

# **Towards the green and just city**

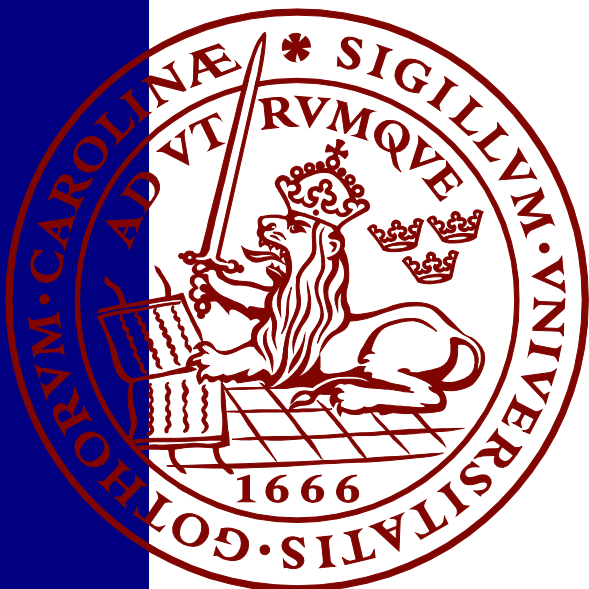
An investigation of justice in urban sustainability planning

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Lund University Centre for  
Sustainability Studies



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A thesis submitted in partial fulfillment of the requirements of Lund University International  
Master's Programme in Environmental Studies and Sustainability Science

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## **Abstract**

As the world becomes increasingly urban, cities are seeking creative and effective strategies to become more climate-proof and sustainable while, at the same time, creating liveable urban futures. Although it is often positioned as such an all-encompassing solution, urban greening has been found to give rise to new injustices and produce paradoxical effects of green gentrification. In combining documentary materials and interviews with city planners, this thesis explores questions of inclusion and equity in urban greening initiatives in Lund, Sweden. It is found that while steps are taken to include residents in the process and ensure equitable outcomes, there are shortcomings and constraints regarding how to generate valuable insight from citizen participation as well as navigating the array of preferences and objectives associated with urban planning. In the end, these can have important implications for residents' sense of control and the ability to establish socially sound urban greening.

**Keywords:** urban greening, citizen participation, equity, urban planning, critical urban theory, just city

**Word count:** 11,840

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# 1 Introduction

Since the turn of the twenty-first century, cities have been at the forefront of the global sustainability agenda. Half of the world's population resides in cities today, a proportion that is estimated to grow into two-thirds of the population over the course of the next three decades (United Nations, 2018). While only occupying three percent of the planet's land surface, urban areas account for 60 to 80 percent of global energy consumption and more than 70 percent of global carbon emissions (United Nations, 2018). Simultaneously, many of the features that make cities so attractive—their architectural structures, and high concentrations of people and capital—further put them at high risk to shocks (Elmqvist et al., 2019; Godschalk, 2003). In light of this, cities are increasingly seeking creative ways to become more climate-proof and sustainable while, at the same time, creating liveable urban futures.

One solution which has been widely embraced is urban greening—that is, a planning approach geared towards creating and improving green amenities (e.g., parks, gardens, and greenways) in cities (Ahern, 2010; Breuste et al., 2013; Kearns et al., 2014). Urban parks and green spaces are long since recognised for their provision of important ecosystem services and benefits to human well-being. The best-known functions include improvements in air quality and urban noise, mitigation of heat island effects, and carbon sequestration (Ahern, 2010; Breuste et al., 2013). Scholars also call attention to the economic opportunities in attracting people and investments (Newton & Doherty, 2014), as well as the various socio-cultural and health benefits, with green spaces being sites for recreation or a sense of peace and tranquillity in an otherwise alienating urban environment (Kearns et al., 2014; Maas et al., 2006).

Since the upsurge in greening initiatives, however, a growing group of scholars has drawn attention to the complexity of achieving such win-win benefits in practice (Anguelovski et al., 2018; Haase et al., 2017). It has repeatedly been found that green spaces are often unevenly distributed across the city landscape, with poorer areas generally having less vegetation than more affluent areas (Anguelovski, 2016; Kabisch & Haase, 2014; Wolch et al., 2014). Additionally, recent studies demonstrate how urban greening can have potentially paradoxical effects in triggering gentrification as neighbourhood areas become more attractive (Anguelovski et al., 2018; Haase et al., 2017). More precisely, new or restored green spaces have been found to contribute to the displacement of vulnerable groups (Wolch et al., 2014) or feelings of being out of place (Goossens et al., 2020). This points to the ways in which the broadly accepted view of urban greening much too often neglects to consider the hidden costs and unintended social outcomes of greening and, in particular, the question of equity and for whom the green city is created (Anguelovski et al., 2018).



## **1.1 Aim and research questions**

So far, research has focused primarily on measuring access to urban green spaces and revealing the unintended outcomes of greening projects in the urban setting. While such findings certainly play an important role in drawing attention to the equity implications of the widely embraced approach of urban greening, it is equally relevant to explore how these may be symptoms of particular decision-making arrangements. As such, the aim of this research is to explore the green urban planning and its implications for ensuring equitable outcomes through Lund Municipality's recent greening initiative put forward as part of the city's broader sustainability agenda. Drawing on Fainstein's (2010) theory of the 'just city', I consider the principles of democracy, equity, and diversity in the decision-making and planning of urban green spaces. In further applying the lens of critical urban theory and the right to the city, I reflect on the current forms of organisation and critically examine underlying constraints as well as the implications of any alternatives. To that end, the following research questions have been drawn up which will direct and maintain focus throughout the research process:

- (1) In what ways are residents included in the planning and practices of urban greening?
- (2) What measures are taken to ensure equitable outcomes from urban greening?
- (3) What constraints or shortcomings can be identified and what are their implications?

By exploring these questions, I aspire to contribute to sustainability science research with an enhanced understanding of the tensions that may arise as societies attempt to guide nature-society interactions along sustainable trajectories (Kates et al., 2001). In line with the recommendations by Jerneck et al. (2011), this thesis adopts a critical lens while striving for problem-solving, by way of questioning the very nature of solutions in an effort to identify possible ways of moving forward. Seeing as the role of cities in addressing the broad suite of sustainability challenges cannot be understated, such research is crucial to support the need for transformative solutions in an increasingly urban world.

## 2 Setting the scene

### 2.1 Greening strategies in the context of urban intensification

In many ways, the approach of urban greening emerged following the upsurge of interest in urban intensification (Ahern, 2010; Haase et al., 2017). Higher densities, it is suggested, not only reduce the need for expanding city landscapes, but also enable more efficient infrastructures and contribute to the revitalisation of inner urban areas (Howley et al., 2009; Jenks, 2000). While accepting the premise of the compact city approach, some scholars remain sceptical of its ability to provide a high quality of life for city residents. In particular, it is found that such high-density living is accompanied by features such as urban noise, reduced mobility, and a lack of open space and urban greenery (Howley et al., 2009; Pacione, 1990). Moreover, Elmqvist et al. (2019) emphasise how densification plans in cities risk compromising the availability or quality of urban ecosystems otherwise vital for urban resilience.

Improving and, where possible, creating new green amenities has therefore been allocated a more central position in the realm of urban planning. More specifically, the urban greening approach has its roots in the green infrastructure concept endorsed by the European Commission in various legislations and strategies, including the Green Infrastructure Strategy, the Biodiversity Strategy, and the Habitats Directive (Haase et al., 2017). More specifically, they define green infrastructure as

a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation. (European Commission, n.d., para. 2)

Importantly, the concept embodies the principles of multifunctionality and connectivity to protect and enhance ecosystem processes in a way that supports social routines and spatial practices (Ahern, 2010; Haase et al., 2017). This focus on multifunctionality and connectivity is particularly central in regard to finding strategic ways to provide ecosystem services in the limited space in compact cities. Findings by Ahern (2010) suggest that the ways in which urban environments are often planned contribute to the fragmentation of natural landscapes to the detriment of ecosystem functions, biodiversity, and other ecological services. The green infrastructure concept therefore goes beyond urban parks and gardens to emphasise a variety of green spaces, with urban greenways forming networks that support species dispersal and movement alongside alternative mobility options, aesthetic and recreational services, and water and climate regulation (Ahern, 2010; Kearns et al., 2014).

Tying back to the scepticism towards urban intensification and the compact city approach mentioned at the start of this chapter, there is much to be gained from increasing both the quantity and quality of green amenities in the urban scenery. Where urban resilience is concerned, urban green spaces help regulate temperatures by shading, evapotranspiration, and lower surface emissivity, or help prevent surface water flooding by interception of rainfall (Breuste et al., 2013; Elmqvist et al., 2014). Urban parks and vegetation have also been shown to incentivise physical activity and thus reduce mortality risk, as well as providing stress relief and a sense of variety through the changing seasonal patterns of flowering vegetation (Kearns et al., 2014). Such health benefits derived from living near green areas have been found even more so among youth, the elderly, and other vulnerable people than any other groups (Maas et al., 2006), suggesting that green spaces provide valuable opportunities for increasing social inclusiveness in cities.

## **2.2 Environmental injustice and the costs of green urban regeneration**

While there is no denying the many benefits of enhancing green amenities in cities, such projects are rarely neutral in their impact on residents in targeted neighbourhoods. To clarify, Kearns et al. (2014) note the tendency of such new infrastructures to lock in trajectories of urban development, or path dependencies, often resulting in “unintended consequences or maladaptation outcomes in the long term that were unidentified and avoided during the planning and design process” (p. 56). Moreover, Anguelovski et al. (2018, p. 418) find the so-called ‘urban greening orthodoxy’—which encompasses the numerous ecological, economic, and socio-cultural values of ecosystem services—to leave out a deeper consideration of the social and spatial impacts of such projects.

In particular, scholars repeatedly call attention to how urban green spaces are used as ingredients in “primarily market-driven endeavours targeting middle class and higher income groups sometimes at the expense of less privileged residents” (Haase et al., 2017, p. 41; see also Anguelovski et al., 2018). For example, some scholars focusing on the spatial distribution of green amenities have found how the quantity and quality of green amenities differs across the city landscape, with access often varying based on socio-economic status, age, and gender (Anguelovski, 2016; Kabisch & Haase, 2014; Wolch et al., 2014). Others have explored the relationship between urban greening and inflating housing costs as areas become more liveable and attractive, adopting the term green gentrification to describe this process of urban regeneration and displacement (Anguelovski et al., 2018; Haase et al., 2017; Wolch et al., 2014). As it happens, findings by Wolch et al. (2014) suggest that such may be the effects even when the primary motive in urban greening projects is to address injustices in their distribution.

Although most studies relate green gentrification to the actual dislocation following soaring housing costs, some scholars further point out how displacement can take many different forms (Slater, 2012). Aside from more direct forms of displacement, gentrification may lead to the exclusion of residents who cannot access housing in certain parts of a city where they could otherwise have lived (Slater, 2012). Those long-term residents able to remain in place due to homeownership or subsidised rental housing may, too, experience effects of displacement (Rigolon & Németh, 2020). Referring to the idea that people consume and produce meaning in the places that they live, green gentrification can result in a sense of psychological displacement without any physical dislocation, as residents lose their social support networks or see their surroundings changing dramatically (Goossens et al., 2020; Rigolon & Németh, 2020; Salter, 2012). Under such circumstances, residents may be driven to leave their homes as soon as possible, or they may experience another form of ‘un-homing’ as they become increasingly marginalised (Goossens et al., 2020; Slater, 2012).

Considering these findings, scholars such as Wolch et al. (2014) propose the adoption of a ‘just green enough’ approach to minimise the effects of gentrification. Central to this approach is the emphasis on justice as well as the creation of smaller, scattered parks and the coupling of greening projects with proactive interventions to create and preserve nearby affordable housing (Rigolon & Németh, 2020; Wolch et al., 2014). Importantly, however, findings by Rigolon and Németh (2020) suggest that such an approach could fall short of expectations. As it turns out, small parks can trigger gentrification much in the same way that larger parks do—especially when located near downtowns and surrounded by an attractive housing stock. Moreover, the authors find that greenways designed to support alternative mobility options foster gentrification even more so than other green spaces (Rigolon & Németh, 2020).

In this sense, greening does not per se—in contrast to what has previously been suggested—foster greater social inclusiveness. The benefits to be gained from the distribution of green amenities across the urban scenery can easily be overridden by the unintended outcomes that, more often than not, affect residents unequally. The point here is not to say that urban greening is the only contributing factor to gentrification, as this is most often not the case. Rather, these studies call into question the general tendency to uncritically adopt urban greening as a win-win solution with benefits for all. Rolling out greening projects without consideration of how residents may experience impacts differently risks locking in trajectories of urban development that leave behind those less able to adapt to the new milieu. This inevitably raises questions on the matter of how to ensure that residents can access the numerous benefits of green spaces *and* remain in place or, more importantly, that of residents’ control over the process of urban greening.

### 3 Theoretical framework

#### 3.1 Critical urban theory and the right to the city

Emerging during the late 1960s following the writings of urban scholars such as Lefebvre, Harvey, and Marcuse, critical urban theory emphasises the continual construction of the urban space including its sociospatial organisation, governance systems, and patterns of sociopolitical conflict (Brenner, 2012). Specifically, critical approaches to urban studies strive to expose injustices rooted in and reproduced by the contradictions between profit-oriented dimensions (e.g., the urban greening orthodoxy) and the everyday life dimensions experienced by city residents (Brenner et al., 2012). In doing so, critical urban theory seeks to map the possible pathways of social transformation towards “more progressive, socially just, emancipatory and sustainable forms of urban life” (Brenner, 2012, p. 5).

Central to this alternative form of urbanisation is the notion of ‘the right to the city’ popularised by Lefebvre in 1968, referring to the demand of those who are excluded and to the aspiration of those who are alienated (Marcuse, 2012):

Lefebvre’s right is both a cry and a demand, a cry out of necessity and a demand for something more. Those are two separate things. I would reformulate them to be an exigent demand by those deprived of basic material and legal rights, and an aspiration for the future by those discontented with life as they see it around them and perceived as limiting their potentials for growth and creativity. (p. 30)

To some extent, these rights can be somewhat simple: the right to clean water, housing, health care, and democratic participation in decision-making, to name a few (Marcuse, 2012). Returning to the topic of urban greening, the demand in Lefebvre’s conceptualisation could perhaps be tied to the risk of gentrification and displacement, whereas the search for liveability more clearly can be related to the aspiration to lead a satisfying life. Still, the concept goes further to explain the right to the city as a moral claim that goes beyond the specific benefits and individual justice in legal terms, to a broad and sweeping right to social justice and to “a better system in which the potential benefits of an urban life can be fully and entirely realized” (Marcuse, 2012, p. 34). More precisely, this entails not only the right to enjoy the city after it is produced, but also the right to determine what is produced and how. According to Marcuse (2012), the task of critical approaches to planning here is threefold: (1) exposing the roots of the problem to those that can benefit from this knowledge, (2) proposing ways to achieve desired results, and (3) politicising political action implications with attention to issues of organisation strategies and potentials.

### 3.2 Planning for the just city

While critical urban theory emphasises the need to politicise current forms of organisation as a means to map opportunities towards a more sustainable and socially just urban life, it remains unclear how to evaluate green urban planning on the basis of justice. To study this, I draw on Fainstein's (2010) idea of the 'just city'. More precisely, Fainstein (2010) describes the just city as "a city in which public investment and regulation would produce equitable outcomes rather than support those already well off" (p. 3). Achieving such outcomes requires the principles of democracy, equity, and diversity to be placed at the centre of urban planning and practice. Here, Fainstein (2010) finds that much of critical theory in planning is focused on decision-making processes and on the ideal that everyone's opinion should be respectfully heard. While Fainstein agrees that this is an important normative argument and acknowledges that greater inclusiveness may lead to more open and better informed decision-making processes, she stresses that it does not necessarily produce just outcomes (Fainstein, 2010).

Often, unjust consequences are attributed to processes not being genuinely open or the participants not being adequately informed as a result of distorted communication (Fainstein, 2010). According to Fainstein, this faith in open communication ignores the reality of structural inequality as well as how citizens may not be good judges of their own interests or the public good. Furthermore, she finds that the value of citizen participation varies with context, with urban citizen participation sometimes mainly involving participants "demanding marginal changes in the *status quo* or benefits that respond to their narrowly defined interests" (Fainstein, 2009, p. 35). In this sense, procedure cannot be separated from substance when striving for equitable outcomes, with substance here referring to the values of those who participate (Fainstein, 2009).

As such, while Fainstein (2010) emphasises that democracy, diversity and equity together are elements of a just city, that of equity is given particular weight. In her theory of the just city, equity refers to "a distribution of both material and nonmaterial benefits derived from public policy that does not favor those who are already better off at the beginning" (Fainstein, 2010, p. 36). Initiatives should therefore be measured in terms of who benefits from them and to what extent, not simply economically but also politically, socially, and spatially (Fainstein, 2010). In the context of urban greening, equity thus relates to the issue of spatial distribution of green spaces introduced in the previous chapter, in the sense that an uneven distribution excludes some from the benefits of green amenities. Green gentrification, too, is related to Fainstein's principle of equity as it leads to displacements of vulnerable groups in favour of more affluent residents or excludes groups from accessing housing in certain parts of a city. That

green gentrification may be the risk of interventions striving to address the distribution of green spaces further calls attention to the complex relationship between urban greening and equity.

The principle of diversity is more diffuse and largely manifests itself through the other two principles in Fainstein's theory of the just city. Recognising the variety of meanings of the term, Fainstein (2010) calls for diversity highlighting recognition, openness to others, and the social composition of places. In this sense, diversity relates to which groups or values are recognised in decision-making processes, as well as pointing to the diverse experiences of accessibility when it comes to green spaces, for example. In Fainstein's theory, diversity can also refer to the development of culturally and economically diverse neighbourhoods through the planning of mixed building types or mixed-use public spaces (Fainstein, 2010). Importantly, while the principle of diversity ties into the other two principles, it may come at the cost of democracy and equity if people are moved against their will or lose their sense of ownership of a neighbourhood which has become more diverse following urban renewal (Fainstein, 2010).

The theory of the just city thus provides a framework for evaluating urban greening on the basis of justice. To clarify, it proposes looking into the decision-making arrangements in terms of whether they offer genuine opportunities for citizen participation. This includes whether they adequately represent all stakeholders and the diversity of perspectives through processes that mediate differences between groups. Moreover, and perhaps more importantly according to the theory, I consider the extent to which programmes reflect an understanding of the costs and benefits to different groups, and what protective measures are taken to ensure equity in their distribution. In so doing, this thesis may expose any shortcomings in the municipality's planning for urban greening and, in line with the threefold task outlined by Marcuse (2012), be better equipped to propose alternative ways forward.

## 4 Methodology

### 4.1 Research design

Seeing as this thesis aims to contribute to an enhanced understanding of how principles of justice are addressed in urban greening, the research is primarily of an exploratory nature. To that end, the study follows a case study design to facilitate a holistic image of the different features of a phenomenon in a real-world setting (Yin, 2003). More precisely, this thesis explores the case of justice in the planning and practices of urban greening with the city of Lund being the unit of analysis. Here, the case study design allows for an in-depth exploration of whether and, if so, how the municipality relates to the preferences of residents throughout the planning process, what steps are taken to achieve equitable outcomes, and what the reasoning is behind these routines.

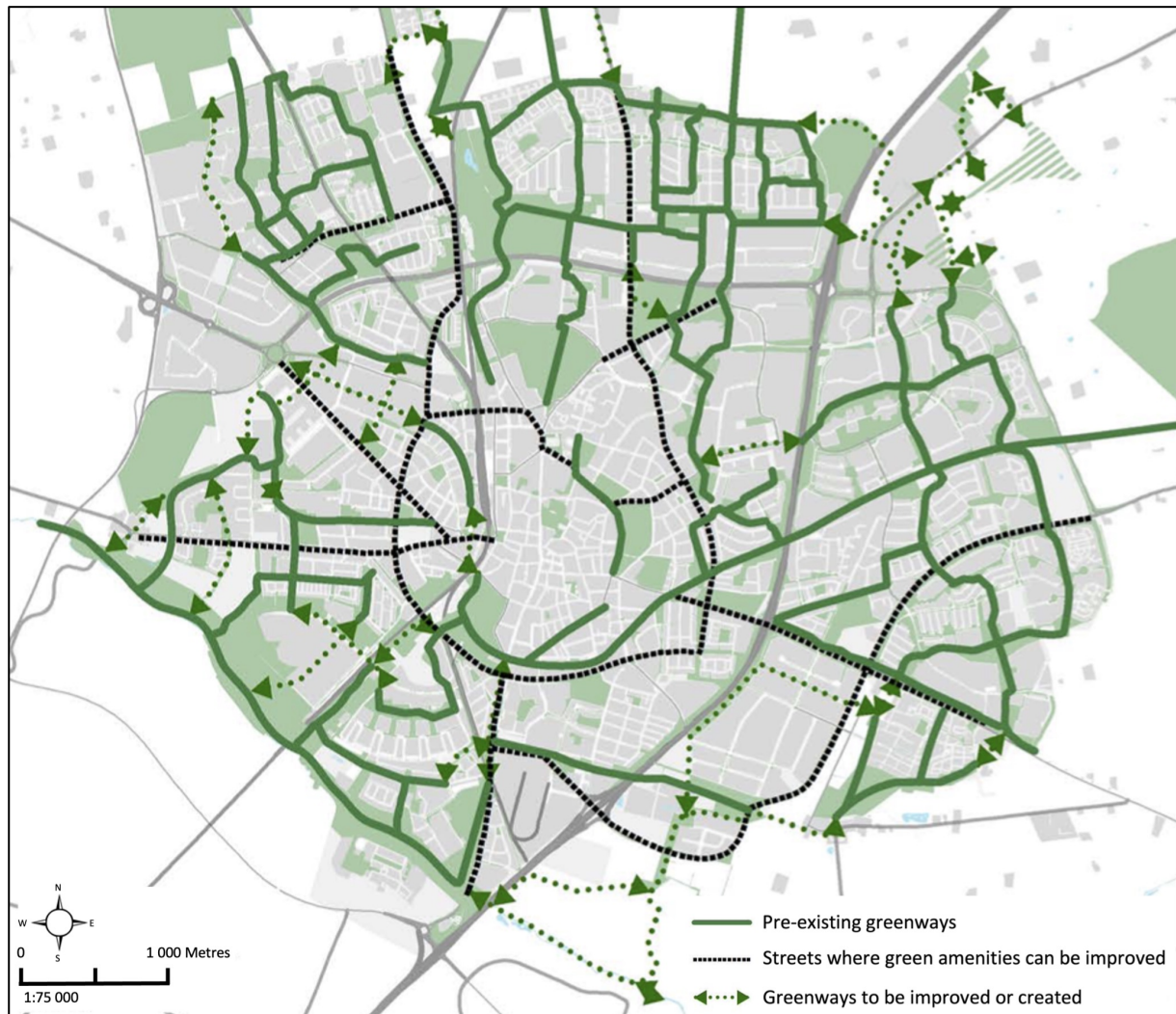
It is often suggested that case studies are limited in their ability to produce generalisable knowledge, and that multiple, strategically selected cases thus make for more compelling results than single case designs (de Vaus, 2001; Flyvberg, 2006). However, as Flyvberg (2006) notes, this does not mean that the knowledge produced through single case studies cannot make valuable contributions to advanced understandings of a phenomenon. Quite the contrary, the close proximity to reality characteristic to the case study design can often be considered a prerequisite for such knowledge production, while simultaneously ensuring the continuous testing of any preconceived notions against the phenomena as they unfold in practice. This calls into question the commonly held view that case studies leave too much room for the researcher's subjective judgement, with the approach instead affording more opportunity for the setting to 'talk back' than any other methods (Flyvberg, 2006). Finally, I propose that the single case design can be particularly suitable for research striving for problem-solving, as it allows for more in-depth engagements with the case and may therefore be better able to produce relevant and useful insights for those involved in the research.

#### **4.1.1 Lund Municipality's greening initiative: 'The Green Lund'**

Located in the southern Swedish province of Scania, the municipality of Lund holds nearly 126,000 inhabitants and consists of eight small towns besides the main city of Lund, where about three quarters of the population resides (Lund Municipality, 2022). With a population growth of 14,000 inhabitants during the last ten years, the municipality's most recent comprehensive plan outlines its strategy for intensification, or growing 'from the inside out' (Lund Municipality, 2018a). However, the municipality recognises the risk that such high-density development poses for green amenities (Lund Municipality, 2018b). Already, the city of Lund is one of the urban areas in Sweden with the least green surface seen



as per inhabitant as well as in relation to the total area (Lund Municipality, 2018a). Largely consisting of many small, scattered parks, the strategy for Lund city is therefore to strengthen pre-existing green amenities and create new networks of greenways across the city (see Figure 1). Moreover, the plan endorses so-called ‘boulevardisation’ in the sense of lining streets with trees and flowering vegetation to reduce barriers to connectivity among urban ecosystems while making the neighbourhoods more attractive (Lund Municipality, 2018a).



**Figure 1.** Map of Lund city displaying pre-existing greenways alongside suggested areas where green amenities can be improved as part of the plan to build an urban green network (adapted from Lund Municipality, 2020).

Part of the subgoal and vision of ‘The Green Lund’ presented in the comprehensive plan, the greening programme emphasises the recreational, ecological, and regulatory benefits of green infrastructures. Indeed, the region is forecasted to experience more days with heavy rainfall as well as more frequent heatwaves, putting the city’s elderly, children, and those with chronic health conditions at risk (Lund Municipality, 2020). The programme further extends into the other subgoals addressing the growing

population and quality of life in the city, with improved green amenities making the densified city more liveable as well as offering sites for recreation and socialising (Lund Municipality, 2018a). In particular, the municipality points to how natural meeting spaces such as urban parks encourage social interaction between people from different parts of the city and fosters a more inclusive social environment (Lund Municipality, 2018c).

An important element of the comprehensive plan generally is the effort to limit the exclusion of groups and operations as the city is transformed. The city of Lund is already found to have difficulty providing reasonable housing for certain demographic groups such as the youth and elderly, with costs becoming inflated as a result of a generally resourceful population (Lund Municipality, 2018c). Finally, the plan emphasises the right of inhabitants to affect their own circumstances as well as the future of the city, whether that be through a continuous dialogue in the planning process or more concrete participation in the design of the city landscape (Lund Municipality, 2018a). In light of this, the city of Lund makes for an interesting setting to explore questions of justice in relation to urban greening.

## **4.2 Data collection**

The case study is based on a combination of qualitative methods of collecting data. Here, triangulation of the data was employed to cross-check findings and develop a more comprehensive understanding of the phenomenon (Flick, 2018). Furthermore, the data was collected through an iterative process, meaning that the analysis was ongoing throughout the data collection so as to help direct the research based on preliminary findings (Bryman, 2012). Specifically, the empirical material can be categorised into two sets of data: official documents and semi-structured interviews. In the following sections, I describe each of the methods in greater detail.

### ***4.2.1 Official documents***

This body of data includes the documents produced by the municipality which describe the plan and strategies for urban greening in Lund. More precisely, these documents include published reports as well as preparatory work and decision material. Regarding the comprehensive plan, five documents have been consulted which reflect different phases of the planning process. Three of these documents describe the vision and basic principles of the comprehensive plan, land use schemes and options, as well as any social, economic, and ecological consequences of the plan. The latter is a decision guidance document informed by assessments undertaken in parallel to and interactively with the preparatory work. Additionally, two unpublished materials accessed via e-mail have been consulted, consisting of

a consultation report and exhibition statement. Aside from these five documents pertaining to the comprehensive plan, three additional documents have been included: one document conveying the municipality's framework on citizen dialogue, and two reports on the greening programme and the programme for social sustainability.

It should be noted that documentary materials are not transparent representations of organisational routines and decision-making processes, and therefore cannot be treated as firm evidence of what they report (Atkinson & Coffey, 2011). As Bryman (2012) notes, documents may record things such as the issues raised at meetings, the views of participants, and the actions to be taken—all of which are interesting to reveal the culture and preoccupation of an organisation. At the same time, however, they are likely to be written from a particular point of view with the prospective scrutiny by others in mind, perhaps resulting in a suppression of disagreements or “a desire to demonstrate that important issues are to be addressed rather than because of a genuine desire for acting on them” (Bryman, 2012, p. 555). In this sense, while documentary materials are associated with distinct social occasions and organised activities and, thus, enshrine a distinctively documentary version of social reality (Atkinson & Coffey, 2011), their employment as a means for understanding aspects of an organisation and its operation largely benefits from being combined with other sources of data (Bryman, 2012).

#### ***4.2.2 Semi-structured interviews***

Seeing as the study aims to explore the municipality's routines and the reasoning behind them, a key source of data is interviews. As such, five interviews with city planners from Lund Municipality were conducted over the course of two weeks in March 2022. The interviews took place over Zoom (except one which was conducted using Microsoft Teams), each around 40–60 minutes. A purposive sampling strategy was employed, meaning that the participants were selected with reference to the research aim and questions (Bryman, 2012). More specifically, respondents included city planners which have been involved in the areas of urban greening, citizen dialogue, or social sustainability. Additionally, a few of the respondents were selected through snowball sampling based on recommendations from other participants (see Table 1 for a full list of respondents).

The interviews were set up in a semi-structured manner to encourage the interviewees' perspectives and experiences based on what they see as relevant or important (Bryman, 2012). An interview guide was developed beforehand to help structure the interviews around topics relevant to the research (see Appendix). The guide was informed by elements of the theoretical framework and literature review, and was continually developed as interesting new themes emerged from the documentary material as

well as the interviews. Still, each of the respective interviews diverged slightly from the guide, in the sense that the level of details on the different topic areas varied between the interviews depending on the specific position and expertise of the respondents.

**Table 1.** List of respondents

Department	Job title	Reference	Date
Municipal Office	Social strategist	Respondent 1	2022-03-18
Municipal Office	Environmental strategist	Respondent 2	2022-03-18
Municipal Office	Environmental strategist	Respondent 3	2022-03-22
City Planning Office	Sustainability strategist	Respondent 4	2022-03-25
City Planning Office	Landscape architect	Respondent 5	2022-03-25

Importantly, the data was collected and treated according to the Swedish Research Council's (2017) guidelines for ethical research. This means that all respondents participated on a voluntary basis and were guaranteed anonymity and the right to terminate participation at any time. Furthermore, the respondents were informed about the aims of the research and their role in the study at initial contact and at the start of the interviews. The interviews were recorded and thereafter transcribed, which all respondents gave their consent for. With the intended use of the transcripts being to identify themes and patterns in the respondents' experiences of the planning process, the interviews were transcribed into a more polished style excluding filler words and repetition (Kvale, 2007). All direct quotations have been translated by me and I take full responsibility for any inaccuracies.

### 4.3 Data analysis

In order to gain insight into how principles of justice are integrated in the decision-making and planning of urban green spaces, the study draws on qualitative content analysis. Often employed in the analysis of qualitative data, the approach entails searching for themes in the materials being analysed (Bryman, 2012). For the purpose of this study, it allowed for the identification of the themes and patterns that captured the phenomena of justice in urban greening. Specifically, the initial search for themes was guided by the theoretical framework and literature review, broadly related to questions such as what the opportunities are for citizen participation, who is represented, how green spaces are distributed, and how the potential risks of displacement and gentrification are addressed. Subsequent themes that

emerged related to tensions within and among the initial themes as well as the differentiation between strategies and respondents' reflections regarding them. Since the analysis was ongoing throughout the data-collection process, all material was revisited at the end of the analysis to reassess its consistency.

As recommended by Ryan and Bernard (2003), special attention was paid to similarities and differences between accounts of topics or concepts. In other words, I compared and contrasted themes that were identified from the interviews and documentary materials in order to recognise any inconsistencies or differing perspectives. Furthermore, emphasis was placed upon the repetition of themes to minimise the risk of deliberate distortion (Ryan & Bernard, 2003). This means that themes which were initially considered irrelevant received further deliberation if they appeared frequently in the materials. This helped ensure the identification of findings that may not coincide with the initially defined themes but nonetheless provide insight into justice in urban greening.

## **5 Findings**

The following chapter features the empirical analysis of the strategies employed by the municipality to engage with and navigate the many preferences and objectives embedded in greening initiatives. In the first part of the chapter, I describe and outline the ways in which Lund's residents are included in the planning and practices of urban greening. The chapter then moves on to the question of equity—that is, how the municipality has taken measures to ensure equitable outcomes from urban greening. Finally, any constraints and shortcomings embedded in the strategies are identified and considered in relation to their implications for just urban greening, addressing the third and final research question.

### **5.1 Engaging residents in shaping the future of Lund city**

A central element in this thesis' approach to justice is the right to determine what form the city should take and the means by which it is produced. In line with this, Lund's programme for social sustainability states that what is built, rebuilt, or changed must be based on the principles of universal design, which means that the needs of all users must be taken into account from the beginning rather than by making adjustments at a later stage (Lund Municipality, n.d.). This view is carried into the comprehensive plan wherein residents' participation is endorsed in various forms, ranging from dialogue in planning to that of residents more actively participating in the design of the physical environment (Lund Municipality, 2018a). Importantly, the plan emphasises the value of maintaining dialogue with those already living in residential areas to ensure that any future development is adapted to their interests and economic opportunities and thus does not risk changing population compositions (Lund Municipality, 2018a).

In 2016, a strategy for citizen dialogue was adopted by the City Council outlining a number of guidelines to ensure uniform and systematic work within the municipality (Lund Municipality, 2016). For example, various methods and tools must be used to reach citizens who do not normally participate in dialogue activities, with particular attention being paid to children and youth's opportunity to participate. It is further stated that dialogues must have a clear purpose and that the ability to influence should be clearly communicated at the onset. Following the dialogue, results must be fed back to those who have taken part in activities and, in the event that dialogues do not end by consensus, representatives and officials are responsible for managing any trade-offs. The strategy describes various forms of dialogue, each of which serves a different purpose (Lund Municipality, 2016). For example, consultation includes dialogues where citizens are given the opportunity to comment on specific issues, with the purpose being to gather views to form the basis for concrete measures or decisions. Co-creation, on the other hand, is described as a longer process of planning and implementing various measures together with

residents living in a targeted area. In any case, the strategy emphasises that citizen dialogue should *not* be used to anchor decisions that have already been made, to inform citizens about decisions, or as something that is done simply for the sake of doing it (Lund Municipality, 2016).

Although the comprehensive plan could be understood as endorsing both consultation in the planning process and the more active co-creation of the physical environment, the empirical material mainly reflects the former. As part of the preparatory work, a planning strategy was distributed during a two-month consultation in the autumn of 2017 (Lund Municipality, 2018a). At this stage, the plan proposal was not fully developed and thus did not present any concrete measures; the focus was on presenting the general aspiration to help encourage citizen engagement and give those interested an opportunity to influence the content of the comprehensive plan (City Planning Office, personal communication, March 7, 2022). Opportunities to participate in activities were announced through various media, and open discussion sites were set up in different premises across the city to reach as broad a range of participants as possible. To reach groups who may not usually participate in such activities, a number of workshops were also arranged for school children in Lund, adapted to the knowledge and age of the participants (City Planning Office, personal communication, March 7, 2022).

During the consultation period, a total of 188 written statements were received through a prepared form on the municipality's website, corresponding to just over 75 percent of all public comments (City Planning Office, personal communication, March 7, 2022). Comments that arose at the discussion sites were entered into a dialogue log which, together with the written statements, formed the basis for a revised planning document to be exhibited for review at the Kristallen town hall from 3 May to 4 July 2018 (City Planning Office, personal communication, March 7, 2022). During the exhibition period, another 196 statements were received from the public, which were compiled in a report documenting any changes made (City Planning Office, personal communication, March 7, 2022).

Aside from the municipality-wide comprehensive plan, several in-depth comprehensive plans have been developed for residential areas such as Brunnshög in the north-east, Västerbro in the north-west, and that of Källby currently underway in the south-west of the city (Lund Municipality, 2018a). Just as the comprehensive plan was yet to be fully developed in the consultation phase, Respondent 4 explains how the dialogue in the Källby area was initiated quite early in the planning process and did not build on a fully developed idea. Invitations to workshops were sent out to approximately 2,000 households, with residents being sampled so as to ensure an even distribution across age, gender, socio-economic status, and the like. The workshops then focused on discussing concrete questions relevant to the local surroundings, including what needs to be preserved and what residents would like to see in the future. Respondent 4 goes on to explain that in subsequent consultation, two alternatives were proposed to

be discussed in a large meeting as well as at library visits and dialogues with children and youth in the area. In the end, they had gathered a total of 200 statements, of which half were from the residents.

In regard to the co-creation of the physical environment, the empirical material is unable to provide sufficient insight into the strategies employed. Here, Respondents 4 and 5 explain that, while the City Planning Office is largely involved in the preparation of the comprehensive plan, its implementation is beyond their responsibility. However, they also emphasise that the dialogue taking place in the initial planning stage is nonetheless highly valuable at these later stages as well, seeing as they call attention to the values to be considered in the implementation of projects. Respondent 5 further explains that, although they may not be actively involved in subsequent work, they are often turned to for input or clarifications as the plan is carried out. On those occasions, they can draw on the preferences which emerged in the dialogues initiated as part of the preparatory work.

## **5.2 Integrating accessibility and housing equity in urban greening**

In addition to ensuring that residents can influence greening interventions by which they are affected, justice in planning further calls attention to how structural inequalities in access to urban greenery and liveable neighbourhoods are addressed. This section presents the spatial distribution of green spaces and the issue of gentrification as they are addressed in Lund's comprehensive plan.

### ***5.2.1 Addressing the quantity, quality, and distribution of green spaces***

It is widely recognised across the municipality's planning documents that, to create equal and healthy living environments, the proximity and accessibility of green spaces and sites for recreation is of pivotal importance (Lund Municipality, n.d., 2018c, 2020). The city of Lund is already one of the most densely populated in Sweden when considering the amount of green space per inhabitant as well as the share of green space in the total urban area (Lund Municipality, 2018c). In 2015, the amount of green space per inhabitant was 162 m<sup>2</sup>—with 458 m<sup>2</sup> being the average for urban areas in Sweden—and the share of green space in the urban area was 10 percent lower than the national average (Statistics Sweden, n.d., 2019). At the same time, it is recognised that the expected population increase and plan to densify the city will further amplify competition for green spaces (Lund Municipality, 2018b).

In light of this, the greening programme recommends green spaces of at least 0.2 hectares within 200 metres of all residents in urban areas (Lund Municipality, 2020). Furthermore, a local park of at least 1 hectare should be accessible within 300 metres of residents, and all city districts should have a district park. Currently, observations show that the vast majority of residents live near at least one park type,



and that relatively few residents (15 percent) completely lack park access (Lund Municipality, 2018c). Still, it is similarly a small proportion (20 percent) which has access to all park types. To that end, the approach is primarily to raise the quality and multifunctionality of existing green areas in the city, in the hopes that this somewhat counteracts the negative effect of slightly reduced green areas (Lund Municipality, 2018c). As Respondent 4 further notes, the options vary depending on the project:

If you have a densification project that is a city block, then it is perhaps difficult to add a park, and you may need to work more with courtyards. But we also have large city transformation projects where we add parks. And in Brunnshög, for example, which is now being developed, we have built a very large park. [...] Also when we look at Västerbro which is one of our larger city transformation projects, there we will add parks as well, smaller park areas.

Importantly, it is possible to trace elements of how the accessibility of green spaces is often individually perceived throughout the documents. The greening programme, in particular, emphasises the need to adapt green spaces to the conditions and needs of different residents (Lund Municipality, 2020). More precisely, the programme recognises how accessibility decreases significantly for children, the elderly, or persons with reduced mobility if the nearest green area is on the other side of a busy road. It is thus not considered enough to merely distribute green areas across the urban scenery; green spaces and the surrounding area should be designed to ensure that all groups can safely access them. This includes parks being accessible by walker or wheelchair as well as ensuring the provision of seats and benches throughout the area (Lund Municipality, 2020).

### ***5.2.2 Combating displacement and (green) gentrification***

An important element of ensuring fairness in the distribution of green spaces is that of residents being able to remain in place as their neighbourhood sees the development and improvement of greenery. While it is not developed extensively, the risk of gentrification is acknowledged in the comprehensive plan. Indeed, assessments undertaken in parallel to and interactively with the preparatory work find that providing amenities such as public transport and parks within reasonable distance often increases the attractiveness of a neighbourhood and may contribute to the displacement of those who cannot afford to stay (Lund Municipality, 2018c). This is further considered to reinforce segregation and thus reduce diversity, with households of lower socio-economic standing often ending up in areas with a lack of greenery and greater amounts of noise pollution (Lund Municipality, 2018c).

Whereas this risk is acknowledged in the planning documents, it is not clear what is done in the sense of implementing protective measures against such effects. Especially when it comes to urban greening,

several of the respondents found that gentrification and displacement were not topics that came up in discussion when planning the development of green spaces across the city. When reflecting on what tools or opportunities could be available to mitigate such effects, the consensus appeared to be that it would not be an option to halt the development of green amenities across the city, as this would get in the way of a fair distribution of green spaces. As Respondent 5 puts it:

Yes, that's a very difficult question. God, I probably don't have a good answer. It is costly and everything that is costly contributes to the fact that the economically weak in society may not be able to move into the newer areas, but... Yes, there I think that the municipality has a responsibility too, to find other options. It is not only by steering clear of green infrastructure that we safeguard those goals, rather there are other governing tools and options to use.

Here, Respondent 4 considers the current housing development as a potential option to reduce risks of displacement and exclusion. More precisely, the programme for social sustainability states that the municipality must provide a wide range of housing to meet the needs of people who are in different phases of life, have different preferences, and different financial conditions (Lund Municipality, n.d.). This view has largely been carried into the comprehensive plan, with cheaper standardised apartments being identified as a way to meet the needs of economically weaker groups and mixed housing supply giving people the opportunity to stay in an area even if their life situation changes (Lund Municipality, 2018a). Respondent 4 explains how this is a way to ensure that students and youth can find their first apartment, that people are able to remain in a neighbourhood after a divorce, or that the elderly are able to move into apartments which better suit their needs without having to leave behind their social network. While this is not given as an example, this reasoning could suggest that providing housing in varying sizes, price ranges, and forms of tenancy makes it more likely that different groups are able to access housing in more attractive areas, or that existing residents can at the very least remain in the area if their current home becomes too expensive.

Such mixed housing supply is supposedly achieved through supplementing missing housing forms in existing areas and focusing on diversity in emerging areas (Lund Municipality, 2018c). In the end, the opportunities to ensure cheap housing largely depend on the resources at the municipality's disposal. As Respondent 4 explains:

Land ownership is an important tool, but it is diverse in terms of what it looks like in different parts of the city. We have urban development projects where we own all the land, such as Brunnshög where we are developing student housing and rental apartments and townhouses, very mixed. But we also have urban development projects where we don't own any land, and

then we don't have that tool. [...] So then it's simply a matter of having a dialogue with the developer and trying to convince them to follow in our footsteps.

In many ways, the issue of land ownership is not solely a problem when it comes to developing cheap and mixed housing; it is similarly related to the distribution of green spaces. Interestingly, several of the respondents described a continuous conflict between housing development and the conservation of green spaces, with the latter much too often being given lower priority. This adds to the relationship between urban greening and equity introduced earlier: not only may interventions striving for a more just distribution of green spaces induce gentrification, but the tools through which to mitigate effects of gentrification could potentially come at the expense of green spaces, too.

### **5.3 Not just a walk in the park: Constraints and shortcomings**

Thus far, this chapter has outlined the strategies through which the municipality tries to ensure greater inclusiveness in decision-making and equitable outcomes from urban greening. These strategies are subject to multiple shortcomings and constraints, all of which have implications for the municipality's ability to carry out socially sound urban greening. For the purpose of this section, they can be grouped into two distinct themes: (1) fostering citizen participation that genuinely produces valuable insight, and (2) navigating an array of preferences and expectations.

#### ***5.3.1 Wrong place, wrong time? Relatability and disengagement***

Section 5.1 showed how the municipality took steps to include residents already as the comprehensive plan was in the initial stages of being prepared. While it is suggested that participation extended into the co-creation of the physical environment, the empirical material was unable to shed light on this and, thus, the shortcomings treated here are only related to the consultation format of the dialogue. Still, the challenges considered by the respondents primarily concern how to adequately represent all residents as well as at what stage and on what level it is most appropriate to initiate dialogue. As such, the reflections may be relevant to consider when engaging in co-creation, too.

There seems to be a general consensus among the respondents on the difficulty of reaching as broad a range of participants as possible. Although the strategies in the municipality-wide and the in-depth plans both were designed to be accessible to various groups, Respondent 1 emphasises the importance of keeping track of who actually turns up. Here, Respondents 1 and 2 similarly note how it is usually the same, active participants that turn up at every meeting opportunity, and that those with higher academic backgrounds tend to be heard more than others. While there may be various reasons as to

why other groups are more difficult to reach, the respondents put it down to either a lack of experience with the process, or a lack of time and interest. For example, Respondents 4 and 5 imagine that not everyone has the same insight or know where to turn to if they take issue with a project: “It could be groups with a foreign background, for instance. Who may struggle with the language or who are not familiar with our tradition of urban planning and how to influence it” (Respondent 4).

Alternatively, people are too busy with their lives to participate, even though they may be interested in the future of the city. As Respondent 1 proposes:

If I consider why people would not attend such a meeting... I don't think it is disinterest, but I think you are busy with other things. And you are not really socially engaged to that extent, I don't think so.

This is especially considered the case for those who are not as affected by their physical environment. Agreeing with this proposition, Respondent 4 elaborates:

Young people can be difficult to reach, perhaps young adults. [...] They may not be as affected by their physical environment as when you are, for example, a family with children, or a child, and you are very much in your immediate environment in a different way.

Lack of experience is not necessarily a problem only for residents with a foreign background. Indeed, the feedback on the consultation strategy for the municipality-wide comprehensive plan suggests that the language overall in the proposal was much too complicated and did not appeal to people who do not have expert competence on the issues (City Planning Office, personal communication, March 7, 2022). Residents further commented that it was a rather visionary text, with concrete measures being difficult to discern and thus difficult to take a stance on (City Planning Office, personal communication, March 7, 2022). This leads into the second challenge related to the stage and level at which it is most appropriate to initiate dialogue. The idea of presenting a plan proposal without established boundaries at such an early stage was not received positively by everyone; comments point to the material being too difficult to absorb on a broad and strategic level, with the plan's significance for local development being difficult to interpret (City Planning Office, personal communication, March 7, 2022).

In a similar vein, Respondent 1 raises certain doubts about the value of citizen dialogue when working with longer time horizons such as that of the comprehensive plan, with such dialogues often not being about things that are the most relevant to people:

I think you should work with citizen dialogue and especially when it comes to city planning, when it comes to the development of areas, parks, places. Then I absolutely think you should

do it because then you are doing something concrete. When working with the comprehensive plan and longer planning processes, this is very difficult. Because people still come back to how they feel right here and now.

Agreeing that the insight will most likely be less clear when dealing with broader plans as opposed to more delimited plans in specific areas, Respondent 5 nonetheless sees some value in such dialogues, since they may provide input on the broader issues that engage residents. Furthermore, the fact that initiating dialogue at such an early stage or without established boundaries has its drawbacks is not to say that it would be more appropriate to initiate dialogue at a later stage. In fact, some comments on the consultation strategy rather found that the plan proposal was already too developed—contrary to what some other residents experienced—and that there was no real opportunity to influence it as the general ambition had already been established (City Planning Office, personal communication, March 7, 2022). Comparably, Respondent 4 is optimistic about the approach adopted in Källby, where they proposed two alternatives based on an early dialogue:

I thought it was a way to test the democratic process a little, to not present a finished proposal or what one as a citizen perceives as a finished proposal. Rather providing the opportunity to see that there are different possibilities for the development of the future.

In the end, this decision in terms of at what stage and on what level it is most appropriate to initiate dialogue can have important implications for residents' sense of control and the municipality's ability to produce just outcomes. More precisely, Respondent 2 finds that when residents cannot understand the implications of proposals in their own surroundings, they are less likely to react until it is too late, and projects are already underway. This points to the importance of dialogue activities being accessible and relatable to residents throughout the planning and implementation of projects.

### ***5.3.2 Connecting the pieces of the puzzle***

Though citizen dialogue carries the potential to produce valuable insight, what form the city takes and the extent to which it reflects this insight is largely determined by subsequent stages. This somewhat builds on what has been discussed thus far in regard to the purpose of dialogue, however it also relates to the resources available and how the insight produced is considered in relation to other objectives.

Several of the respondents express some degree of scepticism towards the alleged purpose of citizen dialogue as it has been conveyed in the comprehensive plan. Importantly, this scepticism is not based on experiences of what has or has not been done specifically in relation to the plan but is grounded in

general observations of Lund as well as municipalities in Sweden at large. Here, they generally feel that the insight produced from dialogues rarely has a bearing on decisions, stressing how citizen dialogue therefore can end up doing more harm than good. Both Respondents 1 and 2 explain more precisely how residents most probably will feel disappointed if their requests or suggestions are not reflected in the final decision or project, thus discouraging future participation. Agreeing that dialogue activities do not always deliver on their promises, Respondent 3 finds that they often are initiated to inform rather than due to a genuine interest in residents' point of view—however they also note how there more recently have been examples of planners actively engaging with residents and that this largely depends on who is in charge. As they explain it:

You know the answer. You inform. The municipality is very good at informing, and it is a bit like when we make programmes and plans and reports. We are good at doing that, but when we are going to talk to the public, then we inform instead of engaging in conversation [...] And then you think that you had a dialogue with the public. But it can be done in different ways.  
(Respondent 3)

In some regards, Respondent 3 considers the tendency of dialogues not having a bearing on decisions to be rooted in the issue of navigating residents' preferences in relation to broader objectives such as ecological health. Concerning this, Respondent 2 notes how that which is best for the environment is not necessarily compatible with residents' preferences of what green spaces should look like, naming the examples of lighting at night and whether to keep lawns neatly cut. In any case, Respondents 2 and 3 both emphasise the importance of actively integrating dialogue findings into projects or, in the event that this is not possible, making it clear that suggestions cannot be realised. This also includes setting aside sufficient resources to be able to implement certain suggestions—something which Respondent 1 finds that most municipalities fail to do. Here, Respondent 4 clearly summarises the difficult task that is navigating the array of preferences and expectations in relation to broader objectives:

Physical planning includes a lot of trade-offs. It is constantly finding a suitable way forward based on the many different goals and directives that we have. We must fulfil social values, ecological values. We must ensure that there is housing. The housing has to be reasonable to live in. It should be a good living environment. At the same time, all developers want to make money. So it's a pretty complex puzzle to put together, where you have to navigate all these questions and find a good balance to make sure the outcome is as good as possible.

In the end, this task of navigating preferences and objectives is one that has to be carried out in each specific residential area. As Respondent 5 explains, this entails not only trying to achieve this balance,

but also establishing what aspects of the broader comprehensive plan are achievable in the area and adapting these to local interests and opportunities. Here, Respondent 4 adds that it is often difficult to follow up on social sustainability in planning processes, calling attention to a recently launched three-year research project where they try to map out how to safeguard social sustainability throughout the entire planning process. It covers questions such as how to get private actors onboard with objectives and establishing a joint lens and language among the actors involved. Moreover, it looks into concrete planning tools or models that can be used to realise social sustainability under different circumstances. For example, Respondent 4 mentions how parts of this may include social bonds, similar to the idea of green bonds, or social compensation in city planning processes. Considering the constraints presented in this chapter as well as the current strategies adopted to ensure equitable outcomes, the results from this three-year research project may therefore have significant implications for the seemingly complex relationship between equity and urban greening.

## 6 Discussion

This thesis set out to explore questions of inclusion and equity in urban greening. In light of previous research revealing the potentially paradoxical effects and unintended outcomes of greening projects, the aim was to critically examine the particular decision-making and planning processes in which these risks may be rooted. The analysis of Lund Municipality's greening initiative is suggestive of there being an ambition to build a just and green city in which everyone benefits from vibrant living environments and has the opportunity to shape its future. Still, the findings also point to the strategies being subject to constraints and shortcomings which could pose difficulties for delivering equitable outcomes. While the comprehensive plan endorses the inclusion of residents in various ways, the findings suggest that how it is carried out may shape the nature of the insight produced. Aside from including residents in the decision-making and planning processes, steps have also been taken to ensure a fair distribution of green spaces across the city as well as developing integrated neighbourhoods with mixed housing to meet various needs and opportunities. However, the options here largely depend on the resources at the municipality's disposal as well as the preferences of residents and private actors involved.

In many ways, the findings are interesting to consider in relation to Fainstein's theory of the just city. As she acknowledges in her description of democracy, citizen participation does not always guarantee better-informed decisions or produce equitable outcomes (Fainstein, 2010). While this is attributed to residents not being good judges of their own interest rather than them not being adequately informed, the example of Lund gives the impression that the two are perhaps not as easily separated in practice. In fact, it could be argued here that the residents' reactions to the comprehensive plan would have been different if they had been able to perceive its consequences in their immediate surroundings. Returning to Lefebvre's differentiation between rights as demands and as aspirations (Marcuse, 2012), the broader, long-term aim of the comprehensive plan could result in residents being more likely to express support as it may speak to their aspirations for a liveable and vibrant urban environment, while not being aware of how it may impact more immediate concerns until it is 'too late' to react.

As such, these findings support Fainstein's (2010) claim that the ability of democracy to contribute to equitable outcomes largely depends on the substance—that is, the extent to which it provides a useful basis for identifying necessary actions or protective measures. Still, while this points to the importance of integrating equity considerations as a separate principle in planning, it is not to say that democracy and inclusion is any less essential. Not only does it have the potential to inform equitable measures under the right circumstances, but it is further important in its own right within the vision of the just and emancipatory city (Brenner, 2012; Marcuse, 2012). Here, the more in-depth plans may be better



equipped to provide valuable insight as they are more relatable to the residents and can include specified implications for the residential areas. In any case, the key takeaway from the findings is the importance of investing sufficient capacity and resources to sustain dialogue continuously throughout all the stages of planning and implementing. More precisely, genuine participation would require that residents are actually able to influence the broad ambition for the city's future development, as well as having a say on the means by which it is achieved in one's local area. Importantly, this necessitates adapting dialogues and plans to the prior knowledge of the residents so as to limit potential barriers to wider-reaching participation. Recognising that disengagement may further be influenced by factors such as time and interest, this includes experimenting with different strategies to make participation more convenient and strengthen public outreach.

Importantly, the empirical material was limited in its ability to provide insight into the co-creation of the physical environment and can therefore not shed light on whether the constraints or shortcomings identified with the initial, broader planning are perhaps mitigated at these later stages. Seeing as the overall direction and objective of co-creation may be largely driven by decisions made at earlier stages, however, democracy and inclusion in these later stages may nonetheless fall short if residents feel that the broad ambition does not correspond to how they envision the future of the city. Future research could explore this issue of scale and timing in greater detail, particularly how the planning at earlier stages or on the municipal and city level interacts with subsequent planning and implementation in specific residential areas. Moreover, it may be interesting to explore how this affects residents' sense of control and the municipality's ability to produce just outcomes.

Regarding the principle of equity in Fainstein's (2010) theory, this thesis focused on the fair distribution of green spaces and the measures taken to mitigate risks of gentrification as neighbourhoods become more attractive following greening initiatives. Interestingly, the strategies adopted by the municipality largely coincide with the 'just green enough' approach proposed by Wolch et al. (2014). Seeing as Lund primarily consists of many small, scattered parks and that the opportunities to create new green spaces is somewhat limited by the objective to densify, the focus is largely on strengthening existing green spaces and creating networks of greenways. Aside from the creation of smaller, scattered parks, Wolch et al. (2014) further emphasise the coupling of greening projects with proactive interventions to create and preserve nearby affordable housing. Here, the municipality similarly emphasises the development of mixed housing to satisfy various stages in life and residents' opportunities.

It is worth noting that, although the strategies reflect the 'just green enough' approach, they are not necessarily rooted in deliberate efforts to combat effects of gentrification following greening projects. Rather, it appears that the emphasis on mixed housing is more so a response to the intensification plan

and the need to accompany a growing population through various housing opportunities. Indeed, the reflections by respondents on the matter indicate that gentrification and displacement are not topics that are necessarily considered when planning for green amenities across the city. This suggests that urban greening is generally perceived as a win-win solution for all, an impression that is reinforced by the emphasis on the benefits of greening across the municipality's planning documents.

Nevertheless, it has been suggested here that the provision of housing in varying sizes, price ranges, and forms of tenancy makes it more likely that different groups can access housing in more attractive areas or that existing residents can remain in a neighbourhood if their current home becomes too expensive. While this could therefore be regarded as a response to more direct forms of displacement (Anguelovski et al., 2018; Wolch et al., 2014) or exclusionary effects of gentrification (Haase et al., 2017; Slater, 2012), it is not entirely clear how it may impact other forms of displacement. Particularly, questions remain regarding the extent to which mixed housing development may address effects of psychological displacement (Goossens et al., 2020; Rigolon & Németh, 2020; Slater, 2012).

In some regards, it could be supposed that such an approach may reduce the risk of psychological displacement resulting from one's social network in the neighbourhood being replaced by new families perhaps leading entirely different lifestyles (Goossens et al., 2020). When it comes to other dramatical changes to one's surroundings, however, the development of mixed housing could itself be considered such a dramatic change contributing to psychological displacement. Similarly, in her discussion of the three principles of the just city, Fainstein (2010) acknowledges how increasing diversity in the sense of developing culturally and economically diverse neighbourhoods through mixed building types may come at the cost of democracy and equity if people are moved against their will or lose their sense of ownership of the area. Here, further insight is needed on how residents perceive the physical changes to their surroundings following urban regeneration initiatives including greening and mixed housing development, as well as what the options may be to address any undesired experiences.

Returning to whether the unjust outcomes identified in the literature are perhaps a result of particular decision-making and planning processes, the findings here have drawn attention to how decisions on the scope and timing of dialogue as well as the management of conflicting preferences and objectives could influence the ability to produce equitable outcomes. Interestingly, the literature suggests how the problem specifically may be rooted in a blind acceptance of urban greening without awareness or consideration of unintended consequences in the planning process (Anguelovski et al., 2018; Kearns et al., 2014). However, despite the risks of gentrification not apparently being discussed in the planning of green spaces in Lund, the strategies adopted by the municipality may nonetheless mitigate some of the effects. In many ways, this could be due to the ambition of the municipality to create more inclusive

residential areas, suggesting that practices of urban greening are less likely to result in unjust outcomes if complemented by a general attitude towards social sustainability and inclusiveness.

In the end, the city of Lund makes for an interesting setting seeing as the population generally is highly educated and that there are relatively few areas that are particularly resource-poor (Lund Municipality, 2018c). Furthermore, the fact that the city already is expensive to the point of middle-class residents having difficulty finding affordable accommodation (Lund Municipality, 2018c) does call into question the extent to which new or improved green amenities could further increase housing costs—although this may vary between residential areas. Considering this, a fuller understanding of the role of planning in facilitating equitable urban greening would further benefit from the phenomena being explored in cities perhaps facing more pronounced segregation and experiences of social exclusion.

## 7 Conclusion

Following an upsurge in urban greening within planning and policy across the world, a growing group of scholars have criticised the tendency of urban greening being uncritically accepted as an infallible solution in much local sustainability planning today. Viewing it as such neglects to consider the hidden costs and shortcomings of greening initiatives and risks setting urban development onto a pathway that excludes those less able to adapt to the new milieu. This thesis strived to contribute to the growing body of critical literature by exploring how such unjust outcomes may be the symptoms of particular decision-making and planning processes. Looking into recent greening initiatives in the city of Lund, I explored how the municipality has included residents in the planning and practices of urban greening, what measures are being taken to ensure equitable outcomes, and what constraints or shortcomings underlie these strategies as well as their interactions.

The findings suggest that, while there is an ambition to build a just and green city, there are a number of constraints and shortcomings in the green urban planning which may pose difficulties for delivering equitable outcomes. More precisely, the municipality initiated an early dialogue on its broader goals as well as more in-depth plans, however some shortcomings were identified in regard to keeping the dialogue relatable to residents and generating insight that could provide a valuable basis to identify protective measures against unjust outcomes. Furthermore, while steps are taken to increase access to green spaces as well as developing mixed housing to accommodate various needs and opportunities, the options available depend on the resources at the municipality's disposal and the preferences of actors involved. Importantly, the findings point to how these constraints may further complicate the already complex relationship between urban greening and equity, with some protective measures such as mixed housing perhaps coming at the cost of access to green spaces.

Still, it appears that urban greening may not necessarily lead to unjust outcomes even when these are not identified during the planning process—at least if the approach is complemented by an aspiration towards social sustainability and inclusiveness in the broader urban planning. In some ways, Lund does not face issues of segregation and social exclusion in the manner that other cities may do; I therefore encourage others to carry out research in alternative urban settings which may provide further insight into the many layers of the justice dilemma in urban greening and local sustainability planning overall. I have no doubts that there is more to this angle than that which has been covered in this thesis, and that we still have plenty to learn about justice in strategies that may be taken for granted as we are searching for transformative solutions in an increasingly urban world.

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## **Appendix: Interview guide**

### **Background**

- a) What is your role at Lund Municipality?
- b) How have you been involved in Lund's work with the comprehensive plan or urban greening?

### **Urban greening**

- a) How does Lund strategically work with urban greening? What different programmes, policies and tools do you currently have?
- b) How does the work with urban greening relate to the broader spatial planning?
- c) What would you say are the challenges in relation to urban greening in Lund?

### **Citizen participation and equity**

- a) How does the municipality work to include residents in the planning and practices generally and in relation to urban greening initiatives? Why is this important?
- b) In relation to the most recent comprehensive plan you write that the municipality's residents should have the opportunity to influence the development of the city, and that this participation can include everything from dialogue in the planning process to active participation in the design of the physical environment. Can you develop further what these entail?
- c) Are there any preferences or concerns raised by residents in relation to urban greening? How have these been incorporated/addressed in the municipality's planning and practices?
- d) Research suggests that the benefits from green infrastructure are often unevenly distributed among city residents. Is this a potential issue in Lund? How is the municipality working to address such effects in the planning and practices?
- e) Some research also finds that urban greening can give rise to gentrification as green infrastructure increases the attractiveness of a neighbourhood and therefore also its value. You write that it is already a challenge to provide reasonably priced housing for many residents in Lund, including students and the elderly. Do you think that Lund's urban greening initiative could contribute to such issues of green gentrification? Does the municipality in some way address such effects in the planning and practices?