The Synergy of Collaboration

Planning multifunctional urban greenspaces in Rotterdam: Multi-stakeholder involvement and collaboration

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Master thesis - Spatial Planning
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Master thesis
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Abstract – Nature can perform many functions in an urban environment, such as contributing to biodiversity, climate adaptation and a pleasant living environment for residents. Multifunctional urban greenspaces are valuable to city life, for multiple functions can be achieved collectively. This multifunctionality is especially helpful in times of increasing citizens numbers and urban densification when available space in our cities is scarce. Because of this diversity of functions, urban greenspaces touch many aspects of a municipal organisation, like the spatial planning, health and sustainability division. A good collaboration between these divisions can help to achieve multifunctional urban greenspaces. This master's thesis focusses on integrated collaboration processes between different divisions within the municipality of Rotterdam in the neighbourhood of Reyeroord. It applies the approach of collaborative planning by integrating the frameworks of Habermas, Giddens and Foucault to the field of urban greenspace planning. Four analytical dimensions are established based on these frameworks, namely inclusion, understanding among stakeholders, recognition of power, and comprehension of discourses and perceptions. The dimensions are used to empirically assesses the collaborative nature of the planning process. The results of this thesis indicate that the institutional structures of the municipality shape the positions of participants, due to the division they are affiliated to. As these divisions are not identical, a privileged position is created for some while creating obstacles for others. This influences participants' ability to participate and contribute to the decision-making in integrated collaboration processes. Recognition of positions and how this influences the planning process is essential in making collaborative planning processes more inclusive. This insight can contribute to better incorporation of all function of urban greenspace and thus improving urban life.

Urban greenspaces • multifunctionality • multi-stakeholder involvement • collaborative planning • the Netherlands

Preface: 2020: a greenspace odyssey

I consider myself a sociologist. I have always been fascinated by people in society and how they make sense of the world around them. However, after my bachelor studies in sociology at the Erasmus University, I wanted to learn more about how I could put my knowledge into practice. I decided to combine my love for architecture and sociology and started the master Spatial Planning at Utrecht University.

As a sociologist, I have a great interest in public places, for those are inclusive places in the city where people meet and interact and where society is formed. Usually, an important aspect of public places is urban green. I have a big love for nature, and therefore this became the subject of my thesis. In the beginning, I got kind of lost in the philosophical aspect of nature. I begin to ask questions like, What is nature? Some scientists believe that humans not only have dominated every aspect of our world but also that consequences of our behaviour will be observable in geological stratigraphic records for millions of years, which means that we have entered a new epoch: the Anthropocene (Lewis & Maslin, 2015). If one would consider nature as untouched by humans, do we still have nature on our planet? I started looking around in my surroundings, in my garden, the streets where I walk and the park where I go to. New questions arose, like, Why do we perceive some plants and animals as nature and others as pests and weeds? In Dutch, even the words for pets and weeds distance themselves from nature, namely '*ongedierte'* and '*onkruid'*, literally meaning *un-animal-like* and *un-plant-like*. The city is usually considered as the terrain of humans, but it is also home to much spontaneous vegetation, that usually comes up between tiles or grows in abandoned lots.

As the majority of the people worldwide live in cities, urban nature is usually the closest we come to nature. Nevertheless, when city dwellers do encounter nature, it is usually in the form of neat parks and colourful flowerbeds that are carefully managed and maintained. This remark made me wonder which forms of nature we do and do not tolerate in our city, and why? I noticed that in the city centre, nature is supposed to be neat and beautiful, mainly focused on providing places for people to recreate, meet and play. Whereas at the edges of the city, nature is allowed to grow more freely, with more focus on biodiversity. Since nature can come in many shapes and forms, it is mostly choices by people that shape what our urban nature looks like. This observation became the starting point for this thesis.

At the start, I would never have guessed that I would be using collaborative planning as the framework for my thesis. I experienced Habermas as too idealistic and not applicable to practice. However, from this thesis, I have learned that Habermas provides us with important lessons that could help make planning more inclusive. Also, it was surprising to see how my two academic studies come together in this thesis as I use three influential sociologists and apply them to the field of planning.

This thesis would not have been possible without the help of certain people. I am grateful for KuiperCompagnons for allowing me to do my internship there and learn a lot about planning in practice. I would like to express special thanks to Maarten van Vuurde, my internship supervisor. Although I believe we both struggled with my thesis, I am very grateful for our discussions and the inspiration you gave me. I would like to thank the municipality of Rotterdam, the people of Reyeroord+ and Joni Reijven for helping me with the case study and their support. Even though it was a hectic time for everybody, you took the time to help me. Special thanks go out to all the respondents, for without them this thesis would not have been possible. Last, I would like to thank Jochen Monstadt, my thesis supervisor. Our meetings did not always feel easy, and sometimes I was more confused about my thesis at the end of our meetings than I was at the beginning. However, by planting seeds instead of trees, you helped me grow my thesis.

I wish you all enjoy reading my thesis, as much as I have enjoyed writing it.

Eva Aimée Louwers

Breda, 2 October 2020

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Chapter 1: Introduction

1.1 Background and problem statement

Cities worldwide face many contemporary challenges, like climate change, loss of biodiversity, citizen increase and social exclusion. Urban greenspaces are often presented as an effective solution to some of these challenges, for they promote the liveability of the city by contributing inter alia to public health (de Vries et al., 2003), climate adaptation (Pauleit & Golding, 2005), social cohesion (Grahn & Stigsdotter, 2003) and real estate value by improving the visual appreciation of neighbourhoods (Morancho, 2003). This multifunctional character gives greenspaces the ability to have a positive impact on the city in several dimensions simultaneously. This multifunctionality is especially valuable in cities where available land is scarce, for it enables the achievement of multiple ambitions in parallel. In recent years, utilizing urban greenspaces as a strategic policy has gained attention in cities throughout the world (Affolderbach & Schulz, 2017; Baycan Levent & Nijkamp, 2004). These aforementioned functions cannot always operate simultaneously, for there are challenges between them (Borgström et al., 2006; Haaland & van den Bosch, 2014; Madureira & Andresen, 2014). Paving a street with stones allows little rainwater to pass through to be absorbed by the ground. Grass, on the other hand, is suitable for climate adaptation, because the soil can absorb rainwater. However, the absence of tiles leads to reduced accessibility for elders, disabled and parents with strollers. Biodiversity is addressed by allowing leaves that fall from trees to remain on the ground, as this is good for the regeneration and productivity of the soil. However, this reduces aesthetics, accessibility and the quality of the grass. These examples illustrate that adding greenspace to a city does not necessarily lead to the fulfilment of all functions, as some functions can counteract one another. Therefore, decisions need to be made on which and how functions will be implemented in the urban landscape.

Sustainable, green and healthy public places in Rotterdam

Rotterdam is a city that wants to make use of the multifunctionality of their urban greenspaces to address the city's challenges (Gemeente Rotterdam Stadsontwikkeling, 2019a). The city is affected by a significant sustainability challenge for it is located in a delta where the sea and many rivers come together. Coastal cities located in low regions are particularly vulnerable to climate change, due to sea-level rise. Despite their necessity to make the city more sustainable, other challenges are also affecting the city. The municipality expects Rotterdam to grow in future years to up to 700.000 inhabitants (Gemeente Rotterdam Stadsontwikkeling, 2019a). Greenspaces are considered valuable for urban residents for they create places for relaxation and stress reduction (Grahn & Stigsdotter, 2003). However, Rotterdam has chosen to build as much as possible in the existing urban area (Gemeente Rotterdam, n.d.-a) and this strategy of densification is often at the expense of urban greenspaces (Haaland & van den Bosch, 2014). To address future challenges, Rotterdam wants to create sustainable, green and healthy public spaces (Gemeente Rotterdam Stadsontwikkeling, 2019a). Their ambitions are twofold. They wish to improve the quantity of urban green, thereby focussing on climate adaptation and biodiversity. Furthermore, they want to

improve the quality and resilience of urban greenspaces, thereby aiming at use by residents and ecology. The multifunctionality of urban greenspaces prevails in their city policies, often lacking attention to the possible tensions. For example, the municipality wants to improve biodiversity in public urban greenspaces by creating more ecological connections (Gemeente Rotterdam Stadsontwikkeling, 2019b). However, it is often difficult to obtain a suitable habitat for flora and fauna, while at the same time creating attractive public spaces that can be used by people. Often people interrupt these habitats and deter wildlife (Gallo et al., 2017).

Decision-making in a multi-stakeholder landscape

The understanding of the multifunctional character of urban greenspaces of the municipality of Rotterdam ensures that urban greenspaces have intersections with various departments and clusters within the municipal organisation. The municipality consists of six clusters, which are considered as the main divisions in the organization. These subdivide into several departments. Even though these clusters all work for the same municipality and follow the same policies, they all operate in different political landscapes, with different council members, budgets, responsibilities and ambitions.

As earlier mentioned, some functions of urban greenspace may interfere with each other, which means that not all functions can be achieved to the same extent for the same place (Madureira & Andresen, 2014). Therefore, decisions need to be made regarding which and to what extent functions will be reflected in the urban landscape. Since clusters have different responsibilities and objectives, they can deploy urban greenspaces differently by opting for a function that matches their aim. This means that their objectives can be conflicting, as opting for one function may lead to an enhancement of some while diminishing others. Municipal officials can use their power and resources, like networks and budgets, in the planning process to achieve their objectives in that place (Margerum, 2002). However, officials that solely strive to fulfil the objectives of their cluster can jeopardise the multifunctionality of urban greenspace, because other functions of urban greenspace might not fit their interests and therefore, can be diminished. Therefore, it is considered essential that officials from various clusters collaborate, share their perceptions of urban greenspace and address the multiple functions to achieve multifunctional urban greenspaces. If these officials are inclusively involved and participating in the process, it is more likely to produce a just outcome (Innes & Booher, 1999). The process can be recognized as important in determining the multifunctionality of urban greenspaces, for this is the stage in which functions are balanced, and decisions are made. If officials collaborate, then the outcome is more likely to be a representation of their objectives – and thus functions, which will enable multifunctional greenspaces. Herein, it is considered important that officials are inclusively involved in the planning process, for this will enable a better representation of the multiple functions they safeguard. Inclusive participation processes, wherein various perspectives are addressed, are essential to collaborative planning. Therefore, this thesis will use the lens of collaborative planning to assess the planning process of urban greenspace and how it enables multifunction urban greenspaces.

1.2 Research objectives and questions

This thesis applies the principles of collaborative planning to the field of urban greenspace planning. The outcome of urban greenspaces is dependent on the planning and decision-making process, for this is the stage in which decisions are made on which functions will be implemented in the urban landscape. This process is shaped by the involved actors, who have different resources and hold different perceptions and objectives related to a particular function of urban green. For multifunctionality to be achieved, all functions have to be considered during the planning and decision-making process. This process is again dependent on the involved actors and the functions they represent. This urban greenspace planning process is represented in *figure 1*. The framework of collaborative planning is used in this thesis, for collaborative planning can help set the right conditions for equal and inclusive collaboration to take place, thereby enabling more consideration to the various actors and the function they represent. This could improve the multifunctionality of urban greenspaces, for instead of domination by a certain actor and function, this enables a process in which attention is paid to all possible actors and functions of urban greenspaces.

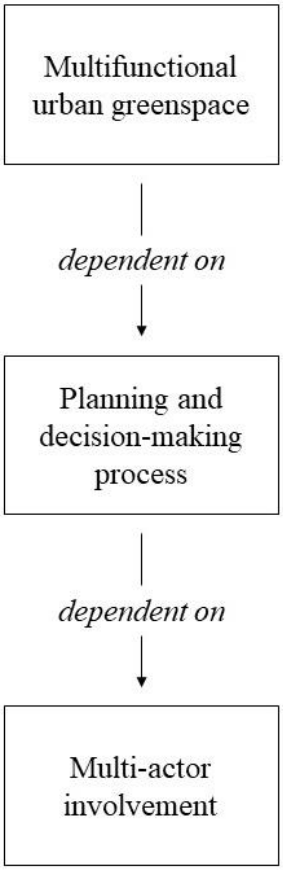

Figure 1: Planning process of urban greenspace, made by the author

This thesis will focus on public urban greenspaces. It is expected that municipal officials will want to deploy a specific function of urban greenspace to achieve the objectives of their cluster. However, there are other officials from other clusters that have a stake in the city. This thesis is interested in how these (competing) officials from separate clusters collaborate and how this cross-cluster collaboration influences the planning process. Therefore, it is more evident to focus this study on public urban greenspace, as this is the responsibility of the municipality and thereby enables to study these cross-cluster collaborations.

Collaborative planning concerns all those that have a 'stake' in a place (Healey, 1998). The thesis is aware of the fact that this means that other stakeholders also have a stake in the planning process of urban greenspace, namely residents and private parties. Residents and private parties are not incorporated in this research, for they are not bounded to a cluster. The interests of residents are not shaped by the tasks and objectives of their organisation. This makes it challenging to establish what determines the function they safeguard. Besides, due to the variety of clusters in the municipality, it is expected that each function will be embodied by a cluster. Including residents and private parties will, therefore, not add additional functions, but only confirm them.

Besides, this thesis is interested in how competing interests can exist in one organisation. The municipality presents itself as the administration of a city that carries out tasks that are of direct relevance to its inhabitants. Municipal officials operate on behalf of one coalition agreement and

one Environment and Planning Act, developed by the municipality. These policies shape the structure of the city and the professional activities of municipal officials. Therefore, it is interesting to see how there are deviations in interests, responsibilities and objectives within this organisation, that might be conflicting. Hence, this thesis will focus on municipal officials for they are affected both by the general policies of the city and by the structures of their cluster. This will enable us to study this duality.

This thesis will examine how the multifunctionality of urban greenspaces is attained through the planning process and how cross-cluster collaboration with multiple stakeholders with various objectives and resources influences this process and the multifunctionality of urban greenspace. The main research question examined in this thesis is:

> *How does the planning process of urban greenspaces with multiple stakeholder interests enable multifunctional urban greenspaces?*

Central to this thesis is the multifunctionality of urban greenspaces. Stakeholders can deploy urban greenspaces differently by opting for a function that matches their objectives and interests. Their different interests and the way this is addressed in the planning process can influence the outcome. The term planning process in the main research question relates to both the input, process as the outcome of urban greenspace, for every phase is dependent on the previous and therefore is vital in achieving multifunctional urban greenspaces in the outcome. For multifunctional greenspaces to be achieved in the outcome, stakeholders have to collaborate in the planning and decision-making process, and every stakeholder that has a 'stake' has to be involved in the input phase. To better answer the main research question, the following sub-questions have been developed:

1. How is multi-stakeholder involvement reflected in urban greenspace?
2. What are the interests of, and power relations between, different stakeholders in urban greenspace planning?
3. How are the interests of competing and collaborating stakeholders addressed?
4. How can multi-stakeholder collaboration be improved to establish multifunctional urban greenspaces?

This thesis focusses on the neighbourhood of Reyeroord in Rotterdam. Therefore, the research questions are applied to this area. The first sub-question will help to identify how different stakeholders from different clusters come together in the urban greenspace planning process in Rotterdam and Reyeroord. Since this thesis assumes stakeholders safeguard certain functions and represented them in the process, it is important to establish how and whether this multi-stakeholder involvement takes place. The second question will address the interests of, and power relations between different stakeholders. As some functions may counteract one another (Borgström et al., 2006; Madureira & Andresen, 2014), it is important to establish the position and resources of stakeholders based on their interests and position in the municipal organisation, for stakeholders can use these resources to achieve their objectives in that place (Margerum, 2002). This would

mean that more powerful stakeholders are better able to fulfil their objectives and interests, and therefore it is more likely that the function they safeguard will be part of the outcome. This makes it essential to establish these interests and power relations for each stakeholder. After establishing this, the third questions will help to see how these interests and power relations are being addressed and used in the planning process. From a collaborative perspective, stakeholders should shift away from competitive interest and bargaining towards collaborative consensus-building (Healey, 1997). If they do so, they are better able to address all possible functions of urban greenspaces, and multifunctionality is more likely to be achieved. However, stakeholders may have conflicting interests, and therefore it is important to see how stakeholder address these (conflicting) interests in the planning process.

This thesis assumes that multifunctional urban greenspaces are valuable to urban life due to their ability to accomplish multiple objectives at once in one location. Collaboration between stakeholder can help in addressing the multiple functions and create a multifunctional outcome. The final question will help establish how collaboration can be improved to establish multifunctional urban greenspaces through an assessment of the input, process and outcome.

The academic and societal relevance of this study

As much academic literature focuses on the various functions of urban greenspace (Grahn & Stigsdotter, 2003; Lepczyk et al., 2017; Morancho, 2003; Toftager et al., 2011; de Vries et al., 2003; Zhou & Rana, 2012) or personal values and experience (Burgess et al., 1988; Gobster & Westphal, 2004; Voigt et al., 2014), the understanding of the multifunctionality of urban greenspaces is well developed. However, how to address this multifunctionality is not well integrated into both the planning, design and management process (James et al., 2009; Messelink, 2002). Existing literature does illustrate the integration of multifunctionality in green infrastructure planning (Hansen & Pauleit, 2014; Meerow & Newell, 2017) or how greenspace components can be linked with urban green services to help planners select the best possible combination of greenspace components (Belmeziti et al., 2018). Nevertheless, more research is needed to understand how existing power relations in multi-stakeholder processes shape the prioritization of some functions (and the associated stakeholder interests) over others and how to better align the functions and interests in the planning process of urban greenspaces in the future.

As cities are growing in population, available land is often scarce. Urban greenspaces can play a valuable role in this due to their multifunctionality. The thesis aims to understand how urban greenspace planning reflects cross-cluster collaboration and how this planning process enables the multifunctionality of greenspaces. Ultimately, this research can also help in improving collaborative planning processes by addressing how stakeholders exert their power in a field where multiple objectives and power structures come together. Power is an essential aspect of planning (Flyvbjerg & Richardson, 2002) and is often insufficiently addressed in collaborative planning (Healey, 2003). By exploring how power influences the planning process, this thesis will hopefully contribute to a deeper understanding of power in collaborative processes. Multifunctional landscapes are not limited to greenspace planning alone but to several other planning fields, such as water management (Hämäläinen et al., 2001), floodplain management (Fliervoet et al., 2013)

and sustainable tourism (Waligo et al., 2013). As a result of this, this thesis can serve as a valuable contribution to the other fields of planning.

In urban landscapes where available land is scarce, urban greenspaces are valuable for people because of their multifunctional character. By creating urban greenspaces that fulfil multiple functions, citizens can benefit from that space to a greater extent. Well-balanced, multifunctional greenspaces are, therefore, a valuable addition to the city. The societal relevance of this thesis is understood insofar as more knowledge about the planning process can help so that greenspaces can be planned and designed in a more multifunctional way. As a result, both people and nature will be able to benefit from these green oases in the city.

1.3 Empirical case

The neighbourhood of Reyeroord and the transition that takes place there, called Reyeroord+, are selected as the case study for this research. Reyeroord is located in the very south of Rotterdam, close to the intersection of three big highways. The sewer needs replacement, and this offers opportunities to place a heating network. Besides these two tasks, City Management (who is also responsible for the sewer) has selected Reyeroord as a starting point for the transition of the city (Joosse & van Buuren, 2020). They want to study how they can approach transitions like circularity, digitalisation and active citizenship integrally. They want to achieve this by moving away from the traditional working method of the municipality and explore new ways of working. Instead of based on hierarchical structures, Reyeroord+ is based on a network structure. An open character and 'learning' attitude characterise this, in which the transition is approached as an ongoing process wherein little is predetermined, and connections are made with colleagues from various clusters. Therefore, the municipality often refers to their involvement in the neighbourhood as a journey. Due to their open network structure and learning attitude, this neighbourhood transition shares significant commonalities with collaborative planning.

Besides, urban greenspaces hold a significant role in the transition of Reyeroord. City Management has established eight ambitions for the neighbourhood. Urban greenspace plays a valuable role in these ambitions, for it can be partially deployed to accomplish multiple of the ambitions, like water management, circularity, liveability and neighbourhood cohesion. This attracts different stakeholders from various clusters of the municipality to participate in Reyeroord+. Reyeroord+ has therefore been selected as the case study for this thesis, for it offers opportunities to study urban greenspace planning with cross-cluster collaborations from a collaborative planning framework in practice.

1.4 Thesis structure

Chapter 2 delves deeper into the multifunctionality of urban greenspaces and how this attracts various stakeholders within the municipality in the planning process (paragraph 2.1 and 2.2). As this thesis applies collaborative planning to the field of urban greenspace planning, it continues by reviewing the scientific literature on this approach by addressing the theory of communicative planning and how this serves as a foundation for collaborative planning. The thesis continues by

discussing the frameworks of Habermas, Giddens (paragraph 2.3) and Foucault (paragraph 2.4). The study operationalises these frameworks into four analytical dimensions which will guide the assessment of the urban greenspace planning process in Reyeroord (paragraph 2.5). The conceptual model gives an overview of the operationalization of the relevant concepts (paragraph 2.6).

Chapter 3 further elaborates on the transition of Reyeroord+ (paragraph 3.1) and how the municipality of Rotterdam practises urban greenspace planning by paying attention to the organisational structure and explaining the clusters (paragraph 3.2).

Chapter 4 addresses the methodology of this research by paying attention to the research method, selection of respondents and research area (paragraph 4.1). Furthermore, it elaborates on the data analyzation (paragraph 4.2).

The results and discussion are combined in chapter 5. In this chapter, the four analytical dimensions are addressed by applying them to the input (paragraph 5.1), process (paragraph 5.2) and outcome (paragraph 5.3) of urban greenspace planning.

The conclusion is covered in chapter 6. The first three sub-research questions will be answered through a discussion of the results (paragraph 6.2). Afterwards, the main research question will be answered, and the last sub-research questions, which gives recommendations to improve multi-stakeholder collaboration to establish multifunctional urban greenspaces (paragraph 6.3). Finally, it reflects on the implementation of this study, and some policy and research recommendations are made (paragraph 6.4).

Chapter 2: Theoretical framework: Collaborating to achieve multifunctional urban greenspaces

2.1 Multifunctional urban greenspaces

Despite a large amount of research on greenspaces, there is little understanding and consensus on the definition of the concept (Taylor & Hochuli, 2017). The variation of types of greenspace is wide. The scope varies from parks, private gardens and urban forests to cemeteries, public spaces and individual trees in the street. Due to this broad and acclaimed distinction, it is important for each study to establish their understanding of greenspace. Even the word *greenspace* does not signify the same as *green space*. *Green space* has a similar implication as yellow door and would imply that all green spaces are taking into consideration, e.g. artificial grass. *Greenspace,* therefore, better reflects the meaning of the concept. Definitions of greenspace focus either on the overarching concept of nature and natural areas in general, or on urban greenspace as urban nature influenced by humans. The concept of greenspaces used in this research will focus on natural areas in the city, designed and constructed by people, of which the basis are plants intended for people's benefit.

The variety of definitions and interpretations illustrates how diverse greenspaces are. This diversity is also reflected in the multiple functions they hold. A landscape is considered as multifunctional when multiple functions are achieved simultaneously (Lovell & Taylor, 2013). Within this landscape, the multiple functions support each other to achieve a better overall performance of the place. The presence of all these functions simultaneously improves the quality of the landscape (see *figure 2*).

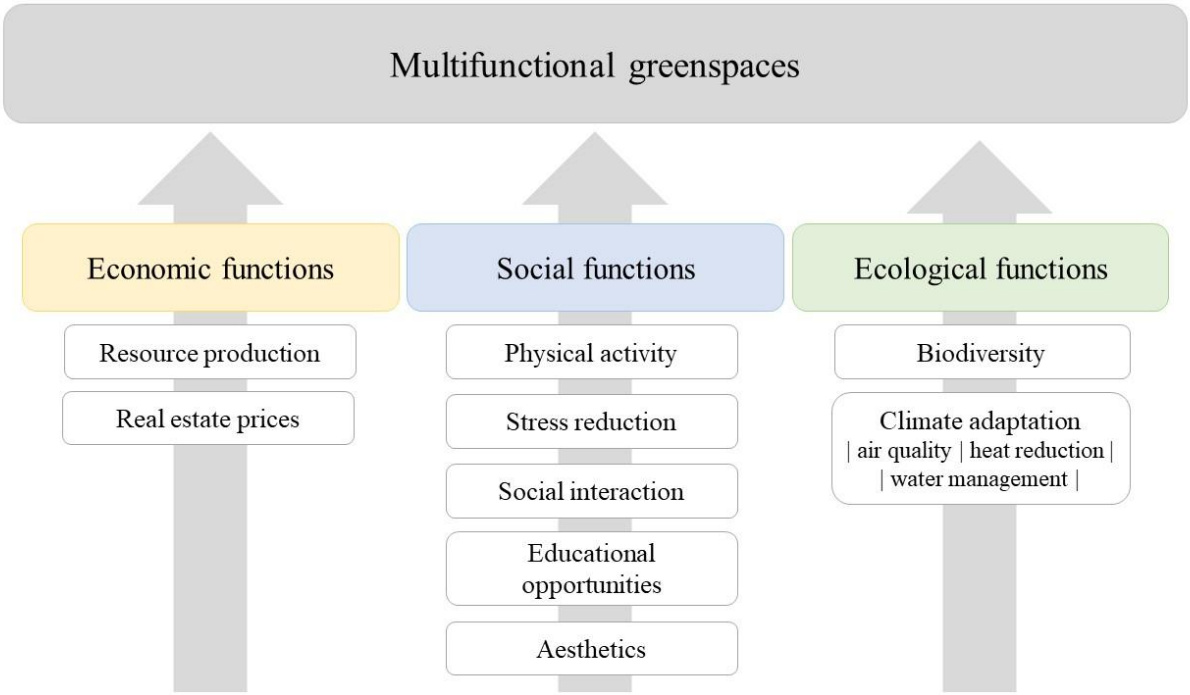

Figure 2: Multifunctional greenspaces, source: Lovell & Taylor (2013), adopted by the author

The various functions of urban greenspaces classify into three main categories:

1. The *economic functions* signify the economic value, like the resources a place provides, e.g. wood production or food from allotment gardens or urban agriculture. Urban greenspaces in a neighbourhood can also increase the price of real estate in the area (Morancho, 2003). Based on three indicators (proximity to public greenspace, view on public greenspace and size of public greenspace), the proximity of real estate to public greenspace showed to be strongest correlated to real estate prices.
2. The *social functions* represent the societal aspects of greenspaces, including both individual experiences, as the welfare of society at large. As individual benefits can result in societal benefits, it is sometimes difficult to make a clear distinction between them. Therefore, these two are discussed in parallel. One aspect of societal functions is health benefits. Urban greenspaces can promote physical activity, which can lower the chances of obesity (Toftager et al., 2001). Furthermore, these spaces can also provide places for relaxation, as they offer places for social interaction, which contributes to an enhancement of social ties and social cohesion (Grahn & Stigsdotter, 2003). Furthermore, people who visit urban greenspaces are less likely to report stress-related illnesses. Greenspaces can also be used for their educational opportunities by creating environments for people to learn about nature (Zhou & Rana, 2012). At the basis of all these functions is urban greenspace visit. Greenspace visit can be stimulated by creating attractive greenspaces. This aesthetic function does not limit itself to visual aesthetics but also includes sounds and smells (Chen et al., 2009). For people to experience the abovementioned benefits, they have to be present, or in proximity, of the urban greenspace. The proximity of residential areas to urban greenspace and accessibility are factors that influence urban greenspace visits and can be deployed to enhance the social functions (Grahn & Stigsdotter, 2003).
3. The *ecological functions* refer to the biophysical environment of a landscape. For urban greenspaces this encompasses biodiversity as well as climate adaptation, for these two are both elements of the biophysical environment. Biodiversity in the Netherlands has drastically decreased since 1990, especially in farm-lands (Wereld Natuur Fonds, 2020). Although cities are often seen as the terrain for people, they can hold a great species of plants and animals (Lepczyk et al., 2017). Currently, this aspect is gaining importance in planning for public spaces, as inner-city nature is more frequently deployed to improve overall biodiversity (Aronson et al., 2017). The contribution of urban greenspaces to climate adaptation can be divided into three main effects: better air quality (Wageningen University and Research, n.d.-a), heat reduction (Wageningen University and Research, n.d.-b) and water management (Wageningen University and Research, n.d.-c).

The available functions are not necessarily identical in every landscape, as their biophysical structures (e.g. a woodland or desert) can differ (Haines-Young et al., 2006). An urban greenspace in the Netherlands, where a maritime climate prevails, is biophysically different from a greenspace in the north of Chile, where there is a desert climate. This structure influences the composition of

plants intended to withstand such climatic conditions. Native plants in desert climates usually consist of low shrubs and plants with little foliage, therefore less capable of creating shade. The biophysical structures can herewith influence the functions of greenspace. Besides geographical differences, the cultural difference can also influence how and to what extent functions are present. In Bali, the greenspaces between the houses and the streets are called 'telajakan' (Kato et al., 2017). They have multiple functions, like flower picking for ceremonies, and they offer a place for street vendors and residents to socialize. However, in Rotterdam, it is not always allowed to pick plants from public spaces. Mediterranean cities, like Malaga in Spain, have a dry climate in summer; therefore, the grass is less likely to survive, for it requires frequent watering. The public spaces in these cities are mainly tiled squares with flower beds and trees. Relaxational activities, like picnicking, are less suitable on tiles and therefore benches are more appropriate. In this case, it is the biophysical structure that influences the design of the public space. Cultural and biophysical structures of a landscape or city determine how and which functions can be implemented in the landscape. The functions described above in the numbering on page 16 apply to northern European countries, for this study takes place in the Netherlands.

Some functions and services automatically derive from urban greenspaces due to the plants that inhabit the place. The presence of trees will reduce some of the heat flux and absorb carbon. Plants are, to some degree, home to animals, like insects. A criticism of greenspace planning is that it could lead to misinterpretations, for it seems like a way to achieve multifunctionality without making decisions between the different functions (Madureira & Andresen, 2014). However, certain decisions can enhance some functions. Planting trees in the street improves aesthetics and contributes to heat reduction. If they are planted in a large distance of each other, they will reduce some heat. However, by creating groups of trees with large canopies, they will reduce more heat due to the size of the trees, but also by providing shade (Santos Nouri & Matzarakis, 2019). On the other hand, decisions can also diminish other functions. Removing fallen leaves from the ground will improve accessibility but will decrease biodiversity, for insects cannot use this to hibernate, and birds cannot find these insects to eat. These practical examples illustrate that some decisions can enhance certain functions while diminishing or even disappearing others.

2.2 Multi-stakeholder involvement

Urban greenspaces have various functions, and these functions can be deployed to achieve various objectives. In a municipality, there are different clusters that all have different responsibilities and aims. Due to the multifunctionality, urban greenspaces are an attractive tool to various clusters, for they can opt for a function that matches their aim. However, these clusters do not have the same ambitions and therefore have different interests in how to plan and design urban greenspaces. The health department will have a stake to use greenspaces to improve residents' health, while the sustainability department will benefit from the use of greenspace for climate adaptation. This means that multiple clusters have a stake in the planning process for urban greenspaces. *Figure 3* shows a visual representation of this.

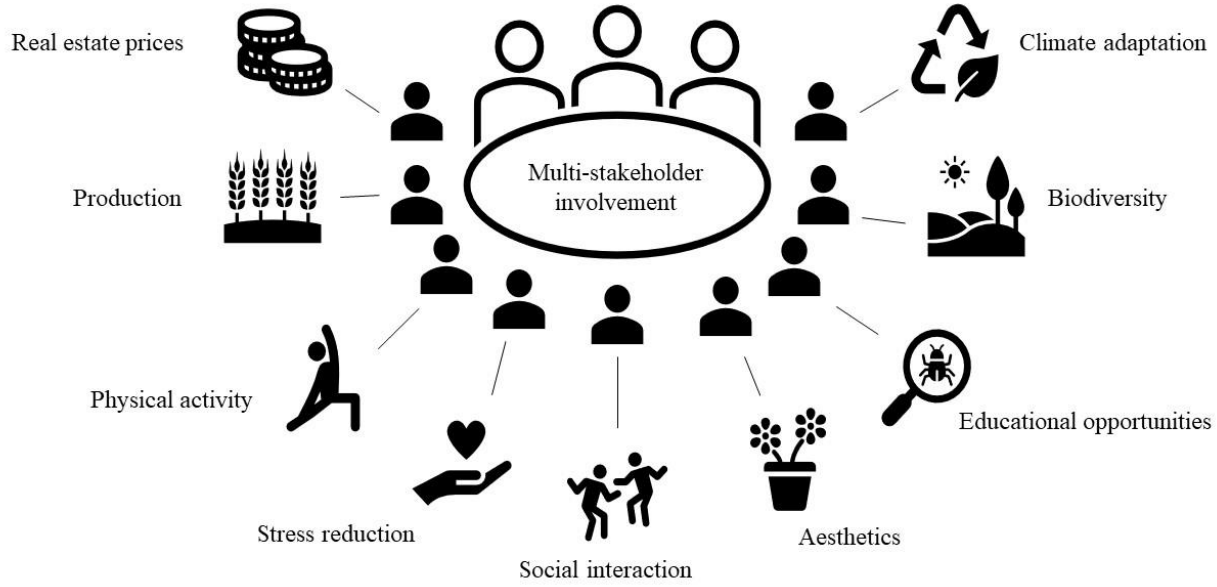

Figure 3: Illustration of how the multifunctionality of urban greenspaces results in multi-stakeholder involvement, made by the author

As mentioned earlier, some functions may enhance or conversely interfere with each other. Therefore, certain design and planning decisions need to be made to balance the functions that urban greenspaces can provide, for simply adding greenspace to a city does not equal in the realisation of all functions. Due to the multifunctional character, various clusters, with specific aims and interests, have a stake in the planning process. The municipal officials that are affiliated to a cluster can be described as stakeholders. Stakeholders define as individuals or groups that have a specific interest in a particular decision (Hemmati et al., 2002). It involves those who have the capacity to influence a decision, as well as those affected by it. In an ideal situation, this would result in inclusive stakeholder involvement. However, in practice, not all stakeholders, those who influence the decision and those affected by them, are always involved. When decisions affect multiple stakeholders, like urban greenspace planning, it concerns multi-stakeholder involvement. These processes "aim to bring together all major stakeholders in a new form of communication, decision-finding (and possibly decision-making) on a particular issue" (Hemmati et al., 2002, p. 2). Multi-stakeholder involvement bases on four conditions:

1. Equitable and accountable communication between stakeholders, who form an equitable representation;
2. The process is transparent and involves participation;
3. It covers a wide spectrum of both vertical and horizontal involvement; and
4. It includes consensus-building, decision-making and implementation of practical solutions.

This multi-stakeholder involvement manifests itself both within the municipality, with multiple departments who are involved (e.g. health, sustainability and ecology departments), and outside with multiple stakeholders, like citizens and private investors (Smith, 2009). For the interests of this thesis is in how stakeholders from different clusters in the municipality collaborate, it will not include citizens and private investors as stakeholders (as clarified in the introduction). The concept of multi-stakeholder involvement is embedded in collaborative planning, where various stakeholders collectively plan towards a shared concern. Although stakeholders all have a stake in that same place, their stakes can be very diverse (Healey, 1997). Stakeholders can choose to plan individually; however, benefits can be gained if they work together. This concept of 'stakeholding' is central to collaborative planning (Harris, 2002). As the functions of urban greenspace do not directly counteract each other, but with the right coordination, can strengthen each other, multiple stakeholders can collaborate in the process. Urban greenspace development offers opportunities to deploy the urban greenspace in a way that it contributes to climate adaptation, by creating groups of large trees, which provide shade, as well as absorb heat. These trees also form wildlife passages for bats and birds, as well as provide aesthetic opportunities. This planning process involves various stakeholders, who may all have a different stake that can be achieved by deploying a certain function. In a collaborative process, stakeholders can combine their strengths and interest to achieve individual and shared goals. This means that collaboration in the process offers opportunities for a multifunctional outcome if stakeholders combine their interests and the function they safeguard and collectively plan towards urban greenspaces that meet their requirements. Therefore, this research will adopt a collaborative planning approach to assess urban greenspace planning. This approach proves to be relevant for urban greenspace planning, for it involves multiple stakeholders in the process, who may share similar and different objectives in the same place, and by collaborating, they can accomplish their objectives and achieve multifunctional greenspaces. Collaborative planning is not considered as a theory, but rather as an approach to planning. Its foundation can be found in communicative planning theory.

2.3 From communicative planning theory to an approach of collaborative planning

Communicative planning is founded on inclusive participation, in which all forms of knowledge are included (Healey, 1997). It evolved in the late 1980s as a response to the traditional, rational planning thought. It is a response to two changes: "the resurgence of economic valuation and postmodern critiques of scientific rationalism" (Harris, 2002, p. 24). Communicative planning responds to the revival of economic valuation by distancing itself from this form of valuation and thereby taking other forms of valuation into account. Essentially, it agrees that individuals are not solely utility-maximizing and rational, but are additionally formed by emotional and moral responses. The postmodern critique of scientific rationalism questions the existence of an absolute truth. Instead of assuming an absolute truth, postmodernism assumes that there is no absolute truth, but that several truths coexist. Communicative planning joins this line of thinking by assuming that knowledge is developed and communicated in many forms, and all knowledge is socially constructed (Healey, 1997). This decline of the traditional rational planning model can be regarded

as the 'communicative turn in planning'. More thought is being given to "how people come to have the ways of thinking and ways of valuing that they do, and how policy development and policy implementation processes can be made more interactive" (Healey, 1997, p. 28). Communicative planning is based on two assumptions: 1) individuals are not isolated from each other but live in complex webs of social relations with each other, and 2) it recognizes multiple ways of knowledge, instead of only scientific knowledge. Jürgen Habermas' communicative action is considered to be at the foundation of communicative planning. However, it has been criticized for lacking a sense of context and structure. Therefore, Patsy Healey incorporates issues of context and structure to communicative planning to create collaborative planning (Harris, 2002). She adopts Habermas' communicative action and enriches it with Giddens' structuration theory. These matters are relevant for assessing urban greenspace planning, for this process is not only shaped by individuals' interaction but additionally by structures that shape these individuals, like norms and values in society and institutions. Therefore, Healey's conceptualization of communicative and collaborative planning will be most appropriate for this thesis. At the basis of her conceptualization are two leading sociologists, Jürgen Habermas and Anthony Giddens.

Jürgen Habermas

Jürgen Habermas' theory of communicative action is at the basis of communicative planning theory. Habermas tries to look beyond narrow instrumental rationalism by expanding this with other forms of reasoning (Habermas, 2015). He argues that our reasoning is dominated by *instrumental-technical reasoning*, which is in line with scientific rationalism and aims to enrich this with other forms of reasoning, namely *moral reasoning* and *emotive-aesthetic reasoning*. Due to his disbelieve in the utility-maximizing and rational individual, other forms of reasoning should be given equal attention in the debate, instead of limiting to instrumental-technical reasoning. Habermas puts the debate, the interaction, at the centre, for through communication, we need to sort out what is important, what is valid and what our course of action will be. This communicative action "is oriented to reaching understanding – a communicative rationality that is discursively and collectively achieved" (Huxley, 2000, p. 370). Equal communication, which incorporates all forms of reasoning, is essential in Habermas' theory.

Urban greenspace planning processes are a collection of stakeholders with different objectives and perceptions of urban green. Habermas' communicative rationality serves as a helpful approach for an equal debate in which all different perception can be addressed. Equal communication is essential is this process, for that will give stakeholders the freedom to participate in the debate and reach understanding. If equal communication would not be possible, one stakeholder could impose his or her opinion on the rest. Only one function would then be included in the debate, leading to mono-functional urban greenspaces. To achieve multifunctionality, it is important that all perceptions of greenspaces can be addressed. Communicative action can prove helpful to achieve this.

Anthony Giddens

For its emphasis on process, communicative planning has been criticised for not paying sufficient attention to place (Harris, 2002). Due to its focus on inclusive collaborative consensus-building and the assumption that all types of knowledge are equal, communicative planning theory has been criticized for not paying sufficient attention to political elements. By incorporating Giddens' structuration theory, Healey tries to overcome these limitations by paying attention to the structures that shape individuals and vice versa. Giddens' structuration theory offers a perspective on the production and alteration of social life (Nash, 2010). The basic assumption of Giddens is the recursive relation between structures and agency (Giddens, 1984). Structures were commonly regarded as external forces acting on individuals, the agencies. People were assumed to be formed by their society. Giddens agrees that external forces indeed shape people, but besides, people also shape the structures surrounding them. Both structures and agents exert power through allocative dynamics, that generate authority through objects, goods and means, like resources or money, and through allocative dynamics that express authority over actors, for example through rules. It is not a one-way relationship, but an interacting relationship. We are made by structures but at the same time makers of these same structures. Society is shaped by our interactions, and we are also shaped by that same society. It is a relational web of interaction between structure and agency.

This structure-agency relationship can also be discerned in urban greenspace planning. The perceptions and objectives that stakeholders have of greenspaces are among others, formed by the cluster they are affiliated to. In return, the stakeholders can also shape how clusters perceive urban greenspaces and what their objectives are. Giddens' structuration theory can help to understand how this interacting relationship is manifested in urban greenspace planning. It shows that the way people understand and interact with their surroundings is not a one-way relationship. People have the abilities to re-shape their surroundings.

Communicative planning

Both Habermas' and Giddens' theories have limitations, but their contributions "highlight both the cultural boundedness of ways of thinking and acting, and the possibilities for learning, for development, and for transformative action" (Healey, 1997, p. 54). The key concepts of communicative planning are that knowledge is socially constructed, putting great emphasis on the interrelatedness of communication and knowledge production. The theory presents itself as being inclusive, by giving a platform to all forms of knowledge, from expert to lay knowledge. And by arguing for more inclusive and collaborative planning or collaborative consensus building. Although communicative planning comes in many forms, the key emphasis is on the following aspects:

1. All knowledge is socially constructed, and expert knowledge is not different from practical knowledge;
2. Knowledge is developed and communicated in many forms;
3. Individuals do not form interest or preferences independently, but through social interaction ad contexts;

4. Relations of power do not only oppress and dominate through the distribution of resources but also through assumptions and practices;
5. Ownership needs to be spread through all ranges of knowledge and reasoning to all those with a 'stake' in a place;
6. A shift away from competitive interest and bargaining towards collaborative consensus building; and
7. Contexts and practice are not separated but socially constructed.

Collaborative planning approach

Collaborative planning derived as a practice from communicative planning. It is based on the key dimensions mentioned above but incorporates this with issues of context and structure. Communicative planning has been criticized for paying insufficient attention to place. Therefore, collaborative planning tries to incorporate spatial awareness and understanding. Healey adopts collaborative planning to a European context (Healey, 1997) making it an appropriate planning form to adopt for this thesis, as the case is based in a European city. Places are regarded as 'social constructs', which means that stakeholders could all have a different perception of the place. They are formed as the product of competing and collaborating stakeholders and may sustain multiple meanings and references simultaneously (Harris, 2002). In an urban greenspace planning setting, multiple stakeholders perceive urban greenspaces through their aims and objectives in that place and the function related to this. Their 'stakes' can be competing as well as corresponding. An urban greenspace can possess multiple meanings to various actors, and even though some of these functions can obstruct one another, they also possess the ability to be present simultaneously, however not always at the same degree. An inclusive and collaborative planning process is at the basis of achieving multifunctional greenspaces, for then sufficient attention is being paid to all possible actors who have a stake, and hence to all the functions a greenspace can hold.

Collaborative planning serves as an appropriate form of planning to assess the planning process of urban greenspaces, for it is based on the assumption of multiple stakeholders who hold multiple meanings within a place. As previously discussed, urban greenspaces are characterized by their multifunctionality, which attracts multiple stakeholders who all hold different meanings to that urban greenspace. Health professionals could have a stake in the health-related functions of greenspace, like its ability to absorb carbon, reduce stress or the space it offers for exercise. An ecologist might focus on the biodiversity aspects of a greenspace, as being a place for wildlife. Urban planners might pay more attention to the spatial functions of urban greenspaces, e.g. to serve as a landmark in the city. This illustrates that various stakeholders all hold various meanings in the same place. Their collaboration in the planning process determines how the functions are aligned in the outcome. However, practical illustrations have shown that some functions can obstruct one another, resulting in competitive stakeholder objectives. So, what results in the manifestation of one function over the other? Collaborative planning has been criticized for not paying sufficient attention to power and conflict (Healey, 2003). However, this is an essential aspect of this thesis and for the field of planning in general (Flyvbjerg & Richardson, 2002). Therefore, it is important to shed light on this aspect.

2.4 Power and conflict in collaborative planning

Conflict is inevitable in planning processes (Flyvbjerg & Richardson, 2002). However, how does the theory of communicative planning or the collaborative planning approach, which basic assumption is to reach consensus, address this?

Communicative planning builds on Habermas' communicative action, where debate through equal communication is central and is aimed at reaching consensus amongst equal participants (Flyvbjerg & Richardson, 2002). Only what happens if consensus is not reached? Communicative and collaborative planning are aimed at changing the institutional governance towards more open discursive styles. Hereby, it only tackles the institutional aspects of power structures and not the individual ones (Tewdwr-Jones & Allmendinger, 1998). This reveals itself into three obstacles:

1. Even though communicative planning relies on neutral actors, these actors could intentionally employ strategies and tactics within the debate to bring about his or her desired ends;
2. Participants could search for likely-minded and create stakeholder groups with those that possess shared agendas and common values to be better able to defend their argument; and
3. Power and information sharing are important aspects to create consensus. However, in practice, individuals will not likely share all their information.

Furthermore, communicative planning aims to allow all perspectives to be heard before reaching consensus. However, in practice, this might not work. The pursuit of consensus might not lead to a more inclusive debate for all, but rather to the retention of dichotomies (Tewdwr-Jones & Allmendinger, 1998). The search for consensus possesses practical problems. Habermas fails to shed light on the empirical-scientific context and therefore has been criticized for being too utopian and neglecting power and as corollary communicative planning as well. Essential to Habermas' communicative action is an ideal society where debate is free from domination, more democratic and based on a robust civil society. However, planning is inevitably about conflict (Flyvbjerg & Richardson, 2002). So, instead of developing a model where power is absent, we have to move towards a model where power is recognized, both its productive and destructive potential. Flyvbjerg and Richardson (2002) integrate Michel Foucault's understanding of society, in which power is always present, into communicative planning. Even though in Habermas' ideal domination is absent, he does presume people to submit to this ideal, making it essentially an oppressive ideal in itself. For what happens if people do not wish to conform to his communicative rationality? Instead of neglecting power, Foucault acknowledges power and conflict as the most effective starting point to fight against domination, for we cannot deny that power is present in our everyday lives.

Due to the spatiality of Foucault's thinking, it serves to be appropriate to apply to the planning practice. His analysis of social 'time-space' explains how practices and knowledges that are specific in both space and time find their manifestation in the landscape. Going back to urban

greenspace planning, it means that planning policies construct their own 'space-time'. Discourses are adopted and implemented at the expense of other discourses. For example, a possible discourse is that nature should serve humans. This would be manifested in a way that greenspaces are made aesthetically attractive for human use. This conflicts with other possible discourses, like nature as nature, where greenspaces are seen as nature, and plants are allowed to grow at their own pace, without human interference. Healey and collaborative planning acknowledge that places are social constructs that are shaped by competing and collaborating stakeholders (Harris, 2002). Therefore, it is necessary to understand "how discourses and strategies of inclusion and exclusion are connected with particular spaces" (Flyvbjerg & Richardson, 2002, p. 56). This thesis aims to understand the discourses revolving around urban greenspaces and how stakeholders are affected by these strategies of inclusion and exclusion, for this can shape how the functions of urban greenspaces are addressed.

2.5 From Habermas, Giddens and Foucault to analytical dimensions to assess urban greenspace planning processes

Habermas' work on communicative action is regarded as the foundation of communicative planning. The essence of his theory is equal communication, which incorporates all forms of knowledge and is aimed at reaching understanding. This offers opportunities for a form of planning which is not dominated by instrumental rationalism and in which all stakeholders are equal. Adopting Habermas' framework to urban greenspace planning can provide a valuable perspective on how planning *should be* done. Laying a basis for equal and inclusive communication allows stakeholders to openly express themselves in the process. This provides opportunities to listen to all the perspectives of stakeholders and the functions they safeguard. Ultimately, this can contribute to a more holistic understanding of the multifunctionality of urban greenspaces and provide a basis for its implementation.

Habermas' communicative action has shortcomings in understanding people in relation to society. It offers a bottom-up approach which revolves around communication between people. However, it lacks a focus on how structures in society affect these people and vice versa. Therefore, Patsy Healey incorporates Giddens' structuration theory and develops a stream of collaborative planning in which more attention is given to the recursive relation between structure (society) and agent (people). In light of greenspace planning, Giddens' structuration theory helps to understand how present discourses shape stakeholders in society and institutions and how their perceptions collectively can also reshape these structures. The theory helps to shed light on the interplay of allocative dynamics (resources), authoritative dynamics (rule structures) and ideas and discourses (Healey, 2003). A discourse is understood as "an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena" (Hajer, 2006, p. 67). This means that discourses are not only limited to society at large but can also be present in organisations. Especially in a public organisation like the municipality of Rotterdam, with over 13.000 employees, this recursive relation is likely to be present. This can be illustrated with an example. The municipality has a perception of how they wish to use urban greenspaces in the city

and what the function of nature is. The municipality of Rotterdam has established three management categories for this in which they make a distinction between exclusive green for the city centre, cultural green for the surrounding neighbourhoods and natural green for the edges of the city (Gemeente Rotterdam, 2017), see *appendix 1*. The municipality adopts these management categories throughout their policies, and this establishes a discourse of urban nature of the municipality, namely that the function of urban greenspaces in the centre is to be aesthetically and user-friendly and that urban greenspaces are allowed to be more dynamic and natural at the edges of the city. However, municipal officials can draw new policies and change the physical layout of the city and thereby can influence the discourses that are present and create more natural urban greenspace throughout the city. This framework of Giddens is valuable for this thesis, for it acknowledges that actors cannot be seen in isolation of their structures and vice versa. This is especially relevant since this thesis looks at how clusters, and the municipal officials that are affiliated to them, collaborate and through this can reshape the urban landscape. Therefore, it is relevant to look at the allocative and authoritative dynamics and ideas and discourses that are present in these clusters and how they shape municipal officials and how they, in return, shape the cluster. It is especially interesting to research how these allocative and authoritative dynamics and ideas and discourses differ between clusters. The recursive relation can help understand how agents and structures shape planning processes and how this takes place. It can help comprehend how functions are prioritized and why they are implemented in the city, or not.

Giddens intention was not so much to provide a theory that could be empirically tested, as it does not prescribe a methodology (Stones, 2005). It is more intended to be used as a sensitizing device to help understand how societies work (Turner, 1986). According to Healey, methodologically Giddens' theory can be best used to understand "how power relations are manifested and 'structured in' ('embedded') to daily life discourses and practices, and in this sense reflects a more Foucauldian sensibility" (Healey, 2003, p. 112). Therefore, the frameworks of Habermas and Giddens will be complemented with Foucault's understanding of power. Additionally, the reason this is applied is that Habermas' theory has been criticized for its neglect of power and Foucault serves as a valuable understanding to how power shapes society (Flyvbjerg & Richardson, 2002). Foucault's framework will be used to understand how power shapes all stages of multi-stakeholder planning processes and how this influences the outcome of urban greenspaces.

Analytical dimensions for multi-stakeholder involvement in planning processes

Based on the frameworks of Habermas, Giddens and Foucault, four analytical dimensions have been established, which will help understand how multi-stakeholder involvement influences planning processes and multifunctional urban greenspaces. The four dimensions are:

1. Inclusion;
2. Understanding among stakeholders;
3. Recognition of power; and
4. Comprehension of discourses and perceptions.

These dimensions have been established because compliance with them offers opportunities for inclusive stakeholder involvement, a collaborative decision-making process and a multifunctional outcome. This thesis incorporates the entire planning process, thereby focusing on the input, process and outcome. Therefore, these dimensions will be applied to all three stages of the planning process, for each phase cannot be seen in isolation of the other. Even though stakeholders collaborate in the decision-making process, if they are not inclusively involved in the input, then it is likely that it will not lead to a multifunctional outcome. And if stakeholders are inclusively involved, but they are not equally and inclusively collaborating, then the outcome is likely to be dominated by a single stakeholder (group). Therefore, it is important to apply the four dimensions to each stage of the planning process.

Inclusion

Collaborative planning is based on the notion that all relevant stakeholders have to be involved in the process, to create a true representation of the spatial challenge and representing all affected stakeholders (Healey, 1997). By participating, actors have the ability to make an impact. At the centre of this thesis is that all functions have to be safeguarded by a stakeholder in the planning process if they are to be incorporated. Therefore, all possible stakeholders must be included. In the composition phase or input phase, this is reflected in inclusive stakeholder involvement. Herein, it is essential to comprehend what determines their participation, for this can foster or obstruct involvement. From a structuration theory perspective, this can help retrieve how dynamics and ideas and discourses influence stakeholder inclusion. Resources influence access to the participatory process. Stakeholders that have the financial resources or time to participate will be more likely to be included, than those who lack these resources (Nordvig-Larsen, 1999 in Agger & Löfgren, 2008). From a Foucauldian perspective, attention should be paid to how power influences stakeholder composition. Both positive (empowering) and negative (restricting) forms of power should be taken into consideration.

During the process phase, inclusion will clarify whether stakeholders are equally incorporated in the decision-making phase. According to Habermas, this is important so that equal communication can take place. Structuration theory can help to understand how dynamics and ideas and discourses shape inclusive decision-making. Foucault will help understand how and which power structures influence the process.

An inclusive outcome would signify an outcome which is not biased towards a certain group or individual stakeholder. An outcome that is based on equal communication would represent all stakeholder perceptions. However, this does not mean that the outcome is built up by the perceptions of all stakeholders in the same degree, but rather that all stakeholders perceptions are taken into consideration and that they are listened to during the process-phase.

Understanding among stakeholders

Reaching understanding is essential to Habermas' communicative action. In the input-phase, this depends on inclusion. If stakeholders, and their perceptions, are equally included, opportunities for understanding are more likely to occur. In light of this thesis, understanding is not merely a matter

of understanding each other, but also whether the understanding of the project is holistic. So, whether all possible perspectives - and thus functions - are taken into consideration. Therefore, equal inclusion is prerequisite for understanding among stakeholders, for otherwise, some perspectives might not be involved.

During the process, understanding means that stakeholders are not only at liberty to speak, but also listen to each other and understand each other perspectives. Reciprocity and tolerance are essential in creating equal deliberation and decision-making (Agger & Löfgren, 2008). This will also foster different kinds of knowledge. Power can work in both ways. Therefore, it is important to not only look at the restricting side of power but also at the empowering side. What fosters understanding and what impedes it? It is crucial to not only look at how stakeholder groups can create understanding but also how they cope with conflict. Inevitably stakeholders will have conflicting interests and objectives. Instead of looking at how this can be avoided, more important is how this can be addressed.

Understanding among stakeholders in the outcome manifests itself in the production of new understanding, which is valued by all stakeholders. This can be new knowledge or networks or understanding of each other's perceptions. In Foucault's framework, this would mean the production of positive power or empowerment. From a structuration theory perspective, the question would be whether stakeholders developed something that contributed to the structures.

Recognition of power

For Habermas does not adequately address power in his work, this dimension is foremost inspired by Foucault and Giddens. On a methodological level, Giddens' structuration theory can be regarded as reflecting a Foucauldian sensibility, for it looks at how power relations are manifested and structured in daily life discourses and practice (Healey, 2003). In light of this perspective, Foucault and Giddens are both used to understand how power structures shape stakeholder involvement, decision-making and the outcome of urban greenspace planning. An essential question in every phase of greenspace planning is how and which power structures shape these processes? From Giddens' perspective, it is interesting to look at how structures exert their power to shape agents, and in return, how these agents use their power to shape structures. Attention is paid to which power structures and dynamics are most decisive in planning, as a lack of resources is usually the most common restraint in collaborative processes (Margerum, 2002). It is expected that different dynamics of power perform different roles during the planning process. Networks might be more decisive in the composition or input-phase, whereas resources might be more of influence during decision-making.

Comprehension of discourses and perceptions

In this thesis, the term discourse reflects "an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena" (Hajer, 2006, p. 67). A discourse is something shared by a group, whereas perceptions relate to individuals. Concerning urban greenspaces, discourses reflect perceptions of nature or perceptions of the purpose of urban greenspace that stakeholders share. These discourses are particularly valuable regarding cross-

cluster collaboration, for it is likely that clusters hold different discourses of urban greenspaces. For example, officials from the health department that are involved in a greenspace planning process hold a discourse in which greenspaces should be implemented to improve citizens' health. Officials from the ecology department are expected to have a different discourse in which urban greenspaces serve as a habitat of flora and fauna. To establish a multifunctional outcome, stakeholders should comprehend the different discourses that are present. Stakeholders should also be aware of the perceptions of individuals. Stakeholders from one cluster might be expected to share a discourse, but within this discourse, various individual perceptions can be present. In Habermas' communicative action debate is most important, for by fostering communication about these discourses and perceptions, stakeholders can establish what is important, valid and how to proceed (Huxley, 2000).

For the input, it is vital to establish what the different discourses and perceptions are and to what extent they influence stakeholders' capacity to participate. The decision-making phase will establish how discourses and perceptions influence the process and what hinders the comprehension of these for stakeholders. Regarding the outcome, comprehension of discourses and perceptions can help in establishing multifunctionality when the outcome is a representation of all discourses and perceptions. The frameworks of Giddens and Foucault can be used to understand how new discourses are built and how discourses work as an oppressive mechanism.

These four analytical dimensions serve as the operationalisation of the frameworks of Habermas, Giddens and Foucault to research urban greenspace planning. *Table 1* presents how the four dimensions can be translated into practical evaluation questions to assess the input, process and outcome of the urban greenspace planning process.

Dimension	*Input (inclusive stakeholder involvement)*	*Process (collaborative decision-making)*	*Outcome (multifunctional greenspaces)*
Inclusion	Who are invited to participate? What determines participation?	Are all stakeholders equal in the decision-making process? Do stakeholders form groups and exclude others during the process?	Do the outcomes reflect the interests or wishes of all stakeholders?
Understanding among stakeholders	Are all functions of urban greenspaces, i.e. expertise of all stakeholders, represented?	Are the deliberations processes characterized by reciprocity and tolerance? Is the stakeholder group capable of handling conflict?	To what extent do the debates produce something which is perceived, by the participants, as essential for decision-making processes?
Recognition of power	To what extent do resources and networks influence the stakeholder composition?	To what extent does the process contribute to endowment and empowerment of all participants? To what extent do resources and networks influence the process?	Have the processes contributed to the building of institutional capital and capacity? To what extent did resources and networks influence the outcome?
Comprehension of discourses and perceptions	What are the perceptions of urban greenspace (functions) of the stakeholders, and how do they differ across individuals, departments or municipality? How do discourses determine stakeholder composition?	How do discourses and perceptions influence decision-making?	To what extent is the outcome a representation of all stakeholders' perceptions? Did the process build new discourses?

Table 1: Analytical dimensions, made by the author

2.6 Conceptual model

The theoretical framework approaches multi-stakeholder involvement in urban greenspace planning from a collaborative perspective. The perspectives of Habermas, Giddens and Foucault have been addressed to establish four analytical dimensions that help to answer the central question: "*How does the planning process of urban greenspaces with multiple stakeholder interests enable multifunctional urban greenspaces?"*.

Expected in this thesis is that multifunctional urban greenspaces can be achieved by collaborative decision-making between stakeholders in the process. The expected prerequisite for this is inclusive stakeholder involvement in the input phase. Because each phase is a prerequisite for the other, the theory of collaborative planning is applied to the input, process and outcome of greenspace planning. The foundation of collaborative planning can be found in Habermas' communicative planning. Central herein is equal communication, incorporating all forms of knowledge and is aimed at reaching understanding between people. Giddens' structuration theory is used to enrich Habermas and revolves around the recursive relation between agent and structure. The neglect of the notion of power, mainly in Habermas' work, is approached through Foucault's understanding of power. In his perspective, power is central to everything in our society. His understanding pays attention to both the empowering and restricting side of power.

The combination of these three sociological perspectives is used to understand the planning process of multifunctional greenspaces. They are operationalised into four analytical dimensions that serve to assess the urban greenspace planning, namely: inclusion, understanding among stakeholders, recognition of power and comprehension of discourses and perceptions. This is illustrated in *figure 4*. By applying the analytical dimensions to each phase, expected is that the input results into inclusive stakeholder involvement. For the process, this is expected to result in collaborative decision-making and for the outcome in multifunctional urban greenspaces.

The questions in *table 1* are translated into normative values at form the conceptual model, see *figure 5*. Expected is that if these values are met inclusive stakeholder involvement, collaborative decision-making and multifunctional urban greenspaces can be achieved. Expected is that each phase is a prerequisite for the other. If inclusive stakeholder involvement cannot be met, then the process can still be based on collaborative decision-making. However, multifunctional urban greenspaces are not likely to be achieved because not all stakeholders from all possible functions are incorporated. The process will be influenced by those stakeholders that are involved, and this will thus influence the outcome. Also, if the input is a representation of all stakeholders that are inclusively included, but the process is dominated by one stakeholder making the decision instead of a collaborative process, then the outcome is expected not to be fully multifunctional. Therefore, all phases of the process are essential for the outcome.

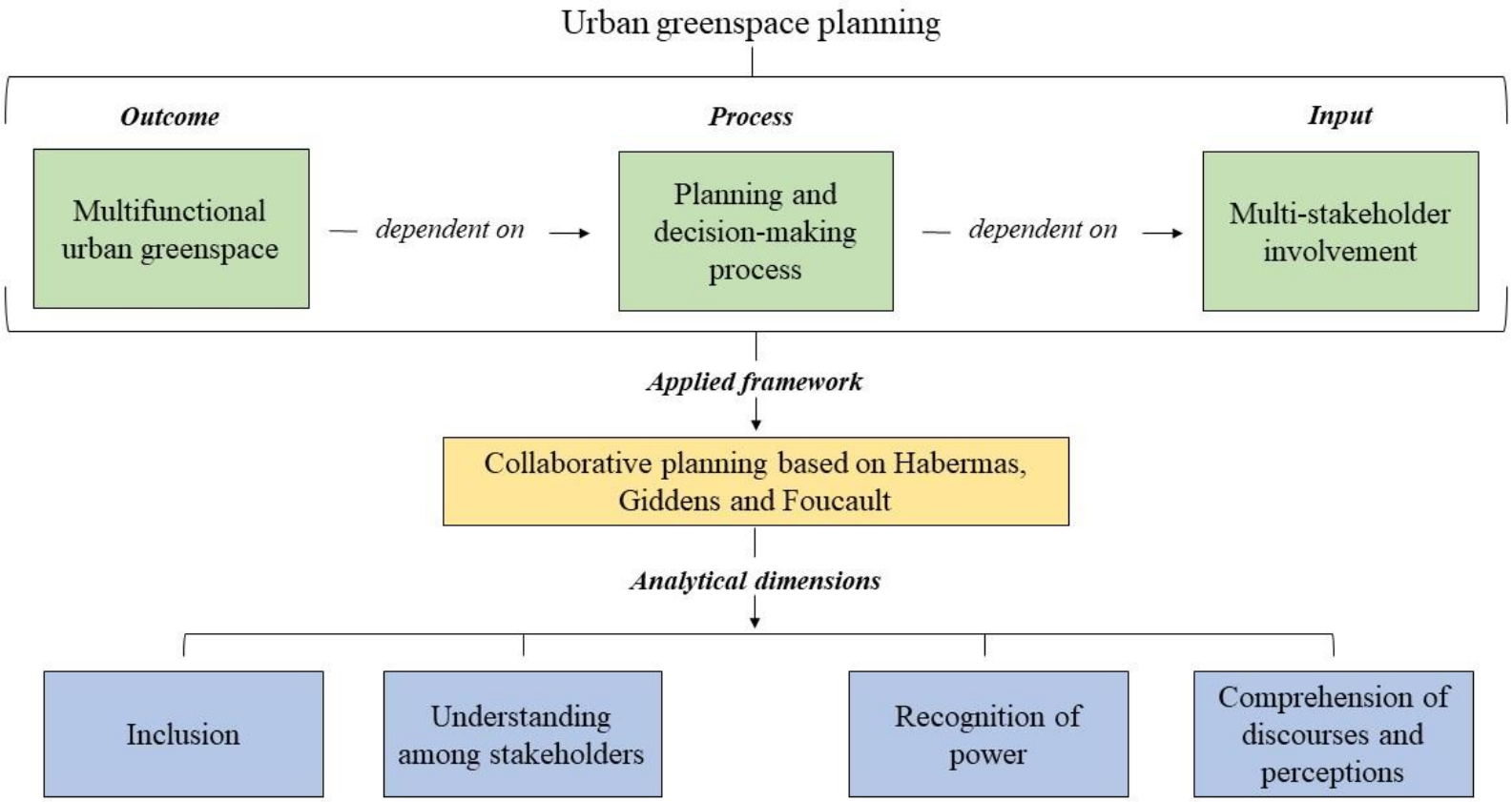

Figure 4: Planning process of urban greenspace enriched with the applied framework and analytical dimensions, made by the author

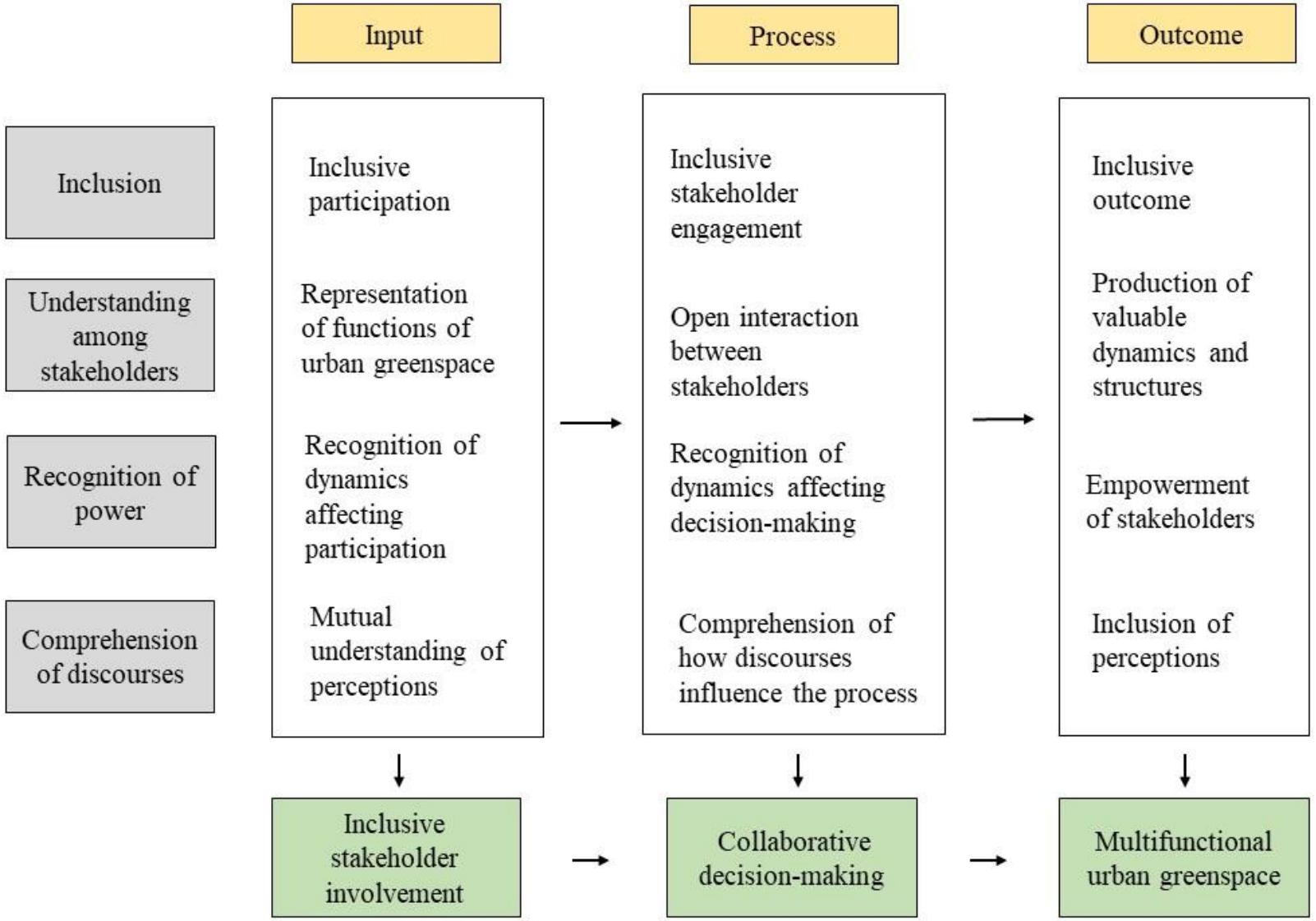

Figure 5: Conceptual model, made by the author

Chapter 3: Case study: the neighbourhood of Reyeroord in Rotterdam

Rotterdam is the second biggest city in the Netherlands, with over 650.000 inhabitants in 2020 (Gemeente Rotterdam, n.d.-b). The city is famous for its largest harbour in Europe, modern architecture and a working mentality of "*stop chatting, start cleaning" ("niet lullen, maar poetsen").* Rotterdam is considered as one of the most diverse cities in the Netherlands. This attracts people from all over the world.

At the same time, the city deals with multiple challenges. They face a sustainability challenge for they are located in a delta where the sea and many rivers come together. Cities located in low regions close to the sea are particularly vulnerable to climate change, due to sea-level rise. Despite their necessity to make the city more sustainable, other challenges are affecting the city. Rotterdam is expected to grow in future years to up to 700.000 inhabitants. This results in 50.000 additional dwellings (Gemeente Rotterdam Stadsontwikkeling, 2019a). As a solution to partly respond to these challenges, the municipality wants to utilise urban greenspaces. Urban greenspaces are considered valuable for city life, for they create places for relaxation and stress reduction. However, urban greenspaces are often under stress due to densification (Haaland & van den Bosch, 2014), a challenge which affects the city.

3.1 Reyeroord+

One of the neighbourhoods in Rotterdam that will undergo a significant transition regarding sustainability and liveability is Reyeroord. Reyeroord is a neighbourhood located in the southern part of Rotterdam. It is part of the area of Groot IJsselmonde. This area was designed in the 1950s by urban planner Van Drimmelen and realised in the 1960s (Gemeente Rotterdam, n.d.-c). This garden city-based area is inspired by a flower petal structure, which is noticeable by a central area with central facilities, like the heart of a flower, surrounded by the districts, which represent the leaves. Reyeroord mainly consists of small apartment buildings and houses with grass areas with some trees in between. However, these urban greenspaces between the dwellings are quite mono-functional and are not intensively used by the residents. In the west of the district is a large urban greenspace in the form of a park, with multiple playing areas for children. An overview map of the neighbourhood is presented in *figure 6*.

The neighbourhood faces several future challenges, such as climate change, energy transition and digitalisation (Gemeente Rotterdam, n.d.-d). The municipality of Rotterdam wants to tackle these challenges in an integral matter by implementing solutions that address multiple challenges simultaneously. The catalyst for the transition of this neighbourhood is the sewer that needs to be replaced. As a result, the street has to be excavated, which offers many opportunities to tackle other issues in the neighbourhood. Reyeroord has therefore also been chosen to be one of five neighbourhoods in the city where they are going to make the transition from natural gas to natural gas-free by placing a heating network. The municipality named this transition of Reyeroord *Reyeroord+*, the strategy to make the neighbourhood future-proof.

Figure 6: Map of the neighbourhood of Reyeroord with the main urban greenspace at the left of the highlighted area; map retrieved from personal communication with contact person, adopted by the author

Eight ambitions have been established to guide the transition of the neighbourhood (Gemeente Rotterdam, n.d.-d):

1. Liveability for everything
   This ambition focusses on attractive public space. The use by, and wishes of, the residents are central to this. The aim is to create friendly outdoor space that invites to play, exercise, meet and stay.
2. Smart use of data
   Information gathering is made more accessible through the use of smart data. For example, for residents to more easily express their opinions through an app or website.
3. Circular: Rotterdam as a material depot
   The municipality aims to give every object deployed in the public space a second life. For example, by using the broomsticks that were used to sweep the streets to create a hedge for animals.
4. Sustainability and renewable energy
   Reyeroord will be one of five neighbourhoods in Rotterdam that will become natural gas-free. Nevertheless, there are also other initiatives in the neighbourhood related to sustainability and renewable energy. In the park, they created lights that get their energy from the plants. In this way, the park also feels safe in the evening.
5. Healthy lifestyle
   The percentage of people with obesity is higher in the borough of IJsselmonde (in which Reyeroord is located), in comparison to the rest of Rotterdam (22% as compared to 14%) (GGD Rotterdam-Rijnmond, 2014). By implementing health programmes and spatial design modifications in the neighbourhood, the municipality wants to make Reyeroord healthier.
6. Healthy family budget
   The municipality wants to help families to become financially healthy. For example, by making the transition to natural gas-free possible for families with a small budget.
7. Using talents
   By creating connections between different parties, Reyeroord will become a neighbourhood in which people can develop their talents. For example, by fostering initiatives and supporting educations.
8. Bridging the generational and cultural divide
   Neighbourhood cohesion is vital for a safe and healthy living climate. The municipality strives to bring people together, for example through activities, like a nature party for children called ‘Batman010’.

Most of these ambitions lay a spatial claim on the public spaces. *Liveability for everything* concentrates on friendly outdoor spaces that invite to play, exercise, meet and stay. *Circularity* wants to give all objects deployed in the public space a second life. For example, by giving a second life to the broomsticks that the municipality uses to clean the streets by creating a hedge. The hedge

creates a habitat for insects and birds. And connections between residents are made through activities that take place in the public space. Due to this focus on the public spaces, urban green plays a significant role in this transition. This is because urban green is a significant component of the current public space and because it offers many opportunities for multiple ambitions to be achieved simultaneously, like water management, circularity, liveability and to bring the community together. This integral approach attracts different stakeholders from various clusters in the municipality to participate in Reyeroord+. This essential role of urban greenspaces in the neighbourhood makes Reyeroord an interesting study area.

Reyeroord+ consists of a core team and a platform. The core team is a small team that is involved on a day-to-day basis in Reyeroord. This team mainly consist of members of City Management. Reyeroord+ originated from this cluster and the ambitions described above are all part of 'Smart Management', the future management approach of City Management (Joosse & van Buuren, 2020). Reyeroord has been selected by this cluster to realise this transition. However, they are not doing it alone. The platform consists of municipal officials from all over the municipal organisation. They can, as the core team calls it, 'travel along the journey of Reyeroord'. The members of the platform participate in Reyeroord next to their regular work in the municipality. Instead of based on hierarchical structures, the involvement of stakeholders in Reyeroord+ is based on a network structure. Also, Reyeroord+ wants to bring along a sort of organisational change by an open and explorative way of working. This makes Reyeroord+ a relevant case study, for they envision an integral working method that incorporates cross-cluster collaborations, and due to their open and explorative ways of working, they share commonalities with collaborative planning. Their ambition to bring along an organisational change is interesting, for this is portrays the recursive relation between agent and structure that Giddens describes.

3.2 Greenspace planning in Rotterdam

The stakeholders in Reyeroord+ come from different clusters and departments within the municipality of Rotterdam. Hence, it is important to understand the institutional setting of the municipality beforehand. The municipality of Rotterdam is divided into six clusters: Societal Development, Urban Development, City Management, Work and Income, Service Provision, and Management and Corporate Support (see *figure 7*). These clusters are subdivided into several departments. City Management and Urban Development are primarily responsible for urban greenspaces, where Urban Development is responsible for creating and redeveloping greenspaces and City Management for the maintenance of urban greenspaces. Because the maintenance is quite deceiving for the development, due to costs and achievability of maintenance, these departments work closely together in the development phase. Within Urban Development, the Department of Spatial Development is responsible for public spaces, and therefore public urban greenspace. For City Development, the Department of Public Works is responsible for public spaces. However, other departments are also involved in public spaces, and thus urban greenspace, like the Traffic and Transport (which is part of Spatial Development). When there is a project in the public space, for example in Reyeroord where the sewer needs to be replaced, then the Department of Water is

involved. Since the street has to be excavated, the department of Traffic and Transport can get involved to alter the street to make it more cyclist-friendly. This might also offer opportunities for urban greenspace, thereby involving the department of Spatial Planning and Housing (part of Spatial Development). Because of the diversity of public spaces, various department, and thus stakeholders, are involved in a project. Rotterdam strives for an approach of project-based working, in which the project is leading, and different stakeholders collaborate (Gemeente Rotterdam, 2015). The involvement of different departments makes urban greenspace planning a little fuzzy since there is not one department solely responsible for all aspects of urban greenspaces.

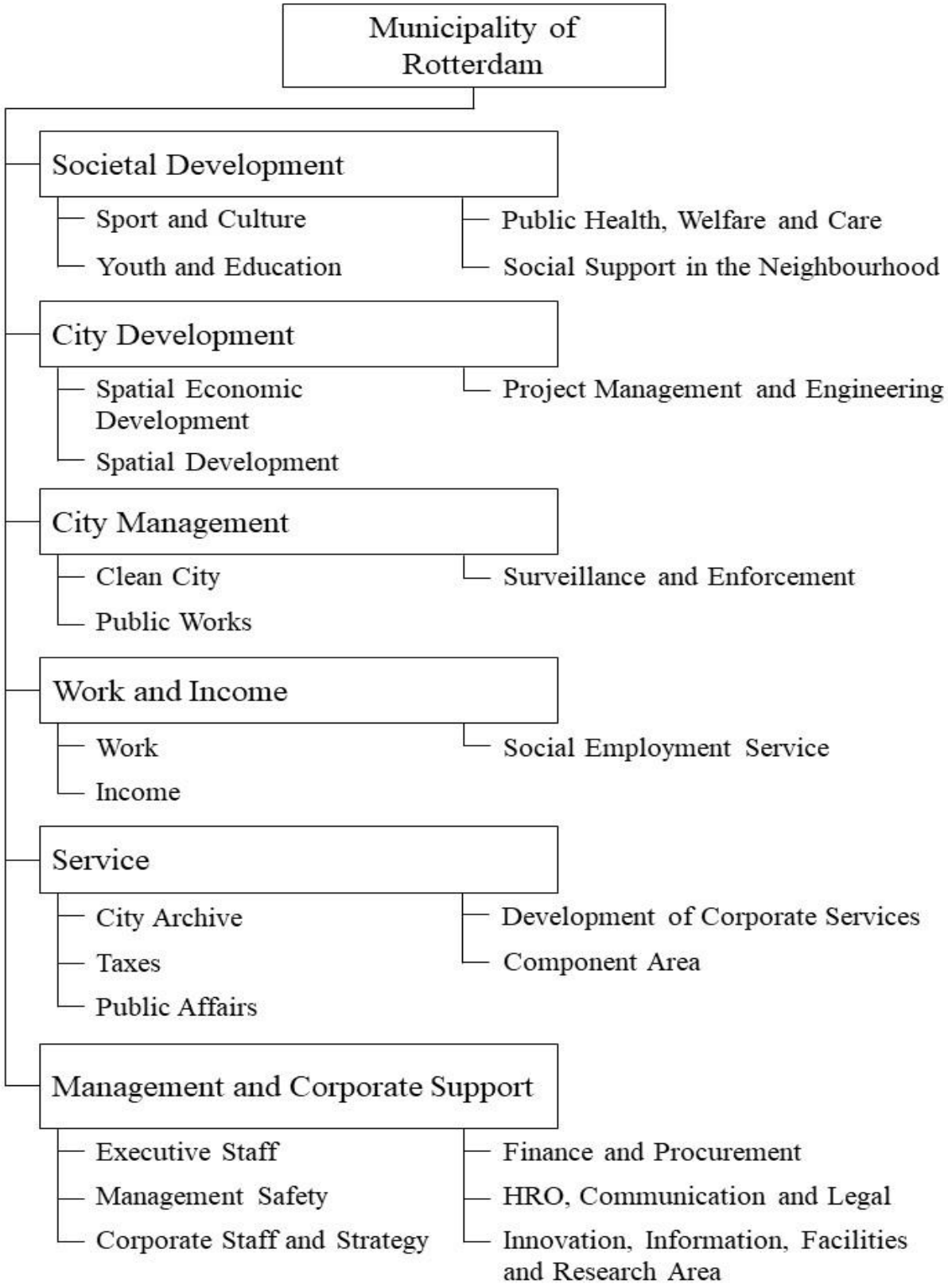

Figure 7: Organization chart of the municipality of Rotterdam with all clusters and departments, translated and made by author

Chapter 4: Methodology

This chapter examines the method used to answer the central research question and sub-questions of this study. This study aims to retrieve to what extent the involvement of multiple stakeholders from various municipal clusters influences the planning process of multifunctional greenspaces. The main question, with accompanying sub-questions, is as follows:

> *How does the planning process of urban greenspaces with multiple stakeholder interests enable multifunctional urban greenspaces?*

1. How is multi-stakeholder involvement reflected in urban greenspace planning?
2. What are the interests of, and power relations between, different stakeholders in urban greenspace planning?
3. How are the interests of competing and collaborating stakeholders addressed?
4. How can multi-stakeholder collaboration be improved to establish multifunctional urban greenspaces?

To answer the abovementioned research question and accompanying sub-questions, the research is structured into three stages, namely the input, process and outcome, for each stage is regarded to be dependent on the preceding to achieve multifunctional greenspaces. Collaborative planning is used as an approach to assess the planning process. Herein, the frameworks of Habermas, Giddens and Foucault are operationalised into four analytical dimensions, namely inclusion, understanding among stakeholders, recognition of power and comprehension of discourses and perceptions (see *figure 4, figure 5* and *table 1*). The analytical dimensions serve as normative assessment criteria. When they are satisfied in the input phase, it is expected to create inclusive stakeholder involvement. For the process, this is expected to result in collaborative decision-making and for the outcome in multifunctional urban greenspaces.

This thesis aims to gain a deeper understanding of how multi-stakeholder interests shape the planning processes and how this enables multifunctional urban greenspaces. Collaborative planning regards places as social constructs, which means that stakeholders hold different perceptions of a place (Harris, 2002). Therefore, it is essential to understand the perceptions and experiences of these stakeholders by staying close to their personal interpretation of the planning process. By retrieving the perceptions and experiences of each individual stakeholder, the pieces of the puzzle are collected one by one to form a comprehensive picture. The interpretation by participants of the social world is one of the key features of qualitative research (Bryman, 2012). Therefore, this research adopts a qualitative approach to study the planning process of urban greenspaces with multiple stakeholder interests.

4.1 Research method, selection respondents and research area

This thesis took place during a unique time. At the start of the thesis, it seemed like business as usual. However, as time passed, things changed. The COVID-19 virus had become a global pandemic. Many countries worldwide, including the Netherlands, chose for a lockdown, to protect people from becoming ill and stop the virus from spreading. This meant that people had to work from home as much as possible and limit their social contacts. The lockdown situation limited the research methods. Street surveys and observation were no longer possible, and interviews had to be conducted from home. The new situation did not influence the selected research method for this thesis significantly, for interviews could still be conducted in alternative forms other than face-to-face. Besides, the employees of the municipality of Rotterdam had to work from home as much as possible. Therefore, the respondents were acquainted with working online. The respondents were all very helpful and flexible and had no problems with this modern way of interviewing.

4.1.1 Research method

This thesis uses a qualitative approach to study urban greenspace planning. This paragraph pays attention to the selected research methods, namely interviews. Furthermore, consideration is given to Reyeroord+ as the selected case study of this research.

Interviews

This research aims to gain more understanding about multi-stakeholder involvement in planning processes of multifunctional urban greenspaces. The analytical dimensions that are established are based on collaborative planning with the frameworks of Habermas, Giddens and Foucault. Collaborative planning is based on a post-modern understanding wherein the belief in an absolute truth is rejected, and instead, it assumes that several truths can coexist. Hence, knowledge is developed and communicated in many forms, and all knowledge is socially constructed (Healey, 1997). This means that various stakeholders can hold different perceptions of a place. Therefore, it is vital to consider the various perceptions that stakeholders, and thus respondents, can hold. Interviews are selected as the most appropriate research method, for they provide the ability to retrieve experiences and motivations behind the planning process (Baarda et al., 2012). Due to the post-modernist understanding of collaborative planning, it is essential to use open-ended questions so that respondents can express their personal interpretation, rather than having to reply through static responses (Silva et al., 2015). This also provides more possibilities for the interviewer to ask additional questions if a particular concept is unclear or needs more in-depth coverage.

Interviews focus on individual perceptions and experiences. For this thesis incorporates stakeholders from various clusters in the municipality, interviews are an appropriate method for they provide the possibility to focus on one respondents' experience and make it possible for respondents to share their understanding and thoughts about the planning process (Bogner et al., 2009). Each interview can be considered as a piece of the puzzle and all the interviews combined will portray a picture of urban greenspace planning processes.

Case study

This thesis examines how the involvement of multiple stakeholders, with different backgrounds, but from the same municipal organisation, collaborate in the planning process. The municipality of Rotterdam is selected as the research area, because of the familiarity of the researcher with this city and because Rotterdam pursues an active policy in the field of urban greenspaces. This is evident from the action plan '*Rotterdam goes green'* (Gemeente Rotterdam Stadsontwikkeling, 2019b) and their vision on public spaces, in which urban greenspaces play a central role (Gemeente Rotterdam Stadsontwikkeling, 2019a). The multifunctionality of urban greenspaces is well embedded in their city policies. Therefore, urban greenspaces have intersections with various clusters within the municipality that can deploy urban greenspaces to achieve their objectives. This makes the municipality of Rotterdam an appropriate research area to study planning processes with multiple stakeholder interests.

The municipality of Rotterdam is an organisation with over 13.000 employees and covers an area of over 319,35 km² (Nationaal Programma Rotterdam Zuid, n.d.), which consists of 14 areas and 71 districts (Gemeente Rotterdam, n.d.-e). Due to the size of the municipality, it is decided to focus on one neighbourhood for this research, namely Reyeroord, and use that as a case study. This case study approach was chosen for it provided consistency in the answers of the respondents because the respondents all work in the same neighbourhood. This gave advantages in comparing the answers because all respondents talked about similar urban greenspace developments in the neighbourhood. Crucial requirements for the case are that cross-cluster collaborations have to take place and that urban greenspaces are addressed through a multifunctional understanding. As mentioned in chapter 3, Reyeroord meets both requirements, which makes it an appropriate case study for this research.

Also, some practical matters influenced the decision to use a case study. It proved to be challenging to recruit municipal officials who were willing to participate. By opting for this neighbourhood case study and starting a collaboration with the municipal, it also became clear to the municipality what this research could contribute to them. The collaboration consisted of the municipality providing respondents and information for the research, and in return, the research was shared with the municipality. As a result, the respondents were more willing to participate, which made the execution of the research easier. The independence of the study was respected, and the municipality did not influence the research.

4.1.2 Selection of respondents

The respondents were selected based on their involvement in Reyeroord concerning urban greenspace planning and the function they safeguard. The respondents were selected in coordination with a contact person from the municipality. This person was someone from outside the case, but who knew the case well. It is respected to interview people from every function of urban green to provide a comprehensive understanding. Additional respondents were selected through snow-balling. An additional meeting halfway through the interviews was set up with the contact person from the municipality to decide whether new respondents needed to be contacted.

The team in Reyeroord consists of a core team with municipal officials, from who the majority is from the cluster City Management. In addition to the core team, there is a platform. This is open to anyone from the municipality. Members are informed about the developments in Reyeroord through platform meetings, a WhatsApp-group and newsletter. The selection of the respondents respected that all functions of urban greenspaces, as described in *figure 1*, were represented by a respondent, see *table 2*.

Function	**Cluster in the municipality**	**Function of urban greenspace**
Core team Reyeroord+		
1. Advisor/project manager water and climate adaptation	City Management; District Management	Climate adaptation and water
2. Employee management and execution	City Management	Biodiversity
3. Program manager Reyeroord+	City Management	Not directly involved in greenspace planning. However, as a program manager, the respondent could give information about the process of in the neighbourhood
4. Advisor, Strategic designer, City laborator	City Management	General green
Platform Reyeroord+		
5. District networker	Service	Social interaction
6. Manager District Cleaning Team, formerly involved in Reyeroord+ from nature and environmental education	City Management, formerly Societal Development	Nature education
7. Advisor safe and healthy living and working environment	City Development	Biodiversity
8. Advisor ecosystem services	City Development	Biodiversity
9. Employee management and execution	City Management	Green management
10. Asset manager	City Management	Green management

11. Policy officer 'Lekker Fit!'	Societal Development	Health
12. Project manager	Work and Income	Employment
13. Trainee	City Management	Biodiversity
14. Ecology consultant, City ecologist	City Development	Biodiversity
15. Landscape designer	City Development	Aesthetics and spatial function

Table 2: List of respondents

The rationale was to include every function of urban greenspace. The function of biodiversity was overrepresented (5 out of 15), while the others were only represented by one respondent and green management by two respondents. However, each representative of biodiversity has a different function in the municipality, which shapes their role and perception of the planning process. Physical activity and stress reduction were merged for both functions were addressed by the same respondent. It was challenging to find a representative for the economic functions of greenspace, e.g. real estate price and production. However, a respondent involved in employment and greenspace was found. This function was not expected initially. For climate adaptation, only the function of water management was covered. The function of air quality and heat reduction was left out, since the neighbourhood faces a water task, but not directly a heat or air task and therefore there was no person available to interview on these subjects.

4.1.3 Research area

This research focusses on the planning process with multiple stakeholder interests. The stakeholders can deploy urban greenspaces by opting for a function that suits the objectives of the cluster they are affiliated to. Rotterdam was selected as the research area because it concerns an organisation with multiple clusters that have a stake in urban greenspace planning, e.g. City Development, City Management and Societal Development. Besides, the understanding of multifunctional urban greenspaces is well developed in Rotterdam. This is evident from their policies, for example, the Vision for Public Spaces (Gemeente Rotterdam Stadsontwikkeling, 2019a) and their action plan 'Rotterdam goes green', that aims to add 20 hectares of additional greenspace between 2018 and 2020 (Gemeente Rotterdam Stadsontwikkeling, 2019b). The various policy documents formulated by the municipality of Rotterdam indicate that the city is actively involved in urban greenspace planning that embodies multifunctionality, which makes the municipality suitable as a research area.

Since the municipality consists of an organisation which covers 14 areas and 71 districts (Gemeente Rotterdam, n.d.-e), the choice was made to focus on one neighbourhood for this research, namely Reyeroord. Reyeroord will undergo a transition in the coming years, in which the sewer will be replaced, and a heating network will be installed. This offers opportunities for other developments in the neighbourhood (Gemeente Rotterdam, 2020). In addition to these spatial

adjustments, the municipality has also chosen to rename Reyeroord a test neighbourhood. Here they are going to test new ways of working, in which citizen participation is central. Many of the ambitions that have been established focus on the liveability of the neighbourhood and concentrate on the urban greenspaces in the neighbourhood (Joosse & van Buuren, 2020). This central position of urban greenspace in the policy objectives makes this neighbourhood suitable for this research. Also, the municipal team works according to an integral approach, in which they try to involve colleagues from all departments of the organization. This has common ground with collaborative planning. Therefore, this case is used to better understand how collaborative planning expresses itself in practice.

4.1.4 Data collection

The research focusses on how the planning processes of multifunctional urban greenspaces are influenced by multi-stakeholder involvement with various interests. The applied framework of collaborative planning is used to retrieve how perspectives and communication, agents and structures and power are of influence. The topic list was divided into four main categories: an introduction, the input, the process and the outcome. The four analytical dimensions were transformed into interview questions. See *appendix 2* for the topic list and how each question relates to the analytical dimensions. The questions were formulated in an open matter and are broadly defined so that they could be specified to the background of the respondent. Fifteen interviews in total were conducted. It was important that each function of urban greenspaces was safeguarded by a respondent in order to assess the planning process. The expected functions were compared with the case, and this meant that eight respondents were needed. Nevertheless, more interviews were needed to achieve saturation. Hence, seven more interviews were conducted.

Due to COVID-19, interviews could not take place in person and therefore, the program Microsoft Teams has been used, for the respondents already made use of this program in their day-to-day work at the municipality. This created a familiar environment and reduced the risk of technological barriers. In the first couple of interviews, it became apparent that respondents had difficulty with broad open questions and abstract concepts, like ‘conflict’. The strategy was adjusted and more specified to people's experiences, for example, by using a specific project of urban greenspace planning in which the respondents were involved.

The interview questions were sent to the respondents before each interview so that they had the opportunity to prepare themselves. Also, an informed consent form was sent to them, in which respondents gave their consent for the chosen method of processing of the interviews.

4.2 Data analysis

All interviews were recorded. In addition to a recording, notes were kept during the interviews. The recordings and notes were used to make a summary shortly after the interview, which was sent to the respondents. This provided the opportunity for the respondents to give feedback.

The interviews were transcribed through an online program named AmberScript. The risk here was transcript inaccuracy. For this reason, it was decided to check the transcripts manually. The choice to use an online program in combination with a manual check resulted in time savings

and accuracy in the transcripts. The manual check also ensures that the transcripts were read more carefully so that the information could be processed better than if they were adopted instantly.

The transcripts were analysed by using NVivo. The nodes that were used were based on the conceptual framework. They were divided into input, process and outcome and subdivided into the four dimensions: inclusion, understanding among stakeholders, recognition of power and comprehension of discourses and perceptions.

As the researcher and the respondents all spoke Dutch, the interviews were conducted in Dutch. Nevertheless, this thesis is written in English. This could result in answers that got lost in translation. Hence, it was respected to translate the quotes of the respondents as accurately as possible.

4.2.1 Reliability and validity

The quality of a research study is assured through reliability and validity. Reliability requires that the methods or measuring instruments are precise (Boeije, 2016). This means that a repetition of the investigation will lead to equal answers. Validity is used to measure what is intended to be measured. Central to this concept is the interpretation of both the research data as well as the theory.

Reliability

Reliability is twofold. The external reliability determines the replicability of the research. This thesis used a case study approach. Hence, it is quite unlikely that the same results are identified in a different neighbourhood in Rotterdam or even another municipality. Therefore, the external reliability cannot be guaranteed.

The internal reliability relates to the design and implementation of the research. A threat of interviews in terms of internal reliability is that flexible methods, like semi-structured interviews, are chosen so that the researcher can make adaptations and through that is better able to observe what is aimed to be observed (Boeije, 2016). The same has appeared in this research. Some respondents had more knowledge about certain questions, and these were more elaborately discussed. Conversely, other questions were discussed less elaborately if respondents had less knowledge about them. However, the internal reliability is respected by using the same topic list and discussing every question, even though some were more or less elaborately treated.

In addition, the interviews were recorded and transcribed literally, so that everything that has been said during the interview was documented. This safeguarded the reliability, for it prevented that some parts were missed.

Validity

Validity consists of both internal as well as external validity. Internal validity revolves around measuring what you aim to measure. External validity is about the ability to generalize. To ensure the internal validity of the interviews, it is particularly important that the interpretation of the data by the researcher is correct (Boeije, 2016). As mentioned before, a summary was sent to each respondent to provide feedback. Also, the interviews were recorded and transcribed to prevent any results from being missed. The topic list was checked beforehand by two persons from outside the

research to check whether every question was clear to a layperson. This prevented misinterpretations of questions.

The risk of biases is also something that has to be taken into consideration when it comes to internal validity. This is a point of attention for this research. The selection of respondents is based on their involvement in urban greenspace, which means that they are likely to have some affinity with urban green. Therefore, municipal officials who perceive urban green as negative did not occur. From the perspective of this research, which is about urban greenspace planning, it is logical that only people who are involved in greenspace planning are interviewed. But on the other hand, multiple spatial objectives come together in a city, of which urban green is only one. Therefore, awareness is required to interpret the answers related to perceptions and discourses concerning urban greenspace. Besides, the transition of Reyeroord+ is characterized by participation based on intrinsic motivation, due to the open network structure. This provides a sort of natural selection of stakeholders, for those that do not feel like they are of value will not participate. Also, those who are sceptical of the movement will not be likely to join. This influences the attitude of stakeholder that are part of the movement.

Central to external validity is the possibility to generalise. By using a case study, that can be considered as divergent within the standard way of working in the municipality, it is harder to draw any conclusions regarding usual greenspace planning processes. However, the working method in Reyeroord+ also shows significant commonalities with collaborative planning and therefore serves as a unique opportunity to learn from collaborative planning in practice. Flyvbjerg explains the value of a case study, even though generalisation is not fully possible: “A purely descriptive, phenomenological case study without any attempt to generalize can certainly be of value in this process and has often helped cut a path toward scientific innovation” (2006, p. 10). Since Reyeroord+ is a transition that embodies both cross-cluster collaborations and a multifunctional approach to urban greenspaces, it serves valuable to study these two phenomena collectively. This study can, therefore, contribute to our understanding of both urban greenspace planning and collaborative planning.

Chapter 5: Results and discussion

This chapter will present results from the interviews that were conducted with the fifteen municipal officials who were involved in urban greenspace planning in Reyeroord. As this thesis presumes that each planning stage (input, process and outcome) is dependent on the previous, this chapter is divided into three parts, namely the input, process and outcome. The analytical dimensions that were established, based on the frameworks of Habermas, Giddens and Foucault, help understand how multi-stakeholder involvement influences planning and decision-making processes and multifunctional urban greenspaces. The four analytical dimensions are discussed in each planning stage. In parallel, this chapter reflects on the scientific basis established in chapter 2 through a discussion which is interwoven with the presentation of the results.

Reyeroord+

The neighbourhood of Reyeroord and the transition that takes places there, called Reyeroord+, were selected as a case study for this thesis. Within the framework of the municipality of Rotterdam, Reyeroord+ uses a slightly divergent approach. In conjunction with the replacement of the sewer, Reyeroord+ is also endeavouring to integrally tackle other objectives in the neighbourhood. Central to their approach is citizen participation. The Reyeroord+ team has collected the dreams and nightmares of the residents, many of which relate to the urban greenspaces in the neighbourhood. There is no sewer under the two main greenspaces, and there are no other big maintenances that have to take place there. As a result, the greenspace offers opportunities to accommodate the wishes of the residents and transitions in the neighbourhood.

Traditionally within the municipality, developments are the responsibility of the cluster of City Development and after being finalised become managed and maintained by City Management. However, Reyeroord is guided by City Management, and they approach the whole transition from the perspective of a management task. During this transition, they explore new working methods wherein they try to address things differently. For example, by using fast tracks for projects that take several weeks instead of the usual months.

The fact that Reyeroord+ can be described as divergent within the standard municipal working method offers opportunities to research collaborative planning in practice, for in their working method they strive to approach matters integrally, open and by an explorative working method. This manifests itself both in terms of possibilities and in the connections they make with other stakeholders within the municipality and beyond. Their approach is based on an open network structure, to which, in principle, anyone can participate. This thesis considers that this way of working is not regarded as usual within the municipality. That is why Reyeroord+ must always be put in perspective with the 'normal' course of events within the city and municipality.

5.1 Input: inclusive stakeholder involvement

From a collaborative planning perspective, it is of importance that all relevant stakeholders are involved in the process, for a true representation of the spatial challenge (Healey, 1997). Therefore,

this section pays attention to how stakeholders are involved in the process, for this determines the composition of stakeholders and influences the decision-making phase.

Inclusion: Who are invited to participate? What determines participation?

The dimension of inclusion revolves around who are invited to participate and what determines their participation. During the interview, the respondents were asked how they became involved in Reyeroord+ and how this organization was composed, to assess the inclusiveness of involvement. This showed that Reyeroord+ consists of a core team with members from different clusters. This team is primarily represented by City Management. Besides the core team, there is a platform that is open to others from outside the core team to join. Respondents indicated that, in principle, anyone from the municipality could join the platform. Reyeroord+ uses the metaphor of a journey to describe their involvement in the neighbourhood. In this journey, people can travel along for a while and can follow the journey in different intensities. For example, by being a member of the WhatsApp-group, attending the platform meetings or participating in projects.

Respondents indicated that participation is based on a network structure, which means that involvement does not take place in a traditional hierarchal sense but through the network of the stakeholders. Most often mentioned ways of involvement are direct invitations, and personal interest and motivation (wherein stakeholders join based on their own initiative). It can be presumed that for both ways of involving stakeholders, the network is of significant importance. Direct invitations take place when members of Reyeroord+ personally invite others, so these people have to be in the network of the members. Moreover, when involvement takes place based on personal interests and motivation, stakeholders have to be acquainted with the developments in Reyeroord if they wish to participate. The network is of influence in this, for through this, stakeholders are informed about the possibilities and opportunities in the neighbourhood. Or they are introduced by someone in their network to Reyeroord+ and see opportunities to participate. So even though this network structure is based on openness and accessibility, it is also limited by the boundaries of the stakeholders' network.

Although none of the respondents indicated that certain people could not join Reyeroord+, the program manager did indicate that there are some requirements. The first is that nothing can be done in isolation of the residents, and second, it has to contribute to the eight ambitions. However, the programme manager also indicated that the ambitions have deliberately been set broadly and ambitiously so that in essence, everything can be accommodated within the ambitions.

Understanding among stakeholders: Are all functions of urban greenspaces, i.e. expertise of all stakeholders, represented?

The dimension of understanding among stakeholders in the input phase revolves around whether stakeholders and their perceptions are equally included, for this would reflect in a representation of all functions of urban greenspaces. If this requirement is met, dialogue between stakeholders can take place. This offers opportunities for reaching understanding, which is essential to communicative planning and Habermas' framework (Huxley, 2000). Therefore, it seemed essential to assess whether all stakeholders or all functions of greenspace where represented in the process

for this could indicate the level of possible understanding. However, too little evidence about the representation of urban greenspace functions was found based on the interviews to make a statement.

Understanding among stakeholders also revolves around the manners of interaction. When the respondents were asked how they experienced the communication and interaction of their involvement, they commented that they experience this as open, accessible and positive. None of the respondents experienced that certain people are not welcome based on their objectives or perceptions. One of the respondents illustrates this:

> *"As I know the club, (...) you can just join it. (....) I would not know (...) the reason for which you would be refused not to participate." – a member of the platform, when he was involved in Reyeroord he was working at Societal Development, now a part of City Management*

Interestingly, even though many respondents experienced Reyeroord+ as an inclusive association to which, in principle, anyone can join, this '*mindset*' of Reyeroord+ also has a dark side:

> *"We have a number of ambitions for the neighbourhood, but we also have the ambition to bring about a bit of organisational change, which requires a very diverse group of colleagues. And yes, it is not that we always know exactly that we are doing it right. So yes, we have consciously chosen not to apply any selection there or something like that. But there appears to be, I think, a kind of natural selection." – a member of the core team, City Management*

This quote, on the one hand, confirms the statement of other respondents, namely that Reyeroord+ is driven by various colleagues within the municipality, which strengthens its inclusive character. However, it also illustrates that the working method adopted by Reyeroord+ is not appealing to everybody within the municipality, and therefore, these people will not participate. The respondent said that participation is based on interest, personality and substantive involvement. Other respondents also addressed this in the interviews. This is an interesting point when it comes to Habermas and Foucault. In this case, it is not that these people do not wish to participate, or cannot participate, based on their available resources, but due to their attitude or perceptions. It can be said that the discourse that Reyeroord+ uses, on the one hand, is based on inclusion, but also turns away those who have deviating perceptions. Habermas puts value into these deviating perceptions, for by bringing them together in a dialogue, actors can reach an understanding that is collectively achieved (Huxley, 2000). However, the fact that certain people do not wish to participate based on their perceptions shows that communicative action is not always possible and these perceptions can operate as power mechanisms, that either enable or, in this case, prevent participation. Communicative and collaborative planning have been criticized for focusing on changing the institutional aspects of power but thereby neglecting the individual aspects (Tewdwr-Jones & Allmendinger, 1998). The obstacles this generates focus on the process; however, this section illustrates that obstacles also occur in the input phase when it comes to individual aspects of power,

for these people do not wish to partake in this involvement. The respondent from the core team further elaborated on this:

> *"But you do have a number of people who really think of us like: "Well, they are experimenting a bit there, playing outside and at some point, they will come back and then they will just go back to normal"." - a member of the core team, City Management*

Habermas' communicative action is based on dialogue that incorporates all forms of knowledge, and wherein knowledge is socially constructed through interaction (Healey, 1997). In this case, one may wonder to what extent this is being compiled in Reyeroord+, where due to the chosen approach, it is mainly like-minded people who are involved, as people who disapprove of it do not participate. It can be called into question to what extent this network approach fosters interaction and a social construction of knowledge to the best extent, or whether it fosters a confirmation of knowledge of like-minded.

Recognition of power: To what extent do resources and networks influence the stakeholder composition?

Even though the respondents indicated that they did not experience as if anybody would not be welcome to participate in Reyeroord+, some factors can be distinguished based on the interviews that show that certain power structures influence the stakeholder composition. As mentioned earlier, participation in Reyeroord is based on a network structure, for which people can be invited or join based on personal motivation. The most frequently mentioned factor that hinders participation is time. Respondents commented that they have other tasks beside Reyeroord for which they are evaluated, and the fact that their involvement is non-binding also signifies in the fact that it is sometimes difficult to find available time to spend on Reyeroord. This is mentioned more often by respondents from other clusters than City Management.

City Management directs the transition of Reyeroord+. Respondents indicated that this makes it easier for officials from that cluster to collaborate, than for those from other clusters. One respondent from the cluster Work & Income was involved in Reyeroord+ and connected people with a distance from the job market with green contractors. He experienced difficulty when convincing his superiors or colleagues about the added value of his work in Reyeroord:

> *"When I talk about the fact that Reyeroord is going through a transition as a neighbourhood and that we are going to see how greenspaces can be made more diverse, then I will get a reaction [from my colleagues] like: "Do you not have a busy agenda, do you not have other activities?"" – a member of the platform, Work & Income*

Contrastingly, respondents from City Management experienced little difficulty when it came to participating. They indicated that they presumed that participation mainly relies on personal motivation instead of corporate support. This discrepancy exposes the influence of corporate

support, for when it is present, it is not experienced, but when it is absent, it is felt clearly by the respondents.

Comprehension of discourses and perceptions: What are the perceptions of urban greenspace (functions) of the stakeholders and how do they differ across individuals, departments or municipality? How do these discourses determine stakeholder composition?

Discourses can be regarded as influential in both the perspectives of Habermas, Giddens and Foucault. All sociologists look at how discourses shape social life. A variety of discourses, or forms of reasoning, can help foster understanding, according to Habermas (Huxley, 2000). Or it can influence the recursive relation between agent and structure in Giddens framework. According to Foucault, discourse operates as a power mechanism. In this thesis, it was expected that discourses that are present in the municipal organisation or clusters or the individual perceptions of urban greenspace of respondents would be of influence for stakeholder composition. Due to the different responsibilities, ambitions and council members that the clusters have, it was expected that they, therefore, hold different discourses and perceptions of urban green. For example, the ambition of a cluster like Societal Development is to improve the well-being of the residents. Therefore, it was expected that since this is their main ambition, the discourse they hold is that everything should contribute to the well-being of the residents. Whereas, for a cluster like City Management, whose responsibility it is to manage and maintain the city, the discourse they hold would be in line with this ambition. Individual perceptions of stakeholders can be formed by the discourses of the cluster to which they are affiliated. Expected was that if a stakeholder group is shaped by people who hold the same perceptions, it is harder for someone with a deviating perception to participate. Therefore, the respondents' perceptions of urban greenspace were questioned. In the interviews, it appeared that all of the respondents mentioned various functions of urban greenspaces, of which biodiversity and the health function were most often mentioned. As all of the respondents listed various functions of urban green, it can be assumed that the respondents shared a multifunctional understanding of urban greenspace. Therefore, it could not be concluded that one perception of urban green dominated and could influence stakeholder composition.

Based on this observation, this thesis expects that the perceptions of functions of urban greenspaces are not as decisive as expected for stakeholder composition. Interestingly, respondents did mention a different factor that was, according to them, of influence for stakeholder composition, namely people's perceptions of integral collaboration. A respondent referred to collaborating as "being part of your character". Another respondent experienced that some clusters feel like certain matters "are not their responsibility". Therefore, it is expected that not perceptions of urban greenspace are of influence, but more decisive are the perceptions of, or the willingness to, collaboration. Many respondents were positive about the integrated approach of collaboration that is used in Reyeroord+. However, they were aware that this integrated approach is not common within their municipal organization. This quote illustrates both the traditional institutional structures of the municipality, as well as the integrated approach of Reyeroord+:

"Traditionally, when we look at ourselves as a municipality, it is quite compartmentalised (…). But as a municipality, we have a lot of those kinds of boxes. And if I go and talk to a resident, I can talk to that resident from one box, but that resident certainly has a lot more to say or wish or to do about the other boxes. So, then I will not be able to just talk about my own box anymore and say about the other box that that resident has to be somewhere else. We are one municipality. Let us bring it all together so we can communicate as one municipality to the inhabitant"- program manager, City Management

5.2 Process: collaborative decision-making

The transition in Reyeroord is guided by two main tasks: the sewer replacement and the energy transition. This influences the choices related to the greenspace developments that take place in this neighbourhood. First of all, there is no sewer under the two main greenspaces in the neighbourhood, so all developments that take place there are not disturbed by future interventions. Besides, many of the wishes of residents relate to the urban greenspaces in the neighbourhood. Because there are no set requirements or visions for the development of the main greenspace, Reyeroord+ approaches this step by step in an organic way by planning and designing the greenspace in a fragmented way, rather than with a comprehensive plan for the entire greenspace. These conditions influence the decision-making process.

Inclusion: Are all stakeholders equal in the decision-making process? Do stakeholders form groups and exclude others during the process?

Inclusion in the process is considered as essential for decision-making for it sets the condition for equal communication to take place. The majority of the respondents mentioned that they experienced the roles of stakeholders in decision-making as equal. Although the roles were experienced as being equal, there were some deviations. One respondent from Societal Development mentioned that she was involved in the construction of a playground between two schools. Even though she was involved, she did feel like she was involved too late. She explained that the plan was as good as finalised, and as a result, she was unable to provide the input she would have wanted. Opportunities in the area of health were missed as a result.

Another respondent from City Development mentioned that his role had changed. He is usually involved as a designer in the public space. However, in Reyeroord he said he mainly acts as a 'policeman', for he has to make sure that matter like '*Rotterdamse Stijl'* (a manual for the public space) are respected. Interestingly, this respondent's role had changed most profoundly because it is not City Development, but City Management that manages Reyeroord. This could be an explanation for the fact that he experienced his capacity as being of little influence.

Although these are only two examples, both are experienced by respondents from outside the leading cluster. This could indicate that even though the respondents experienced everyone's decision-making capacity as equal, the institutional structures, namely which cluster is in charge, are of influence and shape the power structures. It is not the case that these stakeholders were not

allowed to make a decision or provide input, but more so that they were restricted in their decision-making.

Understanding among stakeholders: Are the deliberation processes characterized by reciprocity and tolerance? Is the stakeholder group capable of handling conflict?
The majority of the respondents experienced the decision-making process as pleasant. They felt like they were listed to and that their input was valued. This is most clearly illustrated by a quote of a member of the core team:

> *"If someone has an idea or something like that (...) you try to look if it fits the bill, if it suits within our possibilities. You all try to (...) be on the same page. (....) Instead of resisting and having a conflict, you know, but just deal with it in a very good way and listen to each other." – a member of the core team, City Management*

Even though many of the respondents experienced the decision-making process as pleasant, there were some points of conflict. The mentioned conflicts were most often the result of a collaboration between clusters and were caused by different working methods and deviating perceptions. A disagreement mentioned by both concerns was between City Development and City Management. The disagreement revolved around the different approach that was used in Reyeroord+, in which the urban greenspace was addressed by City Management from the wishes of the residents, and developments that took place were scattered, small and grow organically. This contradicted with the objectives of City Development, for they wished to apply a comprehensive vision for that urban greenspace. They were critical about this way of working with small projects based on citizens' wishes and participation.

According to Flyvbjergs and Richardsons (2002) application of Foucault to collaborative planning, conflict is inevitable in planning processes. Therefore, conflict should not be avoided or ignored, but it seems more important to look at how conflicts are addressed. In Reyeroord, City Management is, as the respondents referred to it, *in the lead* in the neighbourhood transition. This example from the program manager of Reyeroord, from City Management, clearly describes how this affects the planning process:

> *"We started with a number of rhododendron flower beds that we removed, sown with flour mixture, which we did last year. We paid for that. (....) The first time there was a designer involved [from City Development] who knew about the fact that we were going to do that. But it was a wish from the residents. We arranged the participation from Reyeroord+ and we simply carried it out. So that makes it very difficult for a designer to say: "no, I do not want that", if he did not agree based on a particular argument. So yes, we have the money, we are going to do it, residents want it, we want it, you know, then he must have very good arguments to say the least. (....) But that does mean that the role will change in that sense so that we will have more control over what the design will look like." – program manager Reyeroord+, City Management*

This quote illustrates what the impact is of a certain cluster being in charge and how this affects the decision-making process. The leading role City Management and their objective affected the position of City Development. The quote stated that "*it is very difficult for a designer to say no*". This example indicates that the majority of the group was in favour of the approach of City Management, and this made it difficult to express a deviant perspective. From Habermas' framework, dialogue should lead to consensus-building. However, aiming for consensus could also work oppressive from Foucault's framework (Tewdwr-Jones & Allmendinger, 1998). Stakeholders might feel less free in expressing their opinions if consensus is the goal. They might experience that it is more important to come to an agreement than to create a debate with conflicting opinions. However, this example illustrates that neither consensus-building nor debate were present. In a sense, conflict is not addressed but overpowered by the power of the strongest.

Nevertheless, not only in the neighbourhood of Reyeroord but also elsewhere in the city can City Management exercise its power to overcome conflict. In traditional planning processes, City Development makes a plan, and City Management gives advice, based on the management task. City Development is not obligatory to follow this advice. However, there are ways for City Management to circumvent their lesser influence in the design process by alternating the plan in the outcome when City Development is no longer involved. One of the respondents illustrated this with an example. In this example, City Management has a plan for the redevelopment of a street. There are certain places reserved for trees in the design. However, City Development has objections for they believe that this can pose a threat to the living environment and well-being of those trees. If City Development ignores this advice and the plan is executed, City Management can afterwards choose to remove those trees. In this way, they can circumvent the original plan and use their executive power. The organizational structure of the municipality enables this because in general, plans are developed by City Development and then transfer to the responsibility of City Management, and City Development is no longer involved.

Since the majority of the respondents experienced the decision-making process as equal and experience little conflict in their work, it is difficult to make a conclusive statement about this section. However, these examples do illustrate that organisational structures and decisions, like the leadership of a cluster or working methods of a municipality, influence power structures and the way conflict is addressed. So even though individual stakeholders experienced their mutual interaction as equal, institutional structures influenced the decision-making process on a more abstract level. Since foremost respondents from City Development mentioned this friction, it can perhaps even be said that because they were side-lined, they experienced this friction more intensely than people from clusters who are not traditionally part of the spatial developments in a city, like Work and Income and Societal Development.

Hence, how does this relate to collaborative planning? Perhaps Foucault's and Habermas' frameworks can be combined. From Foucault's framework, conflict and power are inevitable to life and planning. In contrast, open and equal communication is central to Habermas' communicative action. Even though these two frameworks might be counteractive, they can be combined in collaborative planning. The majority of the respondents experienced their communication as open and pleasant in Reyeroord+. However, respondents from City

Development experienced that they were side-lined and were not listened to. So even though the process of decision-making was based on tolerance and reciprocity, the institutional setting, and perhaps especially the change of the institutional setting, influenced stakeholders' experience of their role in the decision-making process. Perhaps it could be drawn from this that the conflict is not so much shaped by the process itself, but more on the initial settings that shape the roles of stakeholders in the process. From the perspective of this thesis, which incorporates both Foucault and Habermas, it can be said that the initial setting should be based on inclusion and equality, for fruitful debate with conflicting perspectives to take place.

Recognition of power: To what extent does the process contribute to endowment and empowerment of all participants? To what extent do resources and networks influence the process?
The transition in Reyeroord is directed by City Management. Their prominent position provides them with more executive power and influences the power structures in the decision-making process. A lack of resources is usually the most common restraint in collaborative processes (Margerum, 2002). This is also mentioned by the respondents. A lack of resources can work restrictive. However, networks can be used to empower stakeholders and find budgets elsewhere. One of the respondents mentioned that he used his network to search for budgets in other departments and combined their objectives. He gave the example of a playground in the main greenspace that they wanted to redevelop. Their budget from Reyeroord+ was not sufficient, so he searched in his network to find someone who could help him and knew that there was a budget for playing in another department to which they were entitled.

Respondents from clusters outside of City Management mentioned that they face obstacles when it comes to budgets. One respondent told that certain clusters, like Societal Development, are not entitled to spend budget on urban greenspace. Another respondent from Work and Income was involved in a project in which they connected people with a distance to the labour market with green contractors. He mentioned that he could only arrange this when no money changed hands. The organisation and rules of specific clusters can foster inequality in positions of stakeholders in the decision-making and hinder an integrated and collaborative approach to address urban greenspaces.

The municipality is a city with a local government and therefore a political organisation. In the Netherlands, the city council changes every four years. This four-year spectrum is also of influence in the decision-making of urban greenspaces. It influences the choices that are made on a more strategic level. For example, the action plan '*Rotterdam goes green*', that aspires to add additional 20 hectares to the city, influences the quantity of urban green in a positive sense. Another example is the seven city projects, also known as the big seven, where the city wants to redesign seven important public spaces in the city, of which the majority is located in the city centre. This influences prioritization of these and other projects, but also the general budget of the city. Political choices also influence how much of the budget is spent on urban greenspace. In recent years there have been significant cutbacks on urban greenspace. This influences the composition of urban green. A respondent from City Management indicated that the cutbacks led to a greater amount of grass, for this is easier to plant and maintain.

These upper management decisions also affect Reyeroord+. The program manager explained that in 2017 a group of managers and directors from City Management came together to discuss the future of management, also known as the emancipation of management. They developed a document in which they stated that the transformation of the city starts with its management. Instead of putting the management at the end of a process, their ambition was to place management at the beginning. The managers and directors sought for a place to put their words into reality, and from this Reyeroord+ was born. So even though Reyeroord+ presents itself as a bottom-up association, with citizen involvement and stakeholder initiatives, they are shaped by this upper management decision that influences the transition in Reyeroord, and the way projects are addressed. The whole transition is initiated by City Management, and therefore they are a major part of the developments and decision that are taken in the neighbourhood. This makes it harder for people from other clusters to participate and find management support. Especially because Reyeroord is not a focus area for clusters like Work and Income and Societal Development. These people also have to convince their colleagues and superiors within their cluster of the value of their involvement in Reyeroord.

Comprehension of discourses and perceptions: How do discourses and perceptions influence decision-making?

One respondent referred to the different clusters as different 'blood types'. Other respondents also indicated the differences between clusters. These differences were reflected in the perceptions of respondents of how different municipal officials perceive urban greenspaces based on their responsibility. City Management is responsible for the maintenance of the city and urban greenspaces and therefore looks at how long something lasts and the possible threats and risks. City Development approaches urban greenspaces from its spatial function in the city. Even though multiple respondents acknowledged the differences in perceptions of different clusters, no conclusion can be drawn from this in regards to what extent this influences the decision-making. It is expected that because in Reyeroord participation is based on invitations and personal motivation and involvement is not obligatory, dissent people may be filtered in advance and the people that do participate are, therefore, more likely to hold corresponding perceptions.

Language is an essential aspect of discourses (Hajer, 2006). An interesting comment can be made regarding the language that stakeholders use in cross-cluster communication. Multiple respondents indicated that they adapt their language when it comes to interaction with stakeholders from other clusters. As described earlier, one respondent from Work and Income said that he translated concepts from Reyeroord+ created by City Management into concepts that are common in his cluster, such as co-creation and employment. Another respondent from City Development, who is a researcher on the long-term benefits of urban greenspaces, mentioned that she adapts the language she uses when promoting the importance of these long-term benefits by other managers. These examples do not illustrate how language is embedded in the different discourses of clusters per se, but more how they influence people's approach when collaborating in a multi-stakeholder landscape. However, more research is needed to better understand if different clusters hold different discourses, what they are and how this influences cross-cluster collaborations.

5.3 Outcome: multifunctional urban greenspace

The input and process stage are regarded to be perquisites for an outcome of multifunctional urban greenspace. The focus of this thesis is on the planning process wherein multiple stakeholder interests come together. By applying the analytical dimensions, it has been tried to assess the collaborative nature of the outcome, as this could indicate an outcome of multifunctional greenspaces.

Inclusion: Do the outcomes reflect the interests or wishes of all stakeholders?

The majority of the respondents indicated that, in general, they experienced that the outcome of their collaboration was not dominated by a particular stakeholder (group). Some respondents did indicate that opportunities were missed. For example, because they were involved too late in the decision-making process, which gave them the feeling that they were no longer able to have a say. Alternatively, because of the intended method of working in Reyeroord, in which the residents are given a central place. This last point was mentioned by every respondent from City Development. They indicated that Reyeroord+ lacks a strategic vision and that the wishes of respondents predominate the decisions that are made.

It is not quite possible to fully answer the question of whether the outcome is a reflection of the interests or wishes of all stakeholders. The respondents that were interviewed were not all from the same urban greenspace project. Instead of interviewing all involved stakeholders from one project, the choice was made to interview people from different projects in Reyeroord. This is done so that the representation of every function of urban greenspace could be incorporated. However, this means that the interviewed respondents do not form a true representation of a project, and therefore it is not possible to make any conclusions on this part.

Understanding among stakeholders: To what extent did the debates produce something which is perceived, by the participants, as essential for the decision-making processes?

Understanding among stakeholders for the outcome phase revolves around the production of matters during the process that are perceived as essential for the outcome of the decision-making. For example, the gathering of different people with different areas of expertise that could lead to the production of knowledge that influences the decision-making process. In the interviews, the respondents indicated things they gained from working together in the process, but not directly what they experienced as essential during the decision-making process. They did, however, indicate that they found it valuable that people from different disciplines came together, and knowledge was exchanged. However, this was only mentioned by municipal officials from the core team of Reyeroord+.

Recognition of power: Have the processes contributed to the building of institutional capital and capacity? To what extent did resources and networks influence the outcome?

The majority of the respondents were positive about the creation of institutional capital and capacity. Respondents mentioned multiple matters, of which one was more decisiveness. Respondents felt like they were getting more things done in Reyeroord. They suggested that this is

because Reyeroord+ is considered as a somewhat different association within the municipality, and therefore, they experienced more freedom in their decisiveness. One respondent from the cluster Service indicated that she experienced that she could achieve more, without having to justify it by filling out a lot of documents or getting permission from others. Another respondent from the core team illustrated this by saying that "*Reyeroord opens doors*". He said that he had a plan for something in the neighbourhood, which was usually considered as challenging. When the person in charge asked him where this plan was, and he answered Reyeroord, that person replied with: *"Reyeroord? Let us do it!"*.

Secondly, respondents mentioned that their collaboration between different disciplines and expertise contributed to the building of knowledge. This quote illustrates that their collaboration produced new knowledge, but also new connections that contributed to the decisiveness of stakeholders:

> *"I am now in a group talking about invasive exotic species. But there are water maintenance people in that same group. There are people from road maintenance. Well, they come together, but then you notice that everything is linked. Because not only does the invasive exotic species occur in the park, but it also occurs in the water, but they also grow between the tiles. So, you have common ground everywhere. It is nice that you can talk to each other and come up with a plan of how we are going to achieve this collectively." – a member of the platform, City Management*

The network was most often mentioned when respondents were asked what they gained from their involvement. The program manager told that people's interaction in the network created 'short lines'. He elaborated that in a quote:

> *"What I see happening in our network is that people have, so to speak, a kind of deeper knowledge in those other clusters that they do not belong to, so they also talk more intensely to people. And that those people they speak to are much more inclined to make more of an effort because they know each other well personally. They have the feeling that they are working together. (….) And you just notice that even the tone is very different, that there is much more to that relationship, that you also do it because you just grant something to the other person." – program manager, City Management*

The network not only created new relationships but also contributed to more embeddedness in the municipal organisation, especially beyond the cluster of a person. This also contributed to the empowerment of individuals, because they could contact their colleagues in other clusters or departments informally rather than through formal hierarchical structures. Based on Giddens structuration theory, one could say that the organisational structures bound people. However, with this network approach, they experienced more embeddedness in the organisation, which gave them the empowerment to overcome these hierarchical structures.

Comprehension of discourses and perceptions: To what extent is the outcome a representation of all stakeholders' perceptions? Did the process build new discourses?

Based on the answers of the respondents, it is hard to say whether the outcome of an urban greenspace project in Reyeroord is a representation of all stakeholders' perceptions. This is due to the complexity of a project. Stakeholders are involved in different stages of the project. Therefore, it is not possible to draw any statements based on the interviews.

Another aspect of this analytical dimension is whether the process has built new discourses. What is interesting about Reyeroord+ is that the majority of the people have other activities, usually in other parts of the city, besides their involvement in Reyeroord. One respondent explained what happens due to that:

> *"Because people participate in Reyeroord, in addition to the fact that they often have another function within the municipality, you get a kind of cross-fertilisation between these two. All those individuals learn as it were, at least that is what we hope for. We hope to learn together, and we also hope that the organisation learns." – a member of the core team, City Management*

In the current discourse, the municipality is portrayed as a regulatory, procedural, formal, standardised organisation (Joosse & van Buuren, 2020). Reyeroord+ can be regarded as the opposite of this, due to their open and explorative network structure. This quote illustrates how Reyeroord+ is slowly changing this current discourse. She mentioned in the quote that stakeholders not only learn from each other but that the organisation learns as well. The cross-fertilisation enables a change in the ideas and perceptions of how municipal officials should work in the organisation and how the organisation works. This is perhaps where Giddens' structuration theory is most evident. The stakeholders that participate in the neighbourhood are a part of these new working methods and can promote this in the rest of their organisation. As a result, Reyeroord+ gains familiarity within the municipality as a whole and reaches far beyond just the neighbourhood boundaries. This illustrates how agents in Reyeroord+ 'change' the structure of the municipal organisation.

Chapter 6: Conclusion and reflection

6.1 Introduction

Urban greenspaces are valuable to city life due to their positive impact on multiple aspects. These spaces hold the capacity to contribute to physical and social health (Grahn & Stigsdotter, 2003; Toftager et al., 2011), biodiversity (Lepczyk et al., 2017), economics (Morancho, 2003), climate adaptation (Pauleit & Golding, 2005) and the aesthetics of the city (Chen et al., 2009). Urban greenspaces have a great variety of functions. Nevertheless, these functions cannot always be implemented in tandem equally, for there are possible challenges between them (Borgström et al., 2006; Haaland & van den Bosch, 2014; Madureira & Andresen, 2014). This means that decisions need to be made on which and how functions will be implemented in the city. As these functions cannot represent themselves, they are dependent on the municipal officials that represent them. Due to its wide scope of functions, urban greenspaces intersect with various departments - or clusters - of a municipal organisation. These clusters have different interests in deploying urban greenspace to achieve their ambitions by opting for a function that suits their objectives. For example, the cluster of Societal Development will promote the health-related functions, and the cluster with the ecology department will safeguard the biodiversity function. However, as these function can conflict, decisions need to be made, which means that opting for one function may lead to an enhancement of some while diminishing others. Municipal officials, or stakeholders, that strive to fulfil their individual interests and objectives would jeopardise the multifunctionality of urban greenspaces, for insufficient attention is then paid to the other stakeholders and the other functions of urban greenspaces they safeguard. However, if actors are inclusively involved in a collaborative process, it is more likely to produce a just outcome (Innes & Booher, 1999). Therefore, in this thesis it was expected that if actors are inclusively involved in the planning process, and there is the freedom to discuss different and multiple perceptions, the multifunctionality of urban greenspaces can be better addressed. Central to this is the collaboration between municipal officials from different clusters, for since these officials safeguard a function, their collaboration would enable all functions to be addressed. Hence, this thesis' focus was on how these municipal officials collaborate in cross-cluster planning processes.

There is currently a void in the academic literature when it comes to the integration of multifunctional urban greenspaces into the planning, design and management process (James et al., 2009; Messelink, 2002). Existing literature does illustrate the integration of multifunctionality in green infrastructure planning (Hansen & Pauleit, 2014; Meerow & Newell, 2017), and how greenspace components can be linked with urban green services to help planners select the best possible combination of greenspace components (Belmeziti et al., 2018). However, these do not emphasise the interests of stakeholders and the influence of power structures, and how this shapes the process. The thesis endeavoured to contribute to the academic literature by aiming to create a deeper understanding of the collaborative planning processes and how existing power relations shape the prioritization of some functions (and the associated stakeholder interests) over others. The previous chapters discussed how collaborative planning could serve as a valuable framework

by addressing the frameworks of Habermas, Giddens and Foucault. These frameworks were operationalised into four analytical dimensions. The subsequent chapters provided an overview of the collaborative nature of urban greenspace planning and how stakeholder interests were addressed in the neighbourhood of Reyeroord in Rotterdam. This will allow us to answer the central question of this thesis:

> *How does the planning process of urban greenspaces with multiple stakeholder interests enable multifunctional urban greenspaces?*

The next paragraph will provide a summary of the results and answers to the first three sub-research questions (paragraph 6.2). Paragraph 6.3 will discuss the results in light of the main research question and illustrates how this contributes to the existing academic literature. The final sub-question is addressed in this paragraph, as this gives recommendations on how multi-stakeholder collaboration can be improved to establish multifunctional urban greenspaces. Finally, some reflections are presented, and recommendations are given for further research.

6.2 Summary of the results

This thesis used the transition of Reyeroord+ as a case study to better understand how the planning process of urban greenspaces with multiple stakeholder interests could enable multifunctional urban greenspaces. The collaborative planning approach was applied to the field of urban greenspace planning, for it was expected that this approach to planning could prove valuable in assessing the collaborativeness between stakeholders in the process, which was expected to foster multifunctionality of urban greenspaces. Herein the frameworks of Habermas, Giddens and Foucault were used to establish four analytical dimensions, namely inclusion, understanding among stakeholders, recognition of power and comprehension of discourses and perceptions. These dimensions were applied to each planning phase (input, process and outcome), for it was expected that each phase is dependent on the previous for the realisation of multifunctional urban greenspaces. A summary of the results will be presented by providing answers to the first three sub-questions.

How is multi-stakeholder involvement reflected in urban greenspace planning?

Due to the variety of functions, urban greenspace has interfaces with various departments and clusters within the municipality of Rotterdam, like Societal Development, City Development, City Management and even Work and Income. In standard urban greenspace planning processes, it is City Development that designs a public space, of which urban greenspace is a component. When finalised, it becomes the responsibility of City Management, who is responsible for the maintenance and management of the city. The ways of management can influence the design, and therefore, these two clusters cooperate in the planning phase.

Reyeroord+ uses a slightly divergent approach, as they move away from hierarchical structures and work based on an open and explorative network structure. The urban greenspace

developments in the neighbourhood were mainly initiated by the wishes of the residents, and the ambitions that have been established by City Management, the cluster that is in charge of Reyeroord+. This network structure facilitated a multi-stakeholder involvement with cross-cluster collaborations in urban greenspace planning, for it was not limited by the boundaries of the hierarchy of clusters. The urban greenspace projects were driven by the task, which determined stakeholder involvement. This indicated that anyone that has a stake in that place could, in essence, participate. This open network approach to urban greenspace planning enabled a multi-stakeholder involvement with cross-cluster collaborations. However, there is a dark side to it, for it is limited by the stakeholders' network. Besides the network, the available time of stakeholders was also identified as a decisive factor in urban greenspace involvement. The open network structure enabled municipal officials to participate based on their personal motivation, whereby they often did not have set hours to spend on Reyeroord. Therefore, they had to find time next to their regular work. They could get set hours to work on Reyeroord, but that meant that this had to be approved by their supervisor. Since Reyeroord+ is supported by City Management, it proved to be easier for people from that cluster to create available time and get permission from their supervisor.

It was expected that the perceptions of stakeholders in urban greenspace developments would play a decisive role in stakeholder involvement, for stakeholders that hold corresponding perceptions would be more likely to collaborate than those that hold deviating perceptions. However, this study showed that it is not the perceptions of urban green that are decisive in stakeholder involvement, but the perceptions of collaboration. If stakeholders saw value in collaborating, their perceptions of collaboration and ability to look beyond their own cluster and see connections were more decisive than the fact that certain interests could not be combined. The open structure of Reyeroord enabled the communication between different stakeholders and their perceptions and paid attention to the multiples stakes that were present in a place. However, there is also fragility in this, for stakeholders collaborate mainly based on their own volition. If certain stakeholders did not see value in collaborating, then they were not likely to be involved in urban greenspace planning in Reyeroord. Additionally, the working method of Reyeroord+ was considered as divergent within the municipal organisation. This also deterred some municipal officials who were not in favour of this working method. So it can be called into question whether stakeholder involvement based on an open network structure fostered interaction and a social construction of knowledge to the best extent, or whether it fostered a confirmation of knowledge of like-minded.

What are the interests of, and power relations between, different stakeholders in urban greenspace planning?

Every municipal stakeholder belongs to a cluster within the municipality. These clusters all operate in different political landscapes, with different council members, budgets, responsibilities and ambitions. The institutional structures of the clusters shaped the interests and power of the individual stakeholders, through the authoritative dynamics (rule structures), allocative dynamics (resources) and ideas and discourses. This created different positions for stakeholder from various clusters and influenced the power relations between stakeholders when collaborating.

The respondents mentioned the differences in the characteristics of the clusters. These characteristics presented themselves in terms of responsibilities. Societal Development is responsible for the health of its residents, City Management for the maintenance of the city and City Development for the spatial structures. This could create different interests in terms of functions, for each cluster could safeguard their responsibility by utilizing certain functions of urban greenspaces. However, the results did not indicate that the responsibility of clusters directly influences urban greenspace planning in Reyeroord.

The results did indicate how the different characteristics of the clusters shaped the power relations between stakeholders. Often mentioned constraints in collaborative processes is the lack of budgets (Margerum, 2002). This was also apparent in this study. However, stakeholders deployed their network as an empowering mechanism to find available budgets elsewhere in the organisation. The differences in power relations between stakeholders were most evident in Reyeroord+ due to the leading role of City Management. The managers and directors of City Management initiated the transition of Reyeroord+ to manifest their ambitions for the future of the management of the city. This created support throughout the cluster. Stakeholders from City Management benefitted from this corporate support, for they had a broad network, and it was easier for them to create available time and to communicate with colleagues. Stakeholders from other clusters experienced more obstacles in urban greenspace planning, for they did not experience corporate support, and, therefore, it was harder for them to create available time and entitle to budgets in their cluster. This illustrates how the institutional structure, namely the cluster in charge, shaped the agent, and how this influenced and shaped the allocative and authoritative dynamics and power of individual stakeholders.

How are the interests of competing and collaborating stakeholders addressed?

From a Foucauldian perspective, power is inevitable in our world and planning. The previous section has established that perceptions of collaboration and institutional structures shaped the interests of, and power relations between, different stakeholders in urban greenspace planning. This section will pay attention to how these interests are addressed, for this is an essential aspect in achieving multifunctional urban greenspaces.

This research established that even though Reyeroord+ is based on inclusion and allowed, in principle, all municipal officials to participate, stakeholders were not equal. The transition was originated from City Management as the managers and directors of this cluster assigned Reyeroord as the neighbourhood where they were going to experiment with the future of the management of the city. The eight ambitions that were established all related to these new ways of management. In practice, this meant that many of the developments that took place in the neighbourhood were initiated by City Management. This created conflicts with other clusters, for City Development was not so actively involved in Reyeroord. Instead of approaching matters through the perspective of management, they preferred an all-encompassing strategic vision. This was evident in the main urban greenspace. City Management approached this by using small projects with citizen involvement. However, City Development preferred to be less reliant on the participation of the residents and aimed to develop a vision for this urban greenspace that was more in connection to

the rest of the city, instead of focused on Reyeroord. These competing interests were addressed in a sense that stakeholders from City Management enjoyed more authoritative and allocative power due to corporate support. Therefore, they were better able to achieve their ambitions. Other clusters also experienced difficulties, especially because Reyeroord is not a focus area for clusters like Work and Income and Societal Development. As a result, they also experienced more obstacles when it came to convincing their colleagues and superiors within their cluster of the value of their involvement in Reyeroord.

The upper-management decisions of City Management created a privileged position for officials from that cluster, for it was easier for them to create time, communicate with people within their cluster and enjoy management support. Officials from other clusters experienced more resistance, in a sense that they faced more obstacles when it came to participation, e.g. harder to make time, find budget and experience more resistance from executives and colleagues.

The open and explorative attitude of Reyeroord+ enabled a planning process with multiple stakeholders from different clusters. The results have shown that when these stakeholders are collaborating in the decision-making process, differences in interests were not experienced as obstacles. Especially when it came to urban greenspace planning, for even though they could not incorporate all functions in the same project, it was possible to accommodate a certain function elsewhere in the neighbourhood. Different interests of clusters were not perceived as obstacles, but rather as opportunities to improve Reyeroord. However, when competing stakeholder interests did appear in the planning process, these were often overpowered by City Management, due to their privileged position, which gave these stakeholders more authoritative and allocative power.

6.3 Creating multifunctional urban greenspaces through a planning process with multiple stakeholder interests

The above-mentioned questions and answers lay the foundations for answering the main research question, namely: *How does the planning process of urban greenspaces with multiple stakeholder interests enable multifunctional urban greenspaces?*

The planning process referred to in the research question encompasses the entire process, including the input, process and outcome of urban greenspace planning. Collaborative planning puts great emphasis on the process (Harris, 2002). It is based on principles of equal communication and consensus-building through dialogue, inspired by Habermas' communicative action. However, this study has shown that even though these requirements are met in the process, the position of stakeholders in the municipal organisation influences their position in urban greenspace planning. Giddens' structuration theory helps to understand how structures (the municipal organisation) shape agents (the individuals) and vice versa. His theory pays attention to the interplay of allocative dynamics (resources), authoritative dynamics (rule structures) and ideas and discourses (Healey, 2003). The answers to the sub-questions have illustrated that institutional structures of the structure influence the authoritative and allocative dynamics and perceptions that shape the agents. This means that the capability an individual is given in the planning process is shaped by his or her position in the municipal organisation. Healey reflects on the way structures shape agents in

Giddens' structuration theory as: "[t]he formal institutions of government have a role in providing a hard infrastructure of a *structure of challenges*, to constrain and modify dominant centres of power…" (1997, p. 200). The municipality creates a hard infrastructure that can either empower or restrict officials. Even though the municipality is one organisation, people are conditioned by the compartmentalisation. This creates a municipality that does not always operate as one organisation, but as an assembly of several organisations. The institutional structures influence people's ability to collaborate, for each cluster has its own responsibilities, tasks, political landscape and ways of thinking. This can hinder integrated cross-cluster collaboration. For integrated collaboration to take place, more acknowledgement of people's positions, shaped by their cluster, is needed. In the case of Reyeroord+, stakeholders from City Management experienced a privileged position, for they faced fewer obstacles when collaborating then colleagues from other clusters. This reflects that even though officials all work for the same organisation, they are not equal in planning processes. In the introduction of this thesis, it was expected that each planning phase is dependent on the other for creating multifunctional urban greenspaces, as illustrated in *figure 1*. This means that stakeholders have to be inclusively involved in the input phase, and the planning and decision-making process should be based on collaborative decision-making to create multifunctional urban greenspaces. This thesis has revealed the importance of the input phase, for if stakeholders, and the functions they represent, are not inclusively involved here, it is more challenging to achieve multifunctionality. Therefore, it is crucial to create more awareness of the differences in position for integrated collaboration to take place. Collaborative planning fosters a spread of ownership to all those that have a 'stake' in a place through all ranges of knowledge (Healey, 1997). However, if the aim is to spread ownership and include all stakeholder, then it is essential to acknowledge the position that stakeholders hold, for this influences their ability to collaborate.

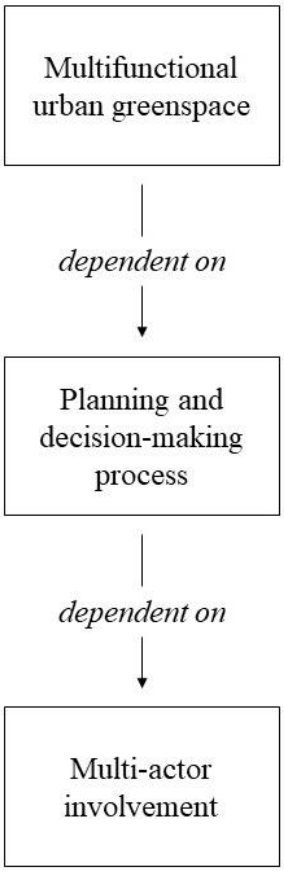

Figure 1: Planning process of urban greenspace, made by the author

The multifunctionality of urban green offers many opportunities for sustainable city life. Since urban space is scarce, it is valuable to combine various functions of urban green, for a greater profit can be achieved. Therefore, it is essential that stakeholders can collaborate and share knowledge, for more opportunities can be enjoyed this way. Nevertheless, although the various functions of greenspace mean that many clusters have a stake in urban greenspace planning, it is not immediately the case that each stakeholder is equally competent to utilize urban greenspace to achieve their objectives. The institutional structures of the municipal organisation create power structures that influence stakeholders' capacity, like their capacity to participate and decisiveness.

If multifunctionality is the goal, then it is important to facilitate this in the decision-making process by creating equal positions of stakeholders in the input phase. Collaborative planning can serve as a valuable framework to create inclusive and equal communication, which helps to incorporate every stakeholders' perspective and all functions of urban green. However, the principles of collaborative planning should not only be applied in the process but be extended to the input phase as well. More awareness of everyone's position is essential, for this will help set the right conditions for this collaborative decision-making to take place. The four analytical dimensions that have been established in this study can help as normative guidelines to enable this. Recognition of power can help to acknowledge stakeholders' positions and create awareness on how the institutional structures shape these positions. This will enable inclusion of stakeholders, for privileged stakeholders could utilise their power to assist others to participate. Inclusive involvement of stakeholders will foster understanding among stakeholders and creates a setting in which communicative action can take places which encourages comprehension of discourses and perceptions between stakeholders. A visual representation of this is presented in *figure 8*.

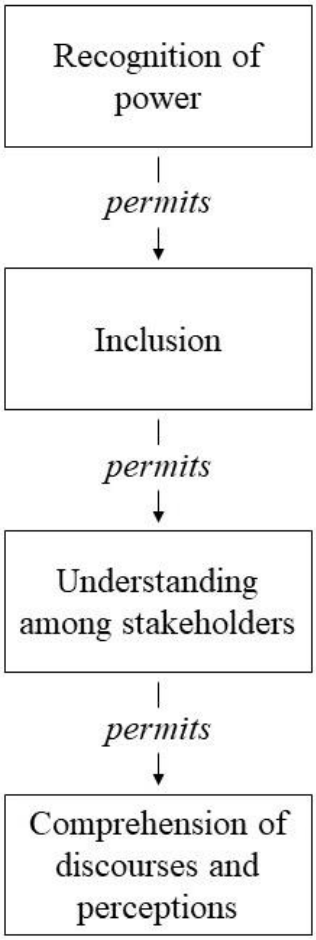

Figure 8: Analytical dimensions as normative guidelines for collaboration, made by the author

Giddens' structuration theory pays attention to the recursive relation between structure and agent. The abovementioned section has revealed how the structure shapes the agent, but Reyeroord+ also illustrates how the agents shape the structure. Besides the physical transition in the neighbourhood, Reyeroord+ also wishes to bring about a different working method, that is based on an open and explorative network structure. Besides a hard infrastructure, this reveals the other side, namely the soft infrastructure. "…[A] soft infrastructure of *relation-building* through which sufficient consensus-building and mutual learning can occur to develop *social, intellectual and political capital* to promote coordination and the flow of knowledge and competence among the various social relations co-existing within places." (Healey, 1997, p. 200). This soft infrastructure gives agents the ability to exert influence on the hard infrastructure of the structure. The results showed that stakeholders shape the structure by overcoming the hierarchical structures and instead adopt an integrated approach in which they collaborate with other clusters. This creates both social capital through an expansion of their network, and intellectual capital for their collaboration enables knowledge-sharing. Through mutual learning which transcends clusters, individuals can see that they are collaborating towards a common goal, i.e. creating a liveable city and municipality. However, it is vital that stakeholders are aware of their own and other positions, for these positions can create unequal power positions.

When adopting Foucault's framework, conflict and power are inevitable to planning (Flyvbjerg & Richardson, 2002). Therefore, it is essential to see how power and conflict are addressed. This research showed how power structures shape stakeholders' position and influence their capacity to participate in collaborative processes. Reyeroord+ uses an open network structure to which, in essence, everybody can participate. However, due to this open attitude, they seem to be unaware of the power structures that shape officials and make it more challenging for some to participate. Hence, they have to acknowledge how power shapes their and others position and use this knowledge to make the transition more inclusive.

The answer to the main research questions reveals the answer to the last sub-question, namely: *How can multi-stakeholder collaboration be improved to establish multifunctional urban greenspaces?* This research illustrated how interests and power structures shape urban greenspace planning. As power is inevitable in planning, it is essential to acknowledge this. When striving for multifunctional urban greenspaces, it is important that all possible functions are reflected in the planning process. This can be done by providing an environment wherein knowledge is shared, and everyone that has a 'stake' can participate. This thesis has illustrated that the positions of these stakeholders are not equal and thereby influences their capacity to participate. Multi-stakeholder collaboration can be improved by acknowledging the different positions of stakeholders and how this shapes their ability to participate and contribute to the decision-making.

A recent study from Erasmus School of Social and Behavioural Sciences of Joose and van Buuren, (2020) has researched Reyeroord+'s working methods and their intended organisational change. They also identified that Reyeroord+ receives generous support from City Management. One of their recommendations was that Reyeroord+ should extent itself throughout the municipal organisation by creating support in other clusters as well if they want to bring about organisational change in the whole municipality. The policy recommendations of this thesis are in line with their recommendation. Stakeholders from City Management experienced fewer obstacles in the planning process due to the fact that they profited more support from their cluster. Stakeholders from other clusters experienced less support and therefore faced more obstacles in the planning process. When creating cross-cluster collaborations, it is vital to acknowledge the differences in stakeholders' positions, for the positions shape the stakeholder's capacity to participate and contribute to the decision-making. More support throughout the clusters can help in creating more equal positions for stakeholders in the process. This will enable every stakeholder, and the functions of urban greenspace they represent, to be included in the planning process.

6.4 Reflection and recommendations for future research

This thesis used a case study to study how the planning process of urban greenspaces with multiple stakeholder interests enables multifunctional urban greenspaces. This paragraph reflects on the research by paying attention to the case study and the implementation of the research. This will serve as a basis for recommendations for future research.

Reflection

The first point of reflection relates to the composition of the neighbourhood of Reyeroord. Compared to other districts in Rotterdam, Reyeroord has a relatively large amount of urban greenspace. The neighbourhood consists of two big urban greenspaces that consist of grass, trees and water. The respondents mentioned that a lot of that space is currently unused, or only used by dog owners to walk their dogs. This enables Reyeroord+ to utilize the urban greenspace for many of the developments because they are not constrained by the scarcity of space and because it is not widely used by the residents. Respondents have mentioned that they used a tactic where they used a small section of the urban greenspace and used that to experiment. The risk is relatively low if that project fails for it has a small social and spatial impact. Besides, many residents have access to a private outdoor space, in the form of gardens and balconies. As a result, they are less reliant on the urban greenspace in their surroundings for relaxation and contact with nature. Reyeroord was selected as a case study for the urban greenspaces can be deployed for multiple ambitions of Reyeroord+, which highlights its multifunctional character, and Reyeroord+ actively pursues integral collaboration between different clusters. The urban greenspaces are not affected by sewer replacement. As a result, a lot of these cross-cluster collaborations take places in the urban greenspaces. The unique approach of Reyeroord+ and their relations with the urban greenspaces made it an interesting case to study how these multi-stakeholder planning process of multifunctional urban greenspaces work in practice. Nevertheless, the question remains of how these processes are affected by multiple stakeholder interests if the land is scarce.

The second point relates to the working method that Reyeroord+ applies. This study applied collaborative planning to the field of urban greenspace planning. The case study offers many opportunities to study how collaborative planning works in practice, for the working methods of Reyeroord+ has many commonalities with collaborative planning. However, it is crucial to keep in mind that this working method is considered as unusual within the framework of the municipal organisation. This makes it harder to generalise the results of this study to the broader spectrum of the entire municipality. Nevertheless, as the previous sections mentioned, Reyeroord can be used as a unique case study that helps understand how multi-stakeholder involvement takes place.

The final point of reflection relates to the implementation of the research itself and specifically the selected respondents. The topic of this study is urban greenspace planning, and therefore people have been interviewed that are involved in this. This means that the respondents are likely to have an affinity with urban green, for it is part of their work. As perceptions are an essential part of this study, it is essential to pay attention to this. The urban greenspaces that are incorporated in this study are part of the public space in the city. Other departments also have a stake in these places and might perceive them not based on the functions of urban greenspace, but from the perspective of infrastructure or safety. As this thesis focused on the multifunctionality of greenspaces, it did not incorporate the objectives of departments that lay a different claim on the available public space in a city.

Also, this research evaluated the collaborative nature of urban greenspace planning processes in Reyeroord. However, only people who are still involved in Reyeroord+ were selected as respondents. No interviews were conducted with people who have left Reyeroord+ or who are sceptical about it. Therefore, the answers are biased towards those who are positive about the transition and their answers could be biased, in the sense that they have experienced their involvement as positive.

Recommendations for future research

The thesis aimed to develop a deeper understanding of how cross-cluster collaboration processes with multiple stakeholder interests are reflected in urban greenspace planning and how this planning process enables the multifunctionality of greenspaces. The understanding of the multifunctionality of urban greenspaces is well developed in the academic literature. However, this is not well integrated into both the planning, design and management process (James et al., 2009; Messelink, 2002). This thesis, therefore, tried to better understand the planning process. The approach of collaborative planning and the frameworks of Habermas, Giddens and Foucault were adopted to analyse how a process with multiple stakeholder interests enables multifunctional urban greenspaces. It has contributed to the field of planning by indicating the importance of the input phase and stakeholders' positions in collaborative processes. This result can provide a valuable contribution to the multifunctionality of urban greenspaces as it enables better collaboration between stakeholders and the functions they represent. This research applied the collaborative principles to the process. A recommendation for future research would be to study whether a process that is guided by these principles would indeed lead to a higher degree of multifunctionality of urban greenspaces in the outcome. An example would be to create a stakeholder group wherein each function of urban greenspace is covered and let them adopt the collaborative principles in the planning process when planning for undeveloped land. This could establish whether planning based on collaborative principles would enable multifunctional urban greenspaces.

As this study used the neighbourhood of Reyeroord as a case study, the main recommendation for future research is to perform the research in another neighbourhood in Rotterdam. Since Reyeroord is based on the garden-city principles, it is recommended to choose a neighbourhood with a different composition, for example, the pre-war neighbourhood Delfshaven. This will give insight into urban greenspace planning in a neighbourhood with a different composition and where the principles of Reyeroord+ are not applied.

This thesis applied the principles of collaborative planning to urban greenspace planning. Central to this is the incorporation of every stakeholder that has a 'stake' in a place. The reflection has discussed that urban greenspace is often an aspect of the public space, in which other stakeholders also have 'stake' that is not related to the function of urban green. To better understand broader planning processes in the city, it could prove valuable to incorporate other municipal

stakeholders that have a ‘stake’ in the public space and research how their interests and power shape the planning process.

Final remark

An important statement about this thesis is that the main subject is urban greenspaces. Hereby it focussed on integrated collaboration between municipal officials. Perceptions and discourses are an important aspect of this thesis and in the framework of both Foucault, where they serve as a mechanism of oppression, Habermas, where dialogue between different perceptions is important and Giddens, where they are part of the recursive relation between agent and structure. The conclusion has highlighted the possible discourses and perceptions and how they might differ between clusters. However, more research is needed to establish these discourses and see how they influence the planning process, especially when multiple clusters, and discourses, come together.

Furthermore, it is essential to reflect on the greater discourse of urban greenspace. Since the municipal officials all work for a city and its residents, it seems like they all share a similar discourse of urban greenspace, namely it as being nature in the city. This form of nature can be regarded as inevitably different from outer city nature. The majority of the nature that is present in the city is there to serve the benefit of the city and its residents. Apart from the spontaneous nature, the ‘planned’ nature is planned, placed and maintained with the purpose to fulfil specific functions in the urban landscape. Therefore, it can be said that even though the stakeholders could hold different perceptions of how urban nature can be utilized to accomplish their objectives, their discourse of urban nature is likely to be corresponding, for the overarching goal of their work is to create a liveable urban environment for its residents. This overarching goal could perhaps help in bringing stakeholder together in planning processes, by focussing on the similarities of their goals, instead of on the differences.

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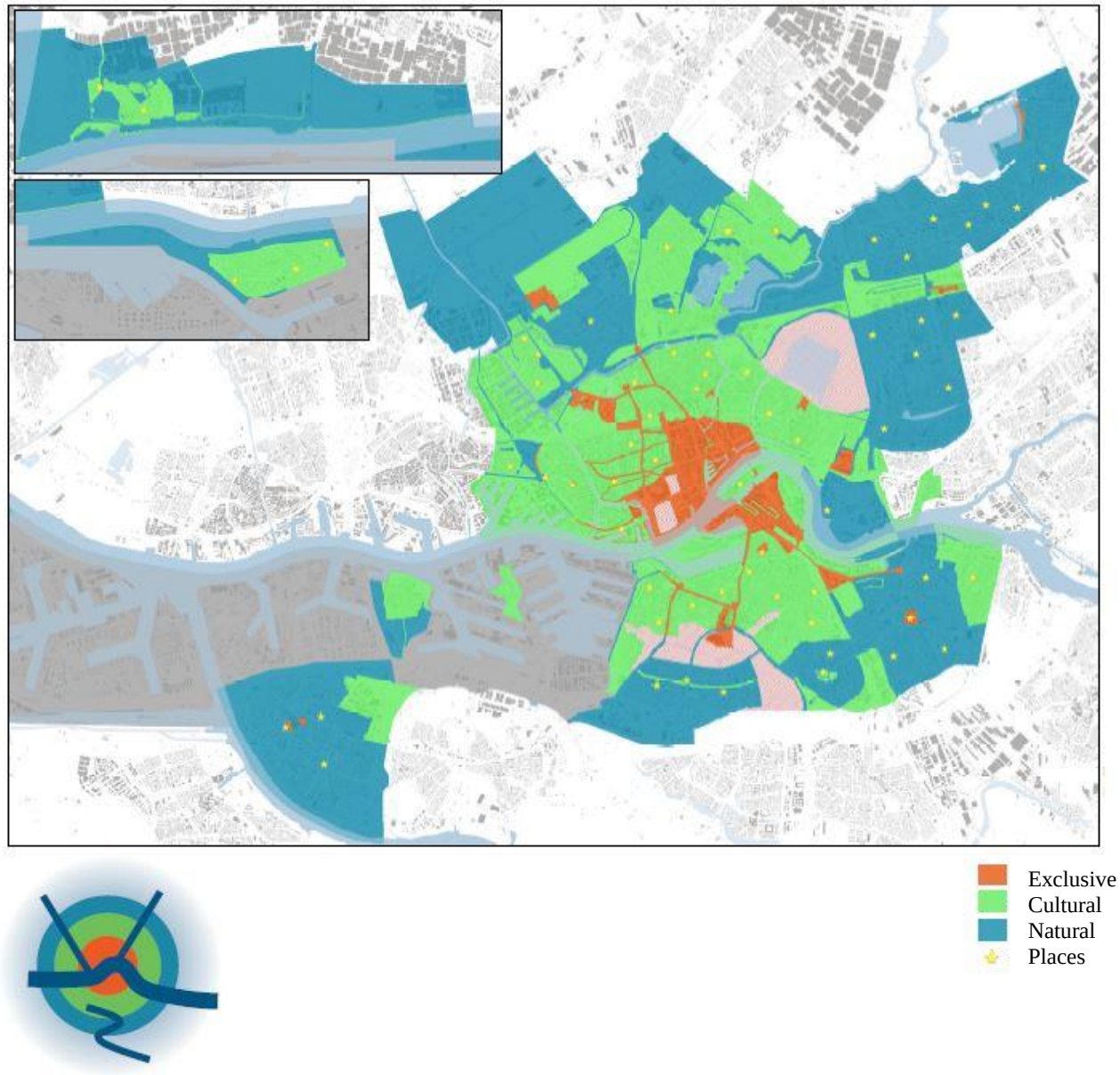
Appendix

Appendix 1: Management approach of Rotterdam (Gemeente Rotterdam, 2017)



Appendix 2: Interview topic list with analytical dimensions

Date:	
Respondent 1. Name 2. Employment time at the municipality of Rotterdam 3. Cluster 4. Background, e.g. study or work	
Preface	My research is about the multifunctionality of urban greenspace. Urban green has several functions, such as contributing to biodiversity, climate adaptation and opportunities for relaxation. Because of this multifunctionality, there are several parties involved in the process, who want to deploy urban greenspaces in the city from their perspective. My research focuses on the process in which these different parties are involved and make choices about the deployment of urban green. The interview is made up of four parts: an introduction, the input for the process (what determines involvement), the process itself (how choices are made) and the outcome of the process. Do you have any questions in advance? 1. Could you tell me a little more about your work at the municipality of Rotterdam? *General question to start the interview and get an insight into the work of the respondent.* 2. Could you tell me a little more about your involvement in Reyeroord? *General question to get an insight into the respondent's involvement in Reyeroord, for the interview is about their work concerning urban greenspace planning in Reyeroord.*

Part 1: Introduction	Reyeroord is going through a transformation. Replacing the sewerage system offers opportunities for the energy transition and other tasks in the neighbourhood, such as more areas for playing, health, circularity and biodiversity. Urban greenspaces can partly be deployed for various tasks 3. How do you perceive the function of urban greenspace in Reyeroord (from your department)? *The aim is to find out what the respondent's perception is of urban greenspace in the neighbourhood.* 4. What additional functions do urban greenspaces hold more in the city of Rotterdam or Reyeroord? *The aim is to retrieve the respondent's perception of the multifunctionality of urban greenspace.*	*Comprehension of discourses and perceptions* *Comprehension of discourses and perceptions*
Part 2: input Stakeholder involvement	5. How are the interested stakeholders involved in the process in Reyeroord? a. Does everyone have an equal role? b. Is everyone involved to the same extent? c. Is someone leading the process? And from which cluster is this person employed? *The aim is to establish how stakeholder involvement takes place and stakeholders' roles are distributed.*	*Inclusion*
	6. What determines whether persons or stakeholders are invited to participate in green development and management in Reyeroord? a. To what extent do ideas about the function of green space, or interests, of stakeholders influence the participation in the process? i. Agreed perceptions	*Understanding among stakeholders*

	ii. Divergent perceptions b. To what extent do resources (budget, time, networks, etc.) determine participation in the process? *The first part of this question establishes how perceptions and ideas and discourses influence stakeholder involvement.* *The second part of the question establishes how authoritative and allocative and power dynamics influence this.*	*Recognition of power*
Part 3: process Planning and decision-making process	7. How are decisions made in the process? a. What influences the decision-making process? i. Different or similar interests? ii. Means? 1. What are these? 2. Are they equal for everyone? b. What are obstacles during decision-making? c. Are you as a group working towards consensus? If **so**, then: i. What strategies are used to reach consensus? If **no**, then: ii. How are the choices made? *This question mainly establishes how decisions are made in the process and how interests and means influence this. Further, it looks at how obstacles are handled, as this is part of how they address power. And if the group is working towards consensus-building, as this is an important aspect of collaborative planning.*	*Inclusion* *Understanding among stakeholders* *Recognition of power* *Comprehensions of discourses and perceptions*
	8. How do you deal with disagreements/contention/conflict?	*Inclusion*

	Conflict is inevitable in planning. Therefore, this question finds how stakeholders address power.	*Understanding among stakeholders*
Part 4: outcome Multifunctionality of urban green	9. To what extent is the outcome a representation of all stakeholders or of a particular stakeholder (group)? *This question provides insight into the extent to which multifunctionality is achieved: if the outcome is the representation of one stakeholder, it is more likely that one function dominates the outcome; if the outcome is a representation of all involved stakeholders than it is more likely that the outcome is towards multifunctionality.*	*Inclusion*
	10. To what extent does the process produce something that is seen as valuable by all stakeholders? a. Does it contribute to the emancipation of stakeholders? b. Does it contribute to a better understanding among stakeholders? c. Does it contribute to more knowledge or networks for individual stakeholders? d. Has it led to new knowledge or understanding about urban green space? *This question asks whether the process has contributed to emancipation (power in a positive sense), understanding (relevant from a communicative action perspective), new discourses or knowledge and networks.*	*Understanding among stakeholders* *Recognition of power and capacity* *Comprehension of discourses and perceptions*
Closure	Indicate that this was the last question of the interview and a summary of the interview will be sent to the respondent to provide the opportunity to give feedback. 11. Is there anything you would have liked to say that has not yet been addressed? Thank the respondent for the interview.	