

2019



# *Densification by high-rise?*

A DISCOURSE ANALYSIS ON THE ROLE OF HIGH-RISE BUILDINGS  
IN THE DENSIFICATION OF POST-WAR CITY DISTRICTS

AUTHOR: F.J. VAN DEN IJSSEL

STUDENT NUMBER: 5555817

UTRECHT UNIVERSITY

MASTER'S PROGRAMME SPATIAL PLANNING

SUPERVISOR: M.H.H. VAN DEN HURK

DATE: 09-08-2019



## Preface

This is my master's thesis '*Densification by high-rise?*'. This is a qualitative research that I have conducted in Amsterdam. It has been written to fulfil the graduation requirements for my Spatial Planning master's degree at the Utrecht University. After completing my bachelor in Social Geography and Planning at the University of Amsterdam last year, with writing a thesis that was also related to the housing market, I decided to choose a master programme in the same direction.

I have been working on this research for the last 5 months. However, this was not an easy process. An unexpected knee operation at the beginning of the thesis period seemed to make it difficult to graduate in the same academic year. I would like to thank my supervisor Martijn van den Hurk, who has helped me with this delay, the research design and for guiding me well through the process. Despite the summer period, I received constant feedback from him.

Graduating has been an educational process in which I was able to apply the knowledge and skills that I gained during my studies in my thesis. I have also developed new skills. Writing my thesis and thus completing my Spatial Planning master would not have been possible without the support of friends, family and teachers.

I am also very grateful to the respondents who took the time to do an interview with me despite the holiday season.

I hope you will enjoy reading it.

Floris van den IJssel

09-08-2019

## Abstract

The pressure on the Amsterdam housing market is extensive. In order not to affect too much of the green areas outside the city boundaries, the solution is sought in densification. Post-war city districts are seen by the municipality as a possible suitable place for this densification. But how should you densify these neighborhoods? Densification seems to be achievable by both low and high-rise buildings. The position taken in this social discussion can be placed under a certain discourse, which is a way of speaking and a set of concepts or ideas. These different discourses on the role of high-rise buildings are being researched in this study. But not every post-war city district is the same. For this research, a small homogeneous post-war urban district, the Kolenkitbuurt, and a large homogeneous post-war urban district, the Bijlmer, have been chosen for this study. The discourses concerning the role of high-rise buildings therefore appear to differ greatly in these neighborhoods. The Bijlmer was built in the past with the pro-high-rise discourse of Dutch architect Siegfried Nassuth as leading discourse. Due to the failure of the neighborhood, and the many problems that this neighborhood has experienced, negative storylines arose about this high-rise, and these negative storylines reflected thereafter in the policy, namely the demolition of many high-rise apartments and the replacement with low-rise building typologies. In the Kolenkit there has never been a substantial role for high-rise in the past, and the dominant discourse also seems to hold on to this low-and midrise, to maintain the 'human dimension' in the neighbourhood. Partly due to the power positions of a certain housing corporation and the municipality in this neighborhood, their discourse coalition became clearly reflected in the built environment. These discourses can therefore certainly be seen in the built environment, and can be explained on the basis of existing power relationships.

## Table of contents

Introduction .....	7
Theoretical framework.....	9
Densification.....	9
Compact city.....	11
Role of High Rise buildings .....	12
Discourse coalition.....	17
Retrofitting .....	19
Methods.....	21
Case 1- Kolenkitbuurt.....	23
Case 2- Bijlmer .....	25
Discourse analysis method .....	27
Operationalization of variables.....	28
Data collection.....	30
Data analysis.....	31
Interview analysis framework.....	33
Desk research analysis framework.....	35
Empirical Research.....	37
The view on the role of high-rise buildings in densification in general .....	37
1) “High-rise is not necessary for densification” .....	38
2) High-rise fits in with the new housing requirements and contributes to densification .....	38
Case 1) Kolenkitbuurt.....	39
Topic 1- Post-war neighborhoods as densification location .....	39
Topic 2 Absence of high-rise culture in the Netherlands.....	40
Topic 3- Role of high-rise building in the retrofitting of this area .....	41
Topic 4- Conflicting opinions and interests regarding the role of high-rise buildings .....	44
Topic 5- The role of high-rise buildings in the mix between living and working .....	45
Results .....	46
Case 2) Bijlmer .....	51
Topic 1- Post-war neighborhoods as densification location .....	51
Topic 2 Absence of high-rise culture in the Netherlands.....	51
Topic 3- Role of high-rise building in the retrofitting of this area .....	52
Topic 4- Conflicting opinions and interests regarding the role of high-rise buildings .....	56
Topic 5- The role of high-rise buildings in the mix between living and working .....	56
Results .....	58
Bijlmer& Kolenkit comparison.....	60
Physical comparison .....	60

Discourse comparison .....	61
Conclusion .....	63
Discussion.....	64
Literature.....	66

## Introduction

Amsterdam has the least affordable houses in the world. Where there are often warnings about situations in cities like New York and London, the conditions in Amsterdam appear to be worse in the area of housing prices. Housing has become almost 64% more expensive in the past five years, while the income of the Amsterdam citizen only increased by 4.4% (Knight Frank, 2019). You will not see this skewed ratio anywhere else in the world. So the city of Amsterdam is becoming increasingly popular. More and more people are moving to the city. This is putting a lot of pressure on the housing market as a result. Absurd house prices and a disappearing middle segment: the city is under pressure. Due to the current economic growth, the urbanization, smaller family households, population growth, the demand for housing continues to increase. The city is expensive because living in urban areas is becoming more and more popular, while the supply of housing remains limited (Gadet, 2018). Affluent people who are not able to find a home in the most popular places, will start looking for apartments in neighbourhoods nearby. As a result, the prices will rise over there. And so, in former working-class neighbourhoods, the houses have also become very expensive in a short time (Savini, Boterman, Gent, & Majoor, 2015). Not so much because of the increased intrinsic popularity of those neighbourhoods themselves, but mainly because of a lack of supply in the original popular neighbourhoods. This has a shortage on the housing market as a result. It is mainly the lower and middle incomes that have trouble to deal with this housing shortage (Savini, Boterman, Gent, & Majoor, 2015). In order to achieve lower house prices, supply and demand will have to come closer together. The municipality of Amsterdam has also realized this, and has set itself the goal of having realized 52,500 new homes by the year 2025 and 70,000 new homes by the year of 2040. Amsterdam foresees a prominent role for high-rise buildings in creating this new neighbourhoods. Is this high-building really inevitable or is it primarily a urge to manifest in the globalising competing city network? And how can high-rise buildings lead to a good quality of the direct and wider surroundings?. The city is focusing on this high rise, because one of the key aspects of the policy is based on urban densification, as stated in the *Structuurvisie 2040* (Gemeente-Amsterdam, 2011). Whether this is feasible, and it will be enough to meet the increasing demand and population growth remains to be seen.

The municipality of Amsterdam is also mostly concerned with this growth. The number of people who want to live in the capital continues to increase, but the number of new apartments cannot keep up with this growth. Partly due to the fact that construction completely stopped during the economic crisis (Savini, Boterman, Gent, & Majoor, 2015). This has resulted in a remarkably tight housing market. But now that the economy is recovering again, the municipality is looking for solutions to tackle this housing crisis. This policy is primarily focused on *densification*, in order to

increase the supply of housing without widening the boundaries. However, this growth also requires a lot of planning, because where should all these people live on a this relatively small piece of land? One possibility for the municipality is the densification of post-war city districts. This post-war neighborhoods started being retrofitted since the urban renewal in the 1990s.

Densification is a term used by planners, designers, developers and theorists to describe the increasing density of people living in urban areas. And is often described as one of the most important goals of a city in order to tackle the housing shortage (Gemeente-Amsterdam, 2011). But is densification in a city always a positive development? When you look at Singapore for example, which is often held up as a role model for densification, there is now a growing concern about the destruction of historic structures, ever-more crowded subways, escalating house prices, and lack of open space. Or when you look at Los Angeles, where the councils of neighbourhoods have protested against densification processes, because of the possible congestion and the loss of local character (Kotkin, 2013).

When cities do believe in densification, going into height with housing seems to be a smart way to achieve more densification in the city. But not everyone sees an important role for high-rise buildings in this densification. Possibly because this high-rise does not seem to be part of Dutch culture. Partly because of, for example, the well-known failure of the old Bijlmer high-rise, many claim that high-rise simply does not suit the Netherlands. Many developers, however, recommend this high-rise as necessary for achieving a modern, well-functioning city. So there seem to be a lot of different thoughts and ideas, discourses, about this process of densification and the role that high-rise should fulfil within this process. But how are these thoughts and ideas reflected in the built environment? In order to visualize this role of high-rise in the development of densification, and the different opinions and storylines, the following research question is the one I tried to answer in this thesis:

*“What role do discourse coalitions play in the high-rise building debate on densification in the retrofitting of post-war city districts, and how can we explain that role?”*

## Theoretical framework

### Densification

Before 1900, living in industrial city came along with many problems in terms of health, safety and quality of life. Urban planners such as Abercrombie and Howard then designed ideas to change the urban living pattern (Abercrombie, Kelly, & Kelly, 1922). Ebenezer Howard came up with the idea of the garden city. All the good aspects of the city and the countryside came together in this concept. With the utopian garden city, Howard wanted to ensure that there was no longer a choice to be made between living in a rural environment and the busy city without green nature. Howard saw the city and the countryside as two magnets that had repelled each other in the past, but in his model were united in one "garden city magnet" (Miller, 2002). Jane Jacobs did not agree with this kind of ideas, since she believed that a city with a high density stimulated a higher quality of life (Jacobs, 1961). It can strengthen the quality of the living environment through sufficient support for easily accessible social, cultural and recreational urban facilities. It can also boost the urban economy by combining employment, good accessibility and high quality of the living environment.

Research has shown that the Netherlands is also densifying (Nabielek, Boschman, Harbers, Piek, & Vlonk, 2012). Urban living environments are constantly changing. Not only does the composition of the population change over time due to relocations, also the housing stock will change in residential areas, by transformation, urban renewal or restructuring (Dam, Groot, & Crommentuijn, 2010).

Restructuring can thereby lead to densification. Restructuring can also counteract the segregation of functions that may have been the case in the past, especially in pre-war living environments.

According to Jane Jacobs this mixed-use is essential for a liveable city. All the dwellings of a specific city area need to be supplemented by other primary uses in order to keep people on the street throughout the day. This can be working areas, entertainment, shops, etcetera. She also argues that the densities of dwellings are important for a city, because it is one of the necessary conditions for flourishing city diversity (Jacobs, 1961). Where people speak negative about high density areas, they often confuse it with overcrowding. But those are two different things. High density means more dwellings into the same amount of land, where overcrowding means that there are too many people living in the dwelling for the number of rooms it contains. But what is the right amount of densification? This question cannot be answered without nuance. This is the reason no clear answer can be given. It all depends on the performance of the specific case. Densities are too low, or too high, when they frustrate city diversity instead of abetting it. Jane Jacobs compares it with taking in vitamins and calories. Right amounts are right amounts because of how they perform (Jacobs, 1961). So the correct amount differs per case. She argues that low density areas can work out well at the beginning for suburban areas, given their location on the city edge. But on the long term, creating

this low density areas is a bad idea. Because when the city keeps growing, the reasons why those semi suburban areas used to be functional and attractive are gone, because they are now interwoven into the city and lose their former geographical closeness to the countryside. Densification in itself is in principle not that difficult. Building more apartments on a piece of land is not the challenge. But making this higher density areas still liveable, sustainable and spatially high-quality is. Because of the fact that more people will be making use of the same amount space, an increased amount of pressure will be placed on the build environment. But how can that be achieved? In order to answer this question, it is important to understand that there is a crucial difference between the actual physical density of a neighbourhood compared to the perceived density. You can place many buildings close to each other, but still not experience density. A good aim for density is therefore not just to build on each other briefly, but many functions that are mixed in an area. For example, functions should not be separated by area, but should be mixed together, work, cultural offerings, activities, parks, and so on. This perceived density can therefore be seen as one of the most important factors for the comfort factor of the city dweller. The cities in which a lot of interaction can arise are therefore seen as the most attractive (Boverket, 2017). How come this densification has become so important in today's urban planning? As mentioned earlier, mainly due to the growing urban population, and the associated housing shortage. Densification can ensure that different parts of the city are linked to each other, reduce segregation and improve safety. Thus, densification can potentially prevent urban sprawl, making people less dependent on the car. This is good for both the quality of life and the sustainability of the city. However, there are also disadvantages to compacting. For example, it is often claimed that compacting can lead to a mixed city (Midu, 2014). However, densification in central locations often results in high land prices. This in turn can lead to gentrification and social inequalities. In addition, densification would ensure a better infrastructure (Haaland & Konijnendijk van den Bosch, 2015). However, this densification often concerns industrial land, port areas or public green spaces, and these areas may have problems with infrastructure because of the lack of public transport or roadways. To conclude, *densification* can lead to retaining countryside's, less travel time, less car dependent infrastructure and a more enjoyable vibrant city life. The challenge for us planners lies within translating this *densification* into a sustainable future (Midu, 2014).

Opportunities are being sought for possible areas to densify, especially in cities where there is a high demand for housing due to the agglomeration benefits that comes along with living in that specific city. The Netherlands seems to be doing well in the field of densification. But how can this be explained? According to Broitman& Koomen (2015) the strong influence of relatively detailed national urban expansion plans in steering urban growth processes is an important factor that

contributes to the success. They argue that this steering in combination with restrictive zoning regulations for specific open spaces helps concentrating residential development while preserving open spaces (Broitman & Koomen, 2015).

### Compact city

Urban *densification* is linked to the urban compact city planning approach. The compact city is a concept in which a city is proposed that uses the existing urban area as much as possible, building in high densities, mixing functions and keeping new urbanization compact in the vicinity of the existing built environment (Clerque & Hagendoorn, 1983).

There are three different characteristics that define a compact city. First of all, a compact city is characterized by dense and proximate development patterns. Second, they must be urban areas that are linked throughout transportation opportunities. And last of all, it should include accessibility to local services (Amer, Mustafa, & Et.al, 2017).

A compact city may include many benefits. For example, the social inequality could decrease as a neighbourhood is more dense. Those cities are also less depending on cars, because more people are walking in these densely populated city districts. Finally research has also shown that inhabitants of compact cities are generally found to be healthier than people who are living in a sprawled area (Mouratidis, 2017). However, there are also studies that try to refute this and say that these people are not healthier at all. Where they seem to agree on in the literature is the fact that a compact environment can cause an increase in your social capital. This social capital is directly linked to the experienced happiness of the inhabitants of a city (Sirowy, 2016).

Research has shown that locations with good accessibility are more attractive and have a higher market value than peripheral locations (Dieleman & Wegener, 2004). Densification can be achieved in different ways. In the densification of suburban areas, it often includes enlarging existing building or creating new apartments on areas that used to be gardens. But what to do with the inner city, and the post-war city districts? The city centre can also include areas where new apartments can be built. It can also include buildings which can be transformed into dwellings, for example empty office buildings or industrial sites. Besides those, it is also possible that low density properties will be replaced by more dense high rise buildings. This process of densifying the inner city is often referred to as *consolidation* (Haaland & Konijnendijk van den Bosch, 2015).

However, there are also potential drawbacks and doubts about the concept of the compact city. The concept of the compact city, for example, does not fit well with the housing preferences of all citizens who, for example, would prefer to live in a more green environment (Nabielek, Boschman, Harbers, Piek, & Vlonk, 2012). Furthermore, the concept of the compact city would be guided by a

romantic image of historic European city centers, but is insufficiently in tune with today's economy. Due to the great focus on densification within compact city thinking, it can also lead to a reduction in the quality of the living environment on a local scale. Because more people are going to live on the same amount of m<sup>2</sup>, the pressure on the public space is increasing, and an increase in incidents can also be the case. In addition, inner-city building can be more expensive due to certain factors, and more difficult to realize due to the shortage of available land, which may lead to higher housing prices (Nabielek, Boschman, Harbers, Piek, & Vlonk, 2012).

### Role of High Rise buildings

So the Netherlands is dealing with a high housing pressure in the big cities. This is increasingly leading to high-rise buildings. Despite the fact that building up high in the air was not really included in the Dutch culture before and because the Netherlands is below sea level, where the soil is often consisting of sand or clay, which is not ideal for building high up in the air, cities like Rotterdam and Amsterdam are starting to adopt this strategy. The concept of a more vertical living and working environment is namely often hailed as a solution to tackle problems involving the growing cities and the continuing urbanization (Drew, Nova, & Fanning, 2014) (Zeiler, 2017).

Many high-rise buildings were created after the Second World War. Between 1960 and mid-1970 many high-rise buildings were being built in Western countries. Many houses were damaged by the war, few were built and there was a shortage of building material. In addition, there was poor quality housing, urbanization, and a decrease in the number of people per household. However, the rise of high-rise buildings cannot be fully explained by this shortage of homes (Wassenberg, 2006). There was also a so-called CIAM movement going on at that time. This was a movement (1928-1959) of 4 important people led by the architect Le Corbusier. They argued that high-rise buildings were becoming the living of the future, since this was in line with the "new wishes of the new people". They believed this type of apartments could create more equality. In their eyes, this could be achieved with high-rise buildings. Frank Wassenberg (2006) said the following about the characteristics of all the buildings originating this CIAM movement:

*“Repetition, regularity, symmetry; the separation of functions; the use of open blocks; uniformity, straight lines; the large-scale nature of housing blocks and open spaces; the use of modern materials and building methods; the provision of communal facilities. Another feature is the location: almost always on the outskirts of town, away from the city centre and amidst industry, railway lines and highways, although carefully separated from these functions. A last characteristic was the production process - quicker, cheaper and more efficient. High rise with prefabricated components, standardization and rationalization of the*

*building process did fulfil all these aspects. This is in a factory-like working style.* " – Frank Wassenberg, 2006

According to Le Corbusier this high-rise apartment buildings could be compared to the production of cars. A kind of Fordism, which is characterized by standardized and industrialized housing units. However, blueprint planning like this is no longer the case in housing development nowadays. These 60 high-rise blocks have caused many failures. Due to these failures, high-rise buildings were often associated with problematic living conditions, isolated locations, poorer sections of the population, negative image, social isolation, emissions and criminal behaviour. As a result, in the years that followed in many Western countries in Europe and North America, no high-rise culture was implemented. This high-rise was only used for office locations and commercial uses (Midu, 2014). However, high-rise buildings cannot simply be placed anywhere. Buildings of such dimensions will have consequences for the living environment of the city. Botir Giyasov and Irina Giyasova (2018) also emphasize this:

*"The growth of modern high-rise buildings significantly affects the existing climatic conditions of the terrain and the environmental balance of the living environment. At the same time, the density of urban development, the infrastructure and transport networks play an important role in changing the living environment."* (Giyasov & Giyasova, 2018)

That high-rise buildings have a great impact on both the physical and social living environment is also argued by M. Ali and K. Al-Kodmany (2012). According to them, there are various concerns that must be included when it comes to building tall buildings. First, the economic considerations need to be taken into account. High costs are often associated with the construction of high-rise buildings, given the sophisticated foundations, technological facets, fire-resistant systems, etc. In addition, only 70% of the total surface area can be really used inside high-rise buildings, while this is more than 80% for low-rise buildings. However, the land price may possibly rise due to the concentration of jobs and services. In addition, they argue that it will also have a great impact on the civic infrastructure. The demand for transport and infrastructure is increasing because more people are using the same amount of m<sup>2</sup>'s. The current power grid, water supply and sewer systems will also have a harder time with high-rise buildings. Not only does high-rise leave its mark on the physical living environment, but socio-cultural factors also play a role. For example, residents of a city like New York, who are used to high-rise buildings, will respond differently to a new residential tower than people in Amsterdam. The social circles that are created in low-rise neighbourhoods differ considerably from those in high-rise neighbourhoods. Residents of high-rise towers would also experience a more locked-in feeling and do not feel really connected with the nature anymore.

Finally, there is also the environmental impact. The construction of high towers, the production of materials and transport costs lots of energy. In addition, they cause a lot of shadow and problems with heating, cooling, and ventilation systems. However, people theoretically need to use the car less because there is more concentration, which is good for the environment (Ali & Al-Kodmany, 2012).

In the book *Form Follows Fiasco: Why Modern Architecture Hasn't Worked* (1978), the author Peter Blake quoted the planner and architect Constantine Doxiades (1913-1975). He stated the following about the then increasing role of high-rise buildings:

*"My greatest crime was the construction of high-rise buildings. The most successful cities of the past were those where people and buildings were in a certain balance with nature. But high-rise buildings work against nature, or, in modern terms, against the environment. High-rise buildings work against man himself, because they isolate him from others, and this isolation is an important factor in the rising crime rate Children suffer even more because they lose their direct contacts with nature, and with other children. High-rise buildings work against society because they prevent the units of social importance -- the family ... the neighborhood, etc. -- from functioning as naturally and as normally as before. High-rise buildings work against networks of transportation, communication, and of utilities, since they lead to higher densities, to overloaded roads, to more extensive water supply systems -- and, more importantly, because they form vertical networks which create many additional problems -- crime being just one of them." – Constantine Doxiades*

Nonetheless, the vision on high-rise buildings nowadays seems to be changing. Because nowadays building monofunctional high-rise buildings is often not the case anymore, and besides that, most of the times the surrounding environment is taken into account. This is achieved by the so-called "Smart Growth", which looks at the characteristics of a region, in order to find out the unique aspects of a particular place. This results in better solutions in the areas of employment, transport and housing (Midu, 2014). Although developing high-rise building will cost a lot of energy, it is potentially more environmentally friendly than low-rise buildings, given the agglomeration benefits, less car use and reduction in travel time (Zeiler, 2017).

According to A. Wood, tall buildings can address a lot of environmental problems that are occurring in urban areas because of the fact it can provide high-density, efficient buildings that are good accessible by public transport systems. But the design of the high-rise buildings itself should be well thought about to be sustainable, because of the fact that high-rise buildings are characterized by the consumption of a larger amount of natural resources and energy than regular buildings (Wood, 2013).

Compact buildings, such as high-rise buildings and medium-high-rise buildings, have smaller façade areas per residential unit. This leads to less heat loss and a reduction in energy demand. In addition, the usable areas per dwelling are usually smaller for high-rise buildings than for extensive low-rise buildings. As a result, with a comparable construction standard, densely built-up residential areas have a lower energy consumption per household than spatially explained residential areas. Secondly, compact forms of development have economies of scale for the use of sustainable heating systems, such as the use of residual heat from industrial facilities, combined heat and power (CHP), geothermal heating systems and heat-cold storage (CHP). With intense building forms, fewer pipes and fewer connection points are required than with extensive building structures. Because the costs of heat pipes are very high, compact buildings and neighbourhoods can make more efficient use of the aforementioned sustainable heating systems (Lotfabadi, 2014). The application of new heat projects is relatively expensive in existing neighbourhoods. For this reason, restructuring offers an opportunity to use more sustainable forms of energy. With a higher density, the use of bicycles and public transport is also increasing (Nabielek, Boschman, Harbers, Piek, & Vlonk, 2012).

Where Jane Jacobs believed that preserving older structures and keeping out all the large scale developments of a city will keep the housing prices affordable. Those new large scale developments would make the city an unaffordable place. But according to American economist Edward Glaeser that is not how a housing market operates. He believes that there should be a limit on protecting older buildings within a city, because he argues "*that great cities are not static—they constantly change, and they take the world along with them.*" (Glaeser, 2011) Cities need new large housing development projects to keep the housing prices affordable, because it will increase the supply. And high-rise is a way of achieving this supply increase. So Edward Glaeser argues that an increase of tall buildings in a city can indeed lower the housing prices. Maybe this will not be the prices of the new apartments, but by creating more space, the high-rise buildings will ease pressure on the rest of the city. He states: "*Height is the best way to keep prices affordable and living standards high.*" (Glaeser, 2011) Furthermore it should be able to make cities greener and better for the environment, because of the fact that less energy is needed in more dense cities according to those scientists. Finally, research has shown that residents living in downtown high-rise buildings had significantly higher life satisfaction scores than residents living in suburban low-rise homes (Du, Wood, Ditchman, & Stephens, 2017). So there are scientists that believe high-rise buildings are able to create a more dense city, and can be part of the solution for the housing shortage and the social inequalities that a lot of cities entails. But is this really the case?

It is often claimed that high-rise is needed to create more dense cities, which is, according to Friso de Zeeuw, incorrect. He states that according to architects Rudy Uytenhaak and Sjoerd Soeters a density

of up to two hundred apartments per hectare can be achieved within six floors (de Zeeuw, 2018). They argue that if you go higher, the ratio between the real usable surface area and the gross floor area becomes increasingly unfavourable. They compare skyscrapers with an avocado. Towers are *"like avocados with a thick seed in the middle"* says Uytengaak (de Zeeuw, 2018). When development includes high-rise buildings, a lot of space is needed for elevators, stairwells, corridors, structures etc. When you are building above 70 meters, you are left with almost only avocado seed, and little flesh. In addition, developers, investors and builders run major financial risks with high-rise buildings. The construction of these types of projects also often takes a long time, which also affects the city view. For most families, high-rise buildings do not offer an attractive alternative. Street environments around high-rise buildings are rarely suitable for children, because of the fact that when to go out to play, they are far beyond the sight of parents. The sense of solidarity of a neighbourhood would also be adversely affected by high-rise buildings. Architect Sjoerd Soeters showed that high-rise buildings can lead to a segregated residential area. He states that the apartments at the top of the tower blocks are expensive and only accessible to the rich people. So the pent houses are only affordable for the higher incomes, while the rest have to live in the shade and wind nuisance. This can cause social inequalities (Soeters, 2019). So the higher a building, the more expensive an apartment will become. The costs increase exponentially starting from a height of around 70 meters. This is due to construction costs, which are high due for example the foundation. When only high-rise buildings will be created, you will only get people with middle and high incomes in that certain area. According to Emiel Arends high-rise must be a means and not an end (Geskus, 2019).

Also Daan Zandbelt is critical the on high-rise buildings trend. According to Zandbelt, it is debatable whether high-rise buildings will automatically lead to higher densities. He argues that high-rise buildings can be an opportunity in the compact city, but not a necessity. The problem with high-rise buildings is that they need a lot of space around them, for example to prevent them from having too much shadowing on the surrounding buildings (Zandbelt & Meyer, 2012). A number of researchers believe that the fact that developers should go up in height to achieve densification is simply not correct. In addition, developability is also difficult since the development time is long and the development risk is relatively high due to the large volume.

Richard Florida is a bit less sceptical about high-rise buildings, but also he emphasizes the importance of older, medium-sized buildings. In a presentation for the congress for the New Urbanism he states the following: *"One of the false statements is that density and skyscrapers are the key ingredients to urban vitality and innovation. This rush to density, this idea that density creates economic growth, is wrong. It's the creation of real, walkable urban environments that stir the human spirit. Skyscraper*

*communities are vertical suburbs, where it is lonely at the top. The kind of density we want is a 'Jane Jacobs density.'* (Florida, Congress for the New Urbanism, 2012).

This historical city parts often create more interaction on the streets, which will result in local communities with small start-ups and a lot of innovations. He argues that there should be a mix of high-rise and low-and medium rise buildings, with both high and low densities to create *'long fuelled urban creativity and powered innovation'* (Florida, The Relationship Between Skyscrapers and Great Cities, 2016). Jacobs advocates living in high-rise buildings in a city and therefore not only high office buildings, as long as there is a good mix of high and low buildings, but also new and outdated buildings.

### Discourse coalitions

So there are various ways of looking at the role of high-rise buildings. These different views can be placed in the context of a discourse coalition. A discourse coalition can be defined as a collection of certain story lines, the actors who use them and the practices in which the power of the discourse is expressed (Hajer & Versteeg, 2005). This storyline is "a condensed sort of narrative that links an event to one or more discourses and thus provides the basis of 'discourse coalitions'" (Hajer, 2009). A discourse coalition is basically a group of actors who share a social construct. Actors can be attracted to a certain storyline for various reasons. The different discourse coalitions can be found by doing a discourse analysis. A discourse coalition is not a closed group of actors, it is a collection of human representatives who come together on the basis of one or more storylines (Hajer, 2005).

But how can we define a discourse itself? Many different scientists have been working on this concept and there seem to be multiple definitions. According to Laclau and Mouffe (1985) a discourse can be described as a structured whole that follows from practices in which relationships are created between different signifiers. Discourses gradually change as a result of the expression of language in writing and word, in which signifiers are always articulated in a slightly different way. A discourse therefore looks a lot like a "story", but differs in that it comprises more than just a specific articulatory practice. When Foucault talks about a discourse, he refers to the historically contingent social system, which includes knowledge and meaning. According to him, a discourse is a way of organizing the gained knowledge and in this way creates the constitution of social relations through the collective understanding of the discursive logic and the acceptance of the discourse as social fact. Foucault sees discourse as a set of rules and conventions that determine the actions of the actors and institutions. Foucault believes that actors are the result of the action and therefore stand still within a certain discourse. In contrast to Foucault, Maarten Hajer believes that discourses are linked to the positions of actors. According to Hajer, the opinions, views and actions are always linked to preferences and interests, which means that different discourses keep arising and actors can switch

between within those different discourses. Hajer (1995) defines discourse as 'a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is giving to physical and social realities' (Hajer, 1995). Coalitions are time-and place related. Due to new information and knowledge created over time, discourse coalitions can change or fade away. There are no sharp boundaries when talking about discourse coalitions. The members of a certain discourse coalition can support each other on one given topic while they may face each other on a different debate about another topic.

Also Laclau and Mouffe (1985) argue about this possibility of change. It is true that a discourse provides a temporary stop to the unstable meaning of words. This implies that discourses on the one hand are changeable, while at the same time there is a certain permanence of significance as the discourses are more rooted in society. In the discourse theory, new ideas are therefore mainly linguistic constructions that can construct existing discourses, while those ideas themselves are also constituted by those discourses.

When a discourse coalition is mentioned in this research, it refers to the definition that Maarten Hajer has given to it. It involves linking different story lines to each other, taking into account the actors that play a role in this, and also looking at how this is put into practice. Doing a discourse analysis can bring a number of benefits. First of all, it is a good way to analyse strategic action in socio-historical discourses and institutions in a broader political context. In addition, a discourse coalition goes further than just a reference to interests because it addresses the context of various specific discourses and organizational practices. Finally, a discourse coalition study can find out about certain prejudices, or how to counteract them, without having to share important knowledge and values (Hajer & Versteeg, 2005).

However, there are also disadvantages to doing discourse analysis. A first point of criticism is that reflection on identity is difficult. In addition, a discourse analysis is useful in solving policy controversies with identity sensitivity. The approach is not useful for understanding or assessing all types of policy problems. The last critical point is that this discourse coalitions tends to perceive *elite behaviour*, and behaviour in linguistic actions from the avant-garde (Korsten, 2008).

But when does a certain discourse acquire a dominant role? This is the case when the central actors are convinced or are forced to accept the power of a certain storyline, this is also called discourse structuration. Furthermore there is the *discourse institutionalization* which is important to become a dominant discourse coalition, in which the ideas of organizational implementation must be reflected in practice (Takahashi & Meisner, 2012). In order for a discourse to become dominant both the

*discourse structuration* and the *discourse institutionalization* needs to be present in order for a discourse to become *dominant* (Hajer, 2006).

But to what extent is a discourse analysis useful for a study like this? Researchers which are interested in housing studies are often critical at doing such analysis. Annette Hastings, however, claims that doing a discourse analysis in this playing field can bring many benefits. For example, doing a discourse analysis results in a disconnection from the positivistic character that studies into the housing market often have. In addition, housing problems can be examined on the basis of a discourse analysis without the traditional disciplines and perspectives. A discourse analysis can add language, psychology and philosophy aspects to earlier studies. At last, new questions, explanations, problems and challenges can be discovered by looking at the same playing field from a different perspective (Hastings, 2010).

So a discourse analysis can therefore clarify the struggle for the hegemony of ideas, concepts and categorizations in and around policy fields. A discourse analysis can be helpful to understand why a certain discourse becomes dominant and considered authoritative while others become discredited. For example why high-rise buildings are dominant in one certain area, while in other areas no high-rise buildings can be found.

### Retrofitting

So living in an areas with high densities can bring many benefits and, in addition, due to the increased supply of houses, can provide a part of the solution to the housing shortage. But what are the exact kind of locations in the Netherlands where this kind of densification still can take place? Research has shown that there are five different kind of locations in the Netherlands which could be still be retrofitted (Haaland & Konijnendijk van den Bosch, 2015):

- 1) Transformation locations of business and port sites
- 2) Restructuring locations in post-war residential areas and growth centres**
- 3) Locations around train stations /public transport
- 4) Locations on the inside of the city outskirts
- 5) Small-scale locations, renovations and re-use of existing buildings

The focus of this research is on this restructuring in post-war city districts. This post-war city districts generally consist of a repetition of open allotment forms, with flats and other buildings standing loose in the space and the street flowing into the often green public space between the buildings. The allotment and buildings are thereby very closely linked to each other in a spatial composition of lawns, trees, walkways and building volumes, which, incidentally, is not always well executed and

maintained. The network, often formed by broad, green access roads, functions relatively independently in this tissue. The post-war city structure is made up of a systematic repetition of open ensembles, such as open building blocks: assembling buildings and public space. The collective elements of the building blocks are important identity carriers, such as entrances, galleries, porches, inner gardens and transition zones between the private home and the public space (Hereijgers & Van Velzen, 2001).

Research states that post-war neighborhoods have been the subject of physical restructuring since the beginning of urban renewal in the 1990s. Different post-war neighborhoods needs different strategies, where is some cases it means changing the whole building typology and some are being retrofitted while retaining the existing identity (Bekx, 2004). The small-scale homogeneous and heterogeneous fabrics in particular offer opportunities for change at all scales without affecting the existing identity. This is more difficult in large-scale homogeneous neighborhoods. Research has shown that transformation of the post-war urban districts requires a collective approach (Bijlsma, Bergenhenegouwen, Schluchter, & Zaaijer, 2008). This post-war city districts generally have a predominant residential function. Due to their relatively peripheral location in relation to the city centre, the neighborhoods often do not include city centre activities. But on the other hand, because of this location, the neighborhoods are easily accessible due to the relatively central location in the local and regional transport network. Research has shown that social housing in post-war neighborhoods has a dominant position, which makes housing associations important players

Three types of post-war fabrics can be distinguished. Small-scale fabrics with a homogeneous or heterogeneous structure, and large-scale fabrics, which are mainly homogeneous in design (Bijlsma, Bergenhenegouwen, Schluchter, & Zaaijer, 2008). The small-scale homogeneous fabrics consist of a repetition of identical flats, three to five storeys high, which form the partial boundaries of the public inner gardens. The small-scale heterogeneous fabrics consist of different types of flats or rows of houses of different sizes. The large-scale fabric is formed by high, monumental flats, which stand loose in a large-scale and completely public space. For this research, a case with a small-scale homogeneous fabric is used as well as a case with a large-scale homogeneous case. These are discussed together with the methodology in the next chapter.

## Methods

This chapter will describe how I have prepared and conducted my research. First of all the problem definition will be formulated again shortly, together with the sub-questions in order to answer my research question. Next, the research tools with which I have analysed my research material will be explained further in detail.

*‘What role do discourse coalitions play in the high-rise building debate on densification in the retrofitting of post-war city districts, and how can we explain that role?’*

### **1) What is densification and what is the relevance on post-war city districts?**

This question looks at the different views on densification, and the characteristics that post-war urban districts have that make these districts designated as suitable densification locations.

### **2) What are discourse coalitions and what different discourses exist relative to densification and high-rise buildings?**

This research is done on the basis of a discourse analysis. To do a discourse analysis it is important to clearly state what is a discourse, what is a discourse coalition and how are these formed.

Furthermore, we look at the different storylines and discourses that can be seen in the area of high-rise buildings with densification.

### **3) How are these discourses reflected in the built environment during the retrofitting and densification of post-war city districts over time?**

Discourses do not always remain the same, over the years different discourses and storylines can become dominant. That is why it is interesting to look into the history of a certain district and see how people thought about high-rise buildings at the time. And how can these discourses be reflected in the built environment, what has been the role of high-rise buildings in the retrofitting of this post-war city districts?

In order to answer this research question, a multiple-case study is used. A case study is a form of qualitative research in which one or more aspects of a certain phenomenon, in this case the high-rise discourses, are studied in depth in its natural environment. It is therefore a qualitative research, in which I try to obtain information from various stakeholders in the field of *high rise buildings* and *densification* by looking at the various discourses. A case study is a suitable method to get an answer to my research questions, since a case study can elaborate and deepen the possible changes that occur in the relevant areas (Bryman, 2012).

This in-depth information can be obtained by going into the motivation behind certain policy of stakeholders, opinions, wishes and needs. In this multiple-case study I look at two post-war city neighbourhoods, namely the Bijlmer and the Kolenkitbuurt. Amsterdam is the capital and by population the largest municipality in the Netherlands. The municipality of Amsterdam has 863,202 inhabitants (CBS, 2019). And Amsterdam, as already mentioned in the introduction, is densifying.

A number of this densification projects have already been set in motion, for example, the renovation of the Kolenkitbuurt. Another task is the retrofitting of the Bijlmermeer, which has been worked on for many years now and will still change in the coming decade. The quantitative demand for housing in Amsterdam remains high, but the qualitative demand also changes over time. To maintain variation and creativity in the city and to avoid monotonous residential areas, it is necessary to look for instruments for a more flexible production. Diversity and a mixed population are important attraction factors for Amsterdam. There is a high demand for high-quality and sufficiently spacious houses, but these must remain affordable to a large extent.

## Case 1- Kolenkitbuurt

The Kolenkitbuurt is a neighbourhood in the Bos en Lommer district in the West part of Amsterdam. The neighbourhood is named after the Opstandingskerk, better known as the Kolenkit, on the Bos en Lommerweg. The neighbourhood was built shortly after the Second World War, in the late 1940s, and consists for the most part of apartment-style apartments. The Kolenkit neighbourhood is relatively small, with over 7,000 residents. When the neighbourhood was built in the 1950s, it was on the outskirts of the city. The neighbourhood is part of the Westelijke Tuinsteden. The ideal of a green, open city with light, air and space follows the philosophy of Cornelis van Eesteren.



**Figure 1. The Kolenkitbuurt source: Van Eesteren Museum, 2018**

Van Eesteren's plan namely has the characteristics of it so called '*Nieuwe Bouwen*' inspired by Le Corbusier: wide streets, open building blocks, apartments and collective inner gardens. It was characterized by the separation of functions. After the construction of the A10 West and the Ringspoorlijn, the Kolenkitbuurt became fragmented and the residents were confronted with environmental nuisance. The condition of the houses and the quality of life in the neighbourhood have also deteriorated. The Kolenkitbuurt came in the news in February 2009 as the most problematic neighbourhood of the Netherlands, with problems such as poverty, unemployment, problem youth and crime. A third of the inhabitants lived at social welfare level, half of the children grew up in a poor family, and the unemployment rate was nearly twenty percent. The housing stock consisted of portico apartment houses without a lift (Vernieuwingsplan, 2003). The houses had 2-6 rooms and were relatively small. Almost all homes had structural defects. The insulation between the houses was poor and caused a lot of noise. Kitchens, balconies and bathrooms were also small and of moderate quality. This had negative consequences for social safety and the management of public spaces (Uitwerkingsplan, 2011).

However, due to these poor conditions, a positive transformation has occurred, because the government, the municipality, housing associations and other organizations took action. The urban district of Bos en Lommer and the housing corporations (mainly housing corporation Eigen Haard) came up with a plan for urban renewal around 2000, which meant that in the coming years a large part of this neighbourhood was going to be transformed and retrofitted (Uitwerkingsplan, 2011). Some buildings were renovated, but the crisis slowed down urban renewal in the housing market (Vernieuwingsplan, 2003). After the crisis, however, this started again and many old residential blocks were refurbished or demolished in order to make room for new construction. The streets are also being redesigned. The type of housing no longer meets the needs of today. In the development of the building blocks and the floor plans of the houses, specific attention is now being paid to the Jane Jacobs 'eyes on the street' (Uitwerkingsplan, 2011). This increases the social safety of the public space.

The boundaries of the city centre environment have been shifting for years from the city centre to the outskirts of the city. The Kolenkitbuurt itself can be divided into three parts (Vernieuwingsplan, 2003):

- 1) Zuidelijk veld:** the southern part between Erasmusgracht and Bos en Lommerweg.
- 2) Midden gebied:** the central part between Bos en Lommerweg and Wiltzanghlaan.
- 3) Kolenkitbuurt Noord:** the northern part of the Wiltzanghlaan

## Case 2- Bijlmer

In addition to the Kolenkit, The Bijlmermeer or colloquially the Bijlmer also had to become a dream living spot in Amsterdam 50 years ago with spacious, affordable houses with lots of green areas. Urban planner Siegfried Nassuth drew the city of the future with a park that was supposed to have the allure of Central Park in New York. Of the 13,000 homes that the Bijlmer had at the end of 1975, 90 percent were in flats. They were spacious and luxurious, especially at the time.

So the Bijlmer was an idealistic new construction project. State-of-the-art high-rise buildings, lots of park-like greenery, car-free pedestrian areas and children's play areas. The Bijlmer was also originally built with the idea that living, working and facilities should be separated. It should improve the Amsterdam city life. Unfortunately, it went differently. Few residents of the city of Amsterdam were interested in moving to this high-rise neighbourhood (Hulsman, 2018). As a result, mostly immigrants came to live here, mainly people from Ghana and Surinam. A lively, cohesive community, but there were problems with crime and drug use. Besides, the functionalism also ensured that people who were unemployed remained in the neighbourhood during the day. The Bijlmer was only designed as a residential area, a place to leave in the morning and return to after work. Nuisance caused by loitering in the inner streets and in the parking garages caused strong feelings of insecurity. This insecurity ensured that many of the original residents chose to move to Almere or Purmerend. This has resulted in a large drainage of the neighbourhood, leaving many apartments vacant. In addition, there were a lot of problems with the facilities in the first years. Collective spaces in the flat were not yet completed, there was a shortage of lifts and poor lighting. This was the reason why they decided a retrofitting of this city district was needed, and many of the high-rise buildings were being demolished (Bestemmingsplan G. A., 2007).



**Figure 2: High-rise buildings being demolished in the Bijlmer, source NOS.nl (2017)**

The Bijlmer is perhaps the reason why the high-rise debate is such a sensitive issue in the Netherlands. The great resistance to high-rise in the Netherlands has to do with our bad experiences with this form of urbanism. As mentioned above, the Bijlmer symbolizes a high-rise neighbourhood where almost everything went wrong after delivery: cumulation of problem groups, social insecurity, drug nuisance, and limited support for retailers and other facilities. High-rise is engraved in Dutch memory as misery. The Bijlmer was the first district to go against the traditional Dutch city structure, without success.

## Discourse analysis method

The next section discusses the methodological aspects of the research. Because I will focus on the interests and perspectives of various stakeholders, I have chosen the *discourse analysis* as an analysis method. It zooms in on the role of the discourses of different parties and how they connect or differ (Bryman, 2012). Some aspects, such as the discourse analysis and relevance, have already been discussed in the introduction and the theoretical framework, but the method of data collection and the analysis techniques will also be discussed within this chapter. Discourses are locked in a variety of "texts", or research units. In the tradition of discourse analysis, interviews, focus groups, speeches, written documents and comics have been successfully studied as a research unit (Bryman, 2012). I am interested in how and why those different versions of the world of high-rise are shaped, and how they are reflected in the built environment.

This research is therefore done on the basis of a discourse analysis, but how do you do such an analysis and what aspects should it contain? The 'label' discourse analysis is now concealing a wide range of approaches, which are not easy to describe briefly. There are, according to Jonathan Potter and Margaret Wetherell, three characteristics that every discourse analysis must contain, and will therefore be included in my research (Potter & Wetherell, 2003).

Each discourse analysis contains talk and texts that are studied as social practices. This is also called linguistic content. This contains both the meanings and topics, but also the linguistic form such as grammar. A distinction must therefore be made between form and content. In general, the discourse analyst looks for the answers to social or sociological questions instead of the answer to linguistic issues (Potter & Wetherell, 2003).

In addition, every discourse actually consists of action, construction and variability. This is because constant actions are carried out based on the writing of stories. With these actions they try to achieve a certain goal through the use of a range of styles, linguistic resources and rhetorical devices. Performing a discourse analysis ensures that the functioning of these constructive processes can be mapped. Doing research on the basis of a discourse analysis is related to constructivism. This is obvious since discourse analysis focuses on the construction of social realities through language, because during conversations and other forms of text people construct, shape and develop different versions of the world. Because different people perform different actions, different discourses are constructed (Potter & Wetherell, 2003).

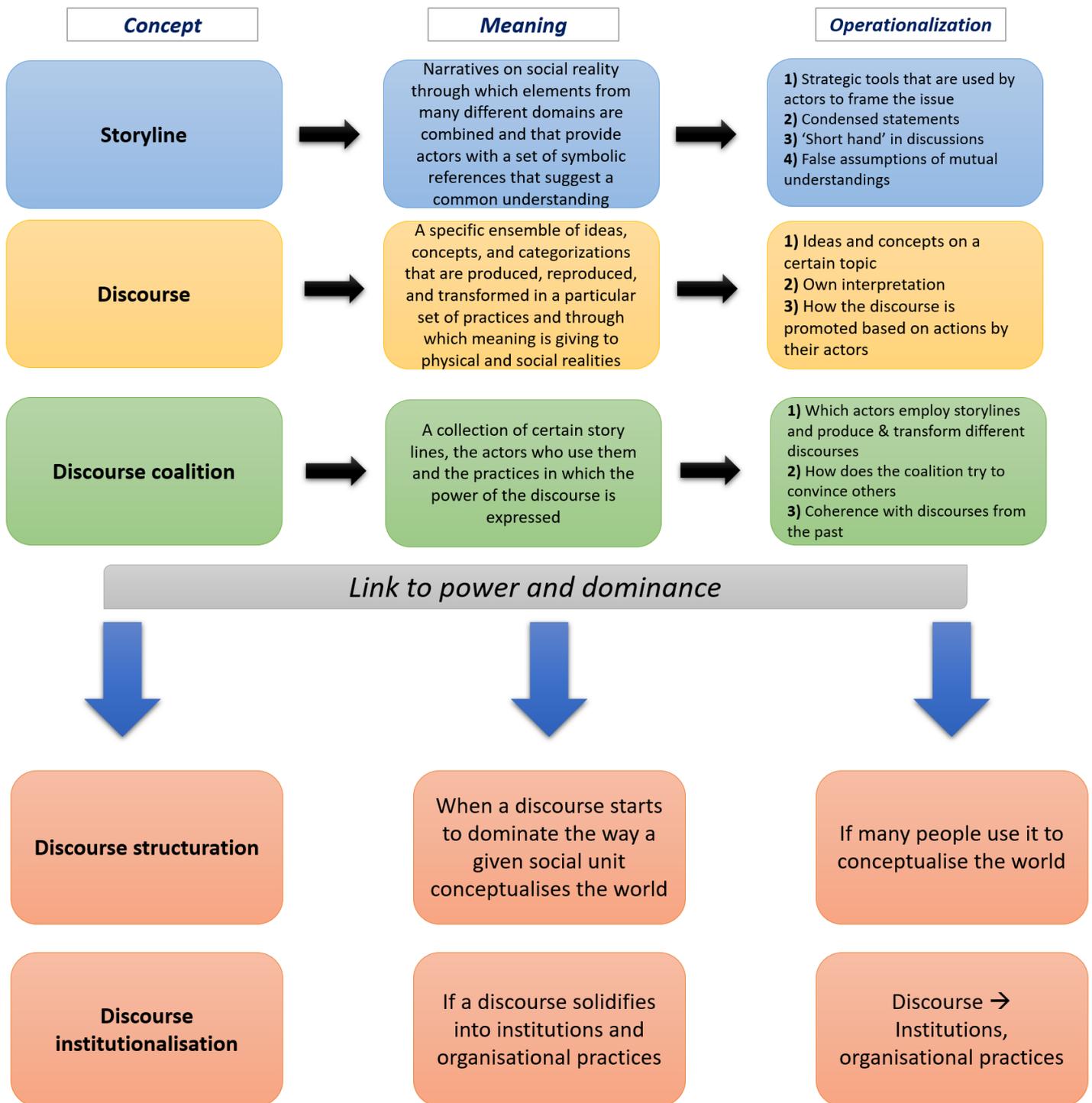
Finally, every discourse analysis deals with the argumentative classification of speech and texts. This can be useful to determine how an argument is put forward in a certain text or speech. A discourse analysis attempts to find out how this argumentation ensures that it is a successful discourse and how it compares to other discourses (Potter & Wetherell, 2003).

Doing a discourse analysis has a qualitative character. Qualitative research has become the definition of a research approach in which figures do not dominate. Qualitative research has a more descriptive nature and focuses on interpretations, experiences and meaning. The qualitative research style is usually interpretative. Qualitative research is challenging, because delving deeper into the nature of a phenomenon provides knowledge about the perspectives from which one can approach the world, about the coherence of various aspects and the field in which they occur (Bryman, 2012).

### Operationalization of variables

How do you find out about the various discourse coalitions? As mentioned earlier a discourse is a way of speaking and a set of concepts, of ideas. A discourse is formed in practice and the discourse acquires meaning in practice. A discourse coalition is a group of actors that through a combination of positioning and practices develops, structures and maintains their shared interpretation of reality, in this case high-rise building. This chapter discusses the relevance of storylines and the impact that these storylines can have on creating meaning. Based on a discourse analysis, storylines can be explained and the relationships between stakeholders can be analysed. There are many different interpretations of reality. More importance is attached to one discourse than the other. Discourse is therefore an important means of power in processes of social or organizational change, because it can influence a society and encourage change. Power must be seen as an opportunity to influence. By influencing the discourse, stakeholders can also influence decision making.

Operationalizing means that these abstract concepts are made measurable by non-abstract and observable phenomena, namely indicators that represent the abstract concept, so that the abstract concept can be used as a measurable variable in this study. This operationalization is based on the way Hajer(2006) describes those concepts. This is shown on the next page in a visual presentation.



**Figure 3: Operationalization, source: Floris van den IJssel (2019)**

## Data collection

As mentioned before, the analysis will be based on policy documents, news articles and semi-structured interviews. With the semi-structured interviews, I tried to get more insights in the way the respondents currently look at high-rise building, in which I had a list of questions beforehand, but was able to ask follow-up questions where necessary. This way of interviewing fits well within the field of qualitative research, because a more complete and complex understanding will be achieved because of the possibility to ask additional questions. This study was exploratory and interpretative in nature. Since this research has an exploratory character, is necessary to understand the attitude and opinions of the participants as well. To achieve this, doing interviews can be useful (Sanders, Lewis, & Thornhill, 2015).

Since I am also interested in the implementation of the high-rise policy in this research, I conducted expert interviews besides analysing the policy documents. An expert interview focuses less on the experience of the respondent himself, but focuses more on the specific knowledge and expertise that this person brings (Meuser & Nagel, 2009). Experts are generally better informed and more motivated to cooperate. This ensures that expert interviews can be used effectively to collect high-quality data (Dorussen, Lenz, & Blavoukos, 2005). But what makes an expert an expert? According to Meuser & Nagel (2009), an expert is a person who is responsible for the development, implementation or monitoring of solutions, strategies or policies. In addition, it must be someone who has privileged access to information about groups, individuals, or decision-making processes within a particular authority. When more in-depth knowledge is needed about a specific phenomenon, in this case the role of high-rise buildings, expert interviews can be useful.

Besides the discourses gathered throughout the interviews, I will use policy documents as well. Although documentation is not always accurate and can sometimes contain prejudices, it can still be valuable information (Yin, 2009). Policy documents can serve to support data collected from other sources, or can serve as inspiration for interview questions, for example. It is important to understand where the document comes from, whether it can be understood and whether it is representative enough to be included in your data collection (Bryman, 2012). In this thesis this method is used to look at the role of high-rise buildings in the future plans of the city. For this, use is made of research reports from the municipality but also of possible documents from developers or housing associations.

## Data analysis

I have chosen to use the *argumentative discourse analyses(ADA)* model by Maarten Hajer in order to analyse my data. In this model adopted by Hajer it goes beyond investigating the grammatical relations of a text (Hajer, *Doing Discourse Analysis: Coalitions, Practices, Meaning*, 2006). As mentioned before, doing a *discourse analyses* is more about the understanding of *the attitudinal and social interactions underlying the composition of a certain discourse and as a means of social change* (Al Ghazali, 2007). In this type of discourse analyses Hajer argues that you will try to understand the battle of discourses and coalitions for a hegemony position.

To analyse media coverage, policy documents and stakeholder interviews, this study uses the roadmap of doing a discourse analysis as created by Hajer(2006) as a guideline. The emphasis is on storylines and discourse coalitions, which are further elaborated below.

Steps of Doing a Argumentative Discourse Analysis	Description	Apply to research
1) Desk Research	General investigation into documents and news articles	Reading high-rise building related news articles, watching debates and creating an overview of the situation in the Kolenkitbuurt and the Bijlmer.
2) Interviews	Interviews with different actors to give an overview of the field from different positions	Conducting interviews with people working at the municipality of Amsterdam, housing corporations, developers etc.
3) Document Analysis	First step to defining different discourses by analysing documents	Combing through the policy documents of the developers, housing corporations, and the municipality (Structuurvisie, Vernieuwingsplannen).
4) Sites of argumentation	The data search to account the argumentative exchange	Where does the high-rise debate takes place?
5) Analyse for positioning effects	Trying to understand the interplay that actors can be 'caught up in', for example by	Looking at the discourse structuration and the discourse institutionalisation in the area of the role of high-rise buildings in the

	trying to force others in a certain discourse	retrofitting of post-war urban areas.
6) Identification of key incidents	Identification of key incidents	Probably unlikely that similar incidents have occurred. This section can, however, look at the possible conflicting interests regarding the role of high-rise buildings, and what influence that has on the policy pursued.
7) Analysis of practices in particular cases of argumentation	Looking back into the data to see if it can be related to the practices	How can the previously found discourses be found in the built environment in the Bijlmer and the Kolenkitbuurt?
8) Interpretation	Account of the discursive structures within a given discussion	Dealing with the fact that doing a discourse analysis has a qualitative character, which means interpretation of the data need to be taken into account. After that a final explanation of the different discourses will be presented.
9) Sending the analysis to the respondents	The analyst divides the discourses by their own reality. The respondents needs to be confronted with the results, in order to control if the interpretation is correct.	Sending the analysis to the different respondents, to see whether if there are no miscommunications.

**Figure 3: Table based on model by Maarten Hajer(2006), source: Floris van den IJssel (2019)**

In this research I chose to study policy documents, news articles and conduct semi-structured interviews. The research involves a group of respondents who represent a variety of organizations and interests. This diversity was important for constructing the discourses. By involving a variety of actors in the research, a broad spectrum of factual information and expertise has been collected. Due to time limitations I was not able to exactly follow the 10 *argumentative discourse analyses* steps by Maarten Hajer. I combined the original *helicopter interviews* and the interviews with *key players*. The last step that Hajer(2006) suggests is a second visit to key actors, but due to the holiday season, the respondents did not have that much time, so in order to check if my interpretation was correct, I did send them my analysis when it was finished.

## Interview analysis framework

Interviews were conducted with various respondents for this study. Experts from different professions have been chosen to obtain a clear view of possible conflicting interests and visions. These respondents are listed anonymously, except for Sjoerd Soeters. Permission has been requested for this, since his role seems essential. The next chapter will show why. For this research I have conducted a number of interviews. These respondents are listed below.

<b>Respondent</b>	<b>Description</b>	<b>Date</b>
<b>1) Respondent X</b>	Assistant Project Manager at the Municipality of Amsterdam, involved with the retrofitting of the Kolenkitbuurt	03-07-2019
<b>2) Sjoerd Soeters</b>	Well-known dutch architect and urban planner. A few years after his graduation, in 1979, he started his own architect firm with his wife Merle Soeters-Steffels. When Jos van Eldonk joined the partnership in 1997, the name changed to Soeters Van Eldonk architects. Soeters continued on his own in 2016 and created PPHP. As an architect, he built the Helicon building in The Hague and Circus Zandvoort, among others. As an urban planner, he created a lot, for example: the Java Eiland in Amsterdam and the gestapelde Zaanse huisjes in Zaandam, and he was involved in the redesign of the Kolenkit in collaboration with Eigen Haard.	18-07-2019
<b>3) Respondent Y</b>	Independent architect and lecturer in urban design at the Hogeschool van Amsterdam, who has been living in the Bijlmer for a long time, and is also the director of the Bijlmermuseum	16-07-2019
<b>4) Respondent U</b>	Hoofdbouw bureau De Nijs. Responsible for the preliminary process up to and including contracting with the customer. De Nijs makes the the plans, the construction site installations, and is on behalf of the construction company for the input of technology and manufacturability at the customer.	08-07-2019
<b>5) Respondent V</b>	Works as a developer at housing corporation Eigen Haard, involved in this retrofitting process of the Kolenkit neighborhood since 2004	04-07-2019

<b>6) Respondent W</b>	Working as a senior consultant for Antea Group, an internationally operating engineering and consultancy firm. Also involved in the redesign of the Kolenkit, through a collaboration with Eigen Haard.	10-07-2019
<b>7) Respondent Z</b>	Directing function Acquisition and Transformation at Wonam, a housing construction organization that wants to create affordable rental properties for the young middle income households. Much of their work is based near the Bijlmer	16-07-2019
<b>8) Respondent H</b>	Urban designer working for the Municipality of Amsterdam, specialised in high-rise. Working on the renewal of the Hoogbouwvisie, part of the <i>structuurvisie</i>	05-08-2019

Figure 4: Table with interview respondents, source: Floris van den IJssel 2019

As mentioned before, the interviews have a semi-structured character. The structure can be found in the topics that emerged in each interview. Based on these topics, I will compare the interviews and then see which possible discourses and storylines emerges. This topic analysis is visualized in the table below.

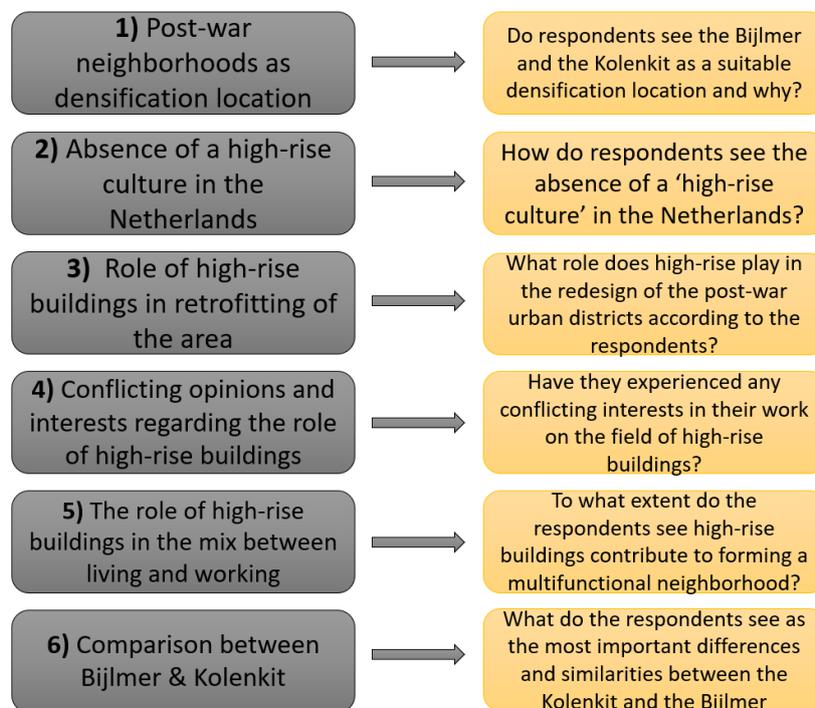


Figure 6: Topic list, source: Floris van den IJssel (2019)

The last topic, the comparison between the Bijlmer& the Kolenkitbuurt will be discussed in the final *comparison* chapter.

## Desk research analysis framework

In addition to the interviews, I have also tried to get many discourses throughout the media. Different newspaper articles were examined with Nexis Uni. Nexis Uni is an online newspaper bank for educational institutions with reliable, mainly Dutch, news sources. This can be useful, for example, to find out when a topic first appeared in the news or what the development of a particular topic, in this case high-rise in post-war city districts, looks like. News articles and columns are often used as an important source in a discourse analysis because they reach a large audience and can therefore have a lot of influence (Bednarek, 2006). An important reason why news items can be important in a discourse analysis is because of their perceived objectivity, because news is never objective. A news item is a representation and that representation is influenced by dominant groups in society. This dominant groups can help me find possible dominant *discourses* (McNair, 2006).

Newspapers are published by profit-making companies, so they rarely take a pronounced position that is very different from public opinion, which do not mean that journalists and editors do not have an opinion, but journalists do guide interpretation by the way they frame an event. This is done primarily by determining which events are newsworthy. Then they choose a certain angle, or storyline. The journalists choose who they want to speak, and that influences in this way the perspective and therefore the content of the message (Philo, 2007).

Articles from newspapers are used you get an overall view on how the role of high-rise is being perceived in the densification debate. The articles that were used for this general view are listed in *Appendix I*. After the analysis of my interviews, this desk research is used to discover a confirmation or falsification of certain discourses.

In Nexis Uni the following search terms were used to find relevant documents:

“Hoogbouw”- “Naoorlogse stadswijk(en)” – “Verdichting” – “Compacte stad”

*(High-rise building, post-war city districts, densification, compact city)*

Professional journals and policy documents have also been used in my analysis. By doing the first part of the Hajer(2006) step-by-step plan, I examined who were the main stakeholders regarding this high-rise building in post-war urban areas. First of all, ofcourse, the municipality turned out to be important, so policy documents such as the *structuurvisie* and *vernieuwingsplannen* were used.

For the Kolenkit this study also made use of the policy document of the Eigen Haard housing association, due to the dominant position they have in this neighbourhood. This will become clear in the next chapter.

These articles are mostly written in Dutch. The interviews were also conducted in Dutch. To keep reliability high, I have tried to translate this as literally as possible. The sources are of course also mentioned, and the interviews are transcribed to guarantee this reliability

## Empirical Research

### The view on the role of high-rise buildings in densification in general

Before I dive deeper into the specific cases and topics, I did *desk research* to get a picture of the different storylines about the role of high-rise buildings in densification in general. I did this desk research based on newspaper articles/columns and policy documents. As mentioned in the *Methods* section, I used Nexis Uni, in which the following search terms were used to find relevant documents: “Hoogbouw” - “Naoorlogse stadswijk(en)” – “Verdichting (Bijlmer/ Kolenkit)” – “Compacte stad”

(*High-rise building, post-war city districts, densification, compact city*). Various discourses and storylines seem to exist about this role, which will not only emerge from the interviews, but to which newspaper articles may also contribute.

Some columns and articles have literally addressed this role of high-rise building in densification. This is of course a very specific topic so there are not that many articles about this. I have arranged the articles / columns written about it in the table below in: Positive - Moderately positive – Negative

The articles, and their point of view, are attached as an appendix to this study.

Point of view Role of high-rise buildings in densification	Amount of articles/columns
Positive	8
Moderately positive	9
Negative	16
	Total: 33

**Figure 7: Point of view- Role of high-rise in densification, gathered through columns and newspaper articles, source: Floris van den IJssel (2019)**

This articles arranged above do not discuss whether they appreciate high-rise or not, or if they think densification is necessary, but if they see high-rise contributing to densification. As can be seen in the figure above, the opinions about the role of high-rise buildings are reasonably equal to positive (moderate) and negative. It seems that two different *storylines* can be distinguished from these articles.

### 1) 'High-rise is not necessary for densification'

First there are the people who do not believe in high-rise as a contribution factor to densification. It should be mentioned, however, that in five of the articles where there is a negative point of view towards the role of high-rise in densification, architect Sjoerd Soeters was included. All the articles with a negative point of view, shared the same storyline. They believed that high-rise buildings are usually promoted with the argument that you can then increase the density in a city, but according to them that is not the case at all. According to them, density is determined by the structure of the number of apartments in square meters and the number of parking spaces that are more or less part of it. The problem with high-rise buildings is that they need a lot of space around them, if only to prevent them from having too much shade on the surrounding buildings. In this storylines, high-rise buildings are by no means the solution for low and medium incomes. It is much more expensive and less efficient than six or seven storeys. This storyline states that there is a tendency that developers that want to build in inner city areas end up with high-rise buildings too quickly. They argue that most people in the Netherlands just want a home with a small garden, especially the starters and middle income with children. For that target group there is precisely housing scarcity and you cannot solve that scarcity with high-rise buildings. That construction is too expensive and not possible at all. And in this storyline, this high-rise trend is also not necessary at all to achieve densification.

### 2) 'High-rise fits in with the new housing requirements and contributes to densification'

The other articles and columns that conclude positively or moderately positively that high-rise buildings do play an important role in the densification. This storyline, for example, claims that "low-rise tradition is too deep in our culture, and that high-rise does not have to be" inhuman. " It should not be about stacking people on cheap land, but efficiently accommodating a strong demand for urban living and working environments. They argue that neighborhoods with medium-sized buildings also has major shortcomings. Not much public green and there is hardly any room to play or to accommodate facilities. With the scarce Amsterdam land and the associated high land prices, high-rise buildings are definitely necessary for densification in this storyline. For example, an article from the high-rise foundation even states that all experts agree that high-rise can play an important role in solving the high demand for housing. This storyline seems to be in line with the chairman of Bouwend Nederland, Maxime Verhagen, who wants the strict high-rise buildings rules to be released in Amsterdam in order to continue to create more affordable homes in the middle segment.

*(The articles on which this separation is based can be found in Appendix I)*

## Case 1) Kolenkitbuurt

As mentioned in the methods section before, I have divided the interviews and the other sources into six different topics, which are based on the findings of the first step *Desk Research* from the step-by-step plan (Hajer, *Doing Discourse Analysis: Coalitions, Practices, Meaning*, 2006). In the transcript of the interviews I have arranged the respondents' answers under these different topics. The similarities or contradictions will become clear in this chapter, and the purpose of the *results* chapter is comparing the respondents' different responses to the topics is, and finding out the different storylines and the associated discourses and discourse coalitions.

### Topic 1- Post-war neighborhoods as densification location

In the interviews I asked the respondents if they see the Bijlmer and the Kolenkit as a suitable densification location and why. There seems to be an agreement between the various respondents on this topic. They all agree that it is an area with a lot of light, air, greenery and a relatively low building density (Respondent W, X, U, V, 2019). And given the fact that the city is struggling with a housing shortage, they see that many people want to live in the city. So there is a task to build thousands of homes within the city boundaries without affecting the green areas outside the city. They seem to agree that this area is well enclosed, close to many public transport points, and also the connection with the A10 (highway) is mentioned by several respondents. This is also underlined by Respondent X (2019) from the municipality of Amsterdam, easily accessible for both public transport and car, and also offers space for densification as well as light, air and space in and around the neighborhood. They seem to agree that what was stated there is outdated, the houses were much too small and it no longer meets modern living requirements (Respondent W, 2019). Due to the good location just outside the ring, all respondents see it as a logical place for transformation. In addition, it is also a good location for densification and retrofitting to solve existing problems. Respondent H, for example, claims that the supply of facilities in this district is declining because the density is too low. The densification tasks in this neighborhood are not only due to the opportunities that it can bring, but also to the solution of the problems that arose in the neighborhood. This means they all see the Kolenkit as a suitable area to create more homes than there used to be. Given this equal storylines, they seem to share the same discourse on this area.

## Topic 2 Absence of high-rise culture in the Netherlands

Also in this area the storylines seem to correspond strongly among the different respondents. It is emphasized that the development of the Kolenkitbuurt is part of the General Expansion Plan (AUP) of Cornelis van Eesteren in which light, air and space are central (Vernieuwingsplan, 2003)(Respondent X). This is not only created by high-rise buildings, because it was not originally based on Dutch culture and ideas. Maintaining the human dimension has been the policy for years and is mentioned by several respondents as leading in the field of high-rise development. They do notice that this culture is slowly changing(Respondent W&V) . Certainly in Amsterdam-Noord and the office area next to the Bijlmer, a changing culture is perceived by the respondents, whereby an increasing amount of new projects seem to consist of high-rise buildings.

What they experience is that Amsterdam is not used to high-rise buildings. Because Amsterdam is built with 5/6 floors and that is considered acceptable, and if you go to the city outskirts, 8/9/10 layers are still tolerated(Respondent U, W). In the high-rise history of Amsterdam, you can see only few numbers of places that were used as locations where high-rise building was acceptable . For example the Bijlmerbajes, the Rembrandt tower, Sloterdijk and the Zuidas. In these places, the original low-rise culture was released and high-rise became sooner accepted. The Pontsteiger and the Sluisbuurt are locations where in the future . There are also many places where this culture is not let loose yet, such as IJburg for example, while according to a number of respondents areas like this are suitable places for high-rise(Respondent U).

### Topic 3- Role of high-rise building in the retrofitting of this area

When you look at the role of high-rise buildings in the Kolenkit, the interviews show that an interesting fact in this Kolenkitbuurt is the dominant position of the Eigen Haard housing association. This position of Eigen Haard at the top as a major investor, animator and director of the area is mentioned by several respondents (V&W), and has a major influence on the role of high-rise buildings (Interview Soeters, 2019). And that it is very special, since this can no longer be the case again, because of the fact that a housing corporation may never do a restructuring like this on its own again in the future with the new housing law. But besides the powerful position of Eigen Haard, the municipality has of course a lot to say about the role of high-rise buildings in the retrofitting of this area. Respondent X argues that the retrofitting of the Kolenkitbuurt has both high-rise and low-rise buildings. The Kolenkit is also inhabited by families with children who prefer homes with their garden and a relatively quiet environment. There is thus both high-rise and low-rise to be found, as well as green areas and playground areas for children. High-rise buildings will only be developed in places where necessary (Respondent X). This is also mentioned by Respondent H, that you can place some high-rise buildings scattered in the Kolenkit, but this certainly cannot become a high-rise cluster in this neighborhood.

This powerful position of Eigen Haard is related to the role of architect Sjoerd Soeters, who prefers to see the role of high-rise buildings as low as possible, as he believes there is no need to develop high-rise buildings in order to create density. In my interview with him it emerged that, according to him, people think too much in terms of units when they want to create high-rise buildings. And if you think in terms of units, the number of apartments will be reached faster. Then it is easy, and you don't have to think long. He describes this as a sad trend. He was therefore approached by Eigen Haard to think about the Kolenkit. Eigen Haard actually had the feeling that they did not just want to make apartment buildings, but that wanted to create buildings that you are suitable for families. The proverbial police officer, nurse and school teacher. They had the idea of replacing those tall, plate-like buildings with those huge gaps between them with smaller buildings without that gap. With smaller streets. During the retrofitting of the Kolenkitbuurt, he tried to design buildings that were no higher than 12 meters. However, relatively new high-rise buildings are existing in the Kolenkit, for example the New Kit, commissioned by Eigen Haard. However, it is immediately made clear in the interviews that this idea did not arise during the collaboration with Sjoerd Soeters, but was made earlier. Respondent V mentioned that Soeters was only involved after the high-rise that has been made, and he is not responsible for that kind of development. That high-rise idea came from another team, namely the Urhahn renewal plan, with Annelies Geersen, who was the supervisor there. They have realized the high-rise on that site. Sjoerd Soeters cited the New Kit building as 'nonsense', and

emphasizes that he was not responsible for it. Respondents seem to be fairly aligned on this topic. However, there are also respondents who would like to see more high-rise buildings in this retrofitting, but fail to do so due to regulations of the municipality. They argue that Amsterdam do allow them to go up, but then they anxiously stick to the parking norm(Respondent U).

For this next two particular subtopics, policy documents and articles have been used as a form of *desk research* to get a broader view on the development of high-rise in this neighbourhood throughout the years.

### *Historical role of high-rise in the Kolenkit*

The houses of the Kolenkit were originally built on the outskirts of the city and were a model of modern building style. The district is part of the Westelijke Tuinsteden, and these formed the link between city and the countryside (Vernieuwingsplan, 2003). The ideal of the green, open city with "light, air and space" was the central thought. The Kolenkitbuurt was therefore built in the early 1950s with pre-war building methods. Those pre-war building methods caused bad housing qualities and conditions, and the storerooms on the ground floor that the designers intended to give all residents "light, air and space", resulted in an unsafe and not lively street scene (Uitwerkingsplan, 2011). Despite the fact that it was part of the *modern style*, the building heights were not as high as in the Bijlmer, which we be discussed in the next part. This neighbourhood often came up negative in the newspapers, and a few years ago even voted the worst city district of the Netherlands. A transformation of the area and the buildings has therefore been opted for. There were plans to demolish many blocks of houses in the Kolenkitbuurt, but the 2008 crisis prevented this from happening. Part of the buildings has remained standing. So the role of high-rise remained limited (Uitwerkingsplan, 2011).

### *Current situation Kolenkitbuurt*

A specific purpose of the municipality is to create more contact with the street. The new Kolenkitbuurt should not remain a 'boring', one-sided residential area according to the *Vernieuwingsplan*(2003) of the Amsterdam municipality. Small-scale activities, working at home and facilities are essential for the vitality of the neighbourhood. This is of course in line with the *compact city ideology* mentioned earlier in the theoretical framework.

The structure of the neighbourhood and the building typology remains intact. The physical restructuring of the neighbourhood is set in motion with spatial renewal. According to the municipality of Amsterdam, the current main structure of the Kolenkitbuurt has sufficient quality to function as a sustainable and flexible framework. Hereby the urban cohesion of the neighbourhood is guaranteed and there is no structural mismatch between existing and new. This in contrast to the Bijlmer, but this will be discussed later on in this chapter. The Municipality of Amsterdam's

*Vernieuwingsplan* emphasizes that the Kolenkitbuurt must become more 'beautiful', more sustainable and more mixed, while creating an attractive, diverse Amsterdam neighbourhood for the future (*Vernieuwingsplan*, 2003). The Kolenkitbuurt will be transformed into a neighbourhood where residents can get opportunities and are willing to take it. A lot has to change for that, in the social, economic and architectural fields. This research focuses primarily on the latter aspect. It had to be made possible for the population that improvements in the income situation result in improvements in the living situation in the neighbourhood. Previously, it was still the case that residents would move out of the neighbourhood and be replaced by people who came living in the Kolenkit by the lack of better options. With the implementation of the renovation, the intention is precisely to retain the residents for the neighbourhood (*Uitwerkingsplan*, 2011). The objective was also to create a more varied population structure from the municipality, with the construction of a wide variety of houses. This means that in 2003 it was stated that about half of the current homes had to be replaced by new ones. The need for densification is taken into account, but on the other hand they also see that the Kolenkit is populated by families with children who have different housing requirements than high-rise buildings entail. This has resulted in a merger that is described by the municipality as a "lively garden city" (*Vernieuwingsplan* 2003). The density increase should increase by more than 70%, without losing the current neighbourhood structure, so no substantial increase of high-rise buildings. As described above, the densification that takes place in the Kolenkit is large. The floor space for living increases from 200,000 m<sup>2</sup> to 340,000 m<sup>2</sup>. This is mainly because small homes are being replaced by larger ones. This will be at the expense of the number of m<sup>2</sup> of public area. Because the open space ratio decreases, and the floor space index and the ground space index increase, you speak of urbanization, on the basis of compact, medium parcelling. For that reason, the municipality has set the building height at 3 to 4 storeys.

*"High-rise buildings will only be realised at places where they are needed, for example to combat noise pollution, or when there is a specific urban development reason for it. But even then, the building height is used with caution, because respect for the human dimension (menselijke maat) is a basic condition for the renovation of a vulnerable area such as the Kolenkitbuurt."* - Municipality of Amsterdam; *Vernieuwingsplan*, 2003, p34.

This is also stated in the *Bestemmingsplan Kolenkit*, that in general, the Kolenkitbuurt has buildings with five floors with a maximum building height of approximately 15 meters. This situation is the starting point (as a rule for new construction) for the zoning plan. Existing exceptions (higher construction height) are determined in accordance with the existing and licensed height (*Bestemmingsplan K.* , 2012).

Due to the municipality's aim for a *lively garden city*, without changing the neighbourhood structure too much, the role of high-rise buildings will remain limited.

In addition to the municipality, Eigen Haard also has an important role in retrofitting of this Kolenkit area. That is why the policy document *Uitwerkingsplan* of Eigen Haard is being used to see how they see the role of high-rise in the densification of this district.

The *Uitwerkingsplan* focuses on creating an urban environment in a quiet green place. This term not only applies to the location of the neighborhood, but also to the contrasts within the neighborhood. The combination of a pleasant and peaceful living environment and the proximity of a busy and lively city life is important here for Eigen Haard (*Uitwerkingsplan*, 2011). Little attention is given to high-rise buildings themselves, but the document emphasized that the human dimension is important and this is achieved mainly through low and medium-rise buildings.

#### Topic 4- Conflicting opinions and interests regarding the role of high-rise buildings

There appear to be a number of conflicting interests in the Kolenkit regarding the role of high-rise buildings. For example the residents of the Kolenkit are involved as much as possible in the plans for the redevelopment of the Kolenkitbuurt. The last part in the northern part of the Kolenkitbuurt that is still being developed, contains high-rise buildings about which a number of residents living nearby have complained (Respondent X). However, this is a plan that follows from the *Uitwerkingsplan* of the municipality that was already established in 2004. In this way the discourse was already institutionalized and the municipality has a dominant position to implement this discourse (Respondent X).

It also appears that the municipality, later than the renewal plan was announced, to let the Kolenkit go along with the high-rise trend that was existing along the A10 highway. The municipality of Amsterdam primarily had to densify that area, and according to them high-rise was the best solution. This high-rise plan did not really took place, because Eigen Haard did not adjust their plan for the area of the Kolenkit. Eigen Haard was sticking to the low-rise idea, and argued to densified enough with low-and medium rise buildings. However, the realization of the high-rise itself encountered few conflicting interests, since according to the respondents high-rise was not controversial and was therefore easily accepted (Respondent V).

## Topic 5- The role of high-rise buildings in the mix between living and working

All respondents commented on the role of high-rise buildings in the pursuit of a multifunctional neighbourhood. In particular, the role of plinths was highlighted. The plinth is the first floor of a tower, which in general, partly due to architectural reasons, often cannot be used for residential functions. For example, according to a number of respondents, this was often used for storage and functions of that kind. However, this does not ensure a lively neighbourhood. When stores or restaurants are established, this will contribute to a vibrant multi-functional neighbourhood. Respondent H, on the other hand, really does not seem to believe in this plinth function of high-rise buildings, and states that there are plenty of Amsterdam examples where a multifunctional neighborhood exists without high-rise buildings. Respondent U can see the contribution that high-rise buildings can make through plinths, but the question is whether that multifunctional neighbourhood will actually work as planned. According to him, you see in many places those who live in that flat do not work in that area. You see that people who live there move out of the area for work, and many people from outside the city go to those commercial activities to work. Despite that, the respondents seem to agree that high-rise buildings can contribute to the quality of life by giving functions to the plinth (Respondents U, V, W).

## Results

Which discourses can be recognized in the different storylines discussed in the interviews? And did the *desk research* shown how these discourses and storylines have changed over the years? The operationalization in the *methods section* showed how a discourse can be recognized. These are own ideas and interpretations of a certain concept, and how these are promoted. Next, there will be looked at the extent to which certain groups joined these discourses and, therefore, form certain discourse coalitions, taking into account equal convictions and the relationship with discourses from the past. Only then can we look at possible *discourse structuration* and *discourse institutionalization* to see if there is a discourse hegemony (dominant discourse).

So the *desk research* at the beginning showed that there are actually two major discourses when looking at the role of high-rise in densification. The first in which high-rise is seen as necessary in the densification debate, and in addition the discourse in which it is believed that high-rise is not needed at all, and often turns out to be inefficient.

The last one mentioned seems to be the dominant discourse in the Kolenkit, given the fact many people seem to share this storyline (*discourse structuration*), and can be seen in the institutions and the built environment (*discourse institutionalization*). The different storylines from the interviews revealed that the policy is actually focused entirely on low and medium rise buildings. So when you look at the role of high-rise buildings in the Kolenkit and the different visions that the stakeholders entail, one clearly dominant discourse coalition emerges. That is, after all, the discourse that believes that densification can also be achieved on the basis of low and mid-rise, and high-rise is not necessary for this.

This criticism on high-rise buildings and the emphasis on the importance of local architecture can be found at the *critical regionalism* discourse. Within this thinking, the solutions to the problems that the increasingly globalizing and urbanizing world entails are sought in low and medium-rised construction. According to the critical regionalism, high-rise buildings cause a loss of the local identity. This discourse examines the specific problems of a certain place, the local cultural identity and the architectural appearance (Zahiri, Dezhdar, & Foroutan, 2016). Critical regionalism is described by Kenneth Frampton as an "architecture of resistance". The built environment must reflect the culture and tradition of its region through its design and materials (Zahiri, Dezhdar, & Foroutan, 2016). This is therefore a discourse that is at odds with for example the aforementioned ideas of Le Corbusier. His ideas are more in line with the International Style. In addition to this international style and critical regionalism, there was also a post-modern movement to be found in the built environment in which the architectural aspects of different eras and styles were used.

How is this discourse coalition so clearly reflected in the policy, but also in the interviews? This seems to be partly due to the fact that Eigen Haard and the municipality appear to be in an important dominant position with regard to the retrofitting of this neighborhood. This special dominant position was emphasized by Respondents V & W.

*“And Eigen Haard at the top as a major investor, animator and director of the area. And that is very special, since this can no longer be copied. Because a housing corporation may never do a restructuring like this on its own again in the future with the new housing law. Now we can still recreate the public space and build owner-occupied homes, and that is no longer allowed in the new situation, because we must develop into partnerships in the future. And there must be another land exploitation, which normally belongs to the municipality, in this case the largest part comes from Eigen Haard.”- (Respondent V, 2019)*

*“It was special that Eigen Haard was also responsible for the public space, which is normally developed by the municipality, what they passed on to us. We have been commissioned via Eigen Haard. And the municipality then pays an amount to Eigen Haard, and they are in the lead to actually implement that.”- (Respondent W, 2019)*

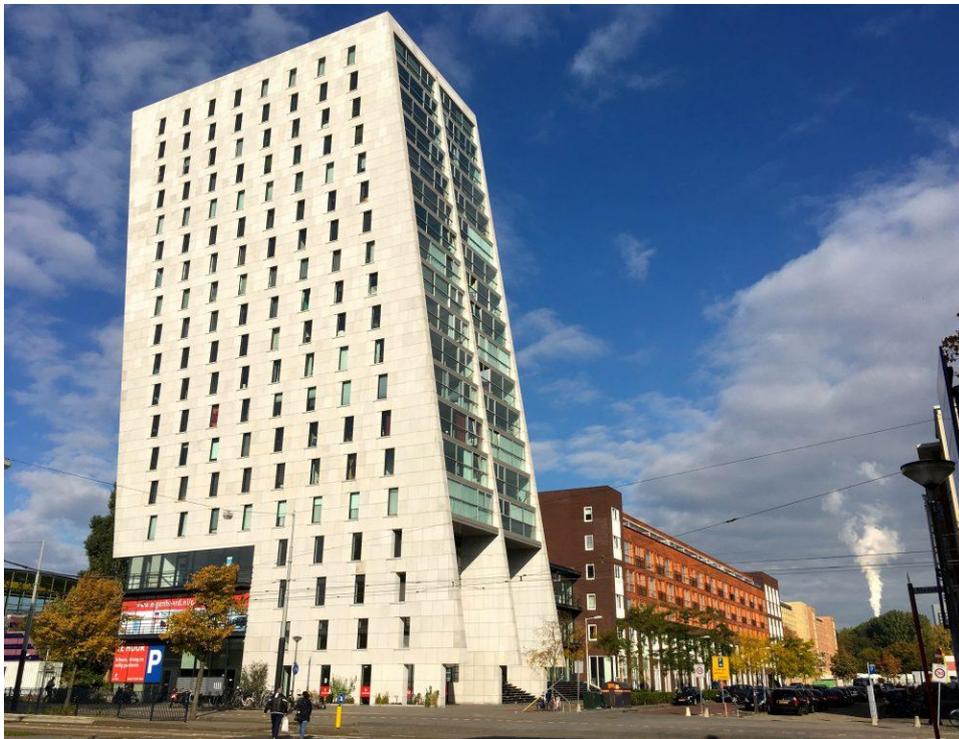
This allows the municipality by creating regulations about high-rise (*discourse institutionalization*) and Eigen Haard by choosing an architect to design the redesign of the neighborhood so that they can implement their own discourse. Because the municipality and the housing corporation are aligned on this. And also Sjoerd Soeters, the architect who started working as a partner with Eigen Haard. These three together form a discourse coalition because they carry the same ideas and also transfer them to the outside world. This coalition can be deduced from the 3 quotes below.

*“Kolenkit developed with a specific strategy to make it accessible to families. Child facilities, and a public space. More the Jane Jacobs philosophy. All our projects that are all now being implemented over there are created throughout that philosophy. But of course that was used by Sjoerd Soeters and incorporated into the uitwerkingsplan.”- (Respondent V, 2019)*

*“We were asked by Eigen Haard to think about the Kolenkit. Eigen Haard actually had the feeling that she did not just want to make apartment buildings, but that she also wanted to make buildings that you can say are suitable for families there. The proverbial police officer, nurse and school teacher. They had the idea of replacing those tall, plate-like buildings with those huge gaps between them with smaller buildings without that gap. With a small street.” (Interview with Sjoerd Soeters, 2019)*

*“The retrofitting of the Kolenkitbuurt has both high-rise and low-rise buildings. The Kolenkit is also inhabited by families with children who prefer homes with their garden and a relatively quiet environment. As already mentioned in the Verniewingsplan, high-rise buildings will only be developed in places where necessary.” – (Respondent X, 2019)*

This shows that they seem to share the same vision regarding the role of high-rise buildings in the densification of the Kolenkit and because this *equal convictions* they join the same *discourse coalition* in this field. Interesting is the arrival of the cooperation with Sjoerd Soeters and Eigen Haard. The start of this collaboration could be indicated as a key incident in the Hajer(2006) step-by-step plan. In the years before, the housing corporation did realized high-rise in this neighborhood, namely *The New Kit*. Which is shown in the picture below.



**Figure 8: Picture of The New Kit (high-rise), commissioned by Eigen Haard- de Westkrant (2016)**

So as the *desk research* and the interviews showed is that Sjoerd Soeters is well known for the fact he does not seem to advocate high-rise building in densification, in order to combat the housing shortage. The Respondent of Eigen Haard (Respondent V) also emphasizes that Sjoerd Soeters was not responsible for buildings such buildings as the New Kit, and that a new direction was chosen. He stated that *Soeters was only involved after the high-rise that has been made*, to state he is not responsible for that. That high-rise idea came from another team, namely the Urhahn renewal plan, with Annelies Geersen, who was the supervisor there. They have realized the high-rise on that site.

It is interesting to see how a discourse of an architect can have an impact on the built environment. In the interview with Sjoerd Soeters he said the following about the New Kit tower and the role of high-rise buildings in the Kolenkit.

*“The New Kit, that crooked building? No, I think that is nonsense. But it was already there. We have tried to make buildings that are no higher than 12 meters purely perpendicular to the forest and tree-lined road. Those who park at the rear have under their deck, which also has the terrace on top, and make streets 12 meters wide, where cars actually do not enter, so that children can play.”-*

Interview with Sjoerd Soeters, 2019

This shows that a building like the New Kit would probably have never been realised if Sjoerd Soeters was working with Eigen Haard at that time. This was not only the discourse from Sjoerd Soeters, Eigen Haard also wanted to take a different path, a change of discourse and asked Sjoerd Soeters for help.

Sjoerd Soeters was asked by Eigen Haard to think about the Kolenkit. Eigen Haard actually had the feeling that she did not just want to make apartment buildings, but that she also wanted to make buildings that you can say are suitable for families there. The proverbial police officer, nurse and school teacher. They had the idea of replacing those tall, plate-like buildings with those huge gaps between them with smaller buildings without that gap. With a small street.

Partly due to the dominant position of Eigen Haard and the Municipality of Amsterdam that shares this vision, and few different storylines about the role of high-rise in in this neighborhood occur from the research both the *discourse structuration* and the *discourse institutionalization* seem to be present. Despite the fact that there seem to be conflicting interests about the role of high-rise buildings. This is evident from the interviews about the role of participation. This is confirmed by the interviews with the respondents from the municipality and the housing corporation.

*“In this case, a participation is not that people have a say, but is contacting the residents, in which everything is presented. And ultimately agree with the municipality, where it is important that you take the residents with you. It is not that they play a role at the urban development level.”-*  
(Respondent V, 2019)

*“We involve local residents as much as possible in the plans for the redevelopment of the Kolenkit neighborhood. The last part in the northern part of the Kolenkit neighborhood that is still being developed, contains an elevation accent about which a number of immediate residents have expressed their concerns. However, this is a plan that follows from the Development Plan that was already established in 2004.”* (Respondent X, 2019)

So, there are few residents, who have a different discourse on the role of high-rise buildings in the Kolenkit, but have no power to accomplish an actual implementation thereof.

Despite this argumentations in the participation, most of the stakeholders and the policy documents seem to agree that the current buildings typology should not be retrofitted into a high-rise neighbourhood, except for some specific places, so there is indeed an *discourse structuration*. And due to the power of the discourse coalition of the municipality and Eigen Haard, also the *discourse institutionalisation* seems to be the case. To conclude, the dominant *discourse hegemony* in this post-war urban district has got a low-medium rise character.

## Case 2) Bijlmer

### Topic 1- Post-war neighborhoods as densification location

There seems to be less agreement on the question whether the densification of the Bijlmer is a good idea. In the Bijlmer, real structural changes had to be made and a lot had to be demolished to make the densification successful according to Respondent H. Respondent Y, who has been living in the Bijlmer for some time, does not agree with the statement that the Bijlmer is a suitable place for densification. They seem to all understand why the Bijlmer was chosen as the densification location, because it seems to be a suitable place because there is still enough space left between the greenery and the buildings. And if the houses need to be built somewhere in the city you have to start building houses, they agree it makes sense to look in areas like the Bijlmer, because there is still enough space for new development in the Amsterdam Zuid-Oost. Two clashing storylines can be found in this case on this topic. On the one hand the municipality and for example Respondent Z that sees the Bijlmer as a suitable location for densification, but on the other hand people who believe in the preservation of the old structure in the Bijlmer (Respondent Y).

### Topic 2 Absence of high-rise culture in the Netherlands

In the Bijlmer there was of course no absence of a so called *high-rise culture*. About fifty years ago, the municipality started the construction of many high-rise apartments in the Bijlmer. This was initiated to become a dream neighbourhood with lots of greenery and space, where car, bicycle and pedestrian traffic were separated from each other. These flats were designed for large Amsterdam families, who had grown out of their homes in the city centre. Since this district consisted mainly of high-rise buildings, the original Dutch low-rise culture could not be found in this area. However, this has changed over the years according to Respondent Y, but this will be discussed extensively in a later topic. And this low-rise culture remains important. That the Dutch tradition of low-rise buildings cannot simply be broken is also emphasized by respondent H, who states that because parts of the city of Amsterdam became part of the UNESCO heritage, and they were obliged at the municipality to show that the urban landscape was handled with care, the creation of a High-rise Vision was inevitable.

### Topic 3- Role of high-rise building in the retrofitting of this area

Respondents argue that you can of course see in the Bijlmer that all those high-rise buildings are being replaced by low-rise (Respondent W&Y). While the setup had a lot of green in between. But through those underpasses and those parking garages came an unpleasant feeling. They all seem to argue that high-rise is not a problem, but you have to make sure that it is still pleasant to live (Respondents Y, W, Z). The storylines of those respondents all seem to state that a big change has occurred in the building typology in the Bijlmer throughout the years. The role of high-rise used to be way larger, then it is nowadays.

In the office area located next to the Bijlmer, respondent Z believes that the role will remain high due to the transformation of tall office buildings. There you just have a lot of offices that were vacant a few years ago and were economically depreciated. And now through demolition of new construction, and the development perspective of the municipality, you can develop up to three times more than it used to be. High-rise is in that case a good solution and will also lead to densification(Respondent Z). In that way you can create a lot of facilities and a liveable neighbourhood. He does not find the high-rise itself a controversy or a difficult point, but he argues that there need to be enough high-rise in order to become an interesting neighbourhood.

However, all respondent argue that the role of high-rise buildings in the Bijlmer has fallen sharply. For example, it emerges from the interviews that originally 25% of the high-rise would be demolished in 1991, but that more than 75% of the high-rise has already been demolished. Much to the displeasure of respondent Y, who is fighting for the preservation of this old structure. According to him, it is not an unsuitable form of living, certainly for starters, and calls it capital destruction.

For the same aforementioned reasons as in the Kolenkit, *desk research* was used for this specific topic on the basis of articles and policy documents in order to get a broader view on the storylines on this role of high-rise throughout the years.

Also for the Bijlmer, *desk research* is used to dive deeper into the comparison between the historical and the current role of the Bijlmer:

### *Historical role of high-rise in the Bijlmer*

This role of high-rise building was of course different in the Bijlmer. As mentioned in the case presentation, fifty years ago, construction began on lots of high-rise apartments on the outskirts of the city of Amsterdam, the Bijlmer (Bruijne, van Hoogstraten, Kwekkeboom, & Luijten, 2002). These flats were designed for large Amsterdam families, who had grown out of their apartments in the city centre. Urban planner Siegfried Nassuth created the "city of the future" (Hulsman B. , 2018). The Bijlmer has of course also been set up with a clear separation of functions. Le Corbusier was one of the most important sources of inspiration for the Bijlmer team of the Urban Development department that designed the Bijlmermeer under the direction of urban planner Siegfried Nassuth. Le Corbusier promoted a strict separation of the four functions that he thought a city had: living, working, recreation and traffic. People lived in Le Corbusier's ideal city in towers or in tall high-rise blocks in parks (Bruijne, van Hoogstraten, Kwekkeboom, & Luijten, 2002).

At first, the Bijlmer seem to become a successful city district. But the problems were arising fast, without a clear turning point. People moving out of the neighbourhood because of poor living standards and crime issues. The municipality noticed the failure of the 'dream city of the future' and in January 1984, almost all housing corporations of the Bijlmermeer came together and merged in the new housing corporation called *Nieuw Amsterdam*, which took control of the management of many apartments and had more money available. From that moment the restructuring of the Bijlmer started.

Investments in the Bijlmermeer and renovations of the flats were not sufficient. In the 1990s, therefore, the municipality of Amsterdam took a rigorous decision: half of the gallery flats had to be demolished and replaced by a *vinex* neighborhood with many terraced houses. In 1992, they decided to demolish a lot of high-rise apartment buildings, around 3,000 dwellings. And in 2001 a survey was conducted among the residents of apartment houses in the Bijlmer. More than 3,500 residents participated. The decision whether or not to demolish apartment buildings is partly based on the results of this study. It has been decided that in the H-neighborhood almost all flats will remain, that in the G and K neighbourhood about half will be demolished and that in the D, E and F neighbourhood almost all the high-rise buildings will be demolished. At the end of 2010, a total of around 7,000 of the 13,500 apartment houses were demolished. So only in the G-K neighbourhood the original urban design has largely been retained. In all the other areas, almost all the high-rise buildings has been replaced for low-rise buildings.

In the media, the old high-rise structure in the Bijlmer is often described as a failure:

*“Around the year 2000, the decision was made to demolish much more of the high-rise monoculture (3400 homes) in favor of a mix of apartments and single-family homes. Only a handful of honeycomb apartments are left. The radical operation ultimately reduces the number of social rental properties from 93 to 55 percent and the share of high-rise buildings from 95 to 45 percent. Of the total investment required of 1.5 billion euros, a third is considered unprofitable. The Netherlands has learned a hard lesson: the concept of social apartment districts does not work.” – CoBouw- Edo Beerda (2010)*

*“The bankruptcy of the Bijlmer is a collective high-rise trauma, but has anyone ever recalculated it? That has been an expensive joke!” - Volkskrant- Sjoerd Soeters (2019)*

*'With those residential towers, a Bijlmer scenario threatens in the Sluisbuurt' 'I take the fiasco of the design of the Bijlmer as a starting point. The decision-making at the time was comparable to what is now likely to happen. Many are too fixated on building houses quickly and see a new high-profile design as an opportunity to let Amsterdam participate even more as a world city. '- Parool Saar Boerlage (2018)*

*"The high-rise wave from the 1960s, although presented as a vision of the future, was an anachronism." Simply put: the Bijlmer was not the city of tomorrow but the city of yesterday. "- quote from Maarten Mentzel, from the article of Bernard Hulsman in NRC (2018)*

What does the policy look like nowadays, to get rid of this negative image, and what is the main building typology being used?

### *Current situation Bijlmer*

As stated in the table down below, the amount of high-rise buildings has decreased from the start of the demolition in 1991 till 2012 by more than 50%. And where there were at first no low-rise buildings, it is now becoming an important building typology in the neighborhood.

WONINGVOORRAAD BIJLMERMEER		
	1992	nu
aantal hoogbouwflats/appartementen	12.500	5.500*
aantal laagbouwwoningen	0	2.500*
aandeel soc.huur/kernvoorraad-plus	100%	70%
aandeel koopwoningen	0%	20%

\*) medio 2012, percentages komen uit 2009. Bronnen: Finale Plan van Aanpak, 2001; Bijlmermonitor 2010, Projectbureau Vernieuwing Bijlmermeer

**Figure 9: Building typology Bijlmer 1992-2012, source: Bijlmermonitor 2010**

There is not much stated about this building typology in the *Structuurvisie of Amsterdam*. They do state that the renewal of the Bijlmer will be completed in the coming decade. After the further renovation and demolition / new construction in the K, D and E parts, the spatial renewal has been completed. The redesign of the Bijlmer Park into a city park is almost complete. Various kinds of living environments are being created: living on the outskirts of the city, multifunctional living environment and living in high density near the centre of the city of Amsterdam. For the 7,000 homes to be demolished, between 7,500 and 8,000 will be rebuilt. 30% of this is in the social housing sector, 70% is in the market sector (Bestemmingsplan G. A., 2007). Ultimately, half of the housing stock in the renewal area will consist of social rental properties and the other half will consist of houses in the market sector. Approximately 45% of the homes will be high-rise buildings. So there will still be a role for high-rise in the Bijlmer in the future, but this role has decreased drastically. A visualisation of the shift is shown in the picture down below.



**Figure 10: High- and low rise Bijlmer, source: BESTEMMINGSPAN DE NIEUWE BIJLMER, Gemeente Amsterdam, 2007**

#### Topic 4- Conflicting opinions and interests regarding the role of high-rise buildings

Some respondents believe that developers try to build as much apartments as possible on the same ground, because every m<sup>2</sup> raises money and in heights that is in theory unlimited (Respondent W& Soeters). And the municipality looks more at the liveability aspect, the so called *human dimension* (Respondent X), this can be seen in the Bijlmer, where it used to be all high-rise buildings, but where it became unliveable, and was therefore being transformed into more low-and medium rise buildings(Respondent W). Respondent H emphasizes that a clear distinction can indeed be made between supporters and opponents of high-rise buildings in Amsterdam. Proponents are saying it belongs to the modern city, and you can't stop it either. But indeed there are people like Sjoerd Soeters who claim that this high-rise is not necessary at all.

There also appear to be a number of conflicting interests in the Bijlmer. It seems indeed that a number of urban planners say, for example Soeters, you should not build higher than 7 floors, because otherwise you will lose contact with the street. Respondent Y, however, is not an opponent of high-rise buildings. Respondents know that the discussions exist, and that Soeters would like a maximum of 7 floors, and a high density. According to Respondent Y, Soeters is directly opposed to the opinion of Le Corbusier that you can put buildings in a park-like environment. The two view the perception of public space differently. The municipality also clearly sees great benefits from the demolition of existing high-rise buildings and replacing them for low-rise buildings. As mentioned earlier, respondent Y takes a different view of this, who sees the old high-rise towers in the Bijlmer as a piece of culture, and a great form of living.

#### Topic 5- The role of high-rise buildings in the mix between living and working

As mentioned in the Topic 5 section on the Kolenkit case as well, almost all the respondents seem to believe in the role of high-rise building in order to achieve this multifunctional neighbourhood in which living and working is mixed together in the Bijlmer as well. The importance of having a lively plinth is also often mentioned in the Bijlmer. And is of course also an important topic in the Bijlmer. Because this first plinth often had no function in the original design of the neighborhood, this often gave an unsafe feeling, because all buildings in the Bijlmer had dense plinths (Bestemmingsplan- De Nieuwe Bijlmer, 2007). If these closed plinths are opened, there will be more contact with the street. Making this high-rise plinth multifunctional can therefore be an important solution. Many semi-public spaces such as elevator halls, corridors and galleries are just vulnerable. And you can activate those baseboards in all sorts of ways. The only disadvantage with high-rise is that you cannot put all kind of functions in the plinths (Respondent H & Y). But you see, for example, that different kinds of

business is created on the ground floor, from a bicycle repair shop to a hairdresser, things like that are important and can therefore contribute to a multifunctional Bijlmer (Respondent Y, Z, W). The storylines seem to be equal on this specific topic.

## Results

In the Bijlmer it seems more complicated to recognize a certain dominant discourse. Because *desk research* has shown that a major shift on this high-rise debate did occur in the recent years. Where the municipality previously believed in the ideals of Le Corbusier, led by urban planner Nassuth, where everything had its permanent, unchanging place and everyone had to live in the same kind of houses (Hulsman, 2018). Studies into, for example, housing preferences, which showed that only 10% of the Dutch people preferred living in high-rise buildings in that time, played no role in the design. Jacoba Mulder (1900-1988), the head of Urban Development who repeatedly insisted on more low-rise buildings, was also ignored. She retired in 1965 and, in her final years, did not want to mislead her successor, a proponent of the Bijlmer high-rise. There has never been a public debate about the design of the Bijlmermeer. If a councillor once asked why there was no more low-rise in the Bijlmermeer, he was told that the design was not yet definitive and could still change. Which of course did not happen (Hulsman, 2018). This means that there was no *discourse hegemony*, due to the fact that the most people did not believe in this high-rise trend, but the discourse institutionalisation of pro-high-rise was applied, because the urban planner Nassuth and the team had the power to implement that pro-high-rise discourse.

Nowadays, according to respondent H, there is more debate about this role of high-rise buildings. The municipality is working on the new *Omgevingsvisie*, and in the context of the *omgevingsvisie* they have many different conversations with different stakeholders in the city, in which high-rise will be an important topic. Furthermore an increasing amount of expert knowledge is being acquired by expertise tables:

*“With the department Ruimte&Duurzaamheid, we also started with expertise tables, in which a number of topics are discussed that we simply do not have as much knowledge about, such as high-rise buildings. We have to share knowledge about this, and we have discussions with people from outside the municipality, for example a developer, who do have knowledge on this topic. This does not lead directly to new policy, but is more to gain internal knowledge.”- Respondent H (2019)*

Despite the fact that it will not immediately lead to new policy, it is possible that in the future more and more different storylines and discourses will be included in the decision-making.

As explained in detail above, there has been a shift in the dominant discourse. Interviews and desk research has shown that in the Bijlmer itself, the *critical regionalism discourse* seems to have gained more power over the years, mainly due to the municipality's decision to demolish so many high-rise buildings and replace it with low 'vinex' terraced houses. Respondent H also emphasizes this shift in

storylines in the field of high-rise buildings in the Bijlmer. This respondent says the following about the change from high-rise to low-rise:

*"In that renewal phase, people really searched to create a pleasant neighborhood. And the streets with low terraced houses contribute to that."* Respondent H (2019)

So the *International Style* discourse has been largely replaced by the critical regionalism discourse, in which low-and medium rise predominates at the current retrofitting of the Bijlmer. This is also stated by Respondent Y, talking about the dominant high-rise discourse in the Bijlmer:

*"Well, almost all the high-rise has been demolished ...Eventually only 25% was the plan, as was agreed in 1991, but I now think that about 75% of the high-rise has been demolished."*  
(Respondent Y, 2019)

The role of high-rise buildings has therefore declined, but desk research and the interviews show that not everyone is satisfied with this.

*"Well I didn't think it was a bad form of living. It was clear that it was difficult to manage, and that was the impotence. But to demolish 8900 social housing units because you can't manage to manage them properly, I thought it was madness. Capital destruction."* – (Respondent Y, 2019)

It was at that time a discourse institutionalization from the municipality of Amsterdam to replace many of these high-rise buildings with low and medium rise building heights, but there seems to be no real discourse structuration.

That is why it is difficult to speak of a discourse hegemony during the retrofitting of this neighborhood, since the role of high-rise buildings has changed so dramatically over the years, and according to a number of respondents will also vary considerably in the coming years (Respondent Y&Z, 2019).

## Bijlmer& Kolenkit comparison

### Physical comparison

As mentioned in the theoretical framework, retrofitting post-war urban districts can have different scales and forms. Small-scale fabrics with a homogeneous or heterogeneous structure, and large-scale fabrics, which are mainly homogeneous in design. In this distinction, the Kolenkit can be placed under small-scale fabrics with a homogeneous design, while the retrofitting in the Bijlmer started with a homogeneous large-scale fabric (Bijlsma, Bergenhenegouwen, Schluchter, & Zaaijer, 2008).

In the Bijlmer there has been a development going on throughout the years from a place that did not function well (old high-rise towers), to something that works much better and is experienced as more liveable (Respondent U). This is also partly the case with the Kolenkit, but to a much lesser extent. According to most respondents, the redesign of both neighborhoods has therefore been carried out with the same principle, much more eyes on the street, Jane Jacobs thoughts, a human dimension for both public spaces and buildings. The human dimension was missing in the old plans of the Bijlmer, in the sense of large-scale in which all functions were separated. And that is now much more mixed and more nuanced in the urban design. According to the respondents (Y, U, V) a comparison can be made. In summary, the similarity lies in the fact that an attempt is being made to create something liveable within the inner-city boundaries. However, the difference is that at the Kolenkitbuurt, the original building strip construction is being maintained there, so no other building types are being used, no closed building blocks with the same heights (Respondent Y). While in the Bijlmer, the transformation is really the opposite. Flats of more than 10 storeys with a flat roof are being replaced by 2-3 storey houses with a pointed roof. In the Bijlmer, the transformation of the neighbourhood is seen as more intense by the respondents. In the Kolenkit, it is mainly the materialization that is changing, but furthermore in terms of typology it has all remained almost the same. Also just open plinths, in Amsterdam West that has always been the case according to Respondent Y. It is also emphasized that West was of course already a more densely inhabited area, where densification was based on demolition of existing homes. This is less the case in South-East, where the residents do not have to leave temporarily in order to make room for the new buildings (Respondent Z). It is therefore emphasized by most respondents that there is a big difference between the redesign of these two neighbourhoods.

## Discourse comparison

In both the Bijlmer and the Kolenkit a distinction can be made between two important discourses about the high-rise. The discourse where the high-rise is not seen as a suitable way of densification, this discourse can be found in the storylines of Sjoerd Soeters:

*“I showed in a study that you can achieve the same density when you create buildings that are no more than 7 layers high.”- Interview with Sjoerd Soeters(2019)*

On the other hand, the discourse in which storylines dominate where high-rise is seen as a necessity in order to achieve large densities.

*“The most important thing is the entire densification task that we have to meet, and if you really make high densities, high-rise is a very good way to do it. To a limited density you can do well with all sorts of other urban forms, but if the density needs to be higher, it will become very dark with lots of shadow with closed building blocks.” – Respondent H (2019)*

But the dominant discourses seem to differ greatly. Where the historical role of high-rise in the Bijlmer was considerable, this was not the case in the Kolenkitbuurt. Where despite the demolition and high-rise being replaced by low-and medium rise building, there are still high-rise buildings clustered in the Bijlmer, this is not the case in the Kolenkit, nor has it ever been.

In the Kolenkit, a shared belief, a discourse coalition, in the area of high-rise, is kept to the low and medium-high rise buildings, as promoted by the municipality, housing corporation Eigen Haard and architect Sjoerd Soeters.

In the storylines surrounding high-rise buildings in the Bijlmer, a discourse shift has taken place over the years, in which the urge for high-rise buildings was abandoned, and more and more solutions were sought in low-rise and mid-rise buildings. The main differences and similarities in the field of densification and high-rise (physical and discourses) are shown in the table on the next page.

Similarities	Differences
<b>1)</b> In both districts, the municipality focusses during retrofitting on the 'human dimension'	<b>1)</b> The high-rise buildings have never been part of the Kolenkit building typology, while this was clearly the case in the Bijlmer
<b>2)</b> Low / medium rise buildings predominated in the densification	<b>2)</b> In the Kolenkit there is no 'traumatic' experience with the role of high-rise buildings, while in the Bijlmer this is the case.
<b>3)</b> Critical regionalism as an important discourse	<b>3)</b> <i>International Style</i> was more reflected in the original Bijlmer structure
<b>4)</b> Strive towards a multifunctional neighbourhood	<b>4)</b> Kolenkit retains much of its old structure, in Bijlmer this is not the case due to the many demolitions of the old high-rise buildings (Small-scale fabrics (Kolenkit) vs. large scale fabrics(Bijlmer))

**Figure 8: Similarities & Differences in the retrofitting of the Kolenkitbuurt and the Bijlmer, Floris van den IJssel (2019)**

## Conclusion

So the major cities in the Netherlands are facing a major challenge in the coming years. Due to the growing population and the continuing migration to the city, thousands of home seekers are being added. The pressure on the Amsterdam housing market is therefore high. The consequences of the scarcity on the housing market are expensive owner-occupied homes and social housing has extremely long waiting times and rents in the free sector are rising rapidly. To protect the greenery outside the city, solutions are sought within the existing city boundaries. As a result, the policy is focused on densification, including the retrofitting of post-war city districts. High-rise is a possible means of achieving this densification. However, there exists several different discourses about this role of high-rise. The central question in this study was to find out what the role of discourse coalitions were in the high-rise building debate on densification in the retrofitting of post-war city districts, and how this role could be explained.

For the first sub-question, the term densification and how this is relevant for post-war urban districts was dealt with. Densification is extensively discussed in the theoretical framework, but can be summarized as a term used by planners, designers, developers and theorists to describe the increasing density of people living in urban areas. Post-war urban areas appear to be suitable for this because of the building typology and the large open spaces that can still be found in these neighborhoods. In fact, these neighborhoods are also referred to as densification locations in policy documents, and the interview respondents also indicate that there are many opportunities for compacting and retrofitting in these post-war city districts.

To get an answer to the main question, there has been looked at discourse coalitions, which are a group of actors that through a combination of positioning and practice developers, structures and maintain their shared interpretation of reality, and what different discourses exist relative to densification and high-rise buildings for the second sub question. This research was therefore done on the basis of a discourse analysis. The *desk research* and interviews revealed that the articles and policy documents showed different storylines about the role of high-rise buildings in densification exist. Two major discourse coalitions can be distinguished from this.

On the one hand, you have the discourse that believes in the role of high-rise buildings for the future city, and as a necessity for densification. This used to an important discourse in the Bijlmer, where the municipality believed in this storyline, and created the high-rise city district. This discourse has become less dominant in this neighborhood over the years.

The opposite discourse on the other hand does not believe in this high-rise, and does not see this as necessary to achieve densification. The *critical regionalism discourse* is in line within this philosophy,

the solutions to the problems that the increasingly globalizing and urbanizing world entails are sought in low and medium-rise construction. Which is the case in the Kolenkitbuurt, where this low-medium rise discourse believe seems to be the dominant one, due to the existing *discourse structuration* and *discourse institutionalisation*. And therefore creating a dominant discourse.

Finally, it was important to determine how these discourses are reflected in the built environment during the retrofitting and densification of post-war city districts over time. *Desk research* and the interviews has shown that the role of high-rise varied greatly over the years, especially in the Bijlmer. The research shows that the high-rise discourses can be found in various ways in the post-war city districts. The Municipality of Amsterdam plays a major role in this, and *discourse institutionalization* becomes clear through certain power relationships. Collaborations with architects, and certain visions and storylines can be seen in the built environment. The dominant discourse has changed considerably over the years in the Bijlmer, which is also reflected in the building typology and the changing role of high-rise buildings over the years.

The role that discourse coalitions play in the high-rise building debate on densification in the retrofitting or post-war city districts is therefore considerable. Because certain power relationships ensure that particular storylines about high-rise buildings can also be represented in practice. How policymakers see the role of high-rise ultimately seem to determines how the built environment regarding high-rise building is shaped.

## Discussion

For this research, a discourse analysis was performed based on the model of Maarten Hajer (2006). This method has made it possible to gain an insight into the discussion surrounding the role of high-rise buildings in the retrofitting of post-war urban areas. How it is discussed within the discourse and which developments have led to certain decisions and changes. It appears to be highly dependent on the researcher's interpretation. This also applies to the articles from which I have made a distinction in my desk research between positive-moderate positive-negative (*Appendix I*). This could be possibly subdivided differently by another researcher. Furthermore, the analysis is also limited due to its relatively small size. To obtain a more detailed picture, more expert interviews, policy documents from other corporations and developers should be used.

Next to that, because I have used an argumentative discourse analysis, I am automatically guilty of my own interpretation of the interviews. The interviews and policy documents are also in Dutch, which means that part of the strength of language is lost in translation. To increase objectivity, I therefore tried to translate the interview quotes as literally as possible into the analysis, and the original Dutch interview transcripts can also be found in the appendix. The research is therefore not

generalizable, but in my opinion gives good reason for further research, so that it is possible to talk with several more important stakeholders, in order to possibly discover other important discourses that may have been missed in this research, especially in the Bijlmer district.

In this research, I focused more on which discourses do exist, and which are dominant in the city districts, than that I have investigated how this debate has actually been shaped. Certainly exploring the discourse coalitions in other post-war city districts in Amsterdam, or possibly other cities to see which similarities and differences can be found, can provide potentially interesting insights in follow-up research. Furthermore, it has often emerged from the interviews that high-rise on public transport hubs seems to be a good option for densification, also according to Sjoerd Soeters. I did not go into specific possible high-rise locations strategies for this research, but that may also be an interesting starting point for a follow-up research.

## Literature

- Abercrombie, Kelly, & Kelly. (1922). Dublin of the future, the new town plan, being the schema awarded first prize in the international competition. *University press of Liverpool*.
- Al Ghazali, F. (2007). Critical discourse analysis: How can. *University of Salford Manchester*, 1-19.
- Ali, M. M., & Al-Kodmany, K. (2012). Tall Buildings and Urban Habitat of the 21st Century: A Global Perspective. *University of Illinois at Urbana-Champaign- Building 2012*, 384-423.
- Amer, M., Mustafa, A., & Et.al. (2017). A methodology to determine the potential of urban densification through roof stacking. *Sustainable Cities and Society*, 677-691.
- Bednarek, M. (2006). *Evaluation in media discourse: Analysis of a newspaper corpus*. London: Continuum.
- Bekx, S. (2004). *De dynamiek van de naoorlogse stadswijk*. Nijmegen: Katholieke Universiteit Nijmegen.
- Bestemmingsplan, G. A. (2007). *BESTEMMINGSPLAN*. Amsterdam: Gemeente Amsterdam.
- Bestemmingsplan, K. (2012). *Bestemmingsplan Kolenkit*. Amsterdam: Gemeente Amsterdam.
- Bijlsma, L., Bergenhenegouwen, G., Schluchter, S., & Zaaijer, L. (2008). *Transformatie van woonwijken*. Rotterdam: NAI Uitgevers.
- Boverket. (2017). *Urban Density Done Right*. Sweden: Boverket.
- Broitman, D., & Koomen, E. (2015). Residential density change: Densification and urban expansion. *Computers, Environment and Urban Systems*, 32-46.
- Bruijne, D., van Hoogstraten, D., Kwekkeboom, W., & Luijten, A. (2002). *Centrumgebied Zuidoost en stedelijke vernieuwing*. Bussum: Uitgeverij THOTH.
- Bryman, A. (2012). *Social Research Methods*. Oxford: Oxford University Press.
- Clerque, F. L., & Hagendoorn, J. (1983). *Werken. Planologische*.
- Dam, v., Groot, D., & Crommentuijn. (2010). Verdichting heeft een grens. *PBL*, 50-55.
- de Zeeuw, F. (2018, november 9). Vooral nadelen bij hoogbouw. *NRC*.
- Dieleman, F., & Wegener, M. (2004). Compact City and Urban Sprawl. *Built Environment (1978-)*, 308-323.
- Dorussen, H., Lenz, H., & Blavoukos, S. (2005). Assessing the Reliability and Validity of Expert Interviews. *European Union Politics*, 315-337.
- Drew, Nova, & Fanning. (2014). The environmental impact of tall vs. small: a comparative study. *Proceedings CTBUH Shanghai Conference*.
- Du, P., Wood, A., Ditchman, N., & Stephens, B. (2017). Life Satisfaction of Downtown High-Rise vs. Suburban Low-Rise Living: A Chicago Case Study. *Sustainability MPDI*, 1-14.
- Florida, R. (2012). *Congress for the New Urbanism*. West Palm Beach Florida.
- Florida, R. (2016). The Relationship Between Skyscrapers and Great Cities. *Citylab*.
- Gadet, J. (2018). Ondermijnt hoogbouw de menselijke maat. *Agora*, 20-22.
- Gemeente-Amsterdam. (2011). *Structuurvisie 2040*. Amsterdam: Gemeente Amsterdam.
- Geskus, M. (2019). Mobiliteit als. *Ruimtelijk Bekeken*, 8-10.
- Giyasov, B., & Giyasova, I. (2018). The Impact of High-Rise Buildings on the Living Environment. *High-Rise Construction 2017 (HRC 2017)*.
- Glaeser, E. (2011, march). How Skyscrapers Can Save the City. *The Atlantic*.

- Haaland, C., & Konijnendijk van den Bosch, C. (2015). Challenges and strategies for urban green-space planning in cities undergoing densification. *Urban Forestry & Urban greening*, 760-771.
- Hajer, M. (1995). *The Politics of Environmental Discourse: Ecological Modernization and the*. Oxford: Clarendon Press.
- Hajer, M. (2005). Coalitions, Practices, and Meaning in Environmental Politics: From Acid Rain to BSE. *Discourse Theory in European Politics*, 297-315.
- Hajer, M. (2006). *Doing Discourse Analysis: Coalitions, Practices, Meaning*. Nederlandse Geografische studies.
- Hajer, M. (2009). *Authoritative governance: policy making in the age of mediatization*. Oxford: Oxford University Press.
- Hajer, M., & Versteeg, W. (2005). A Decade of Discourse Analysis of Environmental Politics:. *Journal of Environmental Policy & Planning*, 175-184.
- Hastings, A. (2010). Discourse Analysis: What Does it Offer Housing Studies? *Housing, Theory and Society*, 131-139.
- Hereijgers, A., & Van Velzen, E. (2001). *De naoorlogse stad*. Rotterdam: NAI Uitgevers.
- Hulsman. (2018, November 29). In idealen kun je niet wonen. *NRC*.
- Hulsman, B. (2018, November 28). In Idealen kun je niet wonen . *NRC*.
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. United States.
- Knight Frank. (2019). *The Knight Frank Global Affordability Monitor*.
- Korsten, A. (2008). Beleid als ideeënpolitiek en. *Online Access*.
- Kotkin, J. (2013). CITY LEADERS ARE IN LOVE WITH DENSITY BUT MOST CITY DWELLERS DISAGREE. *New Geography*.
- Lotfabadi, P. (2014). High-rise buildings and environmental factors. *Renewable and Sustainable Energy Reviews*, 285-295.
- McNair, B. (2006). Cultural chaos: Journalism, news and power in a globalised world. *New York: Routledge*.
- Meuser, M., & Nagel, U. (2009). Das Experteninterview — konzeptionelle Grundlagen und methodische Anlage. *Methoden der vergleichenden Politik- und Sozialwissenschaft*, 465-479.
- Midu, S. (2014). Improving the social sustainability of high rise. *CTBUH Journal*, 24-30.
- Miller, M. (2002). Garden Cities and Suburbs: At Home and Abroad. *Hampstead Garden Suburb Trust*, 6-28.
- Mouratidis, K. (2017). Is compact city livable? The impact of compact versus sprawled neighbourhoods on neighbourhood satisfaction. *Norwegian University of Life Sciences, Norway*, 2408-2430.
- Nabielek, K., Boschman, S., Harbers, A., Piek, M., & Vlonk, A. (2012). Stedelijke Verdichting; Een ruimtelijke verdeling van binnenstedelijk wonen en werken. *Planbureau voor Leefomgeving*, 1-96.
- Philo, G. (2007). CAN DISCOURSE ANALYSIS SUCCESSFULLY EXPLAIN THE CONTENT OF MEDIA AND JOURNALISTIC PRACTICE? *Journalism Studies*, 175-196.
- Potter, J., & Wetherell, M. (2003). Unfolding discourse analysis. *Social Research Methods: A Reader*, 350-356.
- Sanders, M., Lewis, P., & Thornhill, A. (2015). *Research methods for Business students*. Pearson Education Limited.
- Savini, Boterman, Gent, v., & Majoor. (2015). Amsterdam in the 21st century:. *Planning and International Development Studies*, 103-113.
- Sirowy, B. (2016). Public spaces in a compact city: planning for social capital. *Budapest 2016*.

Soeters, S. (2019, april 8). Top 5 verdichting zonder hoogbouw volgens Soeters. *Stadszaken*.

Stichting-Hoogbouw. (2007). *Een studie naar de Nederlandse hoogbouwcultuur*. Stichting Hoogbouw.

Takahashi, B., & Meisner, M. (2012). Environmental Discourses and Discourse Coalitions in the Reconfiguration of Peru's Environmental Governance. *Environmental Communication*, 346-364.

Uitwerkingsplan. (2011). *Uitwerkingsplan*. Amsterdam: Eigen Haard.

Vernieuwingsplan. (2003). *Vernieuwingsplan*. Amsterdam: Gemeente Amsterdam.

Wassenberg, F. (2006). The integrated renewal of Amsterdam's Bijlmermeer high-rise. *Informationen zur Raumentwicklung, Heft 3/4*, 191-201.

Wood, A. (2013). A global analysis of tall, supertall and megatall buildings. . *Intell glass solutions*, 25-29.

Yin, R. (2009). *Case study research: Design and methods*. Alberta: Thousand Oaks.

Zahiri, Dezhdar, & Foroutan. (2016). Rethinking of Critical Regionalism in. *Building MDPI*, 1-16.

Zandbelt, D., & Meyer, H. (2012). *Highrise and the Sustainable City*. Delft: Techne Press.

Zeiler, W. (2017). Sustainable High-Rise Buildings in the Netherlands. *Sustainable High Rise Buildings in Urban Zones*.

**Figure 1. The Kolenkitbuurt source: Van Eesteren Museum, 2018**

**Figure 2: High-rise buildings being demolished in the Bijlmer, source NOS.nl (2017)**

**Figure 3: Operationalization, source: Floris van den IJssel (2019)**

**Figure 4: Table based on model by Maarten Hajer(2006), source: Floris van den IJssel (2019)**

**Figure 5: Table with interview respondents, source: Floris van den IJssel 2019**

**Figure 6: Topic list, source: Floris van den IJssel (2019)**

**Figure 7: Point of view- Role of high-rise in densification, gathered through columns and newspaper articles, source: Floris van den IJssel (2019)**

**Figure 8: Picture of The New Kit (high-rise), commissioned by Eigen Haard- de Westkrant (2016)**

**Figure 9: Building typology Bijlmer 1992-2012, source: Bijlmermonitor 2010**

**Figure 10: High- and low rise Bijlmer, source: BESTEMMINGSPAN DE NIEUWE BIJLMER, Gemeente Amsterdam, 2007**

**Appendix I: Articles about the role of high-rise buildings in densification- Point of View**

<b>Title</b>	<b>Source</b>	<b>Year</b>	<b>Point of View</b>
'Top 5 verdichting zonder hoogbouw volgens Soeters'	Stadszaken	2019	Negative
'Hollandse Hoogbouw'	Stichting Hoogbouw	2019	Positive
'Drie visies waarom hoogbouw wél tot menselijke verdichting leidt'	Gebiedsontwikkeling.nu	2019	Positive
'Hoogbouw als verdichtingsoplossing'	De Architect	2018	Moderately positive
'Vooral nadelen bij hoogbouw'	NRC	2018	Negative
'Verdichting: jazeker; hoogbouw: liever niet!'	LinkedIn	2016	Negative
'Commissie Ruimtelijke Kwaliteit De Schoonheid van Amsterdam- Hoogbouw/verdichting'	Gemeente Amsterdam	2019	Moderately positive
'Hoogbouw is eredivisie voor projectontwikkelaars'	Neprom	2019	Moderately positive
'Den Haag krijgt Manhattan aan de Laak'	Vastgoedmarkt	2019	Moderately positive
'Milieuraad adviseert: geen hoogbouw in Leiden'	Unity.nu	2019	Negative
'Heel Holland de hoogte in'	Groene.nl	2019	Negative
'Raadsleden Amstelveen doen suggesties voor meer hoogbouw'	Amstelveens Nieuwsblad	2019	Positive
'Meer verdichting ja, enkel hoogbouw neen'	VCB	2017	Negative
'Wel of geen hoogbouw: ijdelheid of noodzaak om te kunnen wonen?'	Parool	2017	Moderately positive
'Utrecht blijft groeien: waar gaan deze mensen wonen en hoe?'	DUIC	2019	Positive
'Is hoogbouw een oplossing voor woningnood?'	Architectura	2015	Moderately positive
'3 visies op hoogbouw die wél geschikt is voor mensen.'	Stadszaken	2019	Positive
'Woontorens zijn niet dé oplossing.'	Bruzz	2013	Negative
'Een oplossing voor woningnood? Verticale reuzen.'	Volkscrant	2018	Positive
'Raadsleden: 'Hoogbouw in Leiden tegen woningtekort' '	Leidsch Dagblad	2018	Positive
'Het kapitaal koloniseert de steden steeds meer.'	NRC	2019	Negative

'Borret ziet geen oplossing in de hoogbouw van Leo Van Broeck.'	Architectura	2013	Negative
'Stop de sloopwals, laat ons wonen.'	Parool	2017	Negative
'Hoge flat als verticale veilige buurt.'	BD	2019	Positive
'Hoogbouw gaat niet om hoogte.'	Architectenweb	2018	Moderately positive
'In Utrecht is de Dom-hoogte niet langer heilig.'	NRC	2018	Moderately Positive
'Hoogbouw is een achterhaald en ineffectief idee'	Algemeen Dagblad	2017	Negative
'Architect Sjoerd Soeters over de woningbouw: 'Hou op met dat stapelen in torenflats' '	De Volkskrant	2019	Negative
'Laagbouw is net zo eigentijds als hoogbouw.'	NRC	2017	Negative
'Stedelijke verdichting goed voor de openbare ruimte.'	Stadszaken	2019	Negative
'Zijn we vergeten wie we zijn.'	Groene Amsterdammer	2018	Negative
'Inclusieve stad is loos begrip als er geen businesscase onder ligt'	Stadszaken	2019	Negative
'Moet Nederland van haar hoogtevrees af?'	Gebiedsontwikkeling.nu	2018	Moderately Positive

*Appendix II: \*The interviews are included in the online PDF version of this thesis\**