different firms do this at the same time in the same area, an increasing number of outsiders will be attracted to the area, and this will thus add value to the neighbourhood. Real estate agents and developers will start transforming and selling new dwellings, impacting rent prices in the area. Local people will soon struggle to pay rent and will ultimately be forced to leave their habitations or shops.

The result is the same as with colonization: the weakest are forced to move elsewhere, further away.

## 1.3. The community phenomenon

Since the beginning of humanity, human beings have tended toward groups or packs. People who are together protect each other. This is one of the reasons why, throughout history, humans have rarely been alone: it is a way to survive and be stronger. Humans tend to stay and settle close to things and people they are familiar with. There is a certain feeling of security that people get by sticking with their peers, and by belonging to a community.

A community can be defined as ‘the people living in one particular area or people who are considered as a unit because of their common interests, social group, or nationality’.<sup>1</sup> Thus, communities are gatherings of people who have elements in common which bring them together and give them a feeling of safety and unity. Community makes people belong and care for a place.

<sup>1</sup>Oxford English Dictionary, 3rd ed. (Oxford: Oxford University Press, 2009), s.v. “Community.”

Today, communities can be found all over the United States, reflecting the way the situation of settlers has evolved throughout the country’s history. First, settlers from all over Europe came to the new continent and established colonies. These new settlements could also be defined as communities, because they were composed of people coming from the same country, with the same interests and goals, but also with the same problems and fears. To survive, people had to help each other and stay together. Those are some of the parameters leading to the creation of a community.

The colonies grew, changed and vanished, but other settlements replaced them. With time, more foreigners came and sought to join their compatriots who were already on the American soil. Soon, urban enclaves formed within the new cities because newcomers were looking to settle with people who would understand them and have the same culture.

It is not always positive to remain within one’s own community; through history, doing so has produced disparities among the population of cities. For example, some communities in metropolitan areas were so strong and large that the foreigners no longer tried to learn English, as they stayed with the inhabitants who were similar to them. By doing so, such people slowly exclude themselves from the rest of their city—from the people outside their neighbourhood.

In New York City, plenty of tightly knit communities still exist; for example, the black community of Harlem is still very present, and one can feel their culture while wandering the streets.

Entire communities can also settle in a new place after having fled a country or an area. For example, in Williamsburg, a large number of Hasidic Jews ‘arrived prior to WWII due to Nazi persecution and are still a continuously growing and tight community located south of Division Avenue and North of Flushing Avenue’.<sup>2</sup> The entire initial community left Europe looking for another place to settle. Today, tens of thousands of Hasidic Jews are living in the neighbourhood, and one can feel the atmosphere changing upon entering this area.

<sup>2</sup>Franz Yvonne. 2015. *Gentrification in Neighbourhood Development: case studies New York City, Berlin and Vienna*. Gottingen. V&R unipress. p.115

The community effect can bring people together even if they do not initially have much in common except the love of the place they are living in. For example, after Hurricane Sandy, Red Hook was in a very poor state. Many of its rowhouses’ inhabitants and local shops owners came together before authorities arrived to try to save what was left in the

submerged basements and streets.

<sup>1</sup>Karon, Tony. 2012. «Red Hook  
Apocalypse: How Sandy Undid  
an Up-and-Coming New York  
City Neighborhood». Nation  
TIME

A local resident explained to TIME: 'People are sharing sump pumps, hoses and generators, doing whatever they can to help their neighbors get through this'.<sup>1</sup> We see here that communities can be formed and consolidated through difficult times such as a natural disaster and are not only composed of people with the same culture. Indeed, Red Hook is now home to people with very different backgrounds, but this is something that will be further developed in the third chapter.











## 2. NEW YORK: THE EVOLUTION OF A GENTRIFIED CITY

New York City is a perfect example of the gentrification phenomena; it has been the prey of gentrification for decades. In the 1960s Jane Jacobs, an urban planner living in Greenwich Village, was assisting and fighting against the urban transformations that the metropolis was experiencing. Her fight against Robert Moses and his project for a highway going through Washington Square Park is well known in New York history.

In her book *The Death and Life of Great American Cities*, Jacobs explains what a neighbourhood, a district or a city should include in order to be efficient and a good place to live. According to Jacobs, the main factor leading to a well-functioning place is 'diversity'. In fact, she argues that diversity is the main component of a secure, successful and vibrant area.

The author argues that a place should always have four different components that together create this diversity. Those four components, which will be further developed, are: the mixing of functions, the length of the urban blocks, the blending of building ages and the concentration of inhabitants.

Throughout her book, Jane Jacobs covers these four themes while also naming the difficulties a city faces, addressing the obstacles to diversity that must be overcome in creating a liveable city.

## 2.1. Jane Jacobs, *The Death and Life of Great American Cities*

This sub-chapter will address the four components that, according to Jane Jacobs, a city needs in order to be efficient and welcoming.

### Primary and secondary uses

Primary uses refer to the basic utilities a city must provide. Habitations, offices, factories, schools, universities and more generally compose this category. These are institutions a city provides to fulfil the basics needs of its inhabitants. Secondary uses are attracted by the presence of the primary ones; they satisfy the other needs of the primary function users.

A lack of diversity is created when a place is only composed of one type of functions, such as an urban fabric only composed of offices. For example, at the time Jane Jacobs wrote her book, downtown New York was mainly a place of work. There was a 'time unbalance among its users',<sup>1</sup> meaning that the streets and surrounding shops were only busy during the early morning, lunchtime and the late afternoon. This dynamic creates a negative economic situation for the surrounding services. A neighbourhood must be used over the course of the whole day to be healthy and efficient.

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.154

To do so, it needs to attract different kinds of people; this means that it must have different type of functions. Diversity is created through this mixing of different usages at different times of the day. Diversity of uses creates confrontations between people of different backgrounds, enabling a combining of the social classes. Such situations help urban areas evolve into safer places. Moreover, when people are out in parks and in the streets, this has a direct impact on general safety. An empty place is much more likely to be dangerous and attracts more troubles since, potentially, no-one is paying attention to the surroundings.

The mistake which orthodox urbanism frequently commits is the establishment of a civic or cultural centre. These entities create a kind of island of usage within a neighbourhood. They are destined to be used and visited by the same class of people. These structures become untouchable entities, generating a poverty of use.

On the contrary, the opening of Carnegie Hall on 57th Street in Manhattan, with its cultural function, consequently influenced the apparition of new restaurants, a cinema, shops and so on. It makes the neighbourhood more animated and attracts more users, who, in return, may possibly bring in new secondary functions.

In brief, having a variety of functions in one place brings distinct users with different background together. It creates a diversity that keeps the space busy with people who consequently generate a feeling of security. This security in turn has an impact on the neighbourhood's popularity.

### The length of the urban blocks

Jane Jacobs states that shorts blocks are more efficient than long blocks to create and bring diversity:

Frequent streets and short blocks are valuable because of the fabric of intricate cross-use that they permit among the users of a city neighborhood. Frequent streets are not an end in themselves. They are a means toward an end. If that end—generating diversity and catalyzing the plans of many people besides planners—is thwarted by too repressive zoning, or by regimented construction that precludes the flexible growth of diversity, nothing significant can be accomplished by short blocks. Like mixtures of primary use, frequent streets are effective in helping to generate diversity only because of the way they perform.<sup>1</sup>

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.186

Having shorter blocks allows much more interactions between inhabitants. Those interactions are possible thanks to the multiple crosses that are created by the streets. People, then, have the choice of a large number of itineraries to go from a point A to a point B. The paths of all those commuters, then, tend to mix and meet. At these meeting points, new amenities emerge. Those shops and street intersections create ‘pools of city cross-use’,<sup>2</sup> resulting in more diversity and more people sharing the same space.

<sup>2</sup>Ibid. p.181

Long blocks, in contrast, often force inhabitants of a neighbourhood to always follow the same path to reach the next subway station, thus limiting their horizons: ‘They [the long blocks] automatically sort people into paths that meet too infrequently, so that different uses very near each other geographically are, in practical effect, literally blocked off from one another’.<sup>3</sup>

<sup>3</sup>Ibid. p.181

With shorter streets, the neighbourhood is opened up, and newcomers are more inclined to wander around. When someone is facing a long street, he or she is less inclined to go discover it since the way out is much further.

According to Jane Jacobs, other urban planners may say that these short blocks create a ‘wasteful street’;<sup>4</sup> she on the contrary believes that these ‘frequent’ streets are a major quality for city diversity, bringing people from all horizons together and establishing new secondary functions into the neighbourhood.

<sup>4</sup>Ibid. p.185

### **Mixed-aged buildings**

Having mixed-aged buildings within an urban tissue allows a neighbourhood to have different rent ranges. Typically, the construction of new buildings automatically means the influx of a high rent range within the surrounding, older urban tissue. These higher rents are not affordable to every type of population or institution; it is easier for a bank to rent a space in a new building than for a private individual to do the same. Lower rents attract people with lower means who still wish to live in a good neighbourhood. Different rents ranges, then, allow for a diversity among the inhabitants but also a diversity in the uses within the neighbourhood.

The global rent situation of a neighbourhood can be a good indicator of its well-being: the more older buildings remain, the more help the area needs to evolve towards better living conditions and better diversity. If a place is only composed of old buildings that have not been renovated, it usually means that the inhabitants belong to the same social class. The same phenomenon occurs within new housing projects: they end up with only the same type of people—the only ones who can afford and accept to live in those dwellings.



## High concentration

Density does not mean the end of a neighbourhood, nor does it mean overcrowding:

'No good for cities or for their design, planning, economics or people, can come of the emotional assumption that dense city populations are, per se, undesirable. In my view, they are an asset. The task is to promote the city life of city people, housed, let us hope, in concentrations both dense enough and diverse enough to offer them a decent chance at developing city life'.<sup>1</sup>

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.221

Having a neighbourhood with a high concentration allows people to meet many other inhabitants, and in consequence to mix and create diversity. They are the producers of new ideas and new functions and can support new programs such as cultural initiatives. If a neighbourhood has a higher concentration of people, more providers of amenities will take the opportunity to settle in the neighbourhood.

In conclusion, diversity is the main component a city, a district or a neighbourhood need in to be suitable, constantly evolving and transforming. Diversity allows progress by putting people together. Inhabitants from different backgrounds come together and take care of their own neighbourhood, bringing different points of view on their local conditions and proposing new initiatives—the starting point of progress. This social mix unites people who have nothing in common but the place where they live, the place they share and appreciate. This can create a sort of community spirit, inciting the inhabitants to help each other.

Diversity and a good community are the foundation of an evolving urban life. These two components are the basic elements that an area needs to provide security. Security is a major issue in neighbourhoods. Families must be able to let their children play outside without worrying about their whereabouts. If people live in an area with a good community, someone will always be watching out for children in the streets. Those children will usually play on the sidewalks because that is where interesting things are happening; it is the place where one can see and participate in everything. The sidewalks are the heart of the neighbourhood, where people meet and exchange.

## What are the threats to this diversity?

Jane Jacobs' book posits that different entities are threatening the development of cities and their subcomponents. Two major entities, orthodox urbanism and large corporations, are both spreading gentrification or diminishing the diversity in their own specific ways.

According to Jane Jacobs, the idea behind orthodox urbanism is as follows:

The street is bad as an environment for humans; houses should be turned away from it and faced inward, toward sheltered greens. Frequent streets are wasteful, of advantage only to real estate speculators who measure value by the front foot. The basic unit of city design is not the street, but the block and more particularly the super-block. Commerce should be segregated from residences and greens. A neighborhood's demand for goods should be calculated "scientifically," and this much and no more commercial space allocated. The presence of many

other people is, at best, a necessary evil, and good city planning must aim for at least an illusion of isolation and suburban privacy.<sup>1</sup>

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.181

These principles are the opposite of what Jane Jacobs believes. Orthodox urbanism, in her view, can only create poverty of use, a poverty of community and a poverty of diversity. It leads to a city whose functions are entirely separated from each other, with nothing linking them. Inhabitants lives among the same social class as the one they belong to. No new exchanges of different opinions and situations make the city evolve. Everything is delineated, with little room for improvement.

Large corporations likewise threaten the development of diversity in a city. One could say that gentrification brings new opportunities to a neighbourhood, when, for example, a chain opens a new coffee shop there. However, incorporating a firm that is already prevalent and popular in the rest of the city starts the gentrification of the area surrounding it. It means that this area in development is starting to look like and contain the same elements as the rest of the city. Its diversity is slowly replaced by generic elements. As newly implanted firms transform their area into a progressively popular place, direct consequences may include the rise of rent rates, which will drive the poorest out of the neighbourhood. This is called population displacement and is a main impact of gentrification.

Large corporations can also have a direct impact on the fabric of the city, with, for example, the arrival of a social housing complex. Such projects replace existing habitations which generally have different types of inhabitants, with different incomes and cultures. They are generally an attempt to 'unslum' a place. However, those complexes ultimately bring together people who are all alike and have the same social conditions, the same kind of work and the same problems. Diversity is lost in the process.

Indeed, housing projects often offer only one function—housing—which goes against Jane Jacobs' ideas of a city that creates diversity.

Jacob thinks that projects that are supposed to unslum areas do not take enough into account the actual population they try to help. These populations need to be respected and listened:

Conventional planning approaches to slums and slum dwellers are thoroughly paternalistic. The trouble with paternalists is that they want to make impossibly profound changes, and they choose impossibly superficial means for doing so. To overcome slums, we must regard slum dwellers as people capable of understanding and acting upon their own self-interests, which they certainly are. We need to discern, respect and build upon the forces for regeneration that exist in slums themselves, and that demonstrably work in real cities. This is far from trying to patronize people into a better life, and it is far from what is done today.<sup>2</sup>

<sup>2</sup>Ibid.p.271

In essence, the implantation of successful firms and housing projects in underprivileged areas encourages the spread of the gentrification phenomenon, transforming the population and pushing inhabitants further away from each other.

## 2.2. Williamsburg: from industrial to gentrified

In order to understand the process and impacts of the gentrification phenomenon in New York City, the study of the development of a gentrified neighbourhood is useful. It allows us a first tangible perspective on the topic. The study will focus on the neighbourhood of Williamsburg, which is located on the banks of the East River and belongs to the borough of Brooklyn. The area has become known in the last ten years through its artistic scene and its so-called hipster population.



Fig 1: Waterfront transformation, the former Domino Sugar Refinery and its new forty-five stories high tower

The land Williamsburg is now standing on was bought from the Native Americans in 1638 by the Dutch West India Company. It quickly developed into an industrial neighbourhood because of its geographical assets, the waterfront and therefore its proximity to Manhattan and the East River deep drafts, and Williamsburg became a major industrial port.

At the end of the 19th century, the local industry had grown, and the area was famous for its sugar refineries and breweries. The growth of the neighbourhood and its activity earned the interest of some of the wealthiest inhabitants of Manhattan, some of whom decided to settle in this area because it was less crowded.

But the arrival of this new class of inhabitants and the opening of the Williamsburg Bridge in 1903 led to overcrowding. New ethnicities of immigrants (Jewish, Polish, Italian and others) left the slums of the Lower East Side to settle in the industrial neighbourhood of Williamsburg. By 1917, the living blocks of Williamsburg were the most crowded building units of New York City. Because of this overcrowding, the buildings began to fall into decay.

In 1960, the heavy industrialization started declining in the neighbourhood and its inhabitants began facing unemployment, violence and drug abuse. With time, this situation gave Williamsburg a bad reputation, and people started leaving the neighbourhood.



Starting in the 1970s, the artistic community showed interest in the area. The neighbourhood became attractive for artists looking for large, open spaces with low rents. The waterfront location, not far from Manhattan, was also attractive to this population. From then, the arts community in Williamsburg started growing. With the artists' arrival, Williamsburg started changing; gentrification was about to start.

The reasons why Williamsburg is a prey for gentrification are the same ones that brought industry there in the first place: Williamsburg is on the waterfront, close to Manhattan, and there are transportation and spaces available.

<sup>1</sup>Curran, Winifred . 10/06. 'From the Frying Pan to the Oven': Gentrification and the Experience of Industrial Displacement in Williamsburg, Brooklyn. 14/10/19. p.1433

The process went as follows: first, artists settled in old warehouses without declaring that they would be living there and not only working. They would then transform the warehouses into living spaces. This is called the 'illegal residential conversion'.<sup>1</sup> After this step, owners would apply for a rezoning procedure for their property in order to change from an industrial property to a residential one. With this rezoning process, the owner could then ask the tenants for higher rents.

Following those procedures, general rent prices in the neighbourhood slowly started to rise. Some landlords began to inflate their industrial rents to keep their buildings empty; after a time, they would ask for a rezoning procedure due to financial hardship. It was for, example, common for landlords to find false reasons not to accept some industrial tenants; they would also stop renewing the leases. With the difficulties that the remaining manufactures had in finding affordable places in Williamsburg, they started to move to New Jersey.

With the flight of the industrial sector, Williamsburg became increasingly attractive for middle-upper-class residents, and many industrial lofts were still available for development. Living in Williamsburg was bringing more benefits than living in Manhattan.

In 2005, the New York City council presented a major rezoning plan, changing the affectation of large area of the neighbourhood, especially on the waterfront, from an industrial to a residential zone. This procedure immediately opened the door to large residential projects on the waterfront. This rezoning plan soon opened the door to regeneration practices: 'regeneration practices refer predominantly to the renewal of vacant and underutilised land, the implementation of large scale projects and comprehensive construction of housing units'.<sup>2</sup>

<sup>2</sup>Franz Yvonne. 2015. *Gentrification in Neighbourhood Development: case studies New York City, Berlin and Vienna*. Gottingen. V&R unipress. p.114

Those renewal plans reflect the general push in New York to provide more habitations to accommodate the immigrants and outsiders who are still arriving in the city. Indeed, the city has for ambition to attract the brightest minds: 'New York City puts special emphasis on the competition for globally mobile talents and business through the creation of attractive and liveable neighbourhoods'.<sup>3</sup> By 2030, New York City is expected to have one million more inhabitants; in consequence, the housing demand will explode.

<sup>3</sup>ibid p.127

Gentrification is thus represented by the new housing projects that are flourishing on the waterfront and the new upper class that is arriving. Another sign of the ongoing gentrification is the forced moving out of the former gentrifiers of the 1970s as rent prices increase. Between 2000 and 2014, the average rent in Williamsburg grew 57.7%.<sup>4</sup> The retail chains that can be found in Williamsburg today are another sign of the ongoing gentrification of the neighbourhood. Expensive shops are slowly replacing those that have been there for

<sup>4</sup>NYU Furman Center. 2015. "State of New York City's Housing and Neighborhoods in 2015".

decades.

I personally lived in the neighbourhood, and I noticed the number of young French employees who are living there. In my opinion, this arrival of young wealthy foreigners in a neighbourhood is a sign of gentrification. It means that it has become known for its safety, its transportation facilities and its general agreeable atmosphere. In Williamsburg, this atmosphere comes from the artistic feeling that the neighbourhood provides and cultivates.

A problem with the general evolution of this neighbourhood is that it is slowly losing its industrial identity. Since there are not many industries still functioning there, buildings are transformed or torn down and replaced by high-rise habitations as the original inhabitants are replaced by wealthier newcomers. Those displaced inhabitants must find a new neighbourhood to settle in where rents are still affordable. It is very likely that an artist, forced to move out of Williamsburg, will settle in a place with the same appeal as his or her former neighbourhood. It is likely that his new location will also go through the gentrification phenomenon in the coming years.

We will see with the study of Red Hook in the following chapter that this neighbourhood is slowly entering the same patterns as Williamsburg. The neighbourhoods' histories are similar, and so is their development. In many ways, Red Hook is a smaller Williamsburg, and lessons could be taken from the development of this northern Brooklyn neighbourhood to understand the changes Red Hook will face.



Red Hook Grain Terminal





1: 20'000  
0 100 200 500m

### 3. RED HOOK: A TOUGH NEIGHBOURHOOD IN DEVELOPMENT

Now that we have a general overview on the gentrification phenomenon, in this chapter we will go deeper into the analysis of the neighbourhood I discovered two years ago.

First we will go through its history, from the arrival of the settlers, the first constructions, to its age of glory, its downfall and finally its rebirth through gentrification.

Then, we are going to study the actual state of Red Hook, what kind of threat it is facing, what are its issues, its successes and its failures. This study is going to help us find an axis of potential developments for the neighbourhood.

After the analysis of the current urban situation we will focus on the urban tissues, by studying different ones: the housing tissue, industrial tissue, gentrified tissue and the voids in the urban fabric.

The understanding of the gentrified tissue will allow us to go further in the study of the gentrification in Red Hook. This paper will show the phenomenon's impacts, its means of actions, how it works and how the community is handling the phenomenon.

Finally, after the whole analysis of the neighbourhood, we will understand that it is actually an urban enclave. An urban enclave at different scales. In the development of this sub-chapter I will make a summary of what we dealt with throughout this essay in order to propose a direction of development, a conclusion in the form of a map of reading. A map that gathers the potentials of Red Hook and the actions that should be undertaken in order to help the neighbourhood in its future development.

### 3.1 A forgotten neighbourhood, but a former industrial port of New York<sup>1</sup>

During its development, Red Hook has been important for New York in several ways. One aspect that was present over a long period was its industrial purpose.

<sup>1</sup>Most of the informations can be found in: New York City Department of City Planning. 2014. *Existing conditions and brownfield analysis, Red Hook, Brooklyn.*

Since its foundation around 1600, Red Hook has always been a part of the Town of Brooklyn. The first village to be settled on these grounds was named Rood Hoek and was established by the first settlers, the Dutch. They named it after the hooked shape of its peninsula and the redness of its soil. At that time, the area was mostly covered by water and marshland. The settlers slowly began to fill in the water with rocks and sand, thereby creating new accessible grounds.



Fig 2: Red Hook, 1767



Fig 3: Red Hook, 1845

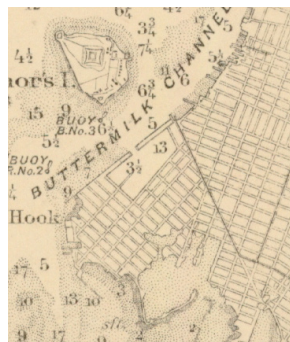


Fig 4: Red Hook, 1861

The Red Hook that we know today started to take its actual urban form with the construction of the Atlantic Basin (1840–1847). This first harbour was designed to accommodate large merchandising ships and to prevent water from flowing into the village. At the Atlantic Basin, ships from Europe could be repaired and unload their goods to distribute them throughout the United States. They would then be loaded with goods back to Europe. With the construction of its docks, Red Hook began to take a major place in the shipping industry; it became 'one of the busiest shipping centres in the United States'.<sup>2</sup>

<sup>2</sup>Ibid p.13

With the success of this undertaking, Colonel Daniel Richards petitioned to have the Atlantic Basin linked with the road system of Brooklyn. A street grid was laid in 1847 to connect the two entities. This grid is still present and still maintains the urban tissue of the neighbourhood.

With the success of the Atlantic Basin, a second one, the Erin Basin, soon followed (1856). It was built to accommodate larger ships, and a large number of warehouses were built alongside it. In total there were 135 acres of docking space. The new warehouses increased the volume of storage spaces in Brooklyn, allowing the area to harbour most of the goods shipped to New York. These storehouses were a main asset of the area, as Manhattan was overcrowded and could not accommodate the products arriving by sea and train. One of the consequences of the influence of the two basins was the creation of Van Brunt Street and some connecting railroads.

Between the Civil War (1861–1865) and the early 20th century, the Atlantic and Erin basins allowed Red Hook to prosper and become a major hub in the shipping industry. The new hub needed manpower, and therefore many Italian and Irish citizens coming from the

European ships began to settle in Red Hook. They settled in rowhouses or small cabins around the neighbourhood, making themselves perpetually available for new working opportunities.

As the depression of 1930 hit the United States and especially New York, the neighbourhood started to decline. Shipments were still held, but with fewer employees and smaller salaries. Companies delivering goods fired their workers as soon as the products were unloaded off the ships. The unemployed seamen started to settle in camps of shacks around the basins, waiting and hoping for new jobs opportunities although some of them did not even know how to speak English.

By the end of 1932, around 1,000 people, not only seamen but entire families, were living in a Hooverville called Tin City. People with no resources were coming to live there. The living conditions were poor: there was no running water, and the soil was too polluted to be cultivated. Some men fell into alcoholism, and soon several deaths due to alcohol poisoning attracted the attention of the authorities. Tin City was embarrassing New York officials, and actions were taken to relocate the inhabitants. Soon the Red Hook Recreation Centre (1936) and its sport fields were built by Robert Moses in place of the Hooverville (1940).



Fig 5: Shacks in Red Hook circa 1930-1932



Fig 6: Shacks in Red Hook circa 1930-1932

The Red Hook Houses, a social housing project, rose up in 1938 to accommodate the remaining families of dockworkers and any from the lower classes who were looking for a place to settle. This project was one of the first federal housing projects in the United States. It is still one of the biggest social housing projects in New York City.

From 1940 to 1960, the activities of the shipping port diminished since containerization was gaining ground over traditional shipping methods. Industry moved to New Jersey, where larger areas were still available. Around 1950, Red Hook was disfigured by the construction of the Gowanus Expressway and the Brooklyn Battery Tunnel, which separated the neighbourhood from the rest of Brooklyn. The isolation was completed in 1950, when the existing trolley service was removed.

After the arrival of containerization, many lots were abandoned and deserted. Therefore, in 1962, the City of New York started buying the vacant land in order to revitalize the area around the Atlantic Basin, proposing different urban renewal plans between 1962 and 1975. Those projects were never completely executed due to multiple financial troubles.

The downfall of Red Hook started with the exodus of the maritime industry, which took its population through economic decline; between 1960 and 2001, the neighbourhood lost half its population. In 1990, the criminality rate hit a high, and there were problems of drugs, violence, unemployment and poverty: 'At this time, LIFE magazine declared Red

Hook as the “crack capital of America” and listed the neighbourhood as one of the “worst” in the United States’.<sup>1</sup>

<sup>1</sup>New York City Department of City Planning. 2014. *Existing conditions and brownfield analysis, Red Hook, Brooklyn*. p.14

Thirty years later, the neighbourhood has undergone a total transformation. The empty warehouses are now full of artists and craftsmen. Families are settling down, new businesses are opening and the reputation of Red Hook is shifting from a place to avoid to the next place to live. These are the first signs of the gentrification taking place in Red Hook. In fact, the artistic community has been attracted by the low rent and open spaces that warehouses were providing in the 1990s. As this new community started to settle in the area, it gave the place a fresh start. Over time, the society developed and tightened, creating a better place to live.

With this new impulse, Red Hook has been able to develop and acquire new amenities, such as a Fairway Market and an IKEA, which have contributed to its arrival on the forefront of the scene. The story of Red Hook is a similar to that of Williamsburg, as the artistic community settled in the area, and the first signs of gentrification soon followed.

Today, Red Hook is home to 10,227 inhabitants, 6,518 of which are living in the Red Hook Houses. The neighbourhood is coming back from its decline after the Depression, but 40% of its inhabitants are still living in poverty. The unemployment rate is 21%, which is more than twice the average rate of Brooklyn or New York. Those who have a job are in general working outside of the neighbourhood.





## 3.2. The current state of Red Hook

In this sub-chapter, we will address the current state of Red Hook, examining its problems and weaknesses. The aim is to achieve an understanding of the general situation in Red Hook before going deeper into the analysis and trying to find solutions to help the development of this neighbourhood.

### 3.2.1 The transport system

Transportation in Red Hook is one of the area's main problems. Commuters experience daily troubles to reach Manhattan; on good days, the trip can take 45 minutes, but it can often take much longer.

The subway lines are a main transport network that commuters can use to exit Red Hook. The only subway station easily reachable on foot is the 9th Street subway station. It is located outside of Red Hook, on the other side of the Gowanus Expressway. To reach it, inhabitants must first cross the busy Hamilton Street, under the highway bridge. This is a zone of highly dense traffic, and people often try to avoid crossing the road there. Commuters who wish to take the subway must cross it, as there is no other more convenient solution.

In addition, the subway station is elevated: it is located 30m above ground level. While I was in the neighbourhood, it came to my understanding that the escalators were often out of order, making it hard for some people to reach the subway platforms.

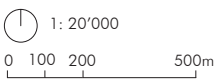
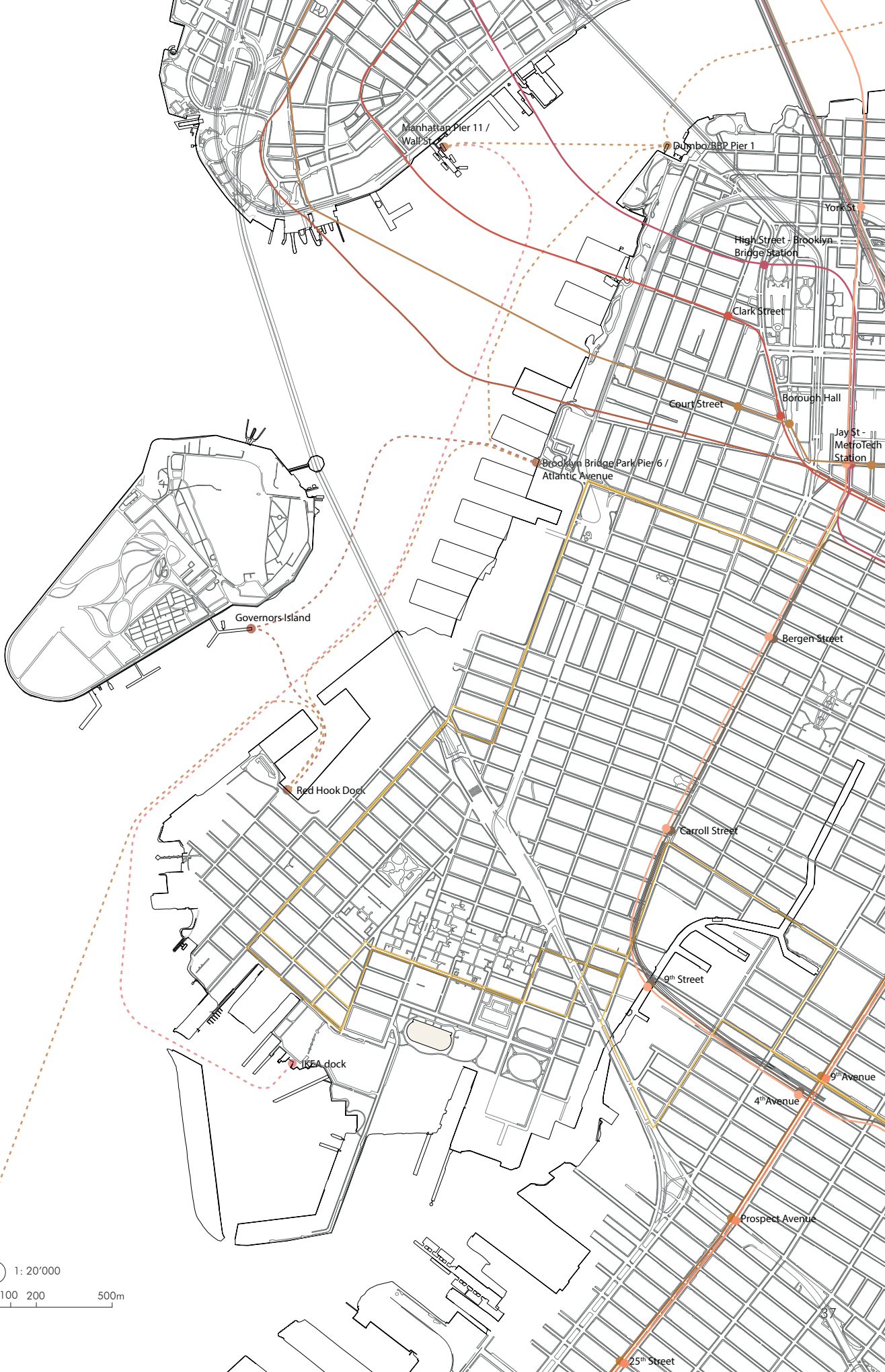
Another way to reach Manhattan is by ferry. The only station is located in the Atlantic Basin. Red Hook has only been connected to this network since 2017. Ferries are the fastest way to access the South of Manhattan, but they only run once or twice per hour. Moreover, the price of the ride is not included in the general subway/bus subscription; this can be a disincentive to buying a ferry pass. The IKEA ferry is another means of transportation that inhabitants can use to reach Downtown. It currently operates works only in the afternoon, and there is a charge for the journey if the commuters are not IKEA customers.

The last transportation method that can be used is the bus network. The buses are considered unreliable, and inhabitants often complain about them. Two buses run through the neighbourhood, but their routes are not very different. People typically use them to get to the 9th Street subway station or to some other subway station further away.

#### Map legend







### 3.2.2 The threat of flooding

Because of its position directly at the water's edge, Red Hook is facing a major flooding threat. The soil of the neighbourhood used to be composed of marshland. These marshes have been filled up throughout history to build the neighbourhood we know today. Although the residents are accustomed to small inundations, they were not prepared to go against Hurricane Sandy in 2012. With the passage of the storm, the neighbourhood suffered from severe damages. The water reached 180cm<sup>1</sup> at some places in Red Hook, covering cars, entering basements and ruining everything that was not protected.

<sup>1</sup>Walsh Brian, 10/17. "Red Hook After Sandy: Flourishing But Vulnerable". 01/01/20

Small shopkeepers notably suffered from Sandy; they often lost all of their stock, and their electrical material was rendered unusable. It took considerable resources for them to recover and be able to open their store again. Some of them unfortunately lacked the resources needed to recover from this disaster.

The Red Hook Houses, the social housing complex, was severely hit by the floods. Because of electrical damage in the basement, the inhabitants went three weeks without power. Now, some of the emergency power supply devices are still present in the complex and power the apartments.

At the present time, some solutions are under study to face the future floods and hurricanes. The authorities appear to have settled on a project to raise some roads that are close to the water in order to create an obstacle for the floods. This could be a way to try to prevent the worst damage.

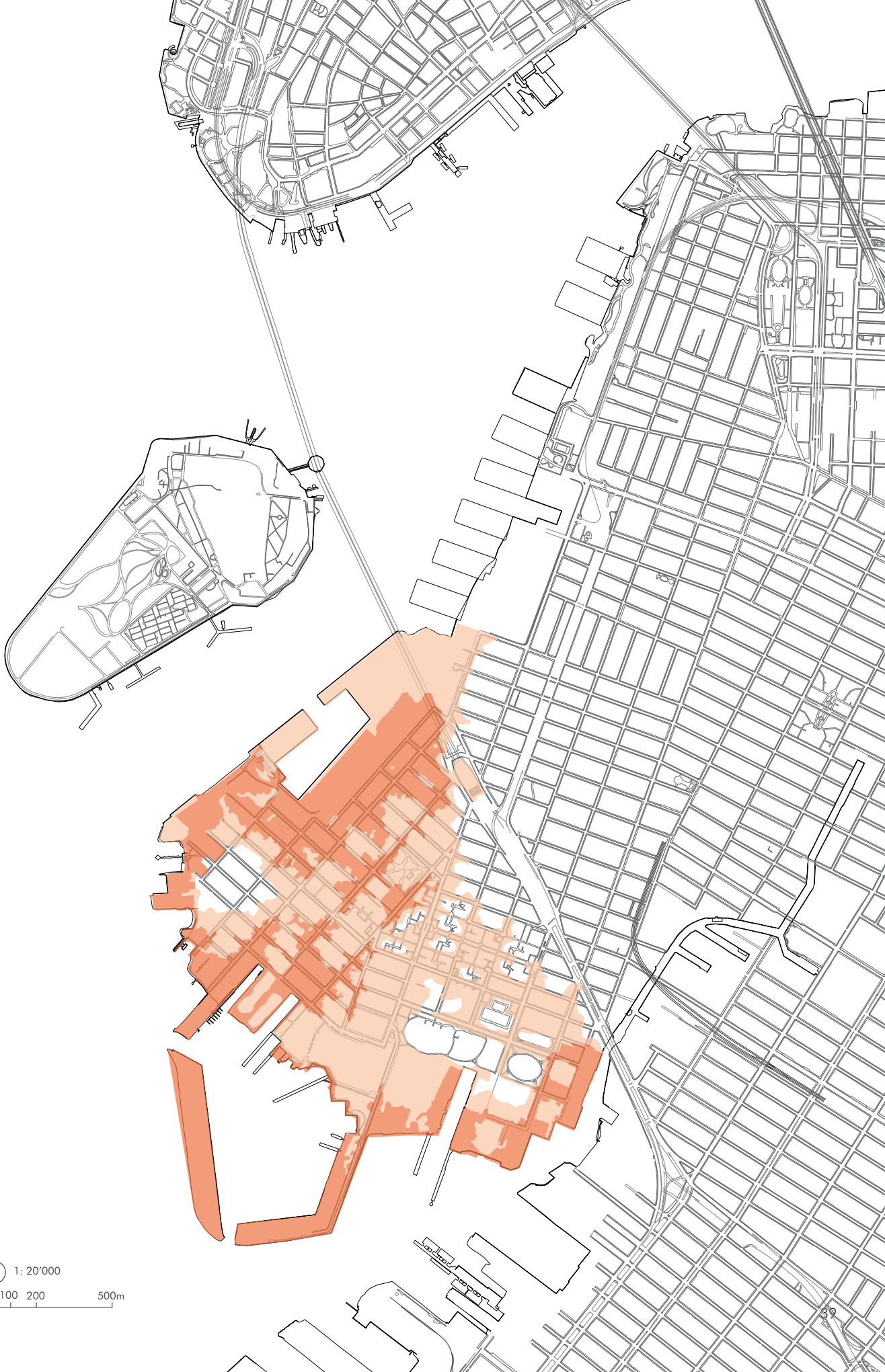


Fig 7: Red Hook after Hurricane Sandy

#### Map legend

- 10-years projections
- 100-years projections





1: 20'000  
0 100 200 500m



### 3.2.3 The Gowanus Expressway<sup>1</sup>

'What is Brooklyn to the highway engineer—except a place to go through rapidly, at whatever necessary sacrifice of peace and amenity by its inhabitants?'—Lewis Mumford, *The New Yorker* (1959)

<sup>1</sup>All the informations regarding the history of the Gowanus Expressway are from: Eastern Roads. "Gowanus Expressway, Historic overview". Accessed December 2019.

This statement sums up the situation in Red Hook after the construction of the segment of the road I-278 called the Brooklyn-Queens Expressway but locally known as the Gowanus Expressway. At the beginning of the 20th century, Robert Moses, a New York City official, wanted to redesign New York and take it out of the Great Depression by transforming its transportation network, therefore promoting its economy.

In 1939, Moses proposed the building of a new expressway, the Gowanus Parkway, on top of an existing elevated route on Third Avenue in Brooklyn.

In 1950, the city approved the extension of the Gowanus Parkway with a six-lane viaduct going through Red Hook. The aim of these new roads was to create a new link between the Brooklyn-Battery Tunnel, the Brooklyn-Queens Expressway and the south of Brooklyn.

The creation of this new expressway in the middle of the neighbourhood of Red Hook led to the apparition of a 'border vacuum'.<sup>2</sup> This means that the presence of this large infrastructure directly impacts the urban fabric around it. The tissue before and after the construction is not the same, and people now tend to avoid the surroundings of the expressway. Their aversion is due to the discomfort that comes with the implantation of the busy roadway, primarily pollution and noise. This creates an unfriendly environment where users do not feel safe in its surroundings

<sup>2</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.257

These kind of borders create vacuums around them, and no other functions work effectively in the area of this busy roadway:

'Or to put it another way, by oversimplifying the use of the city at one place, on a large scale, they tend to simplify the use which people give to the adjoining territory too, and this simplification of use—meaning fewer users, with fewer different purposes and destinations at hand—feeds upon itself. The more infertile the simplified territory becomes for economic enterprises, the still fewer the users, and the still more infertile the territory.'<sup>3</sup>

<sup>3</sup>ibid. p.259

Jane Jacobs writes about such borders and gives the example of railroad tracks. In this excerpt, we can find some similarities with the situation of the expressway:

The places that do worst of all, physically, are typically the zones directly beside the track, on both sides. Whatever lively and diverse growth occurs to either side, whatever replacement of the old or worn-out occurs, is likely to happen beyond these zones, inward, away from the tracks. The zones of low value and decay which we are apt to find beside the tracks in our cities appear to afflict everything within the zones except the buildings that make direct, practical use of the track itself or its sidings.<sup>4</sup>

<sup>4</sup>ibid. p.258

Jacobs states that zones right next to the tracks are the most impacted by their presence, and it is the same situation with the expressway. The areas beneath it and next to it have lost all their values and interest, now consisting mainly of industrial buildings.



Brooklyn-Battery Tunnel

Brooklyn-Queens Expressway

Gowanus Expressway (I-278)

1:20'000  
0 100 200 500m





Fig 8: 1924 aerial view of Red Hook

The habitation's urban tissue seemed to have no major interruptions, it was continuous from one side to the other side of the future expressway. Even if there was Hamilton Street crossing the blocks there was no sharp changes in the tissues. If we look closely to the location of the future sports field, we can see some of the shacks forming the Hooverville in the neighbourhood.





Fig 9: 1951 aerial view of Red Hook

It is a picture taken not long after the achievement of the connection of the Gowanus Parkway with the Brooklyn Battery Tunnel and the construction of the recreation centre, both planned by Robert Moses. The Red Hook Houses have also emerged, replacing houses and shacks that were on site.



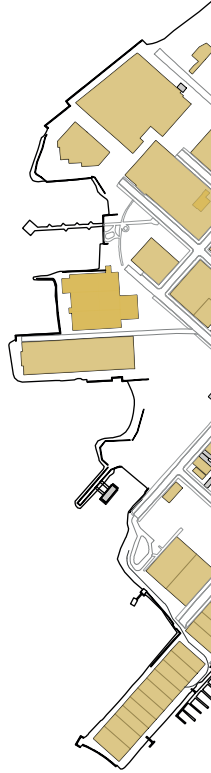
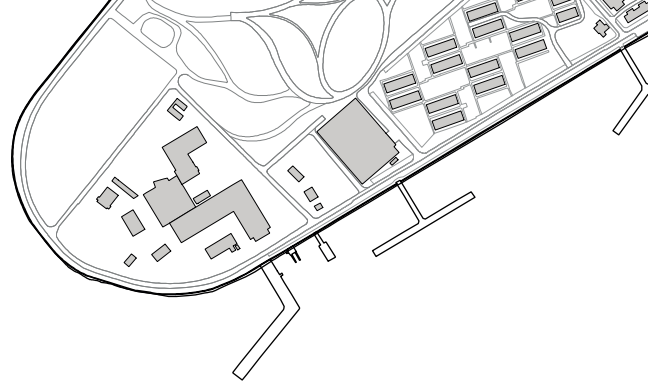
### 3.3 Urban Tissue Study

#### Industrial fabric

The industrial urban fabric has been the main face of Red Hook throughout history; housing followed later to accommodate the workers.

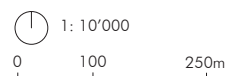
Today, the industrial tissue has a dominant presence, with warehouses, garages, workshops, harbours and docks. Some of these structures are still used for their industrial purpose; other facilities are being converted for other uses. For example, brick warehouses are now taken over by artists because of their large volume, while others are being transformed into apartments. Not all of these constructions are used to their full potential; some are empty and abandoned.

The largest buildings and companies are generally located close to the waterfront because of the transport potential that this situation offers.

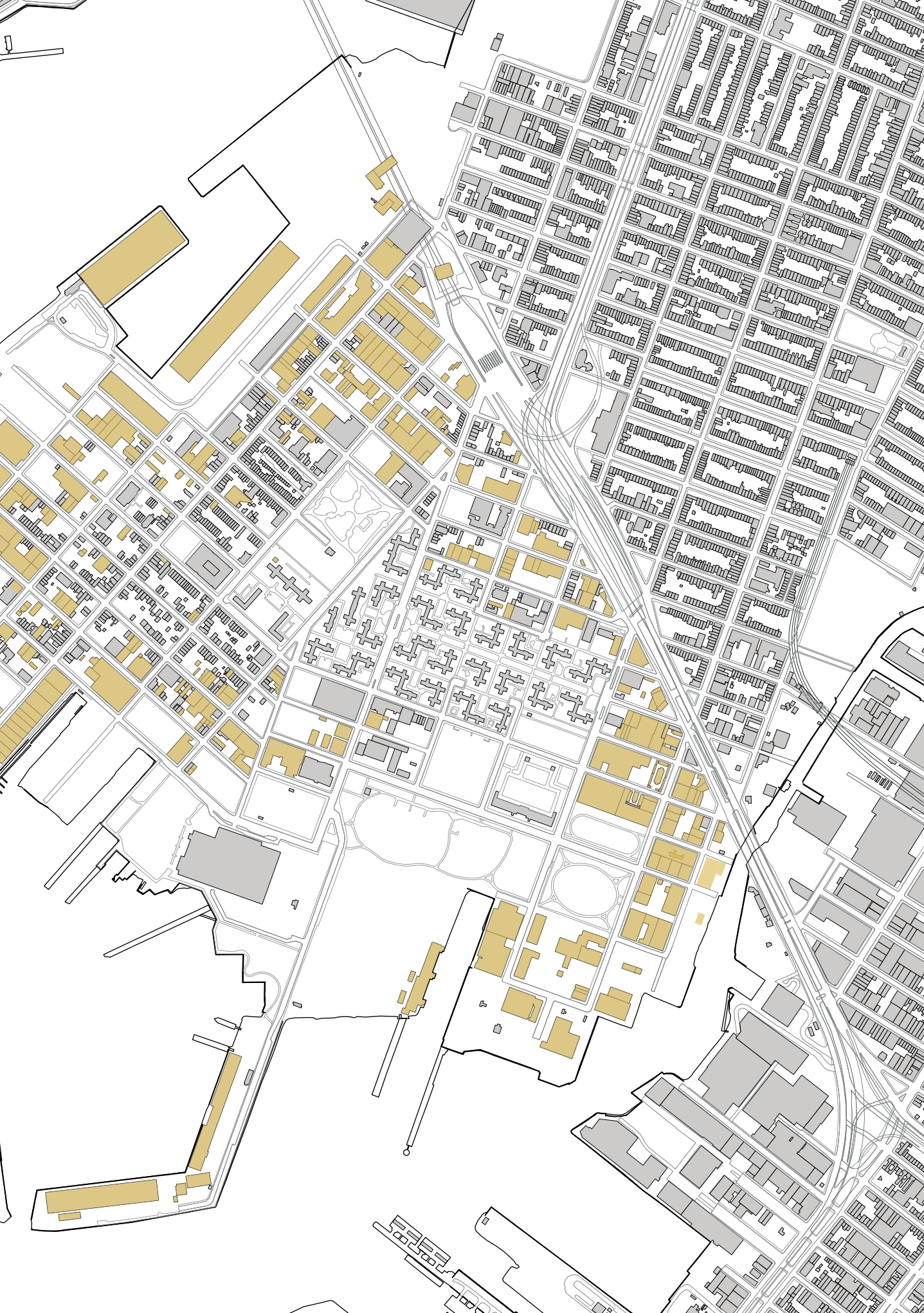


#### Map legend

 Industrial urban fabric

 1: 10'000  
0 100 250m



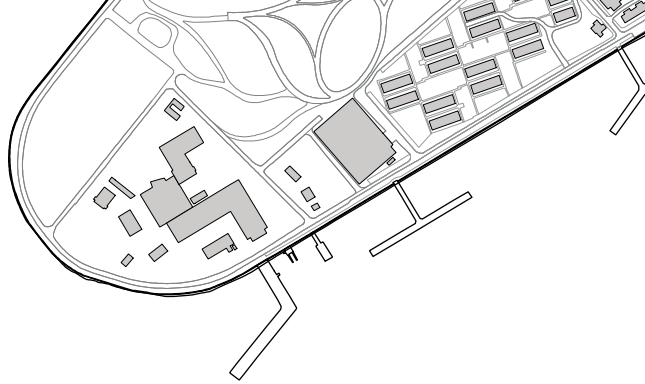


## Housing fabric

In the neighbourhood of Red Hook, the housing market is divided in two categories: the Red Hook Houses and the townhouses.

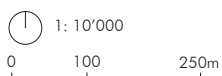
The Red Hook Houses East and West are part of a social housing complex built in the late 1930s. The complex is one of the largest social housing projects in Brooklyn, with 2,873 units in 30 buildings. In 2010, Red Hook had around 10,000 inhabitants, 6,518 of whom were living in the Red Hook Houses (all data are from the New York Department of City Planning).

The rest of the dwellings are made up of the townhouses typically found in Brooklyn. They form blocks of rowhouses which have, in general, two to three floors. On the main street, van Brunt Street, shops are often located on their ground floor. Most of the blocks are not as dense as in the rest of Brooklyn, which suggests that there is a lack of density in the neighbourhood, compared to the rest of the borough.



### Map legend

-  Townhouses
-  The Red Hook Houses (Social housing complex)





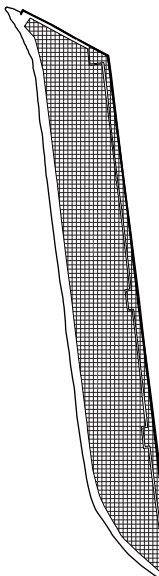
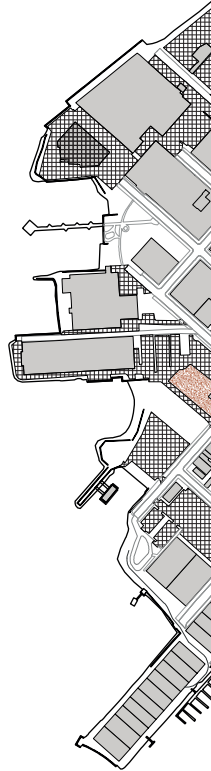
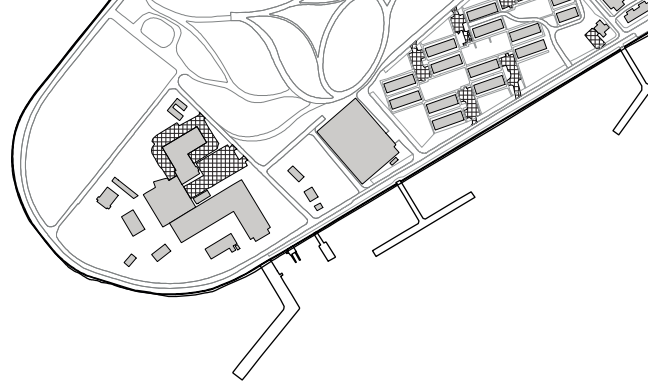


## Voids



The urban tissue in Red Hook is not as dense as in the rest of Brooklyn. Indeed, we can find many empty spots within the residential blocks, perhaps due to a lack of financial means to build further houses. Some empty plots are used by local associations to cultivate vegetables and small plants.

Many ground spaces provide storage for cars and buses; indeed, parking and storage areas are prevalent in Red Hook. This creates a relative impression of emptiness when looking at a master plan.

These voids have potential for further development of the neighbourhood: they could provide spaces for implementing new activities, housing and more, possibly helping to strengthen Red Hook and its urban fabric.



### Map legend

-  Parking spaces/ car pound
-  Empty spaces with development potential

1: 10'000  
0 100 250m



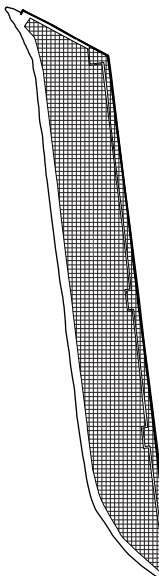
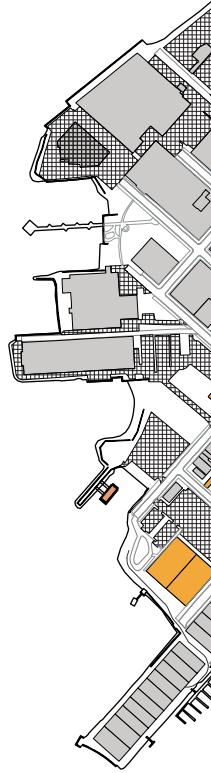
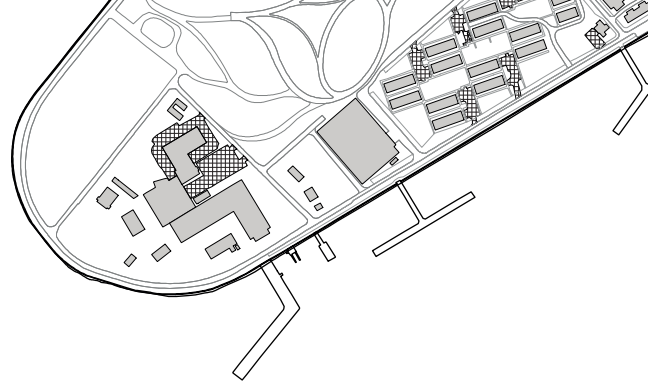




## Amenities

Amenities—churches, schools, authority buildings, supermarkets—are well distributed around Red Hook. However, the western side is better served by advertisement units such as art galleries, local shops and restaurants. The Waterfront Museum is also on this side of the neighbourhood. Moreover, most of the direct accesses to the waterfront are located on the western side of Red Hook.

Therefore, the eastern half of the neighbourhood is arguably badly served by amenities and the advertisements spaces. This situation is mainly due to the presence of the Red Hook Houses, as they use a large amount of the ground space area.



### Map legend

- Supermarkets/restaurants
- Authority buildings: police stations, fire station...
- Entertainments, art gallery...
- Schools
- Churches

1: 10'000  
0 100 250m





# Gentrified

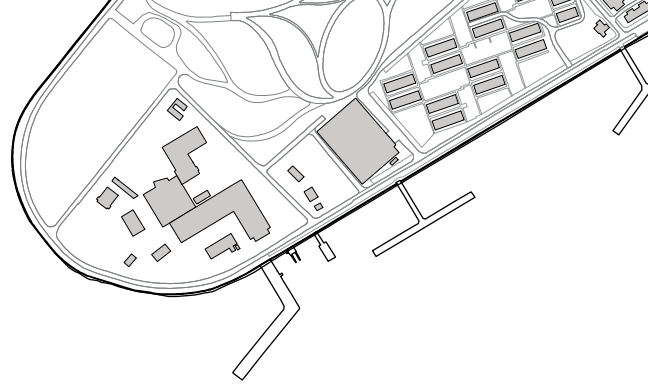


Fig 11: Future sorting and delivery hub for UPS



Fig 10: Tesla Motors' sales and service centre, opened in 2016



Fig 12: The former Revere Sugar Refinery demolished in 2006



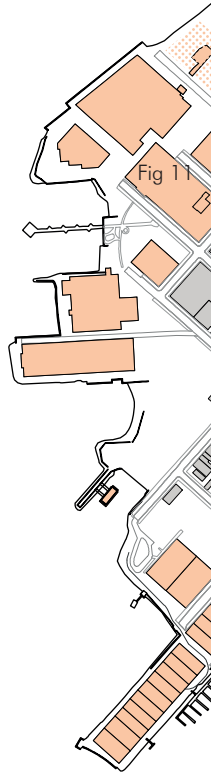
Fig 13: Possible project, Red Hook Point, Office-Retail Complex



Fig 14: IKEA, 2008

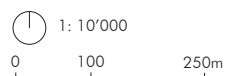


Fig 15: The S.W. Bowne Grain Storehouse, demolished in 2019



## Map legend

- Future projects bringing gentrification
- Gentrified urban fabric with a small impact on Red Hook's inhabitants
- Gentrified urban fabric having a large impact on Red Hook's inhabitants





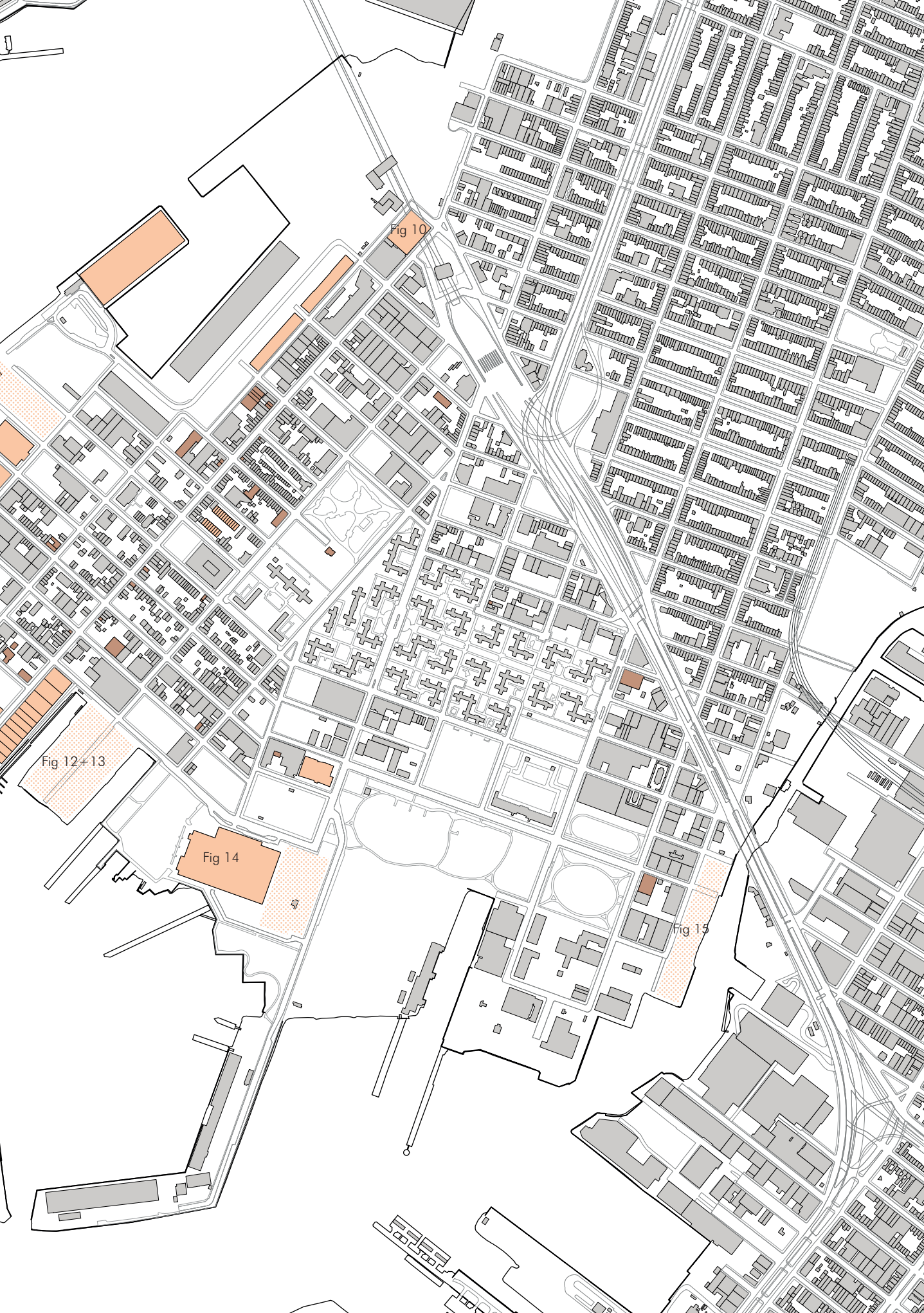


Fig 10

Fig 12+13

Fig 14

Fig 15

### 3.4 The gentrification phenomenon in Red Hook

After having read *The Death and Life of Great American Cities* by Jane Jacobs and the texts of Neil Smith and Ruth Glass, and having investigated the development of Red Hook and Williamsburg, I came to the conclusion that there are two types of gentrifiers. I will call them the large gentrifiers and the small gentrifiers. Each has different impacts on neighbourhoods and communities, different processes leading to gentrification, and different concerns associated with it.

The larger gentrifiers are mostly significant corporations or at least entrepreneurs with large financial means who can do whatever pleases them with the plot they buy. This often leads to the non-compliance of the local communities. Usually, those actors do not consider the heritage that the plots and buildings represent to the community of a neighbourhood.

For example, Red Hook's Lidgerwood Building, dating back to 1882,<sup>1</sup> which housed 'manufacturers of Hoisting Engines, Superior Boilers, and Conveying Machines'<sup>2</sup> for years, has been bought and resold by different companies in recent years and is now in the hands of UPS (United Parcel Service).

<sup>1</sup> The Red Hook WaterStories Team. Lidgerwood Manufacturing Company, founded 1873

<sup>2</sup> Ibid

At the present time, the warehouses have been largely torn down by their new owners, with consideration for the history and importance in the neighbourhood before the irreparable harm was committed. One last building now stands on the plot that was once covered with warehouses.

This example reveals how the inhabitants are uniting and forming associations to preserve what they consider their heritage. A petition gathering 1,670 persons in May 2019 opened a dialogue between UPS and the community. After many discussions, the association and the company managed to agree on keeping the main facade up and continuing the deconstruction on the rest of the site. This was a small victory for the community, even if they had already lost most of the warehouses on the site.<sup>3</sup>

<sup>3</sup> Lore Croghan, *Red Hook activists fight to save historic factory from UPS demolition*  
Lore Croghan, *Demolition of historic Red Hook warehouse put on hold*

The same process took place on another plot in the neighbourhood. The S.W. Bowne Grain Storehouse was torn down this summer after a suspicious fire had destroyed its roof in June 2018. The owners of the plot, the Chetrit Group, a Manhattan-based, family-owned development firm, are seeking to build residential towers on the plot. The topic is creating significant tensions with local activists and communities: 'The Bowne building is at the centre of an enormous land grab, where wealthy real estate speculators are snatching up as much property as they can, in anticipation of being allowed to build new luxury residential towers and office buildings'.<sup>4</sup>

<sup>4</sup> Michael Stahl, *Is arson to blame for a fire set to destroy part of Brooklyn's industrial past?*

In conclusion, the S.W. Bowne Grain Storehouse and the Lidgerwood Building are victims of large gentrification. We could add to this list the industrial buildings that were destroyed during the construction of the IKEA (Fig 14) on the shore of Red Hook, or the Revere Sugar Refinery (Fig 12, 13), whose plot is now left empty because the project intended for it is supposedly on hold.

The more time goes by, the more real estate agents and firms will be aware of the possibilities and potential that Red Hook has to offer, such as the waterfront view and the tranquillity



that can be found in this neighbourhood. This means that in the near future, the community will face more and more difficulties to keep the spirit of their neighbourhood intact.

To sum up, large gentrification, led by large firms or powerful personalities, is having direct impacts on the inhabitants by destroying their build heritage. The new constructions almost never take into account the local population and their needs. Only IKEA proposed to employ some inhabitants of the Red Hook Houses.

On the other side, small gentrification is less violent for the urban fabric and the community. This process takes the existing urban fabric, the existing buildings, and transforms and repairs them. Such gentrifiers care about the community and become a part of it. At first, they were mostly artists who came in the 1980s–1990s, when the neighbourhood was still in a dark period. Artists began to settle in the warehouses on the waterfront because their rents were not expensive and because they needed large and generous volumes where they could make their art. Since the first wave of artists, more joined them over time.

Now, art galleries such as Pioneer Works, opened in 2012, are emerging in the neighbourhood, bringing diversity to the urban fabric and the population and helping Red Hook to evolve and develop itself. This trend combats the lack of diversity that is present in this area, which is mostly composed of industrial sites and dwellings.

The restaurants and shops located on the main street of Red Hook, like Baked, which opened in 2005, are ‘mom and pop shops’, meaning that they are small, independent businesses, not part of a larger scheme and only opened in a single location. All those small entities are taking part in the diversification of Red Hook, an area that needs more advertisement opportunities, more places to meet people and more activities.

This gentrification is a process that is brought about by people from outside of the neighbourhood, but it has impacts at small scales and benefits not only the owner of the business but also the local inhabitants.

<sup>1</sup>Franz Yvonne. 2015. *Gentrification in Neighbourhood Development: case studies New York City, Berlin and Vienna*. Gottingen. V&R unipress. p.114

In conclusion, the gentrification phenomenon is something that Red Hook and its inhabitants will have to learn to live with. It is going to be more and more present, since New York is looking for further areas to develop its real estate market as it seeks to accommodate 1 million more people by 2030.<sup>1</sup>

The inhabitants of Red Hook should use the small gentrification already present and support it in order to create more unity in their communities and bring out more diversity. This would help the neighbourhood evolve in the right direction for the comfort of its inhabitants.

### 3.5 Analysis of the biggest issue of Red Hook: Its situation as an urban enclave

After having studied the different layers of Red Hook and the problems this neighbourhood is facing, such as its public transportation difficulties, the threat of flood, the Gowanus Expressway acting as an obstacle and its different urban tissues, especially the gentrified fabric, we can conclude that the biggest issue in Red Hook is its general disconnection. Indeed, one obvious obstacle prevents its connection to the rest of the city: the Gowanus Expressway. If we add to this condition the coastal situation of Red Hook, we end up with a case of a real urban enclave. Red Hook may be defined as an island within the urban fabric of Brooklyn.

Disconnection issues are not only present at the scale of the Gowanus Expressway. Upon studying this area, we understand that the disconnection is present at three different scales:

**The scale of Red Hook itself:** A physical and social disconnection in Red Hook (Fig:16)

**The scale of Red Hook and the close neighbourhoods:** The Gowanus Expressway, an obstacle to the connection (Fig:17)

**The scale of Red Hook and the city:** The defeat of public transport (Fig:18)

Each of these three cases has different issues to address. An attempt to eliminate the first source of disconnection should focus on the community of Red Hook and try to build new relations between people and their communities. The second one involves physical and structural connection issues between the south and north sides of the Gowanus Expressway. The largest scale, covering Red Hook and New York City, mainly consists of disconnection related to public transportation.

After having studied these different sites, one will be able to highlight the main strategies to reconnect Red Hook to Brooklyn and achieve a general cohesion in this area. The paper will mainly focus on the scale of Red Hook itself and the scale of its surrounding neighbourhoods, as the larger one is a public transportation issue that can only be dealt with at the scale of New York City.

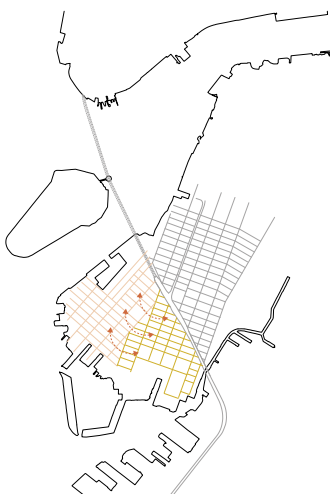


Fig 16: Disconnection within Red Hook

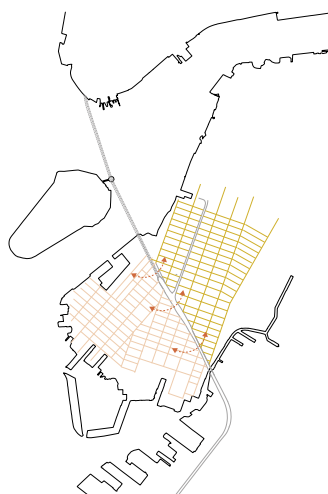


Fig 17: Disconnection between the close neighbourhoods

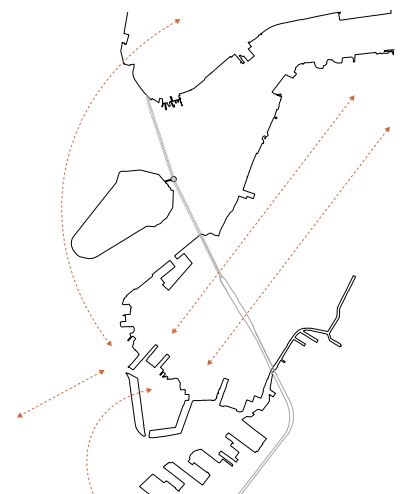
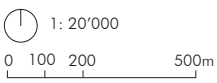
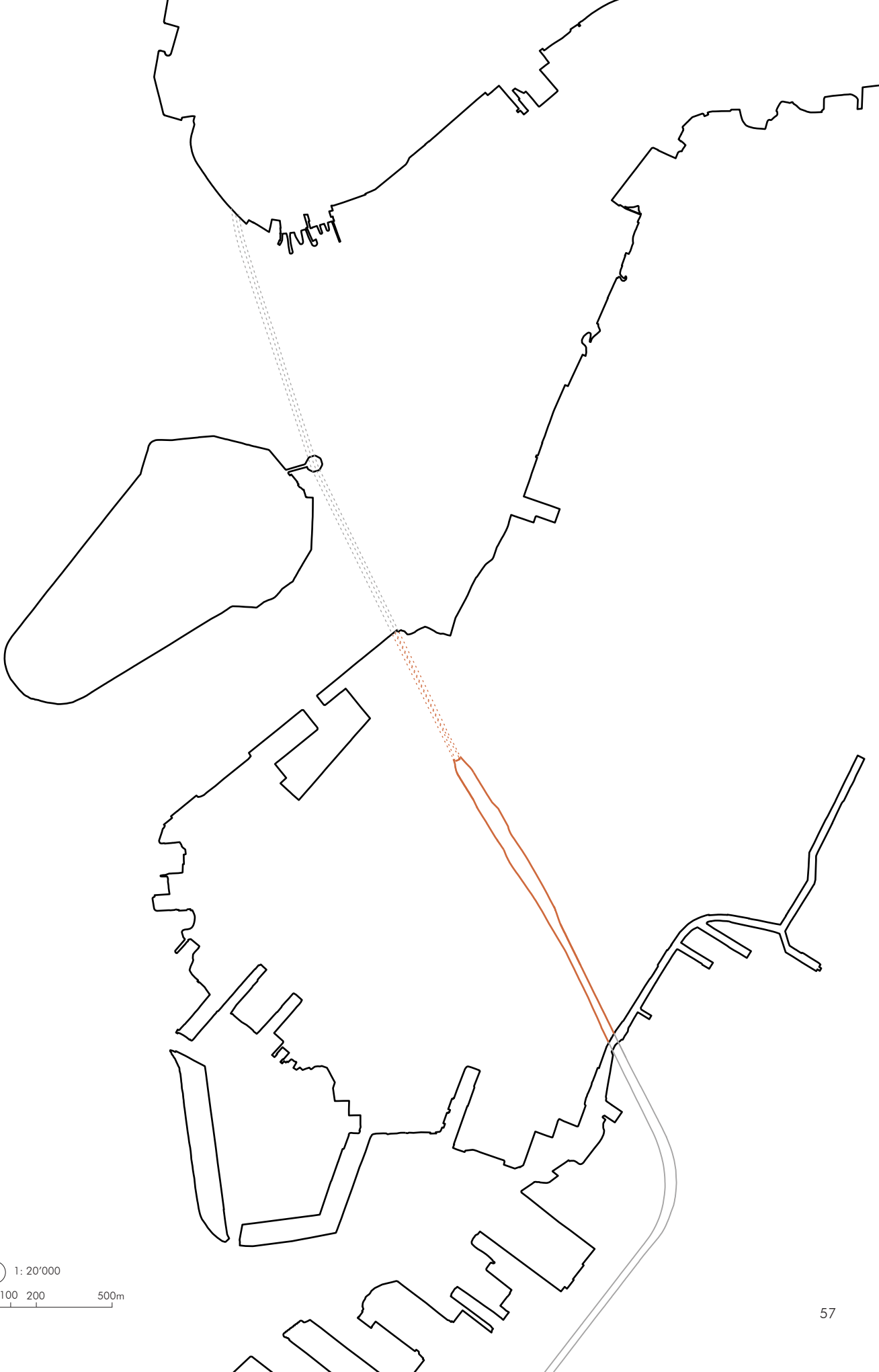


Fig 18: Disconnection with the rest of New York City





## 3.5.1 At the Red Hook scale

### The shift in the grid (Fig 19)

The first disconnection that one notices when looking at a plan of Red Hook is the one produced by the fracture of the urban grid of Brooklyn. The main grid meets a secondary one, producing a bend in the urban fabric. This bend is marked by Dwight Street.

I personally think that this shift comes from the construction of the Atlantic Basin, which induced the planning of the streets, but also from the goal of having streets that are perpendicular to the waterfront. This orientation change causes a fracture between the two grids, making it difficult to create direct connections. The ends of the streets on these two urban grids do not correspond and are rarely facing each other. They often end up facing empty plots, parking areas or abandoned buildings, conditions which do not enhance the interactions between these two different entities.

### The habitations' urban fabrics (Fig 20)

The interactions between the two sides of Red Hook are even more difficult since the dwelling tissue is also cut in two parts. On the right side, most of the habitations are part of the Red Hook Houses social complex. On the other side we find the townhouses that are typical of the Brooklyn urban fabric. We see that those two types of dwellings do not mix.

The Red Hook Houses create a 'border vacuum',<sup>1</sup> the same kind of vacuum we saw emerging next to the Gowanus Expressway (p.40). For example, I noticed during my visit to Red Hook that there were not many pedestrians around the social housing project. While walking through it, I saw almost no one in its streets. It has become an entity that non-dwellers avoid. People have no reason to cross it since it is already isolated due to its location behind the Gowanus Expressway, hidden from the rest of Brooklyn. Inhabitants of the rest of Red Hook have little interest in going through the area because there is nothing exciting in it. This lack of activities is also present if we go further into the neighbourhood, behind the complex. The only amenity that might attract or encourage outsiders to go across the Red Hook Houses is the subway station located on the East of the neighbourhood.

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.257

In her book, Jane Jacobs speaks about the consequences of the presence of a low-income project on the Lower East Side of New York. The Red Hook Houses create a similar situation to a less dramatic degree. Jacobs writes:

At the borders of the dark and empty grounds of the massive, low income housing projects, the streets are dark and empty of people too. Stores, except for a few sustained by the project dwellers themselves, have gone out of business, and many quarters stand unused and empty. Street by street, as you move away from the project borders, a little more life is to be found, progressively a little more brightness, but it takes many streets before the gradual increase of economic activity and movement of people become strong.<sup>1</sup>

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.260

This is precisely what is happening in Red Hook: there are few commercial activities around the Red Hook Houses, with the exception of an unwelcoming supermarket. There are no uses that would make someone wish to stay in the area. However, if we go further to the west, we find Van Brunt Street, which is the commercial corridor of the area.

Dwight Street, hinge axis ———

Shifted grid ———

Grid following the Brooklyn grid ———



Fig19: The physical separation of the two sides of Red Hook

Townhouses fabric ———

Red Hook Houses fabric ———

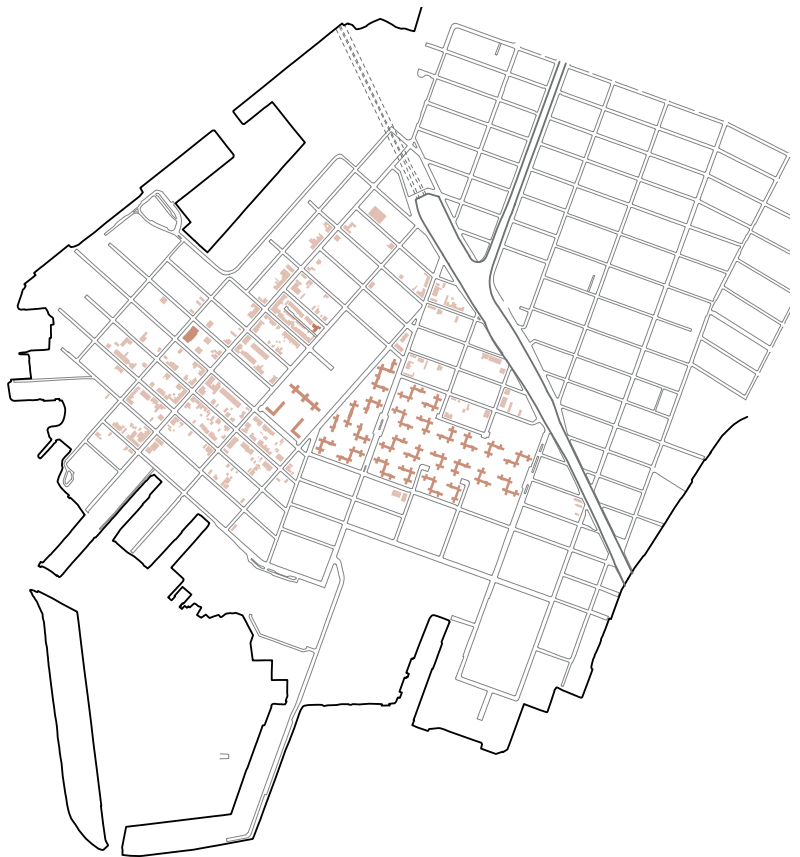
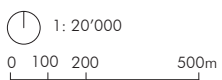


Fig 20: Separation of the two habitation tissues



The fact that people outside the complex avoid crossing the Red Hook Houses emphasises the neighbourhood's lack of social diversity; it creates a separation among the social classes. People with fewer financial means live in the social housing complex, while inhabitants living on the west side of Red Hook are generally more financially stable. This creates a social disconnection between the different communities.

### **The industrial and gentrified ring (Fig 21)**

The idea of the Red Hook neighbourhood as an enclave is strengthened by the fact that the habitation fabric is surrounded by the industrial and gentrified tissue. These two fabrics form a wall between the inhabitants and the waterfront, preventing access to the water. The dwellings form an island within the area of Red Hook.

Eventually, if all the future projects that are planned in this ring come to fruition, the inhabitants of the neighbourhood will be socially disconnected of their own urban tissue. Since these projects are not planned for the inhabitants but for exterior users, apartments seekers, start-up teams and firms, the local inhabitants will not be able to use these new buildings. They will not have any role to play in the new development. They gain few advantages from these projects. The historical tissue they know and want to protect is being torn down without their being able to do anything about it. This loss is a main concern of the activist community of Red Hook.

### **The density of the neighbourhood (Fig 22)**

Last but not least, the density of Red Hook, 5382 hab/km<sup>2</sup> is low compared to the Manhattan's density. It is actually five times smaller. The highest density can be found in the Red Hook Houses, they are the highest buildings of the neighbourhood, going from six to ten floors and accommodate around 60% of the total population.

We can see that there are many empty spaces in the neighbourhood, including several green spaces. Jacobs warns about lack of density in her book. A place with low density is a place where diversity is not created. Without density, people are less inclined to meet with each other; they cannot exchange ideas and participate in the development of their neighbourhood together.

She goes further to explain that density is important to combat a neighbourhood's 'border vacuum'.<sup>1</sup> High density brings other uses and functions around these borders and would thus activate those dying spaces around the Expressway and the Red Hook Houses

<sup>1</sup>Jacobs, Jane. 1961. «The death and life of great American cities». New York. Random House. p.257

To summarize the disconnection within Red Hook, we could say that disconnection is present in the neighbourhood physically and socially. First, the shift in the grid, the separation of the dwelling fabric and the presence of an industrial and gentrified urban ring all participate in creating disconnection throughout the neighbourhood. Second, the inhabitants are socially disconnected since they often do not mix with the other social classes.

To strengthen the connection between the two sides of the neighbourhood and its two communities, Dwight Street could be a hinge element to focus on. It is in the middle of the neighbourhood, in between the two dwelling fabrics and at the centre of the shift of the grid, and it may have the potential to reconnect Red Hook.





Fig 21: A ring of industrial and gentrified urban fabric surrounding the habitations

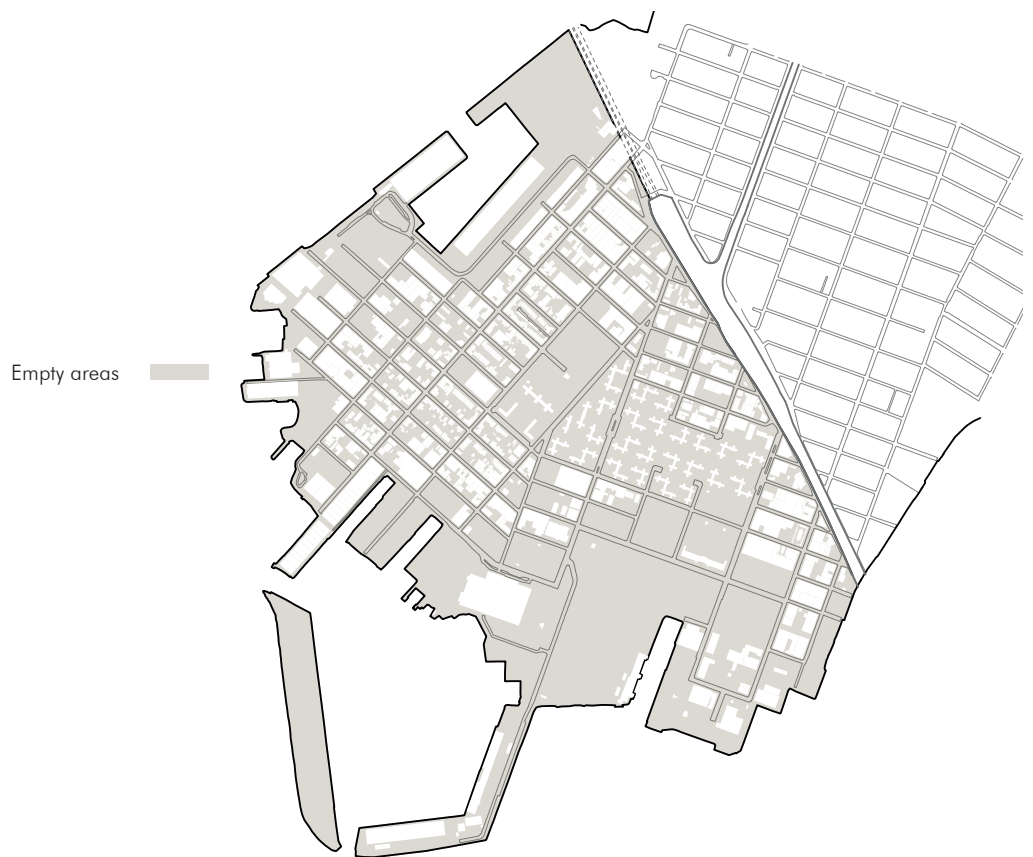
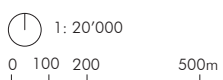


Fig 22: Red Hook, a low density neighbourhood



## 3.5.2 At the neighbourhood scale

The reason for the disconnection between Red Hook and the rest of its close neighbourhoods is clear. This fracture is the result of the presence of the Gowanus Expressway. As previously discussed, the Expressway has cut the neighbourhood in two parts that now have difficulties in staying connected. This is, in contrast to the Red Hook scale, a physical disconnection more than a social one. This type of disconnection regards unused spaces, areas whose potential is not exploited. It is clearly more an urban disconnection.

In fact, this large infrastructure (the Gowanus Expressway and the Brooklyn-Battery Tunnel) generates four different situations of connection or disconnection on the Red Hook territory: (Fig 23-30)

1. The two neighbourhoods are connected when streets pass over the Brooklyn-Battery tunnel (~20.6% of the ground surface that the highway/tunnel cover) (Fig 26)
2. There is no connection when the tunnel goes above ground (~20.4% of the ground surface) (Fig 27)
3. There is no way to reach the other side when the Expressway slowly turns into a bridge (~25.6% of the ground surface) (Fig 28)
4. The Expressway is a bridge, and inhabitants and cars can pass under it (~33,4% of the ground surface) (Fig 29-30)

This means that around 46% of the ground covered by the Gowanus Expressway and the Brooklyn-Battery Tunnel is uncrossable.

There is already an attempt to add a connection through this uncrossable area: a pedestrian bridge crosses the highway and meanders among the different levels of the ramps. The introduction of this link highlights the need for further connections in the neighbourhood.

In fact, the places where the connections are possible are not well exploited, and they are in general not safe for pedestrians. The sidewalks are either poorly maintained or even non-existent in some places. Under the highway, the time given by the traffic light to cross the six lanes can be a short. These situations create a feeling of insecurity, and people tend to go through the area as fast as possible.

Moreover, the empty paved space under the higher parts of the Gowanus Expressway is not used at all. There is currently around a 13m-wide area of potential space in between the two three-lanes routes composing Hamilton Avenue. Those areas could have great connecting potential if only they were activated. Currently, this middle space has a negative reputation; there is not much light, it is dirty, the traffic is heavy and there is significant noise and pollution. In addition, the intersections with the other streets are known to be dangerous, they are the crossroads with the highest number of accidents in Red Hook.

- Pedestrian Bridge ..... (dotted orange line)
- Streets that are completely cut in two by the Gowanus Expressway (solid yellow line)
- Streets that are able to link the two sides of the Gowanus Expressway (solid orange line)

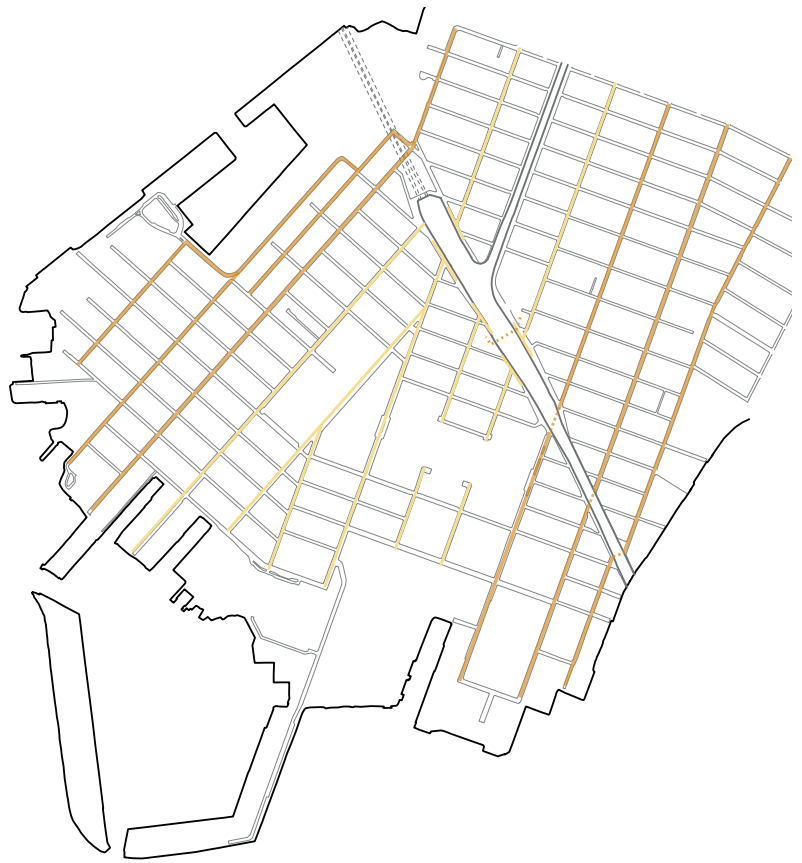
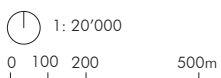


Fig 23: Connected and disconnected streets from one side of the Gowanus Expressway to the other

- 1) Possible connections on top of the tunnel (dotted orange pattern)
- 2) No crossing because of the tunnel's exit (yellow dotted pattern)
- 3) No crossing because of the height of the highway (orange dotted pattern)
- 4) Possible connections under the highway Average height: 8m (orange grid pattern)
- 5) Possible connections under the highway Maximum height: ~25m (orange cross-hatch pattern)



Fig 24: Five different spatial relations with the Gowanus Expressway





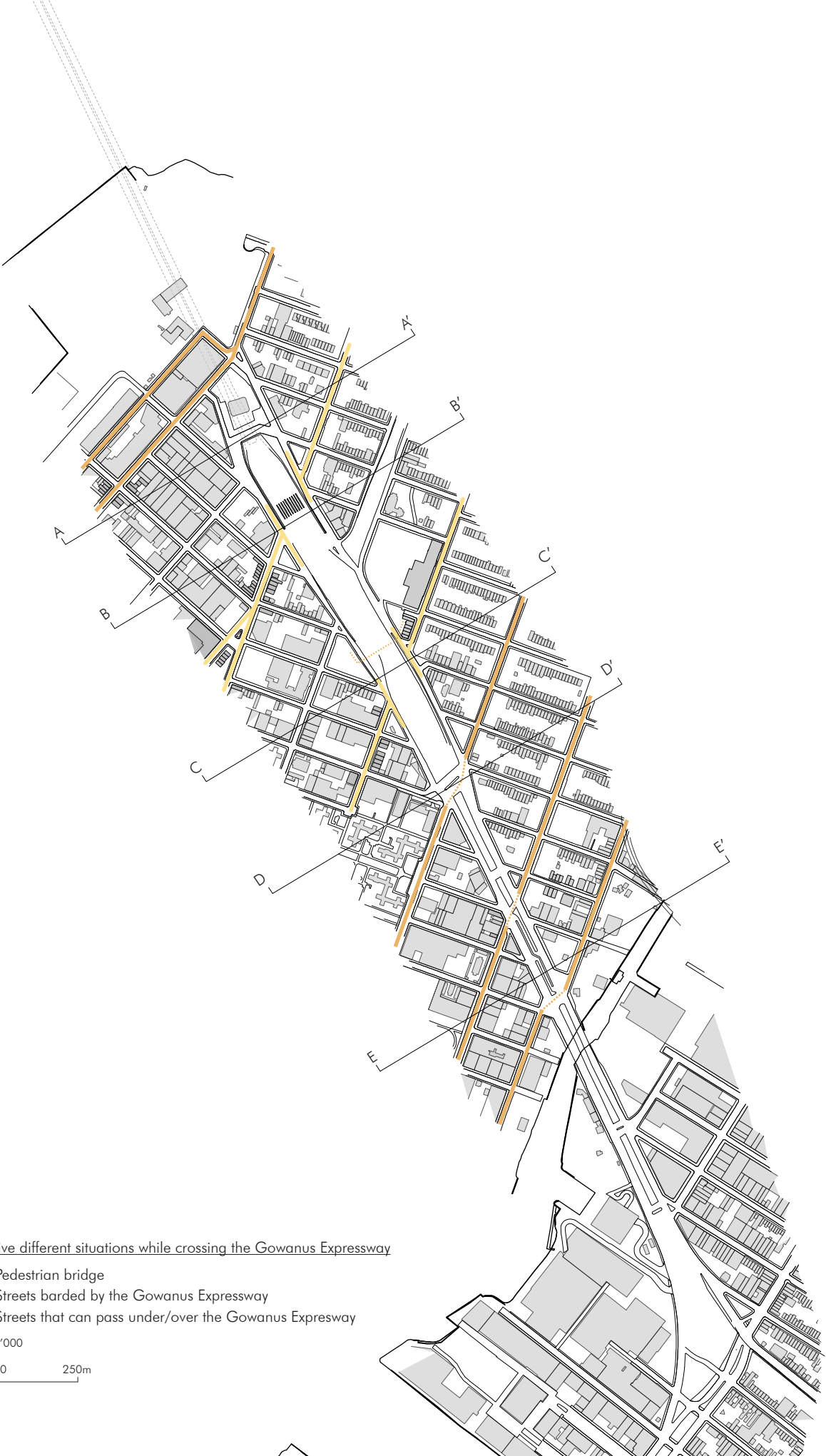
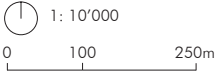
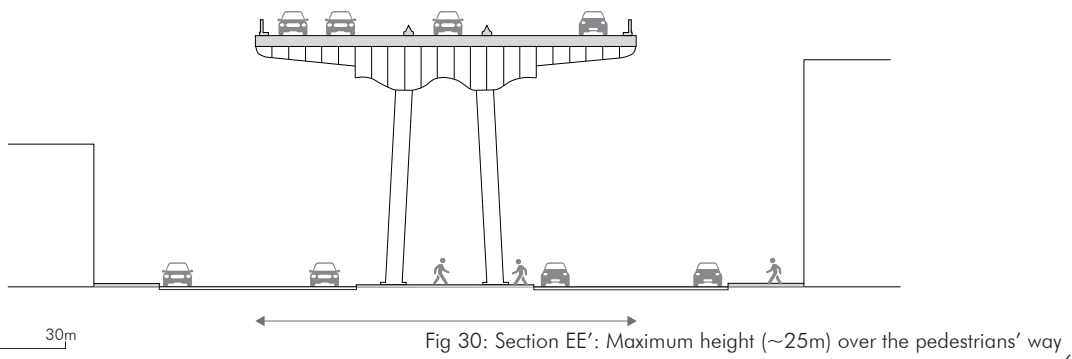
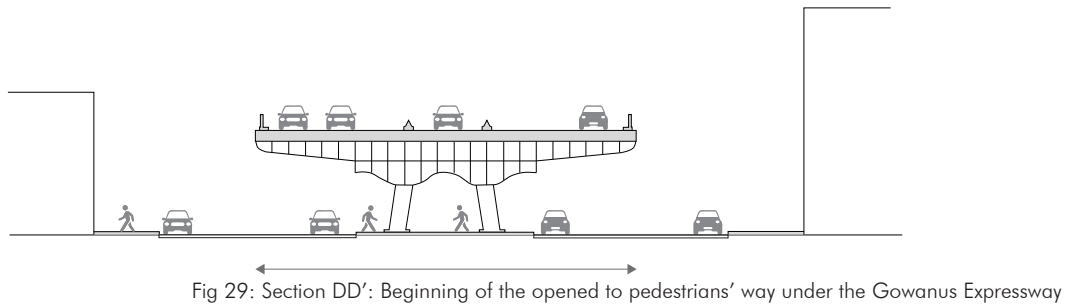
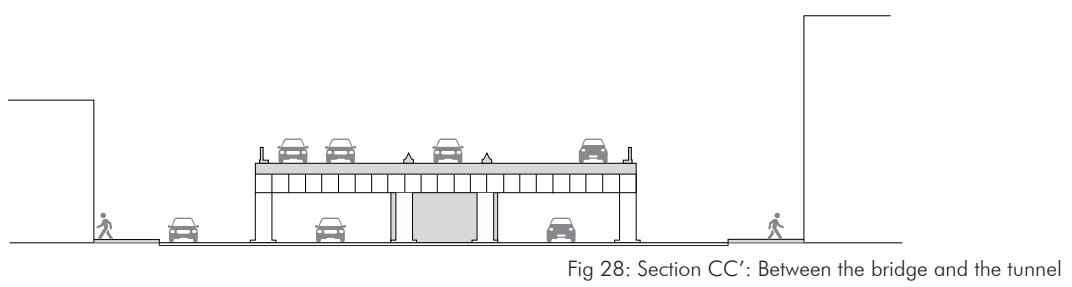
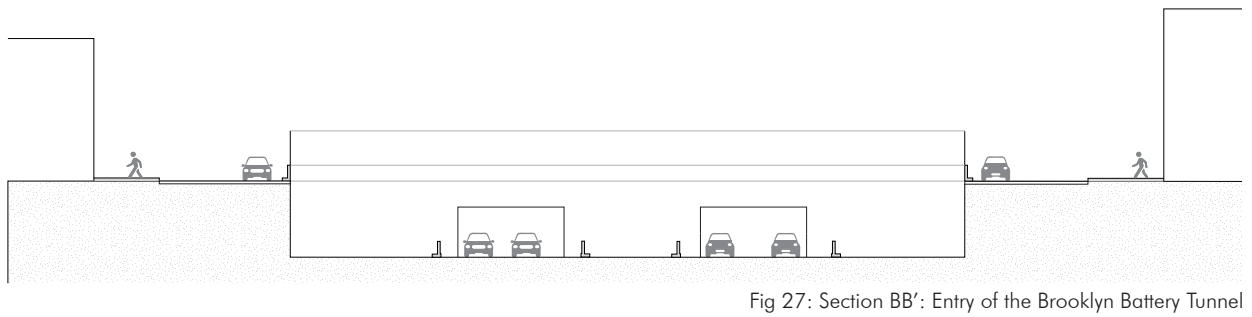
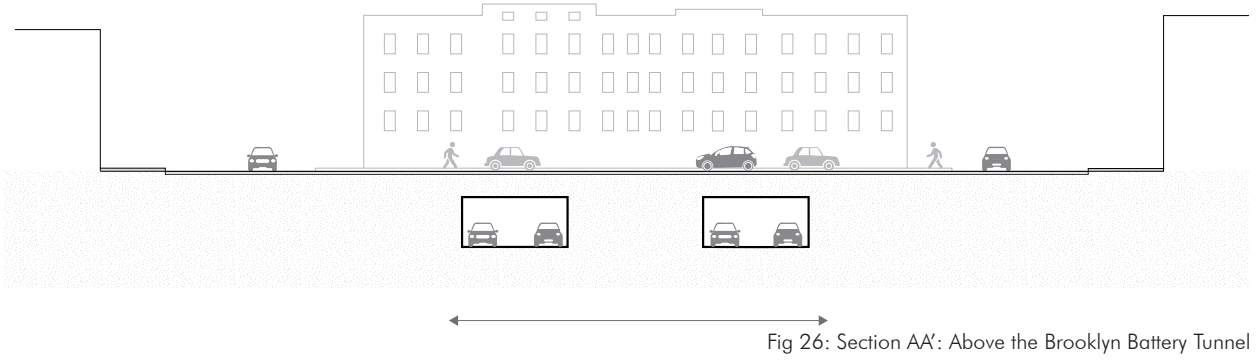


Fig 25: Five different situations while crossing the Gowanus Expressway

- ..... Pedestrian bridge
- Streets barded by the Gowanus Expressway
- Streets that can pass under/over the Gowanus Expressway





## Relations between the north-south street grid and the urban fabric

If we look closely at the streets that directly link the two sides of the highway, we see that most of the urban fabric around them consists of either industrial or gentrified tissues.

The reason for this situation is easily understandable. What industrial and gentrified areas most need is accessibility. At these positions, they are reachable by water transportation services and by the streets directly linking them to the rest of the City.

This is a kind of an escape route, since the users of these two urban tissues are, for the most part, only in the facilities during working hours. At the end of the day, the aim is to exit the neighbourhood in the fastest way possible. (Fig 31)

There is, however, another case scenario: if a firm wants to settle someplace where there is no direct accessibility, it will create access. That is what happened with the introduction of IKEA in Red Hook. The facility is not located along one of those directly connected streets. In response, IKEA added a private ferry line for its customers.

To summarize, the large industrial areas are mostly located on the waterfront because of their accessibility, but for the gentrified urban fabric, there are more reasons for this choice of location. First, the gentrifiers are mostly attracted by low rents and large spaces, which the old industrial facilities on the waterfront provide. Second, Red Hook has many unexploited assets that gentrifiers are eager to use to make profits. Those assets include its waterfront situation, the views of the Statue of Liberty and the Manhattan skyline, and the tranquillity of the neighbourhood. One must not forget that this kind of neighbourhood, with its industrial past, is a gold mine for gentrifiers.

If we now look at the housing fabric, we see that there is only one street, van Brunt Street, linking the housing fabric to the other side of the Gowanus Expressway. This is the main commercial corridor of the neighbourhood, with shops on the ground floor and housing beginning on the first floor. The Red Hook Houses are not linked at all to the other side of the Gowanus Expressway; they are hidden behind it from the rest of Brooklyn. The highway is used as a blind to hide the industrial areas and the social housing project. (Fig 32)

The housing fabric is, in conclusion, entirely left apart from the rest of Brooklyn, with no direct links with the rest of the borough. Again, Dwight Street could have the potential to support a new connection.



Streets that are able to link the two sides of the Gowanus Expressway



Industrial fabric



Gentrified fabric



Future gentrified area



Fig 31: Industrial and gentrified fabrics are mostly linked to the streets that are connected to the rest of the borough

Van Brunt Street, commercial corridor



Pedestrian Bridge



Dwight Street



Streets that are completely cut in two by the Gowanus Expressway



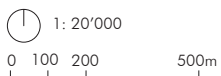
The Red Hook Houses fabric



Highlight of the obstacle zone



Fig 32: The Red Hook Houses: an obstacle hidden behind the Gowanus Expressway





## 4. WHICH FUTURE FOR RED HOOK?

After studying the gentrification phenomenon, its origin with Ruth Glass and Neil Smith, its impacts with the study of *The Death and Life of Great American Cities* by Jane Jacobs and the research on Williamsburg, which is in many ways similar to my case study, I identified some key elements that could help the development of Red Hook.

The writings of Ruth Glass and Neil Smith serve more as guidelines to understand the gentrification phenomenon and its origins, and what components lead to the gentrification of a place: the low rents, the return of the suburban inhabitants, the decay of a neighbourhood and the asset investments. In Red Hook, gentrification comes mainly from the industrial past and the building conditions it provides: large warehouses that can accommodate large lofts, artist studios or breweries, or large areas that can be rebuilt to create a new working hub with the idea of making large profits.

As we saw previously, Jane Jacobs wrote about the need of diversity in a city, a component Red Hook is clearly lacking. She also criticized 'orthodox urbanism'; for example, she explains why she despises social housing projects such as the Red Hook Houses. She says that these big complexes create a feeling of insecurity and that families cannot always have an eye on their children when they are playing outside. These projects go against the idea of mixed use; they are only composed of housing, which does not provide any diversity. Furthermore, the general density of the neighbourhood is low, which also explains the lack of mixity in the area. Having a bigger build environment would improve the dialogue among its inhabitants.

Then, with the study of Red Hook itself, three major points came out. First, the neighbourhood is scarred and therefore disconnected by the presence of the Gowanus Expressway. Second, gentrification is having an increasing impact on the development of Red Hook, and it does not always benefit the local communities. The inhabitants and the urban fabric can either be the victims of gentrification or work with it. It depends whether the gentrification is, as I previously discussed, large or small.

Thirdly, different communities in the neighbourhood are working quite well on their own, but there is no communication between them. These communities are coming from the unmixed housing tissues, and this is slowing the development of the area.

Finally, Red Hook is cruelly lacking public transportation that are needed to be well connected to the rest of the City and for inhabitants to be able to reach it relatively quickly.



## 4.1 General assets of Red Hook that should be enhanced

In order to act on the several problems that I mentioned earlier—mainly, the disconnection and the lack of diversity—the following are some elements that should be strengthened, reinforced, extended or highlighted.

First, the axes coming from the extension of the Brooklyn grid, going through the middle of the neighbourhood and directly through the housing tissue, should be strengthened. These axes are the weak points for access in Red Hook and they should be improved. (Fig 33)

To do so, the passageway under the Gowanus Expressway should be made secure and more attractive. It then creates a proper link between the east edge of the Red Hook Houses and the other side of the Expressway. The streets going through the social housing project should also be strengthened by the introduction of other uses into the area; this would bring new activities and influence outsiders to come inside the project. There is plenty of free space within the complex that could be used to bring in commercial uses or other activities. In addition, the fences that surround the social complex should be removed; this would make the place more welcoming and encourage people to come in.

The pedestrian bridge crossing the Expressway above the neighbourhood should be highlighted; its surroundings areas should be improved and strengthened in order to make the place more attractive and welcoming. For example, when I was on the site, I did not notice that there was a way to cross the highway at this location. Its spaces are littered with garbage and industrial waste materials. The bridge is unwelcoming, when it should be celebrated and kept clean for public use. Doing so would make this bridge a more effective tool for connection. (Fig 34)

One should also emphasise the amenities that are assets to the neighbourhood, as they bring diversity and have the potential to make Red Hook evolve in the right direction. The waterfront, for example, should be enhanced. These assets are often products of small gentrification, such as art galleries, the local winery and local restaurants, but there are also amenities that cater for the local communities, such as Red Hook's two urban farms and outdoor spaces like a sports field and parks. (Fig 35)

At the same time, one should look at the potential voids that are present in the area and that could have the potential to bring diversity and density into Red Hook. For example, there are already some initiatives to establish urban gardens in empty lots between row-houses. Those areas could have significant potential if they were used correctly by the communities, with the possibility to bring people together. (Fig 35)

In order to connect these highlighted amenities to the north to south axis they should be sewed to each other by the existing perpendicular grid. Some of the perpendicular streets should be strengthened to support the urban fabric. Thus the two grid systems would be reinforced and form one entity. Finally, the two networks sew all the different urban components into one large patchwork that works together. (Fig 36)

North-South axis —

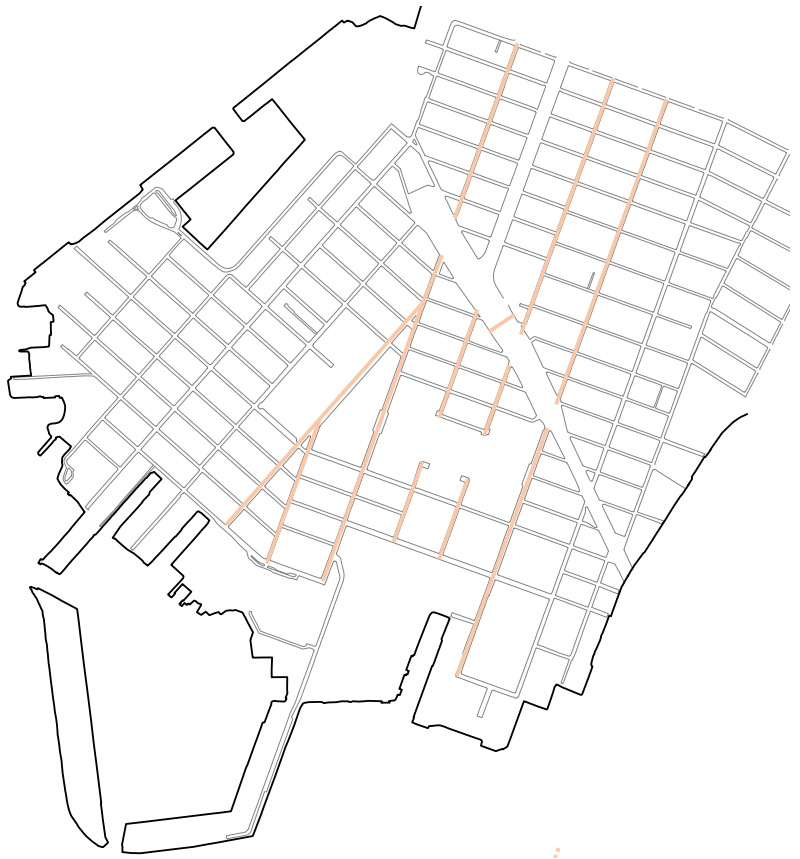


Fig 33: North-South axis with little connections between Red Hook and the rest of the borough

Portions of the North-South axis to strengthen or extend —  
Strengthen the area of the pedestrian bridge

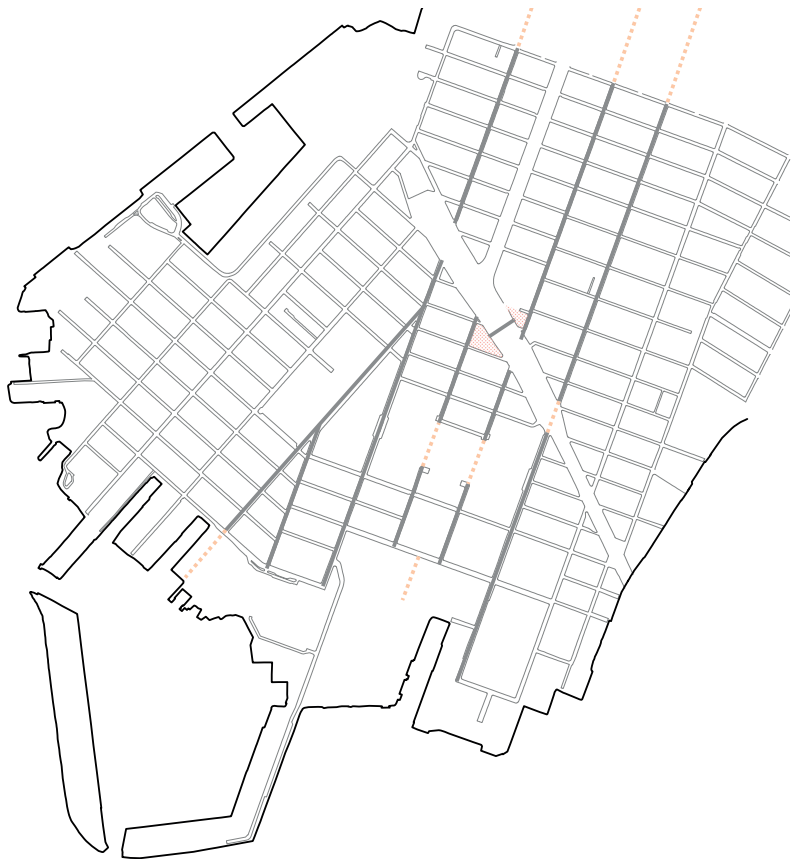
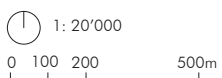


Fig 34: Sections of the North-South axis that need to be strengthen



To this end, the sewing should arise from Dwight street, which is the hinge axis of Red Hook, and spread from it in two directions. This street is ideal because it is the site of the shift between the two urban grids. It is also close to two passages leading to the other side of the Expressway. Furthermore, Dwight Street is located in between the social housing and the rowhouse tissues; it is therefore an axis that has the potential to become a major commercial street for Red Hook. The road going from Dwight Street to the subway station should also get particular attention. It should be a place that guides the inhabitants to the local public transportation. (Fig 36-37)



Fig 35: Recreation areas that can be found in Red Hook and the empty plots/spaces in the urban fabric



Hinge axis, Dwight Street ———  
 West-East axis to  
 strengthen the urban fabric - - -

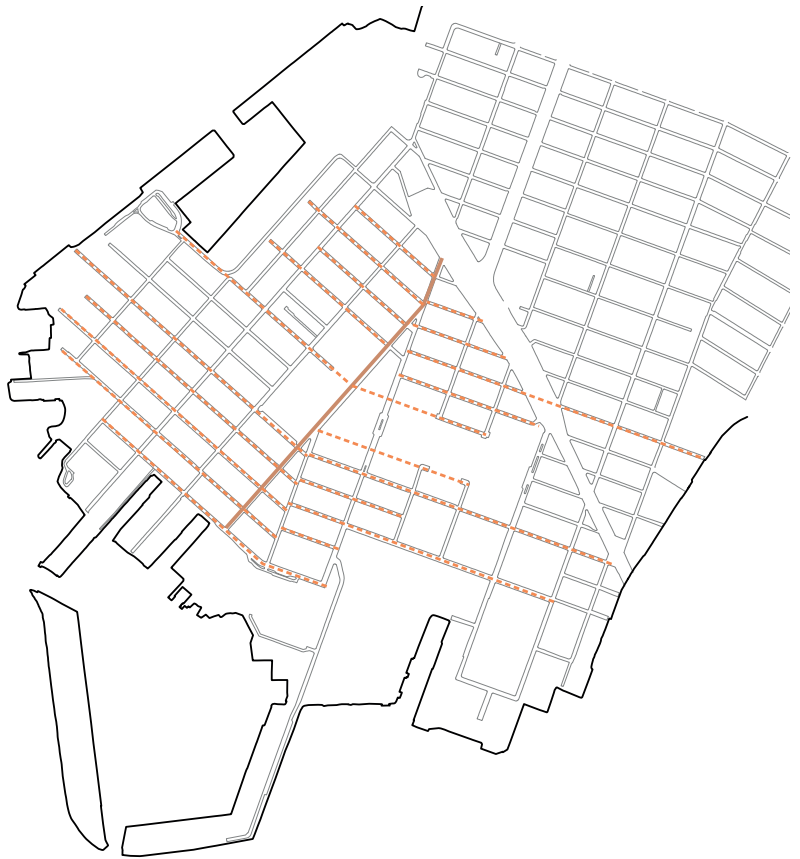
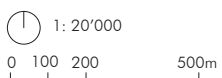


Fig 36 :Horizontal axis that should be strengthen in order to sew the urban fabric

Hinge axis, Dwight Street ———  
 Main axis of connections  
 to the outside ———  
 West-East axis to  
 strengthen the urban fabric - - -  
 Amenities ·····  
 Outdoor spaces ■■■■  
 Voids in the urban tissue ■■■■



Fig 37: Connections between the horizontal axis and the recreation areas and the voids





## Conclusion

To summarize the previous analysis, two aspects need to be addressed in order to allow Red Hook to evolve: the gentrification threat and the neighbourhood's disconnection. The aim is above all to satisfy the current inhabitants of the neighbourhood and give them tools to improve their everyday life. They are indeed the first victims of the weak connections and the ever growing impacts of the gentrification phenomenon.

In order to give the community a chance to resist the impacts of large gentrification, the interactions between the different social classes must be strengthened. To consolidate their exchanges, interventions within the urban fabric of Red Hook must be performed. The western and eastern side of Red Hook need to be more connected, and some of the horizontal axes (Fig 36) must be emphasised and improved. They are currently the weaker points of the neighbourhood. Strengthening these axes would link the two habitation urban tissues and, in consequence, link together the different communities present in Red Hook.

These axes are chosen for the potential links they might have with the surrounding amenities: the waterfront, the museum, the art galleries, the restaurants, the urban farms. They also should be linked to some of the voids within the urban fabric that have developments potential.

Dwight Street, in the middle of the two sides of Red Hook, would thus become a hinge axis and have the potential to be a commercial corridor. By reinforcing it, we would also strengthen its link to the pedestrian bridge. To improve access to the subway station, the road going from it to Dwight Street should also get particular attention such that it guides the inhabitants to public transportation.

Creating a connection between the two sides of Red Hook would allow interactions between its inhabitants and would create a stronger community. Having a strong community improves a neighbourhood's chances to have an impact on the decision and reflexions of large gentrifiers in the neighbourhood. A strong community gives a voice to the inhabitants and allows them to impact the development of their neighbourhood.

Large gentrifiers are always powerful entities and it is difficult to be heard by them, when they have the power and means to do whatever they want with the plots they bought. But we saw with the example of Red Hook's Lidgerwood Building, that when the community comes together it is possible to save some of the heritage of the area.



The small gentrifiers can also be used in the process of making a strong community. These actors are often the owners of small amenities in Red Hook; they bring diversity, and the inhabitants are directly profiting from their presence. Establishing more small gentrification could be a way to give Red Hook's people new places to gather, meet and exchange.


















The second aspect that needs to be taken into account to support the evolution of Red Hook is the disconnection with the rest of New York City. Some of the streets going north that are cut by the Gowanus Expressway must be strengthened. Inhabitants need exit points to exit Red Hook more quickly. To strengthen these exit points, the area underneath the ramps of the Expressway and the area around the pedestrian bridge must be addressed. These are spaces with unused potential, and they must be enhanced to give the inhabitants a reason to pass through these openings.

Another step would be to work on the general public transport disconnection. The neighbourhood needs more direct access to Manhattan, which could be achieved with ferries, buses, the subway or other methods.

Together, these actions would sew Red Hook's urban fabric while also potentially creating better connections with its surroundings, thus eliminating the impression that Red Hook is an island within Brooklyn.

In conclusion, an architectural project dedicated to the community, with multiple implications and impacts throughout Red Hook, would help to strengthen the general connection in the area. It should also have the potential to bring the inhabitants together and would therefore give the local population leverage to resist the large gentrification project on its banks.

#### Map legend

-  The Gowanus Expressway seen as an obstacle
  -  Hinge axis between the two side of the neighbourhood
  -  Section on the north-south axis that need to be strengthened in priority
  -  North-south axis between the two side of the Gowanus Expressway
  -  Horizontal axis to strengthen in order to link the two sides of Red Hook
  -  Potential large scale connection with the city
  -  Amenities guiding the axis that need to be strengthened
  -  Future gentrified projects
  -  Gentrified tissue
  -  The Red Hook Houses seen as an obstacle
  -  Industrial buildings
  -  Amenities (Restaurants, deli, art gallery, churches, schools)
  -  Voids that could be asset for the development
  -  Outdoor spaces that are assets for the neighbourhood
  -  Urban fabric along the axis to strengthen
  -  Subway line
  -  Subway line
- Both tissues are forming a ring/obstacle in the neighbourhood







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# Iconography

By page, every drawing or image without mention has been produced by the author.

Fig 2: Red Hook, 1767

Ratzer, Bernard. 1766-1767. "Plan of the City of New York in North America: surveyed in the years 1766 & 1767". <https://redhookwaterstories.org/items/show/91>

Fig 3: Red Hook, 1845

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Fig 4: Red Hook, 1861

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Fig 5: Shacks in Red Hook circa 1930-1932

Municipal Archives. 1930-1932. no author. no title. [https://historicalcharts.noaa.gov/historicals/preview/image/LC00120\\_00\\_1861](https://historicalcharts.noaa.gov/historicals/preview/image/LC00120_00_1861)

Fig 6: Shacks in Red Hook circa 1930-1932

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Fig 7: Red Hook after Hurricane Sandy

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Fig 8: 1924 aerial view of Red Hook

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Fig 9: 1951 aerial view of Red Hook

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Fig 10: Waterfront transformation, the former Domino Sugar Raffinery and its new forty-five stories high tower Marks, Katherine. 12/09/19. "On the Williamsburg Waterfront". 19/12/19. <https://www.nytimes.com/slideshow/2019/09/12/realestate/on-the-williamsburg-waterfront.html>

Fig 12: Tesla Motors' sales and service centre, opened in 2016

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Fig 11: Future sorting and delivery hub for UPS

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Fig 12: The former Revere Sugar Refinery demolished in 2006

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Fig 13: Possible project, Red Hoek Point, Office-Retail Complex

Visual House. n.d. "Red Hoek Point". 17/10/19. <https://www.scapestudio.com/projects/red-hook-point/>

Fig 15: The S.W. Bowne Grain Storehouse, demolished in 2019

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*I would like to thank Harry Gugger for his supervision, Augustin for his ability to guide me in the right direction, Julia for her precise proofreading and my family for their constant support.*

*A special thanks for all the Brews.*