

The Green and Just City?

Discourses on urban greening in local sustainability planning

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Abstract

In the realm of urban planning, urban greening – the creation or restoration of green spaces in cities – has risen as an attractive approach for policy-makers and planners engaged in sustainability. As the benefits of urban greening are many, from social and cultural to environmental and economic, it has become positioned as a win-win solution to several urban challenges related to sustainable development. A growing group of scholars has, however, stressed that urban greening can give rise to new injustices and inequalities through disproportionately benefiting those already well off, as well as creating paradoxical effects of green gentrification. Despite this, urban greening continues to be a consensus-oriented planning approach with little consideration of for whom the green city is created. This study applies critical discourse analysis to explore how the idea of urban green space as a public good for all discursively has come about, and with what implications on social justice. Through a case study in Gothenburg, four discourses on urban greening are identified: the liveable city, the attractive city, the resilient city, and the dense city. In policy, these discourses co-exist and complement one another in creating a utopian vision of the green city. In practice, however, discursive struggles often materialise, resulting in conflicts between different development goals and a decoupling between policy objectives and the urban reality. Notably, the study indicates a prioritisation of economic goals, resulting in urban greening interventions often being rationalised by their potential of increasing attractiveness and competitiveness. Issues of social justice, however, are poorly understood, and the equity implications potentially arising from urban greening agendas receive little or no attention.

Key words: urban greening, sustainability planning, justice, critical discourse analysis, Fairclough

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1 Introduction

Climate change and rising inequalities are two of the most pressing challenges that modern society is facing, and they are highly interlinked. In their fifth assessment report, the Intergovernmental Panel on Climate Change states that climate-related hazards particularly affect socially and geographically disadvantaged people, thus exacerbating inequalities and triggering new vulnerabilities (IPCC, 2014). While this discussion – as part of a broader climate justice debate – mainly focuses on inequalities and inequities across countries, the impacts of climate change and climate action on equity within countries and cities have received far less attention (Islam & Winkel, 2017).

Cities are major contributors to greenhouse gas emissions and have been identified as key sites in addressing climate change (Bulkeley, 2013). Furthermore, cities are characterised by concentrated and rising inequalities (Connolly & Steil, 2009). As cities respond to and prepare for the impacts of climate change, wealthy areas and groups tend to be prioritised, often at the expense of the urban poor (Anguelovski et al., 2016). Hence, climate action might negatively impact existing urban inequalities. This calls for a greater focus in urban planning on the interlinkages between climate change measures and social equity and justice (Long & Rise, 2018). Often, city leaders and policy-makers advocate sustainability agendas in which social, environmental and economic sustainability are clustered together in an allegedly perfectly balanced way (Gilbert, 2014). In reality, however, the equilibrium between these three pillars is not that perfect, and the social dimension of sustainability tend to be poorly understood in environmental planning (Dempsey et al., 2011).

One solution that has received increased attention lately in the strive for creating sustainable and climate-resilient cities is urban greening, a city planning approach focused on creating new, or improving existing, green amenities (e.g. parks, gardens, greenways, etc.) in urban areas. A range of benefits and services provided by new or restored green space is highlighted in the academic literature, such as environmental and climate benefits from mitigation of and adaptation to the effects of climate change (Demuzere et al., 2014), socio-cultural and health benefits from increased contact with nature (Hartig et al., 2014), and economic benefits from attracting people and investments and creating opportunities for city-branding (Gulsrud et al., 2013). The multifunctionality of green space undoubtedly makes it an attractive tool for policy-makers and planners, and urban greening has been positioned as a win-win or no-regrets solution to several modern urban challenges related to sustainable development (see e.g. European Commission, 2012).

A growing group of scholars has, however, stressed that such win-wins rarely occur in practice (Anguelovski et al., 2018a; Turkelboom et al., 2018) since

urban greening interventions often involve trade-offs between different development goals (Haase et al., 2017). Recent studies have also emphasised equity impacts of urban greening projects in cities, as these tend to disproportionately benefit affluent communities and cause distributional injustices (Wolch et al., 2014). Additionally, it has been demonstrated that new or restored green spaces in many cases produce paradoxical effects in distressed neighbourhoods by triggering land revaluation and displacement of vulnerable groups (Anguelovski, 2016). Despite the equity implications of urban greening being increasingly highlighted in academic disciplines of critical urban studies, it continues to be a consensus-oriented planning approach with little consideration of for whom the green city is created (Anguelovski et al., 2018a; Connolly, 2018).

1.1 Aim and research questions

In this study, I aim to demonstrate the need for a more nuanced understanding of urban greening within the contemporary urban planning paradigm focused on creating sustainable and resilient cities – going beyond the current emphasis on the benefits of green space and taking into consideration perspectives of social justice. Drawing on Norman Fairclough’s (2010) critical discourse analysis, I explore how discourses on urban greening emerge and find resonance in planning policies and practices. By further applying Susan Fainstein’s (2010) theory of the Just City, I examine the wider social implications of this, particularly analysing the extent to which discourses on urban greening produce just outcomes. By doing so, the study contributes with enhanced understanding of the relationship between discourse, urban greening, and justice in the context of planning for sustainable cities. This is crucial in the attempt to create cities that are not only green, but also just, inclusive and sustainable for all. Through a case study in Gothenburg, Sweden, I analyse urban greening along the following research questions:

- 1) *Which are the dominant discourses on urban greening?*
- 2) *How are discourses on urban greening articulated in urban planning practices?*
- 3) *To what extent are aspects of social justice in relation to urban greening addressed in urban planning practices?*

1.2 Scope and delimitations

The thesis applies a discursive approach to explore the increasingly important role of urban greening in local sustainability planning. To provide context for studying this, Gothenburg, Sweden’s second largest city and home to half a million residents, is drawn upon as a case study. Gothenburg is a suitable setting for the aim

of this study for its long-standing and diverse engagement in sustainability planning, including a rising focus on urban greening. While planning occurs at many levels of governance, this study is concerned with the local level. Therefore, I focus on how the municipal organisation in Gothenburg addresses urban greening, both at a city level through policy and strategic planning, and at a neighbourhood level through practices of urban greening. For the latter, I narrow the empirical focus to the neighbourhood Kvillebäcken, located in the outskirts of Gothenburg's new development area Älvstaden (River City). During the last two decades, Kvillebäcken has been transformed from industrial and service area to exclusive residential neighbourhood, branded by the municipality as Gothenburg's showcase for sustainable development (Thörn & Holgersson, 2016). In this transformation, urban greening has played an important role, not least in the marketing of the new neighbourhood. In light of this, Kvillebäcken provides an interesting case example for studying both the practical and discursive implications of urban greening more in-depth (see section 4.1 for a more detailed contextual description).

1.3 Conceptualising urban greening

To address new urban challenges such as climate change, deteriorating public health, and segregation, the attention for green space interventions is rising in the realm of urban planning. By the mid-1990s when strategies for improving the green fabric of cities increasingly became part of urban environmental and sustainability planning (Wang & Banzhaf, 2018), it was usually referred to as green infrastructure, a concept still common in both planning theory and planning policy (Wright, 2011). The European Commission has played a leading role in promoting the concept of green infrastructure as a way to address challenges related to sustainable development. They define green infrastructure as

...a strategically planned network of natural and semi-natural areas with other environmental features and managed to deliver a wide range of ecosystem services. (European Commission, 2013: 3)

In this definition, green infrastructure is understood as a form of natural capital, and the multiple services provided by nature for the benefit of human society are strongly emphasised (see e.g. Laforteza et al., 2013; van Leeuwen et al., 2010).

Another concept that more recently has received increased attention and gained momentum in policy circles is the concept of nature-based solutions. It is closely related to and builds on the green infrastructure concept but extends the definition to include not only nature and society, but also the economy. By focusing on innovation, nature-based solutions seek to address sustainable development goals through optimising synergies between nature, society, and the economy (Faivre et al., 2017). The European Commission – one of the leading

actors in integrating the concept into policy debates – defines nature-based solutions as

...solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions. (European Commission, 2016)

While both green infrastructure and nature-based solutions emphasise the multi-functionality of green space, urban greening – which is the term I use – has risen as a common concept particularly in the literature concerned with the equity implications of urban greening. Within this growing field, an increasing number of scholars are questioning whether urban greening in reality provides multiple benefits for all citizens (e.g. Anguelovski et al., 2018a; Cole et al., 2017; Wolch et al., 2014). The concept of urban greening is less concerned with the functional values of green space, such as the services provided by nature for humans, and focuses more on the actual process of greening. Cole et al. (2017) for instance, defines urban greening as

...the creation or restoration of green amenities (ie, parks, gardens, ecological corridors that connect natural areas, greenways, playgrounds and other recreational spaces, and so on) in local neighbourhoods. (Cole et al., 2017: 1118)

Drawing on this definition, I understand urban greening as the process of making cities greener in terms of planning for, creating and restoring green spaces in urban areas. This process involves both the early planning stage in which visions and objectives around urban greening and strategies for achieving those objectives are decided on, as well as the stage of actually creating or restoring various kinds of green spaces and nature areas.

Scholars studying urban greening with a focus on equity draw on a range of fields such as urban planning, political ecology, environmental justice, and public health. In particular, studies have been concerned with demonstrating that urban greening projects can give rise to new inequalities and injustices through disproportionately benefiting wealthy groups, as well as creating paradoxical effects of green gentrification (e.g. Anguelovski et al., 2018b; Connolly, 2018; Dooling, 2009). While this growing body of research principally has been concerned with demonstrating, measuring and explaining the social implications of urban greening agendas, the knowledge systems that produce and reproduce such agendas are given far less attention. My study responds to that and adds to the existing literature a theoretical understanding of the way in which discourse matters for how urban greening is institutionalised, made sense of, and governed. This is an important contribution as it enhances the understanding for the role of discourses in creating and maintaining the idea of the green city as a utopia for

everyone (see Anguelovski et al., 2018a), while also problematising this idea and adding to the discussion of for whom the green and sustainable city is created.

1.4 Outline of the study

To guide the reading of the thesis, this section provides a brief overview of its different parts. The thesis consists of 5 chapters with corresponding subchapters. After this introductory chapter, the theoretical framework is presented. The chapter first lays the foundation for the role of discourse in relation to the critical study of urban greening. Then, the theoretical and conceptual premises underpinning critical discourse analysis are outlined, followed by a section in which the concept of justice is theorised in relation to urban greening.

Chapter three then presents the overall research design, the methods through which the study has been conducted, and the empirical material. The chapter also includes a description of the analytical model, based on Fairclough's critical discourse analysis, which is employed as a framework for analysing the empirical material.

This is followed by the analysis. The chapter begins with a description of the context within which the study is set, followed by three sections in which the result of the thesis is presented, analysed and critically discussed. First, the dominant discourses on urban greening are described and established. Second, these discourses are more deeply examined through an analysis of how they are articulated in policy as well as how they unfold in practice. Lastly, the relationship between discourse, urban greening, and justice is explored.

After the analysis follows a concluding chapter. Here, the main findings of the thesis are summarised, including a discussion of their wider implications and potential for further research.

2 Theoretical framework

2.1 Discourse and urban greening

Building on the assumption that urban greening involves problematic aspects in terms of the distribution of benefits from green amenities in cities, I take on a critical approach in the sense of questioning the existing reality, asking how it has come about, and exploring what the possible alternatives are (Cox, 1981). Such an approach is key for the objective of untangling how the current consensus around urban greening has become institutionalised in planning policies and practices, but also to move beyond existing understandings and explore alternative paths.

Several scholars have suggested that urban greening interventions can give rise to a paradox by producing new social inequalities and vulnerabilities (Anguelovski et al., 2018a; Haase et al., 2017; Wolch et al., 2014). To unpack this paradox, I make the assumption that the notion of discourse matters for how urban greening is understood, made sense of, and governed. It matters in the way that we use discourses to convince ourselves and others that a certain way of viewing a problem is more important than other ways (Harvey, 1996).

A discourse can be understood as a shared way of making sense of and apprehending the world. A fundamental assumption is that language – or the way we discuss and interpret different problems through the use of language – construct certain understandings that conditions the way in which a particular phenomenon is defined and addressed (Dryzek, 1997). Hence, discourses produce knowledge and meaning. It is a practical, social and cultural phenomenon that contributes to structuring the existing reality (van Dijk, 1997). For the research aim of nuancing the understanding of urban green space as a public good for all, discourse analysis is a suitable approach as it offers tools for critically reflecting upon how the existing reality, or rather the way we perceive that reality, have come about, and with what implications (Harvey, 1996). More precisely, it allows me to analyse how understandings of urban greening are constructed and given meaning, and further how those understanding lead to the prioritisation of certain actions and policies while overlooking others.

2.2 Critical discourse analysis

There are many traditions of discourse analysis, all of which employ different methodological and theoretical principles. In this study, I draw on Fairclough's (e.g. 2003, 2010, 2015) critical discourse analysis (CDA) which is concerned with the empirical study of the relations between discourse and the social world (Winther Jørgensen & Phillips, 2002). CDA is a critical approach committed to social change. By focusing on the way in which unequal power relations, inequalities, and injustices are manifested and reproduced through discourses (Winther Jørgensen & Phillips, 2002), CDA identifies and criticises the wrongs in society with the aim to change the existing reality in particular directions (Fairclough, 2015). Hence, CDA is about searching answers to why the reality looks like it does and with what implications for marginalised or vulnerable social groups, while also exploring how the world could or should transform towards the better.

Ontologically, CDA draws on critical realism. This implies that the world is seen as encompassing both a discursive (texts, language) and non-discursive (structures, relations, processes) reality (Fairclough, 2010). Compared with social constructionist approaches to discourse analysis in which everything is seen as discourse, this is an important difference. While CDA strongly emphasises that language has social effects, for instance in the sense of bringing about change in our beliefs, values, and knowledge, these effects depend on the way in which the social reality already is (Fairclough, 2003). The world is thus not reduced to being fully socially or textually constructed – as in social constructionism – but aspects of it exist independently of our experience or knowledge of it (Bhaskar, 1975). This should not, however, be misinterpreted as empirical realism or objectivism. Rather, critical realism acknowledges that there is a material and non-discursive dimension to social life which has to be taken into consideration in the analysis of socially constructed, discursive events (Sayer, 2000).

2.2.1 Three dimensions of discourse

Although the distinction between the discursive and the non-discursive is sharp in Fairclough's approach, these dimensions are always dialectically related to each other (Winther Jørgensen & Phillips, 2002). Hence, discourse cannot be defined independently from the social reality within which it is produced and governed (Fairclough, 2010). Discourse is, however, a complex concept often used in abstract ways and with overlapping definitions. Fairclough's understanding of discourse has its roots in the linguistic tradition, although the approach has been applied broadly within the social sciences and humanities. He understands discourse as ways of representing aspects of the world from particular perspectives (Fairclough, 2003). Discourse in his definition is practically synonymous with semiosis, but without limiting the analysis to solely a linguistic level. Rather, discourse is "language viewed in a particular way, as a part of the

social process (part of social life) which is related to other parts” (Fairclough, 2015: 7). Discourse is thus never *just* discourse. It is a three-dimensional social practice consisting of texts, discursive practices, and the social world (Fairclough, 2010). While text is language (written, spoken, visual), the discursive practice is the processes through which texts are produced (e.g. speaking, writing) and consumed (e.g. listening, reading) (Winther Jørgensen & Phillips, 2002). It is through these processes that texts have social effects, hence contributing to shaping the social world (Fairclough, 2003). The social effects are, however, governed by the way in which the social world is organised through power relations, social structures and institutional processes (Winther Jørgensen & Phillips, 2002). Hence, at the same time as discourse is constituting the social world, it is also being constituted by it.

If placing urban greening within Fairclough’s definition, this means that the way in which urban greening is represented in texts have social effects. These effects take on various forms. For instance, representations of urban greening (in policy documents, planning processes, political negotiations, etc.) produce and reproduce knowledge about how urban green space should be planned, designed and implemented. Moreover, it shapes values, beliefs, and understandings around the role of urban greening in planning practices. This further has effects on the material world in terms of contributing to changes in the urban landscape. However, discourses do not automatically bring about particular effects, as this depends on the way in which society already is. Therefore, the implications of urban greening discourse on people, actions and the material world must be understood in connection to the broader social context within which the discourses are part.

2.2.2 Interdiscursivity

For the aim of linking discourse to the social context, the concept of interdiscursivity – the constitution of a text from *different* discourses (Fairclough, 2010: 96) – is key. This implies that texts draw upon multiple discourses articulated together rather than one single. The relationship between different discourses is often complex and can be studied through interdiscursive analysis. An interdiscursive analysis is a mediating level of analysis investigating on the one hand how discourses are articulated together through representations, and on the other hand how they become enacted as new ways of acting and interacting (Fairclough, 2010).

In the case of urban greening, we can think about interdiscursivity in terms of different discourses representing urban greening differently being articulated together in the same text (e.g. a policy document). This means that when municipal planners and decision-makers make sense of urban greening, they rely on ideas, beliefs, and meanings drawn from multiple discourses representing different perspectives. How these discourses overlap, cooperate, compete with or possibly dominate one another, for instance in terms of the meanings and ideas they convey, further have implications on the way in which the discourses are

operationalised or put into practice (Fairclough, 2013). For instance, when discourses represent opposing ideas, they may give rise to discursive struggles leading to particular discourses being contested or dominated (Fairclough, 2003). In this way, analysing how discourses on urban greening are articulated together in urban planning practices enables understanding of the way in which discourses are put into practice and with what broader implications.

2.3 Justice and urban greening

While the interdiscursive analysis can be seen as a mediating analytical level between discourse and the social context, an additional theory is needed for studying the wider implications produced by the way in which discourses unfold in practice (Fairclough, 2010). Of particular interest in this thesis is the connection between discourse, planning outcomes and justice, or more specifically, how discourse affects whether justice is to be the outcome of urban greening practices. To study this, I draw on Susan Fainstein's (2010) Just City theory – a normative framework providing conceptual and theoretical tools for evaluating urban development projects on the basis of justice. Fainstein argues that for achieving urban justice, planning and policy must balance the three principles of democracy, diversity, and equity. With these principles as a moral basis, a just city is “a city in which public investment and regulation would produce equitable outcomes rather than support those already well off” (Fainstein, 2010: 3). James Connolly (2018) applies this definition of a just city to urban greening, and argues that the criteria against which green space interventions are measured and evaluated should be expanded along Fainstein's principles of justice to assure equitable and positive outcomes. In green space planning today, the focus is generally on the benefits of greenery and it is often uncritically accepted that more urban green space is a desirable win-win solution for all. Fainstein provides a model for challenging this green planning orthodoxy (see Connolly, 2018) and for evaluating to what extent existing and potential urban greening policies in fact produce equitable outcomes.

To achieve equitable outcomes, Fainstein stresses that justice – measured along democracy, diversity, and equity – must explicitly be placed in the centre of all urban policies and bear on all public decisions (Fainstein, 2010). The goals of democracy, diversity, and equity might, however, be difficult to combine as they are often in conflict with each other. While Fainstein emphasises that it is these qualities *together* that form the principal components of urban justice, she clearly prioritises equity above the others. In her theory, equity refers to “a distribution of both material and nonmaterial benefits derived from public policy that does not favour those already better off at the beginning” (Fainstein, 2010: 36). She criticises urban programs for ignoring distributional outcomes rather than pushing for a just distribution of benefits. A criterion of equity – centred around *who* benefits from policy outcomes and to *what* extent – is therefore crucial to apply to urban decision making (Fainstein, 2010).

In her description of democracy, the relationship to justice is more uncertain. While acknowledging that greater inclusiveness and citizen participation contributes to a more open decision-making process, Fainstein emphasises that it does not necessarily guarantee a commitment to a more just society. This since the outcomes from deliberation vary according to the values of those who participate (Fainstein, 2010: 66). Diversity is in a similar way emphasised as a necessary quality while not guaranteeing reconciliation with equity (Fainstein, 2010: 71). The concept of diversity, both in reference to the physical environment and social relations, has been guiding for urban planning ever since the 1960s when Jane Jacobs became very influential in promoting ideas of diversity as a key principle for creating attractive and liveable cities (Jacobs, 1961). Jacobs ideas have, however, been used by many to legitimise economic development agendas and justify policies that contrast with equity – Richard Florida’s (2002) theory about the “Creative Class” in which he promotes a diversity limited to urban elites of highly educated and creative people probably being the most striking example. Fainstein strongly opposes this kind of diversity as it supersedes equity. Instead, she calls for diversity that highlights recognition, openness to others, and the social composition of places (Fainstein, 2010: 67).

The centrality of equity in Fainstein’s theory is reflected in the literature suggesting that urban greening can give rise to new inequalities and injustices (e.g. Anguelovski et al., 2018a; Checker, 2011; Connolly, 2018). In line with Fainstein, this growing body of research clearly emphasise the need for incorporating a focus on equitable outcomes into planning and practices of urban greening. Two principal takes on the relationship between urban greening and equity can be identified in the literature.

First, scholars have focused on the spatial distribution of green amenities and emphasised that low-income and marginalised people tend to have less access to high-quality green spaces than more affluent people (e.g. Abercrombie et al., 2008; Dahmann et al., 2010; Wolch et al., 2005). While urban green space undoubtedly provides significant positive effects on public health and wellbeing (Maas et al., 2006; Villeneuve et al., 2012), the uneven distribution of green amenities creates environmental injustices in terms of who benefits from those effects (Wolch et al., 2014). Critical scholars have therefore called for a more nuanced discussion around urban greening which takes into consideration the question of how the benefits from green spaces are distributed and enjoyed in both short and long term (Anguelovski et al., 2018a; Cole et al., 2017; Rutt & Gulrud, 2016). This aligns with Fainstein’s equity criterion of measuring the outcomes of decision-making and urban policies in terms of who benefits from them and to what extent.

Others have focused on the relationship between urban greening and land revaluation and analysed the conditions under which urban greening creates unintended social effects such as displacement, marginalisation, and exclusion (e.g. Anguelovski et al., 2018c; Checker, 2011). To describe this process, Sarah Dooling (2009) has developed the concept of “ecological gentrification”, defined as “the implementation of an environmental planning agenda related to public green spaces that leads to the displacement or exclusion of the most economically

vulnerable human population” (Dooling, 2009: 630). Other scholars have referred to this as “environmental gentrification” (Checker, 2011) or “green gentrification” (Anguelovski, 2016). Green gentrification can occur also when the motive is to address injustices in the distribution of green space, for instance through cleaning up and revitalising contaminated and run-down sites (Anguelovski, 2016). This complexity gives rise to what has been called a “green space paradox” (Anguelovski et al., 2018a), implying that although the creation of new green space in distressed neighbourhoods can have positive effects on health and well-being, it can also increase housing costs and property values – thus threatening the displacement of vulnerable residents (Wolch et al., 2014). Often, such “from brownfield to greenfield” clean-up causes industrial and working-class communities to disappear, while obscuring the equity issues tied into this under claims of development being inevitable (Curran & Hamilton, 2012). Hence, the relationship between urban greening and equity is undoubtedly complex. To deal with this complexity, more nuanced and interdisciplinary thinking interrogating the relationship and contradictions between social and ecological goals in the realm of sustainability planning is surely needed (see Campbell, 1996).

3 Methods and material

3.1 Research design

The thesis applies a case study research design facilitating in-depth explorations of the features of a specific phenomenon within its real-world setting (Yin, 2014). This means that the case (discourses on urban greening) is studied across a specific context (local sustainability planning) within a particular geographical setting (Gothenburg). The unit of analysis is the City of Gothenburg, meaning that I focus on how the municipality – including municipal administrations and municipally owned companies – relate to, understand, and work with planning and practices of urban greening. The municipality is responsible for the overall physical planning in the city and is therefore key in untangling how urban greening is made sense of at the local level of governance. Moreover, the case is studied at two levels of analysis – starting at a citywide level to then narrow the focus to a neighbourhood level (see figure 1 for an illustration of the research design).

The advantages of using a case study design are many. Most importantly, it enables the collection of a rich material based on which complexities and intriguing aspects around the chosen case can be analysed holistically and profoundly (Yin, 2014). More precisely, it allows an in-depth exploration of the ways in which urban greening is represented, how those representations are articulated in urban planning practices, and with what implications. All research designs nevertheless have their limitations, so also the case study. Often, case studies are criticised for not being generalisable since a single case cannot serve as a sample of a larger population (Denscombe, 2018). However, this does not mean that a case study is unable to shed empirical light beyond the contextual boundaries of the studied case. Most case studies aim at some sort of generalisation, although in analytical rather than statistical terms (Yin, 2014). In this study, the aim is to expand and enrich the theoretical principles for the relationship between discourse, urban greening, and justice, also beyond the setting of the studied case.

While the case study design should be seen as an overarching methodological framework, I use a combination of qualitative methods to collect empirical data (see section 3.2). The data is then organised, coded and analysed using Fairclough's (2010) three-dimensional model of critical discourse analysis (see section 3.3). To increase the validity of the results, I triangulate data from different sources and contrast and compare findings. Combining and triangulating

different types of data and methods is a common approach in case study research since it allows the researcher to analyse the case from different angles and perspectives, thus enriching the understanding for the studied phenomenon (Denscombe, 2018).

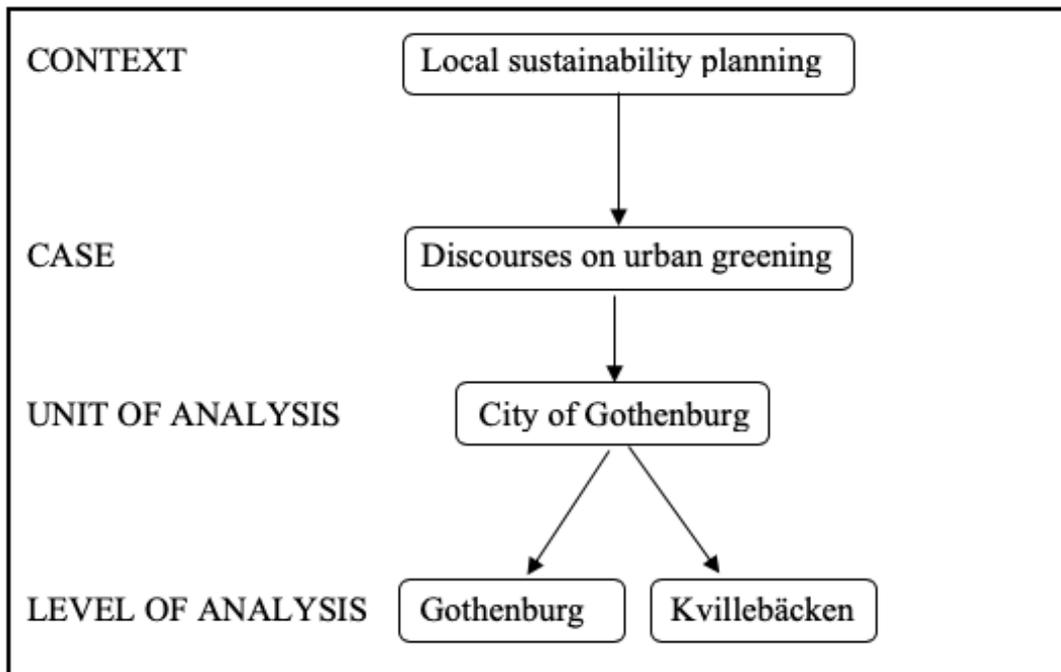


Figure 1. Illustration of the research design.

3.2 Data collection

Collecting case study evidence is never a routinised process; it requires the ability to deal with unexpected challenges or opportunities along the way (Yin, 2014). The data collection process must therefore be flexible to changes and is for this purpose usually not completely organised or planned from start (Bryman, 2016). In light of this, I have adopted a certain degree of flexibility and openness concerning this stage of the research, meaning that the empirical material has been collected in a somewhat open-ended manner. This was particularly important in the process of selecting people to interview (see section 3.2.2).

The empirical material can be categorised into two sets of data: official documents and semi-structured interviews. In order to make the analytical scope manageable, I have nevertheless had to make certain choices in terms of which entities and policies within the municipal organisation to focus on based on their relevance and importance for urban greening. A central actor in this is the Park and Landscape Administration, responsible for managing and developing Gothenburg's parks and nature areas. Another significant actor is the City Planning Authority. Through their work with comprehensive and detailed development planning, they have an important role in assuring that green space is planned into existing and new developments in the early stages of the planning

process. For the neighbourhood level of Kvillebäcken, Älvstranden Utveckling AB – lead actor in the redevelopment process – and Lundby District Administration – a municipal administration locally situated in Kvillebäcken – have been identified as important actors.

3.2.1 Official documents

This body of data includes official documents produced and approved by the municipality that in different ways establish and communicate goals, plans, and strategies relating to urban greening in Gothenburg. At the city level, the *Green strategy for a dense and green city* (Göteborgs Stad, 2014b) constitute the key source (hereafter referred to as the Green Strategy). The Green strategy is a politically adopted strategy for maintaining and further developing green qualities in Gothenburg from both a social and ecological perspective. At the neighbourhood level, I focus on two official documents that have played a particularly significant role for the renewal of Kvillebäcken: the *Programme for renewal of East Kvillebäcken* (Göteborgs Stad, 2002), and the *Detailed development plan for East Kvillebäcken* (Göteborgs Stad, 2009a). There is, however, a time aspect here that needs to be taken into account. The redevelopment of Kvillebäcken started before the Green strategy was adopted. Hence, it is not certain that all discourses that the Green strategy draw upon are articulated in this process. The transformation of the neighbourhood has nevertheless materialised particularly from 2011 and onwards when the actual building was initiated (Despotović & Thörn, 2015). It is therefore interesting to analyse if and how the discourses that urban greening draw upon today was articulated already in the early plans of renewal, and further how they translate into the later stages of detailed development planning and implementation.

3.2.2 Semi-structured interviews

In discourse analysis, it is often necessary to complement one corpus of data with additional sources to add depth and to explore new angles and perspectives (Fairclough, 1992). While the official documents provide insights and facts relating to the formal planning process, they do not reveal how planning unfolds in practice. Therefore, I have conducted semi-structured interviews with city officials from the four municipal entities of focus: the City Planning Authority, the Park and Landscape Administration, Älvstranden Utveckling AB, and Lundby District Administration. The selection of respondents has been based on purposive sampling, meaning that I have selected participants with reference to their relevance for the research aims and questions (Bryman, 2016). In other words, I have looked for respondents based on their involvement in planning or practices of urban greening either at the citywide level or in relation to the Kvillebäcken project. Additionally, a few of the respondents were selected through snowball sampling based on recommendations from other participants. In total, I have

conducted 8 semi-structured interviews with 9 city officials, each around 40-60 minutes (see Table 1 for a full list of respondents). The interviews were conducted in person during a one-week fieldwork in Gothenburg in April 2019.

Semi-structured interviewing is a flexible data collection method since the interview is only partly organised beforehand (Bryman, 2016). On the basis of two interview guides, one for the city level and another one for the neighbourhood level (see Appendix), I structured the interviews around a few topics with related questions. The guides were, however, not strictly followed, allowing the participants to talk rather freely about what they viewed as important. Such a flexible approach has the benefit of revealing how the respondents view the world and make sense of the issues discussed, without constraining their thoughts and stories too much within a specific frame (Bryman, 2016).

Interviews are spoken discourse, and in order to textually analyse these, they need to be transcribed (Fairclough, 1992). For this reason, all interviews were recorded and later on transcribed, which all participants gave their consent for. This stage of the research gave rise to specific ethical considerations. Empirical material should always be collected, used and stored in accordance with ethical principles, but when research involves the participation of human beings, ethical concerns are particularly important (Yin, 2014). In order to assure the protection of the values, rights, and interests of the respondents, the material has been collected and handled following the Swedish Research Council's (2017) guidelines for ethical research. Most importantly, all respondents participated on a voluntary basis and were given accurate information about the aims of the research as well as the use of the material before any interview took part. All direct quotations have been sent to the respondents for approval. They have been translated by me and I take full responsibility for any inaccuracies regarding this.

Table 1. *List of respondents*

Work place	Position title	Reference name	Date
Lundby District Administration	Development Manager	Respondent 1	2019-04-01
City Planning Authority	Project Coordinator for Älvstaden	Respondent 2	2019-04-01
Park and Landscape Administration	Project managers for Kvillestråket	Respondent 3 and 4	2019-04-02
Park and Landscape Administration	Team manager at the Garden Society of Gothenburg	Respondent 5	2019-04-03
Älvstranden Utveckling AB	Process Manager Sustainable Development	Respondent 6	2019-04-03
City Planning Authority	Architect/Urban designer	Respondent 7	2019-04-03
City Planning Authority	Comprehensive planner	Respondent 8	2019-04-04
Park and Landscape Administration	Landscape architect	Respondent 9	2019-04-04

3.3 Analytical model

Drawing on Fairclough's (see 2010: 126-145) three-dimensional model of critical discourses analysis, I analyse the collected material through three steps corresponding with the three dimensions of discourse previously explained: *text*, *discursive practice*, and *social practice*.

First, the *texts* are analysed descriptively and representations of urban greening are sorted out, giving me a smaller material to work with. Based on this material, the discourses that the texts draw upon are identified. Second, I analyse how discourses are articulated together through *discursive practices*, particularly focusing on the meanings, ideas, and beliefs underpinning different representations of urban greening. Lastly, the wider implications produced are explored by connecting the discourses to the *social practice*. In particular, this step is concerned with whether discourses are reproducing or changing existing social structures of inequalities or injustices (Winther Jørgensen & Phillips, 2002). In this step, I apply Fainstein's (2010) Just City theory and focus on the relationship between discourses on urban greening, policy outcomes and justice based on the principles of democracy, diversity, and equity.

As I am working with quite a lot of textual material, I have set up a number of analytical questions (Table 2) to guide the reading of the material. The questions have been defined based on the theoretical and analytical framework and are intended to reveal how particular ideas and meanings about urban greening are produced, consumed and articulated, and with what wider implications

Table 2. *Analytical model*

Dimension of discourse	Analytical questions
<i>Text</i>	How is urban greening represented and from what perspective? What discourses do the texts draw upon?
<i>Discursive practice</i>	How are discourses on urban greening articulated together? What discursive struggles and overlaps can be identified? What meanings underpin the discourses? What ideas are promoted? What is concealed or left untouched?
<i>Social practice</i>	Who benefits from urban greening practices? To what extent? Are discourses on urban greening reproducing or changing existing structures of inequality? With what implications on justice?

4 Analysis

The analysis consists of four sections, beginning with a description of the context of sustainability planning in Gothenburg. I then present, analyse and critically discuss the result of this thesis. In 4.2, the dominant discourses on urban greening are identified and described, relating to the first research question. In 4.3, I analyse and critically discuss the way in which these discourses are articulated together through discursive practices, relating to the second research question. In 4.4, I draw on the findings from 4.2 and 4.3 and analyse the extent to which Fainstein's principles of justice in relation to urban greening are addressed in planning practices, relating to the third research question.

4.1 Sustainability planning in Gothenburg

Planning occurs at many levels of governance. In Sweden, the municipalities have the central responsibility for the physical planning of land and water areas within their geographical boundaries. All planning is regulated by the Planning and Building Act, and at the municipal level, planning is guided by a comprehensive plan and detailed development plans (Boverket, 2018). Apart from these plans and regulations, each municipality develops a range of additional strategic documents and policies contributing to establishing the context within which planning is carried out.

In Gothenburg, municipal planning and decision-making is strongly guided by a sustainability discourse (Tahvilzadeh et al., 2017). As part of this discourse, the role of urban greening has received increased attention lately, and an overarching vision of creating a green, dense, and sustainable city has been established (see Göteborgs Stad, 2014b). 2014 marks a particularly important year for Gothenburg's urban greening trajectory as the municipality adopted the new Green strategy (Göteborgs Stad, 2014b). The Green strategy is a strategic document developed by the Park and Landscape Administration with the aim to ensure green qualities while the city is growing and becoming increasingly denser. It stipulates strategies and goals for planning, investment, and management in relation to all available green areas under the disposal of the municipality, and constitutes an important source for decision making in spatial planning. The Green strategy is structured around two goals – one social goal concerning the role of green spaces in contributing to a rich and thriving city life, and one ecological goal concerning the city's flora and fauna and the role of ecosystem services. It is one of Gothenburg's three principal planning strategies developed in accordance with and aimed to concretise the *Comprehensive plan for Gothenburg*

(Göteborgs Stad, 2009b, 2009c). Together with the *Development Strategy Göteborg 2035* (Göteborgs Stad, 2014a) and the *Traffic Strategy for a close city* (Göteborgs Stad, 2014c), the Green strategy is meant to function as a guiding document for decision making in all planning and development processes. These three strategies are further closely linked to the *RiverCity Gothenburg Vision* (Göteborgs Stad, 2012), which specifies the plans for Gothenburg's inner city over the next 20 years (see figure 2 for an illustration over the mentioned strategies and the way in which they are related to each other).

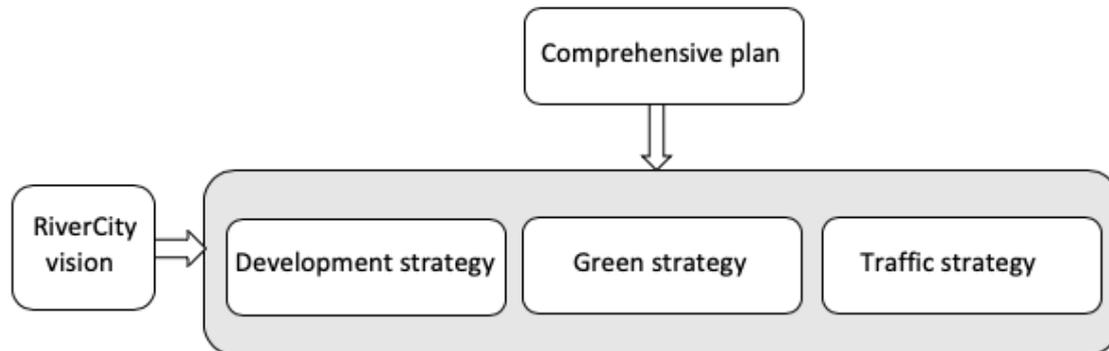


Figure 2. Gothenburg's key planning documents. The Green strategy, the Traffic strategy, the Development strategy, and the RiverCity vision together set out the course for the ongoing transformation and expansion of Gothenburg. They are all guided by the Comprehensive plan and have the time horizon 2035.

One of Gothenburg's most pressing challenges is rising segregation and increasing social polarisation (Andersson et al., 2009). Today, Gothenburg is home for approximately half a million residents. By 2035 this number is projected to increase to 700.000 (Göteborgs Stad, n.d.). In order to make space for the growing population, while at the same time counteracting urban sprawl and further segregation, a major development project of expanding Gothenburg's inner city is currently taking place. Key in this project is the early millennial plans to develop the old brownfields along the river that separates the mainland from the island of Hisingen to a new inner-city area called Älvstaden (River City). Älvstaden is being developed on centrally located land which has been unused since the 1980s when the shipyards closed down. The project implies a doubling in size of central Gothenburg (Älvstaden, n.d.). Consequently, the city map is being redrawn as peripheral areas across the river are turned into attractive and central land (Thörn & Holgersson, 2016). The most striking example of this redrawing – and an interesting site for analysing the practical outcomes of urban greening – is Kvillebäcken, the pilot project of the new Älvstaden area.

Kvillebäcken is an old industrial and working-class area at Hisingen established in the early 20th century. As a harbour city, Gothenburg was one of the first cities in Sweden to experience post-industrial structural change (Holgersson et al., 2010), and by the end of the 1970s, Kvillebäcken went from industrial area to unplanned site attracting small businesses and organisations (Olshammar, 2010). Over the next decades, Kvillebäcken developed into a living and informal

urban environment dominated by a broad mix of dwellers running second-hand markets, immigrant associations, car repair shops and lunch spots (Despotović & Thörn, 2015). Soon, however, the area was deemed a slum, and various initiatives for transforming it was taken (Olshammar, 2010). Two large construction companies, NCC and Wallenstam, bought properties in the area already in the 1980s as they saw the potential for future exploitation (Despotović & Thörn, 2015). Nevertheless, nothing happened until 2002 when the City Planning Authority presented a new programme for renewal, proposing a transformation of the area into a residential neighbourhood (Göteborgs Stad, 2002). The programme was approved by the Planning and Building Committee, and the municipality soon began to brand the upcoming area as Gothenburg’s showcase for sustainable urban development (Thörn & Holgersson, 2016). Administratively, Kvillebäcken comprises also of an older residential area (see map, Figure 3), although the name Kvillebäcken (or sometimes New Kvillebäcken) today usually is used with reference to the renewed part.

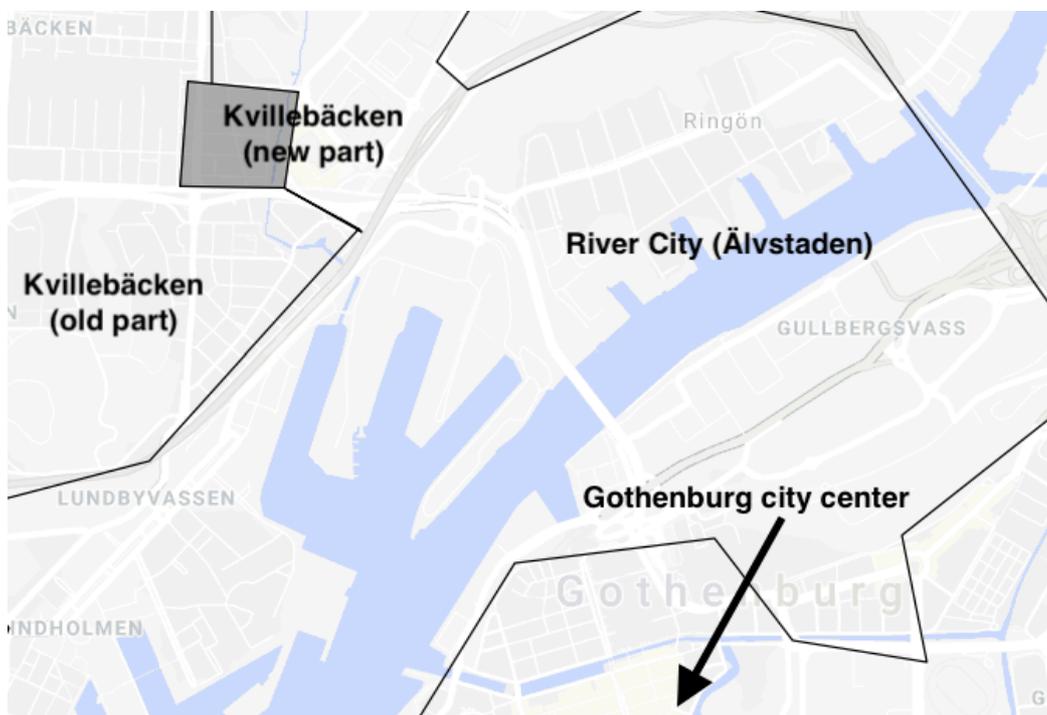


Figure 3. Map over Kvillebäcken/Älvstaden

The programme for renewal was the first official step towards a demolishing of informal industrial Kvillebäcken. Through first stigmatising the area and describing it as run-down, messy and unsafe, a complete transformation – and with that, the displacement of those running their businesses there – was legitimised as inevitable. At the same time, the new, upcoming neighbourhood was branded as green and sustainable, thus “upgrading” the area and making it attractive for an urban elite (Thörn & Holgersson, 2016).

Shortly after the plans for renewal took off, the municipally owned company Älvstranden Utveckling AB was designated responsibility for developing Kvillebäcken. The cooperation with private actors was strong, and in 2008,

the Kvillebäcken consortium was established between Älvstranden and six private construction companies and property owners (later on one public housing company also joined). The consortium agreed on a common goal of developing Kvillebäcken into a socially, ecologically and economically sustainable neighbourhood with 1600 new apartments (later on it was going to increase to 2000). Today, Kvillebäcken has been turned into a modern and dense neighbourhood for an urban middle class, showing no signs of its social and cultural past (Despotović & Thörn, 2015).

As the analysis will show, the branding and communication of the new neighbourhood as green and sustainable played a key role in this transformation. Therefore, I explore the role of discourses on urban greening in the renewal of Kvillebäcken both in a practical (how discourses are put into practice) and rhetorical (how discourses are drawn upon in communication) sense. By doing so, the analysis untangles how a green vision contributed to the emergence of a new exclusive neighbourhood, and with what implications for both previous and current dwellers.

4.2 Four discourses on urban greening

Within Gothenburg's overarching planning vision of creating a green and sustainable city, different discourses that gather actors towards common goals and objectives are drawn upon. Based on the Green strategy, and complemented with the interview material, I have identified four dominant discourses through which urban greening is represented in the context of sustainability planning: *the liveable city*, *the attractive city*, *the resilient city* and *the dense city*. While these discourses to a varied extent are overlapping, the way in which they conceptualise urban greening and from what perspective distinguishes them from one another.

Before presenting the discourses and their meanings, a recalling of Fairclough's definition of discourse is in order. A discourse is a way of representing aspects of the world from a particular perspective through which knowledge and meaning are produced (Fairclough, 2003). Different discourses represent urban greening differently and from different viewpoints, although they might overlap in terms of the meanings, ideas and beliefs they promote. In this way, discourses are related to other discourses and may complement (e.g. through promoting similar ideas) or compete with (e.g. by promoting conflicting ideas) one another. While the following sub-sections are focused on establishing the discourses and describing what they mean for urban greening, it is impossible to present this without touching upon how they are related to each other. This will, however, be further elaborated on in section 4.3, focusing on how the discourses are related to each other and articulated together, and with what implications in terms of objectives and outcomes.

4.2.1 The liveable city

In the discourse of the liveable city, urban greening is represented as a crucial component for cities to live and flourish. Lately, the concept of liveability has risen as a guiding principle in urban planning and policy (Ruth & Franklin, 2014). Liveability is, however, an ambiguous concept to which different people attach different meanings. Generally speaking, it can be understood as the degree to which a place is inhabitable and fit to live in, seen from the perspective of individuals (Shamsuddin et al., 2012). This further requires certain elements of urban life to be fulfilled, regarding both basic needs and the physical environment (Ruth & Franklin, 2014). The latter ties liveability to environmental sustainability and emphasises the value of green amenities in generating the ecosystem services that allow urban life to thrive (Ruth & Franklin, 2014). This role of green space in creating a thriving city is repeatedly promoted in the Green strategy:

In a Gothenburg with a healthy and flourishing city life, parks and nature areas are close to residents and visitors. The city offers parks and nature areas for everyone, with rich and diverse experiences. It is possible to move along green and blue paths, both in everyday life and as recreation. (Göteborgs Stad, 2014b: 8)

A healthy city life is here linked to green spaces through recreational aspects and walkability. A walkable environment has many benefits and is often promoted as key for creating liveable communities. Walkable cities are socially and functionally attractive, encourages healthier living, and improves social interactions (Cheshmehzangi, 2015). This connection between urban greening, walkability, and public health is likewise emphasised in several of the interviews. One of the respondents promotes the idea of thinking more in terms of the green as the principal constituting structure connecting the city rather than the grey:

If we can see the green as the constituting structure instead of streets, then we have the opportunity to build a much more walkable city and a much more sustainable and climate-friendly city [...] which in the long run would benefit both our planet and public health, as well as creating a more equal urban space. (personal interview, respondent 1, 1 April 2019)

The health aspects of a green and liveable environment mentioned here are frequently reflected both by the respondents and in the Green strategy. In particular, linkages between green space, physical activity, health and quality of life are emphasised. Quality of life is a particularly important concept in the discourse of the liveable city. This since liveability cannot be measured solely in economic terms. Although material wellbeing is an important aspect of liveability, the degree to which a place is liveable involves subjective evaluations of how individuals perceive their quality of life (Ruth & Franklin, 2014).

Compact city environments nevertheless include many factors that can trigger negative impacts on life quality. One such factor is noise pollution,

particularly caused by urban traffic. Noise pollution has been recognised as a major health threat in cities as it can cause sleep disturbances, stress-related diseases and other health problems (Koprowska et al., 2018). Green spaces have an important function in reducing noise in cities and through that creating a more liveable environment (Koprowska et al., 2018). In the case of Gothenburg, this function of greenery is highlighted in several of the interviews as well as in the Green strategy:

Noise can contribute to an unpleasant urban environment and be bad for health. The city's parks and nature areas function as green oases, pauses in the city's noise. (Göteborgs Stad, 2014b: 30)

Another aspect of liveability which is promoted in the analysed material is the value of green spaces in encouraging social interaction between people, thus contributing to a rich social life and potentially reducing segregation. As commented by one of my respondents:

Green environments can function as meeting points where people from different parts of the city come together. It can be a place for interaction and recreation, for people to express themselves and for being part of a context. (personal interview, respondent 9, 4 April 2019)

The Green strategy expresses similar ideas of parks and other green spaces functioning as

...neutral meeting points with mixed functions for everyone. Parks and nature areas that are accessible to the public can help increase the sense of belonging. Research shows that areas used as meeting points can increase trust between people and reduce fear and conflicts in society as well as segregation between different groups. (Göteborgs Stad, 2014b: 28)

These two quotes highlight the role of parks and nature areas as social integrators. In the sense of reducing segregation, a park must, however, be visited by members from different social and ethnic groups, which might not always be the case. According to a study by Amin (2002), many urban public places tend to be visited by a homogenous group of people, giving little opportunities for contact between strangers. It can thus not simply be taken for granted that parks will reduce segregation or increase trust between people. For functioning as social integrators, it is crucial that parks are inclusive, accessible, and appealing for people with diverse backgrounds and interests (Peters et al., 2010). The green strategy reflects such aspects through representing parks and nature areas as

...green living rooms in the city. They should be useful, accessible, attractive and offer opportunities for varied activities. [...] Great variation in and between areas encourages outdoor activities and increases the possibility of spontaneous meetings between people. (Göteborgs Stad, 2014b: 46)

It is further emphasised that the green environments constitute

...some of the city's most important meeting places. [...] Parks provide space for encounters between people, the usage is free and everyone is welcome. By designing places for everyone's needs, it becomes possible to meet across borders. (Göteborgs Stad, 2014b: 29)

Designing places for everyone's needs requires specific strategies. In this respect, the Green strategy promotes ideas of urban greening as a way to strengthen Gothenburg's identity and people's sense of belonging:

Gothenburg's parks and nature areas should strengthen the city's identity. Parks are environments that the Gothenburg people know and thrive in. The sense of belonging to an area is connected to the area's special character. (Göteborgs Stad, 2014b: 29)

Here, placemaking is drawn upon as a strategy for making people connect to Gothenburg's green environments, thus strengthening the city's identity. Placemaking is a common planning approach closely linked to the concept of liveability. It involves the idea that neighbourhoods should be designed around particular places that can function as the heart of communities and to which people can develop a sense of place or place attachment (Wheeler, 2013: 51). Place attachment – the creation of an emotional bond between people and places – has further shown to be particularly important for stimulating social cohesion (Forrest & Kearns, 2001), since people who connect emotionally to a particular place are more likely to connect to other people who use that place (Peters et al., 2010).

4.2.2 The attractive city

In the discourse of the attractive city, urban greening is represented from a perspective of economic development and conceptualised as an important strategy for building and maintaining a competitive image. As stated in the Green strategy:

The large city parks and nature areas contribute to profiling Gothenburg and give the city identity. (Göteborgs Stad, 2014b: 41)

In the increasingly globalised economy, the importance for cities to differentiate themselves from their competitors has risen and municipalities struggle to sell their city as a unique and attractive place for visitors, residents, and investors (Gulsrud et al., 2013). As reflected in the quote above, greenery is considered to be an appealing and important element in the urban environment. This is picked up by municipalities, and “green brands” are increasingly being crafted with the aim of boosting the attractiveness of cities (Gulsrud et al., 2013). In the Green

strategy, parks and recreation areas are repeatedly referred to as important features for creating a cityscape that is attractive for residents and tourists:

By enabling different unique experiences, in the urban parks and larger nature and recreation areas, we can attract people to visit different parts of the city. (Göteborgs Stad, 2014b: 47)

The discourse of the attractive city is here overlapping with the liveable city discourse, as both promote ideas of designing green spaces that are appealing to people and that creates identity. The difference between the discourses is the perspective from which urban greening is represented. While the liveable city is focused on individuals and on how people perceive their environment, the attractive city articulates urban greening principally from a perspective of economic development. This is reflected in the Green strategy:

Well-maintained public spaces are important for their attractiveness and are thus important for the city's economy. (Göteborgs Stad, 2014b: 52)

Here, urban greening is conceived as a tool for economic development. The connection between greenery, attractiveness, and economic benefits is a recurring theme in the Green strategy, which emphasises that green areas can boost the economic value of neighbourhoods and the city:

Access to and quality of green areas, in the immediate neighbourhood, affects the demand and price levels of housing. Attractive parks and nature areas also increase the value of cities for tourism. (Göteborgs Stad, 2014b: 57)

No conclusions are, however, drawn from the claim that green space “affects the demand and price levels of housing”. The claim stands alone, but the context within which it is written gives the impression that the effect is desirable. That it could lead to green gentrification (see. Dooling, 2009) is, however, not considered. This way of rationalising urban greening projects by their potential of increasing economic values (e.g. through tourism, speculation and rising property prices) is characteristic for the discourse of the attractive city. The aim is not principally to make the city attractive for its residents, but rather to make it attractive from a perspective of economic development and growth.

As the discourse of the attractive city increasingly finds resonance in the realm of planning, one respondent working with social sustainability at a district level in Gothenburg expresses concern that urban greening projects are being justified in terms of economic aspects rather than social:

We can see a discursive change in the sense that when it is so difficult to make space for the green in an area [...] some people start to argue for social values from an economic development perspective, and one can wonder if that is really our role? [...] It must be urban development we work with. But sometimes you

meet planners who see their job as working with economic development.
(personal interview, respondent 1, 1 April 2019)

This quote reflects a general problem in urban planning regarding the difficulties in arguing for social and environmental goods in non-economic terms when decision-making so strongly is guided by an economic development agenda (Wheeler, 2013). The discourse of the attractive city in this sense provides an appealing frame through which planners and policy-makers can argue for investments in green amenities from an economic perspective. The problem, though, is that such an approach tends to be blind to social vulnerabilities and might create new dynamics of exclusion and invisibilisation (Anguelovski et al., 2018a). Hence, the discourse of the attractive city is first and foremost an economic story assuming synergies between different sustainability goals. In reality, however, planners are constantly forced to deal with conflicts between such goals (see Campbell, 1996) – conflicts which the discourse of the attractive city leaves untouched.

4.2.3 The resilient city

The resilient city discourse highlights the value of nature and green solutions in making cities robust and prepared to cope with external climate-related stressors through urban ecosystem services. This is an important theme in the Green strategy which repeatedly refers to the climate adaptive role of greenery:

Ecosystem services work in different ways to control the climate in the urban environment. Vegetation, especially trees, mitigate climate impact by reducing the temperature, thus counteracting the urban heat island effect. (Göteborgs Stad, 2014b: 56)

Usually, ecosystem services are grouped into four categories: provisioning, regulating, habitat, and cultural services (Gómez-Baggethun et al., 2013). In the discourse of the resilient city, it is first and foremost the regulatory aspects that are highlighted. Regulatory ecosystem services are crucial for creating resilient cities as high population density and a compact city fabric causes significant stress on the urban environment, thus making cities vulnerable to hazards caused by climate change (Depietri et al., 2012). The heat island effect mentioned in the quote above is one example of how climate change particularly affects cities (Wamsler, 2014). It refers to urban areas being significantly warmer than its less dense surroundings, causing severe impacts on health and quality of life (Ward et al., 2016). In the Green strategy, it is emphasised that vegetation has an important role in the sense of regulating such impacts and improving the urban climate:

The vegetation contributes to better air quality, air temperature, and wind climate. Trees and green surfaces, on and near buildings, contribute to more even

local temperature and reduce the need for heating and air conditioning. (Göteborgs Stad, 2014b: 50)

This role of vegetation in improving the urban climate is likewise reflected in several of the interviews. One respondent comments:

It is important in so many ways and contributes to the climate of the city. From a climate perspective with heat waves, cloudbursts and so on, greenery will be very important. (personal interview, respondent 8, 4 April 2019)

Another respondent emphasises the role of urban greening in providing

...ecosystem services in all its forms. Such as recreational services but also in terms of creating a better living environment, better air quality, and a more pleasant climate. (personal interview, respondent 9, 4 April 2019)

As reflected here, the discourse of the resilient city has similarities with the liveable city discourse. This since an improved climate and environment is beneficial for the urban population. Hence, a city in which ecosystem services are preserved and developed to improve resilience can increase liveability and quality of life. While the discourse of the resilient city focuses on promoting the regulatory functions of green environments, the discourse of the liveable city explicitly links these services to the benefits they provide for the people living in cities, such as socio-cultural and health benefits.

This points to the multiple ways in which ecosystem services can be valued – from a social and health perspective to resilience and adaptation. Social and cultural values are, however, often difficult to measure. It is therefore common to discuss ecosystem services in terms of the economic benefits they bring about (Gómez-Baggethun et al., 2013). Such ideas are reflected in the Green strategy:

The cost of managing stormwater can be drastically reduced if the water can be delayed, absorbed and filtered through vegetation. (Göteborgs Stad, 2014b: 50)

The contributions of regulatory ecosystem services are sometimes also referred to as a form of insurance value since they reduce vulnerability to costly climate-related hazards (Gómez-Baggethun et al., 2013). This is linked to indirect economic benefits from avoiding or reducing damages caused by extreme weather events. The Green strategy explicitly promotes insurance values from green amenities in relation to flood risks:

In order to avoid overloads in our water systems, with flooding as a result, there is an increased need for local delay of stormwater. [...] By creating more green spaces in those parts of the city that consist of hard surfaces, creating more green roofs and walls and to a greater extent preparing our existing green spaces for managing water, flood damages can be reduced. (Göteborgs Stad, 2014b: 56)

Extreme weather events such as floods and heat waves have severe consequences both for humans and the economy of cities, and as these events become more frequent, urban planners must increasingly integrate strategies for both risk reduction and climate adaptation into the overall spatial planning (Wamsler, 2014). Ecosystem services are – as promoted in the discourse of the resilient city – key in this. Nevertheless, it is important to note that although regulatory ecosystem services are beneficial for a city as a whole, their effects are often neighbourhood specific. To avoid that efforts of resilience, climate adaptation and risk reduction disproportionately benefit certain groups above others, it is crucial to consider how the benefits derived from ecosystem services and adaptation measures are distributed (Anguelovski et al., 2016).

4.2.4 The dense city

The discourse of the dense city differs from the discourses defined above in the way in which urban greening is represented. While the liveable city, the attractive city, and the resilient city all focus on the functional values and benefits from green space, the dense city discourse conceptualises urban greening from a perspective of land use planning, strongly emphasising ideas of maximising the use and potential of urban land. In doing so, it draws on notions from the other discourses in terms of the values provided by green space and seeks to encompass them within an overarching model of planning. This is reflected in the aim of the Green strategy:

The Green strategy for a dense and green city aims to show how Gothenburg can remain and be further developed into a city with important green qualities, from both a social and ecological perspective, while we are building the city denser. (Göteborgs Stad, 2014b: 6)

In this way, the Green strategy seeks to incorporate urban greening within an already ongoing process of densification, emphasising that:

Greenery in the dense city contributes to improved health and quality of life for the Gothenburg people, attractiveness, biodiversity and ecosystem services. (Göteborgs Stad, 2014b: 50)

Here, the discourse of the dense city is overlapping with the three other discourses from which it borrows ideas of both liveability, attractiveness, and resilience, thus legitimising densification. Density planning – often referred to as a compact city model – has become an increasingly appealing approach for sustainability planning in growing cities (Haaland & van den Bosch, 2015). Focus in such an approach is on infilling and improving existing urbanised areas (Wheeler, 2013: 137), usually through high-density housing, transit-oriented development, land use mix and the encouragement of cycling and walking (Burton, 2000). In

Gothenburg, the municipality draws heavily on density planning, and as previously mentioned, the urban population is expected to significantly increase over the next decades. More people choosing to live in cities nevertheless means that the use of and demand for public places and green spaces increases, at the same time as more land becomes exploited for housing and services. To cope with this, one of the explicit goals of the Green strategy is to ensure that sufficient green space per person is planned into new construction and densifying areas:

Creating dense neighbourhoods, which include green public places for a rich urban life, is important in a growing city. The total amount of parkland must be large enough to meet the residents' recreational needs and cope with an increasing number of visitors with maintained high quality. (Göteborgs Stad, 2014b: 42)

It is, however, not specified what “enough” parkland means. Rather, the Green strategy assumes that densification and urban greening can go hand in hand. Research has, however, showed that densification processes increasingly put green spaces under pressure (Haaland & van den Bosch, 2015), and lack of green amenities both in terms of quality and quantity has been identified as a problem in densifying areas (Jim, 2004). While the Green strategy does not present any such problems, the respondents give a more nuanced view and highlight challenges in terms of encompassing urban greening within a compact city approach. As explained in one of the interviews:

Public space is a cost, so of course, when talking about density, the economy plays a great role. [...] And we are building on very expensive land, so the big question is how to make that work? (personal interview, respondent 1, 1 April 2019)

The political message is that each exploitation project preferably should generate a positive return, but at least not a deficit – as stated in the City budget (Göteborgs Stad, 2019a: 57). While green space involves a cost – both in the creation and in maintenance – other things competing for the increasingly attractive and demanded land brings high economic revenue. In this way, green space risks being underprioritised in contexts of exploitation, and creating enough green space to meet the needs of an increasing number of residents in densifying areas – as stated in the Green strategy – might turn out challenging in practice.

4.3 Articulation of discourses

Texts within which particular discourses are represented “draw upon, incorporate, recontextualize and dialogue with” other texts in which other discourses might be represented (Fairclough, 2003: 17). In this way, Discourses on urban greening – as defined above – have not been produced in a vacuum. As previously mention-

ed, a sustainability discourse has to a large extent shaped the overall context within which planning in Gothenburg is carried out, and green space planning is no exception. Through the policy objectives promoted (e.g. improving quality of life, increasing attractiveness, supporting urban ecosystems and maximising land use), the identified discourses on urban greening all incorporate notions drawn from a broader sustainability discourse aiming to reconcile economic development goals with social and ecological wellbeing.

Sustainability is, however, an elusive concept (Ruth & Franklin, 2014), and scholars have argued that the sustainability discourse presents a paradoxical decoupling of policy objectives and outcomes (Tahvilzadeh et al., 2017). In light of this, the discourses of the liveable, attractive, resilient and dense city provide a more tangible focus, making them seem more achievable and perhaps easier to put into practice. How they are put into practice nevertheless depends on the way in which they overlap, compete with or possibly dominate one another in texts and through discursive practices (Fairclough, 2003). Through triangulating and comparing data from different sources, first at the city level and then at the neighbourhood level, this section is devoted to analysing and critically discussing how discourses on urban greening are articulated together in complex and sometimes competing ways, and with what implications in terms of their outcomes.

4.3.1 City level: Gothenburg

In the Green strategy, the identified discourses are co-existing and present substantial overlaps in their representations of urban greening. Through articulating similar ideas but from different perspectives (see table 3), they cooperate in creating a vision of urban greening as a public good for all and as part of a solution to many of the challenges Gothenburg is facing, most importantly segregation, climate change, and public health issues. For instance, the discourses of the attractive city and the liveable city both promote ideas of green space as a valuable and much needed urban element for creating a thriving and healthy environment through which the city is being profiled as attractive for people to live in and visit. They further overlap in their vocabulary, both using words such as “attractive” and “identity”, although in different ways (e.g. from the perspective of individuals versus the economy). Such overlaps in language are common for different discourses produced within the same domain of social life (Fairclough, 2003: 131). In this way, the discourses complement each other through emphasising on the one hand social benefits from a green and liveable environment, and on the other hand attaching these benefits to economic development goals.

Similarly, the discourses of the resilient city and the liveable city cooperate in their focus on ecosystem services. While the discourse of the resilient city particularly emphasises values of regulating ecosystem services, the liveable city discourse promotes cultural ecosystem services such as recreation, social enrichment, and aesthetics. Through combining these focuses, they bring together

values of adaptation and climate preparedness with increased quality of life and improved health. Such values further contribute to boosting the city's competitive image, thus also adding to and complementing the discourse of the attractive city.

Through these interdiscursive relations, the Green strategy represents urban greening from both a social (the liveable city), environmental (the resilient city) and economic (the attractive city) perspective. The discourse of the dense city then encompasses this within an appealing planning model, assuring co-existence between dense and green. In this way, urban greening is – in line with how the EU describes green space approaches such as green infrastructure planning and nature-based solutions (see European Commission, 2012, 2016) – represented in policy as a win-win solution with multiple benefits for people, the environment, and the economy, thus strengthening the consensus around the green city as a utopia for all.

The interview material nevertheless reveals another reality in which some of the synergies assumed in the Green strategy are questioned (see table 3). Most importantly, the respondents emphasise challenges regarding densification which the Green strategy leaves untouched. These challenges are principally of economic and physical kind relating to the use of land in densifying areas. In particular, issues arise in the new development project Älvstaden, key in the ongoing densification of Gothenburg. Älvstaden is being developed on old industrial and contaminated land and the cleaning up of that land involves high costs. The project coordinator for Älvstaden explains that it is technically difficult and expensive to build in the area, and to pay for the expensive land they have had to plan for dense exploitation (personal interview, respondent 2, 1 April 2019). This has further given rise to a land use conflict as the dense exploitation has made it difficult to meet the needs for green spaces. Another person involved in the project explains:

A mapping of Älvstaden shows that we plan for high exploitation to cope with the economy, which can cause a lack of public free space and free space for children. Free space for children and the level of exploitation are connected. If we plan more housing, we must also take care of the children that housing generates. (personal interview, respondent 7, 3 April 2019)

Hence, economic constraints in relation to the use of land might give rise to a paradox in the sense that a higher level of exploitation increases the demand for public space and green space, making it difficult to fit all necessary parts within the available land. Another respondent comments:

If we are going to have a high level of exploitation, then we end up with this issue that we cannot fit sufficient dimensions of green space into that. (personal interview, respondent 9, 4 April 2019)

A discursive struggle can thus be identified in the sense that the discourse of the dense city ends up competing with, rather than cooperating with, the other three discourses when unfolding in practice. While promoting ideas of bringing urban

greening and densification together, the discourses entail different policy priorities forcing trade-offs between different values and restricting their compatibility with one another. In this way, municipal planners face challenges in arguing for the values of green spaces. As commented by one respondent:

These are soft values, and in the tough economic reality we live in, it is easy to neglect them. We fight for that all the time. (personal interview, respondent 3, 2 April 2019)

Hence, while the discourses co-exist and overlap in the Green strategy in an allegedly perfect way, the reality is much more complex. Under the constraints of a political economic-growth-first agenda, the dense city discourse challenges the liveable-attractive-resilient vision presented in the Green strategy. Älvstaden further exemplifies how the discourse of the dense city ends up dominating the others when put into practice, leading to a decoupling of the objectives formulated in the Green strategy from the outcomes of planning – similar to the decoupling observed by Tahvilzadeh et al. (2017) in relation to the sustainability discourse. Ultimately, this raises the question of whether the proposed marriage between dense and green is conceivable in the real world of planning, or ends up being a distant idea far from the urban reality?

Table 3. *Summary of how discourses on urban greening are articulated at the city level of analysis.*

	Green strategy for a dense and green city	Interviews
The liveable city	Urban greening enables a rich and thriving social life and improves health and wellbeing through cultural ecosystem services.	Urban greening is a desirable solution with multiple benefits for the urban population.
The attractive city	Urban greening enables the creation of a competitive image as a green and sustainable city, thus strengthening the city's attractiveness and economy.	Urban greening contributes to making areas more attractive, but social rather than economic values are highlighted.
The resilient city	Urban greening contributes to adaptation and climate preparedness through preserving and developing regulating ecosystem services.	Urban greening creates a better climate in the city and through that a better living environment.
The dense city	Synergies between dense and green: greenery in a dense city contributes to improved quality of life, attractiveness, biodiversity and ecosystem services.	Conflict between dense and green: densification creates challenges in meeting the needs for green space.

4.3.2 Neighbourhood level: Kvillebäcken

At the neighbourhood level, similar discursive overlaps and struggles as for the city level can be observed through the case example Kvillebäcken. Although the plans for transforming Kvillebäcken into residential neighbourhood initiated before the adoption of the Green strategy, the project has been realised alongside the rising focus on urban greening as a planning priority. The identified discourses can, to a varied extent, be found articulated throughout the project – sometimes explicitly linked to urban greening, but also in more general terms regarding the renewal. In particular, the discourse of the dense city is drawn upon in legitimising exploitation and renewal of the area, while the discourse of the attractive city together with the liveable city is key in the reframing of the area from run-down and unsafe to dynamic, green and sustainable. The discourse of the resilient city, on the other hand, is less articulated, although clearly having a role in relation to the broader sustainability focus of the project (see table 4).

The dense city discourse provides an overall frame for the context within which the planning of Kvillebäcken has been carried out. Through the construction of 2000 new apartments (75 % tenant-owned and 25 % rental), a completely new inter-city neighbourhood targeting an urban middle class has taken shape. In the programme for renewal, high-density housing is being motivated by the area's central location:

The location motivates dense urban development. [...] Special for the area is that new development opportunities are offered “in the middle of the city” which is a great quality and challenge. The demand has also increased for centrally located housing. (Göteborgs Stad, 2002: 4)

Before the plans of expanding Gothenburg's inner city took shape, Kvillebäcken was considered a peripheral area in the outskirts of Gothenburg. By describing it in the programme for renewal as located “in the middle of the city”, a revaluation of what the municipality considered to be underutilised land began. From start, the plan was to build 1000 new apartments, but the number doubled as the detailed development plan concluded that it was “necessary to increase the number of apartments in order get a reasonable economy in the project” (Göteborgs Stad, 2009a: 4). This was a demand from the private construction companies NCC and Wallenstam who owned large pieces of land in the area, and exemplifies how private property owners were given significant influence over the planning process (Thörn & Holgersson, 2016). Likewise, it illustrates how the discourse of the dense city increasingly gained importance as the project was being realised. However, as 2000 new apartments were being built, there was also a need for changing the negative image of the area, which the municipality had contributed to creating through the previously mentioned stigmatisation process (see Thörn & Holgersson, 2016). The new neighbourhood targeted an urban middle class, but there was a concern about getting the apartments sold since “Kvillebäcken was not seen as an area where someone wanted to buy an expensive apartment” (personal interview, respondent 6, 3 April 2019). To change this image, the

discourse of the attractive city was heavily drawn upon, and the word “attractive” is repeatedly being used both in the programme for renewal – the first official step of reframing the area – and in the detailed development plan:

Attractive housing is mixed with public places, squares and green areas for recreation as well as elements of trade and businesses. The intention is to create a pleasant, dynamic and safe urban environment. (Göteborgs Stad, 2009a: 1)

By describing the new area as “pleasant” and “dynamic”, an attractive image is created which can be contrasted with the stigmatised image of Kvillebäcken as run-down and messy. The word “safe” further legitimises the planned demolishing of the area, as its existing character is assumed to be “unsafe”. As part of this reframing, Kvillebäcken soon became branded as Gothenburg’s showcase for sustainable urban development. One of my respondents from Älvstranden Utveckling AB explains that “the image needed to be changed completely, and from that came this green, sustainable, environmentally-friendly Kvillebäcken”. She further comments that the sustainability idea was employed as a branding strategy by the Kvillebäcken consortium as “a way to sell apartments, because they were really afraid that people would not want to live here” (personal interview, respondent 6, 3 April 2019).

In this way, “green” and “sustainable” became buzzwords for selling the new neighbourhood as a liveable and attractive place – before anything was even built. The idea of Kvillebäcken as green further played an important role in the revaluation of the area in the sense that the green brand effectively boosted its economic value (Thörn & Holgersson, 2016). In the detailed development plan, the social consequences from the expected revaluation are presented as unproblematic:

Higher rents in the future will probably mean that a large proportion of the area's current businesses will move to other areas and that new businesses will move into the area. (Göteborgs Stad, 2009a: 28)

The renewal of Kvillebäcken nevertheless forced out almost all current dwellers through a gentrification process which has been described as brutal, and in which the idea of the green-sustainable-attractive neighbourhood played a significant role (Thörn & Holgersson, 2014). The word “green” was used both in a broader sense of advancing an environmental planning agenda focused on climate mitigation (e.g. energy-smart buildings), recycling, low-carbon transportation options and so on, and in relation to physical green space components. The Kvillebäcken consortium writes at the official neighbourhood webpage:

Green spaces and water are becoming increasingly important as design elements in a densifying city. The plan for Kvillebäcken entails a large addition of green spaces in the area. You can easily call Kvillebäcken Gothenburg's new green neighbourhood. (Kvillebäcken, n.d.)

Considering the marketed image of Kvillebäcken as Gothenburg's "new green neighbourhood", the area gives a surprisingly hard, dense and grey impression. Many of the buildings have green roofs and nicely developed courtyards, but as these are embedded within squares of buildings, they do not contribute to giving the area a green character, nor are they accessible for the public. In terms of public green amenities, one park in the outskirts of the neighbourhood, connected to the greenway Kvillestråket, provide the only green space for recreation and play. The park and the greenway are indeed important qualities for the area. The park is, however, located very close to a road and highly exposed to traffic noise (Göteborgs Stad, 2019b). It is further expected to be co-used for a range of different purposes, such as for preschools, recreation, and other activities. In practice, this turns out problematic, and several of the people I interview highlight that Kvillebäcken lacks sufficient qualitative green spaces, particularly for the children. The area has three preschools, and they all have very small yards which can only be used by a small group of children at a time. Against this backdrop, the respondent from Älvstranden Utveckling AB emphasises that there is a good reason to problematise the marketed image of Kvillebäcken as green, and explains that it "has been criticised for being too embellished and for targeting a young, educated and well-off middle class". She continues:

The area would have benefited from one block being a park. But for economic reasons, the municipality doesn't do that. When we sell the land, we get money for each square meter housing area. If building a park that is seen as lost revenue and thus a cost. [...] It is a pity that the cost is all that matters, rather than looking at what values it brings. (personal interview, respondent 6, 3 April 2019)

The prioritisation of economic goals once again comes up as an obstacle restricting the realisation of objectives in relation to urban greening. In Kvillebäcken – as for the rest of Älvstaden – the land was very contaminated, and to finance high clean-up costs the planned exploitation needed to be high. We can thus see how the discursive struggle observed at the city level between dense and green materialises in Kvillebäcken, and consequently how the branded image is being detached from the actual development process. The implications of this are twofold. On the one hand, people living in the area today lack access to public green spaces in their immediate vicinity, particularly impacting negatively on the children. On the other hand, the green branding – employed with the specific aim of upgrading the area and making it attractive for an urban elite – contributed to the displacement of previous dwellers. One of my respondents explains:

Many people living in Kvillebäcken thrive there, [...] but they have been able to choose to live there. Of course, you thrive where you choose to move, but it is very obvious that not all groups have been able to choose to be in Kvillebäcken now in the same way as before. (personal interview, respondent 1, 1 April 2019)

In light of this, I would argue that Kvillebäcken provides a striking example of green gentrification (see e.g. Anguelovski, 2016; Checker, 2011; Dooling, 2009),

but in a rhetoric sense rather than through any particular urban greening intervention. The green rhetoric used throughout the renewal has been enabled and advanced through the discourse of the attractive city, articulated together with and complemented by the discourse of the liveable city. It has, however, ultimately been a mechanism for economic development, and the green image has materialised as a distant idea detached from its practice.

Table 4. *Summary of how discourses on urban greening are articulated at the neighbourhood level of analysis.*

	Planning/objectives	Practice/outcomes
The liveable city	Liveability is key in the planning: Kvillebäcken will be transformed into a pleasant, dynamic and safe urban environment in which housing is mixed with public places, squares and green areas for recreation.	People who live in Kvillebäcken today thrive there, but others have been forced out. Hence, the area might be considered liveable but exclusively for an urban elite.
The attractive city	Through a green rhetoric, Kvillebäcken is branded as a showcase for sustainable urban development (cooperation between the municipality and private construction companies).	Kvillebäcken has not become particularly green, and the marketed image of the area as Gothenburg's new green neighbourhood has been criticised for being embellished.
The resilient city	Aspects of preserving biodiversity and potentially implementing green-blue solutions for storm-water management are mentioned in the planning documents, but resilience is not a central discourse.	Plans for open storm-water management have not been realised.
The dense city	Synergies between dense and green: The central location motivates dense urban development which is made attractive and liveable through green qualities.	Conflicts between dense and green materialise in Kvillebäcken as high exploitation has been prioritised on the expense of green space, thus decoupling the green image from the urban reality.

4.4 A green and just city?

As I have shown, discourses on urban greening are tumbling across each other in complex and sometimes competing ways in the realm of sustainability planning. In policy, the identified discourses on urban greening co-exist and complement each other, and together they constitute a “we can have it all” discourse promoting urban greening as a win-win solution. In practice, however, discursive struggles and trade-offs between different goals often materialise. Hence, it is not simply the content of discourse that matters for what is to be the outcome, but rather the way in which discourses are related to each other and the process through which they are put into practice. In this section, I bring in the justice perspective and explore the wider implications of this along the question: to what extent is justice, evaluated in terms of democracy, diversity and equity, in relation to urban greening addressed in urban planning practices? If we recall Fainstein’s definition, a just city is one in which “public investment and regulation would produce equitable outcomes rather than support those already well off” (Fainstein, 2010: 3). Achieving justice in the city further requires that planning policies and practices balance the moral principles of democracy, diversity, and equity (Fainstein, 2010).

From a perspective of democracy, Gothenburg’s green strategy highlights several important aspects, both in terms of direct participation, inclusion, information and communication. One of the explicit objectives is to include citizens in the planning of public places, and the ability for people to influence planning is emphasised as key for a healthy city (Göteborgs Stad, 2014b). Ideas of making some land available for community gardening or other initiatives are also mentioned. Fainstein (2010) nevertheless stresses that the outcomes from citizen deliberation not necessarily are equitable, as this depends on who participates and their values. Moreover, assuring that everyone gets a voice in planning contexts often turns out challenging in practice. As commented by one of my respondents:

When having a dialogue and inviting the public, it is often a specific group of people participating. But how do we make sure that other groups also get their voices heard? [...] That is a huge challenge within urban development. (personal interview, respondent 4, 2 April 2019)

Attempts to include weaker or less heard groups in planning usually require specific measures. While the Green strategy lacks explicit strategies for this, there are good examples of citizen participation in relation to urban greening in Gothenburg. For instance, in the restoration of the greenway Kvillestråket (which runs through Kvillebäcken), the Park and Landscape Administration cooperated with Lundby District Administration in the development of a dance pavilion targeting young girls. The project leaders for Kvillestråket explain in an interview that they worked in deliberation with the girls (through workshops, dialogues, etc.) since this was a group identified to be less heard in planning contexts. The dance pavilion is meant to function as a “green oasis” along the greenway – a

natural meeting point for interaction and physical activity. One of the project leaders says that the idea has been to “mix the green and the social, and to encourage encounters and recreative aspects” (personal interview, respondent 3, 2 April 2019). As discussed earlier, Kvillebäcken has been criticised for not living up to the communicated image as Gothenburg’s new green neighbourhood and for not offering sufficient public green spaces. Considering this, Kvillestråket is especially important in the sense of providing space for recreation in the close vicinity of the otherwise dense area. The greenway is around four kilometres long, starting in the urban city landscape and ending in a more rural nature area. By connecting the urban with the rural, different kinds of green environments are offered along the way.

This leads us into the principle of diversity. In Gothenburg, diversity in relation to the physical environment is widely addressed in urban greening policy. Diversity further plays a key role in the identified discourses. Principally, diversity is discussed in the Green strategy in terms of creating different kinds of green spaces, both from a social perspective (e.g. meeting different needs such as recreation, rest and play) and an ecological perspective (e.g. improving biodiversity) (Göteborgs Stad, 2014b). A diverse green structure is further promoted to increase both the city’s attractiveness and liveability, while also being good for urban ecosystems and crucial in contexts of densification. However, the previously observed land use challenges in densifying areas often limit the ability to create diverse greenery. A landscape architect at the Park and Landscape Administration explains:

We face challenges for instance with getting enough space for trees in the street structure. [...] Many of these plans and visions you see with tree lanes along the streets turn out to be dream scenarios since there is a hard reality under the ground. (personal interview, respondent 9, 4 April 2019)

With a “hard reality under the ground” the respondent refers to grey infrastructures such as water pipes and electrical cables which might be damaged by tree roots. As an alternative to trees and other types of land vegetation, greenery at unconventional spaces, such as roofs and walls, has become increasingly popular in Gothenburg’s dense areas (Johansson, 2012), not least in Kvillebäcken where many of the buildings have green roofs. While most of them are thin sedum roofs with rather limited effects both in terms of ecological and social benefits, some buildings have private green rooftops providing both cultural and regulating ecosystem services (e.g. Brf Klätterträdet, see Björnheden, 2015). Hence, although Kvillebäcken lacks public green spaces, there are examples of diverse greenery. The problem, however, is that these private green spaces are not accessible to everyone. Rather, they are located in unaffordable buildings targeting a particular social elite. The Kvillebäcken consortium writes in an evaluation report:

Kvillebäcken has a nice atmosphere of relaxed city life. The neighbourhood attracts creative and conscious people seeking inspiring encounters. (Kvillebäcken, 2018)

Considering Fainstein's definition of diversity as including a perspective of the social composition of places (Fainstein, 2010: 67), Kvillebäcken does less good from a perspective of diversity. As has been shown, the social composition of the neighbourhood was completely ignored during the renewal. Moreover, the explicit focus on attracting the "creative" and the "conscious" means that a large group of people, not least those inhabiting the area before the redevelopment, are excluded from Kvillebäcken's "nice atmosphere of relaxed city life", as well as from the vision of the green and sustainable neighbourhood. Often, these sustainability flagship projects are indeed elitist and rarely have a place for everyone (Curran & Hamilton, 2012). Anguelovski et al. (2018b: 16) argue that "cities are in many cases actively creating a new green utopia for the creative class and a green mirage for lower-income and minority residents" – a description bearing much resemblance with Kvillebäcken's transformation. Against this backdrop, more nuanced thinking is required to better understand how aims for diverse green spaces for all people can be achieved in a just way, without giving rise to new patterns of invisibilisation and inequities.

In terms of equity, this is by far the most complicated principle in the Just City model. The equity criterion refers to the distribution of benefits deriving from public policy, which, according to Fainstein (2010: 36), should be distributed in a way that does not favour those already well off. In the Swedish sustainability debate, the focus is overwhelmingly on the interrelation between social, economic and environmental sustainability, while issues of justice and equity seldom are discussed (Bradley et al., 2008). Hence, questions of who benefits from sustainability interventions – including urban greening – and to what extent, receives very little attention. Campbell (1996) have argued that this view of sustainability as balancing social, economic and ecological goals is too holistic and obscures the conflicts between different goals that arise in the real world of planning. As I have shown in the analysis of discourses and discursive practices, urban greening gives rise to several goal conflicts of this kind, most notably materialising as economic and institutional obstacles restricting the quantity and quality of green spaces. These goal conflicts further have implications on equity in the sense that economic values rather than demands for recognition and equal distribution of benefits are prioritised.

Unlike environmental concerns, equity issues tend to be poorly understood in processes of planning and decision-making (Wheeler, 2013). To achieve a just sustainability it is, however, crucial to explicitly consider social equity (Agyeman et al., 2003). In Gothenburg, equity in relation to urban greening is vaguely addressed in policy. While the Green strategy emphasises that the planning and design of green spaces should be guided by factors of attractiveness, accessibility, usefulness, security, and proximity (Göteborgs Stad, 2014b), it is unclear what this means in practice. Moreover, words like justice and equality are completely absent. As argued by Fainstein (2009: 35), "the very act of naming has power",

and in the call for just cities, we must explicitly talk about justice in urban policy. Otherwise, demands for equity end up being marginalised as well as poorly understood (Fainstein, 2009).

As mentioned, several studies have emphasised that benefits from urban greening often are unequally distributed (e.g. Wolch et al., 2014). While I have not empirically examined the distribution of benefits from urban greening in Gothenburg, my material indicates a lack of, or at best a vague, understanding of equity in relation to urban greening in planning and policy. Parks and green spaces are uncritically assumed to benefit everyone, and aspects of green amenities possibly giving rise to paradoxical or unjust effects are not considered nor addressed. One of my respondents says:

As I have thought of it, the restoration of parks or public open spaces has a positive impact on the immediate environment. (personal interview, respondent 8, 4 April 2019)

While this is often true, it might not be true for all citizens (Cole et al., 2017). Another respondent acknowledges that parks have high value, but have not thought of it as a factor giving rise to unintended social effects such as green gentrification:

No, not in that way. But that it increases in value, or that parks in the immediate neighbourhood have high value, well that is true. (personal interview, respondent 8, 4 April 2019)

That urban greening is framed within a “we can have it all” discourse (the green city as liveable-resilient-attractive-dense) rather than a social justice discourse makes a significant difference from a perspective of equity. First and foremost, the one-sided focus on benefits fails to consider unexpected or paradoxical social consequences of urban greening agendas under claims of win-win effects. In the “we can have it all” discourse, urban greening interventions are rationalised by their potential of increasing attractiveness, competitiveness, and economic values. Alongside this, ecosystem services generating positive social and ecological effects are assumed to trickle down. Potential social ramifications, however, receive little or no attention.

Hence, while democracy and diversity to a varied extent are addressed in relation to urban greening in Gothenburg, the relationship between urban greening and equity is much more complex. To deal with this complexity and confront injustices, the paradoxical dynamics of urban greening first and foremost need to be acknowledged in planning, and their effects well understood. As Campbell argued already in 1996, we need more nuanced and interdisciplinary thinking – including greater integration between social and environmental theory – in contexts of planning for sustainable cities (Campbell, 1996). Moreover, we need to move beyond exclusive green city visions and luxury sustainability developments, and begin to consider ways of imagining sustainable and green urban futures differently.

5 Conclusions

The result of this thesis shows that discourse matters for the way in which urban greening is made sense of, institutionalised, and locally governed. It is not, however, principally the content of discourse that matters for what is to be the outcome of urban greening, but rather the processes through which discourses are put into practice. Against this backdrop, this study has 1) established the dominant discourses on urban greening, 2) explored how they unfold in practice, and 3) critically discussed whether urban greening produces just outcomes.

Drawing on Gothenburg as a case study, I have identified four interrelated discourses through which ideas, beliefs and notions of urban greening are shaped. These are the *liveable city*, *the attractive city*, *the resilient city*, and *the dense city*. While these discourses in many aspects are overlapping – for instance in terms of the meanings and visions they convey – the way in which they conceptualise urban greening and from what perspective (e.g. economic, social, environmental), distinguishes them from one another. Together, these discourses position urban greening as a win-win or no-regrets solution to a range of urban challenges such as climate change, public health issues, and environmental degradation. In this way, the idea of the green city as liveable-attractive-resilient-dense provides an appealing frame for municipal planners and policy-makers engaged in sustainability. While I have looked particularly at Gothenburg, the identified discourses are not limited to this context, nor to the practice of urban greening. Rather, these discourses have emerged within a broader political context of growth-oriented sustainable urban development within which they are constantly reproduced and articulated in new ways in relation to particular practices – of which urban greening is one. The overall result thus points to a general tendency within urban sustainability planning, while particular aspects may unfold differently in other settings. In this way, the thesis provides theoretical and analytical insights for discourses on urban greening which may be expanded beyond the setting of this investigation.

Through analysing how discourses on urban greening are articulated and put into practice, this study challenges the idea of the green city as a perfect win-win approach. In policy, the identified discourses co-exist and complement one another in creating a consensus-oriented vision of green space as a public good for all. In practice, however, discursive struggles often materialise, resulting in conflicts between different goals and a decoupling between policy objectives and outcomes. The analysis of Kvillebäcken exemplifies how the discourse of the dense city often ends up dominating the other discourses as economic obstacles in relation to the use of land restrict the ability to meet the needs for green space. In Kvillebäcken, this discursive struggle between dense and green further led to the

green vision surrounding the renewal ending up a distant idea detached from the urban reality. As I have shown, the heavily marketed image of Kvillebäcken as Gothenburg's new green neighbourhood is in many aspects problematic. Most importantly, the green rhetoric employed as a branding strategy to attract a particular urban elite contributed to "upgrading" the area, resulting in increased property values and displacement of previous dwellers. Hence, the renewal of Kvillebäcken caused significant equity implications, partly through rationalising an exclusive green city vision by its potential of increasing attractiveness and competitiveness. In light of this, the lack of public green space in the new area is nothing but remarkable. And while Kvillebäcken has not turned out particularly green, the renewal process interestingly demonstrates how urban greening is not only a practical planning approach, but also a visionary practice raising equity concerns in terms of who is included and who is excluded in visions of the green city.

By combining a discursive approach with a perspective of justice, I have shown that equity in relation to urban greening is poorly understood, and that the social justice implications potentially arising from urban greening agendas – whether practical or visionary – are not given sufficient attention in planning. Through this result, the thesis adds to the growing body of critical research on urban greening a discursive understanding for how the consensus around urban greening has come about, and with what wider implications for marginalised people and communities. As such, the thesis provides a foundation for a more nuanced understanding in regard to urban greening in the realm of sustainability planning, extending beyond the one-sided focus on multiple and interrelated benefits that has become orthodox in planning today.

In the strive for creating green cities that are also just, I have argued that we must move beyond elitist green city visions for the creative and environmentally conscious, and explore how alternative, more inclusive green urban futures might look like. In light of this, I call for an expansion of the discursive approach adopted in this thesis, to further explore oppositional discourses that may provide alternative ways of making sense of urban greening. As argued by Fairclough, discourses are not only representations of the world as it is now or as we know it,

...they are also projective, imaginaries, representing possible worlds which are different from the actual world, and tied into projects to change the world in particular directions. (Fairclough, 2003: 124)

Critical discourse analysis is an important tool for exploring ways in which society could or should transform towards the better. And while green spaces in cities are essential in so many ways, making them equally accessible and beneficial for everyone requires new political solutions. To assure everyone's right to a sustainable and green urban future, justice must be placed at the centre of planning.

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Appendix: Interview guides

The following is a protocol for the *City level* of analysis regarding semi-structured interviews with city officials involved in the planning and practices of urban greening in Gothenburg.

1. Background

- a) What is your role here at [work place]?
- b) How are you involved in the work with urban greening (planning for and/or creating/restoring green amenities such as parks, greenways, green roofs) in Gothenburg?

2. Urban greening

- a) How does the City of Gothenburg strategically work with urban greening? What policies and tools do you have?
- b) How is the work with urban greening coordinated within/between administrations?
- c) How does the work with urban greening relate to the overall spatial planning?
- d) What would you say is the motivation for working with urban greening? What are the values and benefits with a greener city?
- e) What are the challenges in relation to urban greening in Gothenburg?
- f) Do you perceive Gothenburg as a green city?

3. Social sustainability

- a) What does the social goal in the Green strategy means? In what way is it important?
- b) How do you work to achieve the social goal? How are social aspects represented in green space planning?
- c) Research indicates that the benefits from green amenities in cities often are unevenly distributed, and that urban greening projects tend to disproportionately benefit affluent communities. Is that something you have thought of as an issue in Gothenburg? Do you in some way address such effects in the planning?
- d) There are also research indicating that urban greening can contribute to gentrification as green areas often are considered more attractive which increases their value. Is that something you have thought of as an issue in Gothenburg? Do you in some way address such effects in the planning?

4. Closing

- a) Is there anyone else you suggest I talk to about urban greening in relation to social sustainability in Gothenburg?
- b) Is there anything you would like to add that we have not discussed?

The following is a protocol for the *Neighbourhood level* of analysis regarding semi-structured interviews with city officials involved in the renewal of Kvillebäcken.

1. Background

- a) What is your role here at [work place]?
- b) How have you been involved in the renewal of Kvillebäcken?
- c) How is Kvillebäcken related to the Älvstaden-project?
- d) What was the motivation for a renewal of Kvillebäcken?

2. Urban greening

- a) What has been the role of urban greening in the development of Kvillebäcken?
- b) Kvillebäcken has been branded very strongly as a green and sustainable neighbourhood, what are your thoughts about that? What role has this branding of Kvillebäcken played in the development of the area?
- c) What would you say is the motivation for working with urban greening? What are the values and benefits with a green neighbourhood?
- d) What has been the role of the Green strategy in the development of Kvillebäcken?
- e) What are the challenges in relation to urban greening in Kvillebäcken?
- f) Do you perceive Kvillebäcken as a green neighbourhood?

3. Social sustainability

- a) How do you work with social sustainability in Kvillebäcken? How are social aspects represented in relation to urban greening?
- b) Research indicates that the benefits from green amenities in cities often are unevenly distributed, and that urban greening projects tend to disproportionately benefit affluent communities. Is that something you have thought of as an issue in Kvillebäcken? Have such aspects been addressed in any way?
- c) There are also research indicating that urban greening can contribute to gentrification as green areas often are considered more attractive which increases their value. Is that something you have thought of as an issue in Kvillebäcken? Have such aspects been addressed in any way?

4. Closing

- a) Is there anyone else you suggest I talk to about urban greening in relation to social sustainability in Kvillebäcken?
- b) Is there anything you would like to add that we have not discussed?