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# Planning for an urban recreational landscape

Tracing geographies of outdoor recreation in the  
compact city

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compact city

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# Planning for an urban recreational landscape: tracing geographies of outdoor recreation in the compact city

## Abstract

Outdoor recreational activities, at recreational facilities, in nature and urban green areas, are proven to benefit both the mental and physical health of urban residents. However, in the contemporary urban planning paradigm, where compact cities are forefront, planning for outdoor recreational amenities is increasingly in conflict with such compact ideals. In a Swedish context, a historical perspective on the question of outdoor recreation in the urban sphere discloses a rich legacy of past welfare recreational planning resting on the notion of enabling sports for all. In this thesis, I aim to offer an interpretation, and to deepen the understanding of, the interactions and tensions between outdoor recreation, compact city models and lingering planning legacies of past recreational planning. I do this in order to scrutinise the conditions for outdoor recreation within the compact city.

The thesis adopts a material-semiotic approach and leans on assemblage theory, science and technology scholars working on the ordering effects of planning and previous studies on materialised discourses in the landscape. Findings of the thesis indicate an increasing fragmentation of outdoor recreation. This fragmentation leads to multiple definitions of the issue and a fragmented geography for outdoor recreation. These intertwined fragmentations, the thesis argues, support the rationales of the compact city, while marginalising outdoor recreational geographies. Based on the findings, the thesis concludes a need of reassembling landscapes for outdoor recreation and suggests that a historical perspective offers a fruitful way to do so.

*Keywords:* Assemblage theory, Compact city, Landscape planning, Material-semiotics, Materialised discourse, Ordering, Outdoor recreation, Recreational planning, Relational geography, Urban densification

# Planering för ett urbant rekreationslandskap: en undersökning av utomhusrekreationens geografier i den täta staden

## Abstract

Utomhusrekreation, i naturen, på anläggningar eller i gröna stadsmiljöer, är bevisat positivt för en ökad mental och fysisk hälsa. I den samtidiga stadsplaneringen där urban täthet premieras hamnar dock ofta utomhusrekreation i konflikt med visionen om den täta staden. I en svensk kontext visar ett historiskt perspektiv hur dagens utomhusrekreation i staden är starkt beroende av den tidigare rekreativplaneringen under välfärdsstatens byggande, fångat i frasen idrott åt alla. Denna avhandling syftar till att erbjuda en tolkning, och fördjupa förståelsen, av de interaktioner och spänningar som uppkommer mellan utomhusrekreation, den täta stadens ideal och arvet av en tidigare rekreativplanering. Detta för att kunna granska förutsättningarna för utomhusrekreation i den täta staden.

Avhandlingen utgår från ett materiellt-semiotiskt förhållningssätt och lutar sig mot assemblageteori, forskning inom teknik- och vetenskapsstudier kring planeringens ordnande effekter samt på tidigare studier av materialiserade diskurser i landskapet. Resultaten i avhandlingen pekar på en ökande fragmentisering av utomhusrekreation, både rörande multipla definitioner av frågan men även rörande en allt mer splittrad geografi för utomhusrekreation. I avhandlingen argumenterar jag att dessa sammanlänkade fragmentiseringsprocesser dels understödjer skapandet av den täta staden, och dels marginaliserar rekreationens geografier. Baserat på dessa resultat hävdar avhandlingen ett behov att om-arrangera rekreativlandskapen för den täta staden, och att ett historiskt perspektiv är en möjlig väg för att göra detta.

*Nyckelord:* Assemblageteori, Landskapsplanering, Materialiserad diskurs, Materiell-semiotik, Rekreativplanering, Tät stad, Urban förtätning, Utomhusrekreation

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Stockholm, August 2023

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## List of publications

This thesis is based on the work contained in the following papers, referred to by Roman numerals in the text:

- I. Engström, A. & Qviström, M. (2022). Situating the silences of recreation in transit-oriented development. *International Planning Studies* 1–4
- II. Qviström, M., Engström, A., Peinert, H. & Pries, J. Renegotiating green space for the compact city: uncovering the ontological politics of green planning in a deregulated planning system. (Submitted to *Urban Forestry and Urban Greening*)
- III. Engström, A. Scrutinizing the plan-ability of recreation in the compact city: continuing and discontinuing modernist planning legacies. (Submitted to *Planning Theory and Practice*)
- IV. Engström, A. & Lepoša, N. Sports for all, reshaped, in contemporary Swedish recreational planning: the case of Alby Public Health Park. (Manuscript)

Papers I–3 are reproduced with the permission of the publishers.

The contribution of Amalia Engström to the papers included in this thesis are as follows:

- I. I am the first author of this paper. The concept for the paper was developed by Qviström. I conducted the literature search and review, as well as data collection and analysis for the minor case study. The text was written in collaboration between myself and Qviström.
- II. I am second author of this paper. The paper was conceptually designed by Qviström and Pries. I contributed through the collection of empirical material, taking part in analysis and presentation of material, writing and editing. I was responsible for the description of Swedish planning.
- III. I am the sole author of this paper
- IV. I am the first author of the paper and had the main responsibility for the theoretical framework. The paper was conceptually developed in close collaboration with Lepoša. We shared data collection and collaboratively wrote the paper.

# 1. Introduction

Walking over a forested ridge at the edge of a mid-sized Swedish town, I notice the legacies of a period of extensive recreational planning. It is a familiar encounter: various combinations of public outdoor facilities, such as running paths, ski slopes, football pitches and tennis courts, as well as the urban forest. These legacies together form a recreational landscape, planned in tandem with the extensive urban expansion of the town during the 1960-70's. This particular location, called Apoteksskogen in the northern parts of the Stockholm region, is where pine trees and birches stand rooted in the sandy soil of the ridge and where the faint noise of the adjacent highway mingles with the sound of bouncing footballs and children's' voices. It is at once very local but yet also national, possibly even international. The 60-kilometre-long ridge connects Apoteksskogen to a multitude of other recreational localities throughout the northern Stockholm region. The recreational landscape of this particular part of the ridge is also forging relationships to other locations beyond the ridge that share a similar history as materialisations of a welfare idea of accessible leisure. The 'golden era' of recreational planning during the 1960's (Hultman 2000; Stenske & Hansen 2014) also linger in other forests, green spaces and sports grounds throughout Sweden and beyond.

Walking further down the ridge in Apoteksskogen, I first encounter a new building in corrugated metal, housing an indoor football field. This is an indication that Apoteksskogen is not (only) a dormant legacy of the past, but continuously changing as new facilities for leisure are developed. Further ahead I see large building cranes at work constructing a new urban neighbourhood. It is a compact city in the making, with a new tower shimmering in gold as the ultimate indication of the constant change. The contemporary planning is not only challenging the form and ambitions of the

urban and recreational planning of the late modernist era, but also challenging and changing the recreational landscape through which I am walking. This recreational landscape is thus a scene for interactions between contemporary urban planning and legacies of late modernist planning ideals. The term late modernist planning is here used as a way to capture an era and the loosely tied ‘patchwork’ (c.f. Pries & Qviström 2021) of design principles, technocratic standards, political and social norms, and urban fabrics, including the landscape beyond buildings which together came to characterise urban development from the 1960’s onwards to the mid 1970’s (see Roos & Gelotte 2004; Hall & Vidén 2005 and their discussions of the ‘records years’ of building).



Figure 1: Lingering traces of a materialised discourse of “Sports for All” in Apoteksskogen, Upplands Väsby. A tennis court with the net temporarily supported by a branch.

This thesis has been developed as a part of the research project *The Welfare Landscape Reassembled: Policies for sustainable outdoor recreation in times of urban densification*, financed by the Swedish Research Council for Sustainable Development, FORMAS. *The Welfare Landscape Reassembled*

studies legacies and futures of the green landscape of the Swedish welfare state, at its peak during the 1960–1970s. *Welfare Landscape* is in this context understood not only as the physical setting (lawns, forests, parks, courtyards, playgrounds, etc.) but also as a socio-material complex where the materiality of land intermingles with political ambitions, social norms and techniques of governing—a welfare landscape that could be described as the materialisation of an internally complex welfare discourse (Braae et al. 2020; Pries & Qviström 2021).

From the perspectives held by the project the *Welfare Landscape Reassembled*, Apoteksskogen comes to the fore as a piece of welfare landscape. The ridge is not only an example of a welfare landscape as such, but the ongoing reassembling of the ridge also captures the current changes of the Swedish welfare landscape. Not only are new layers of technology and uses added to Apoteksskogens recreational landscape, but new visions and policies guiding the urban development of surrounding areas are reinterpreting the ridge for new purposes. This dynamic between materialised discourses and a *retranslation* (Østmo & Law 2018; Adolfsson et al. 2021) of such materialisations lies at the heart of both the project the *Welfare Landscape Reassembled* and this doctoral thesis.

Within the broad theme around the concept of welfare landscapes, the focus of this thesis is the segment of outdoor recreation. Outdoor recreation became a central element in landscape and urban planning during the welfare era (Moen 1991; Fahlén & Stenling 2016; Pries & Qviström 2021). The notion of *Sports for All*, coined in a public inquiry published in 1969 (Idrottsutredningen 1969) became a slogan for a discourse where the importance of inclusive participation in physical activities and bodily movement was seen as paramount for the health of the public and the individual. Thus, while only one aspect of a broader welfare planning (Norberg 2004), it was an influential one for the planning and design of outdoor environments. The 1969 inquiry proposes to define sports as “all the competitive and other physical activities that the people perform to reach a certain result or to get exercise and physically active recreation” (Idrottsutredningen 1969: 16). Building on this wide definition, I will use the term outdoor recreation to denote a wide variety of activities performed for recreational purposes in the outdoors<sup>1</sup>. I do not intend to differentiate

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<sup>1</sup> I chose not to use the concept Sports, as sports in English carries a narrower meaning leaning towards competition and rule based activities (Cambridge Dictionary 2023).

between activities performed for leisure or for competition, nor between high intensity and low intensity activities.

The empirical problem that this thesis addresses are the challenges of planning for outdoor recreation *for all* in a planning system today that is heavily influenced by compact city ideals. As will be discussed under following heading, outdoor recreation is needed as part of counteracting public health challenges. At the same time, urban form is increasingly becoming more compact, which means less room for a mix of functions. Furthermore, increased density and residential developments in compact forms equals more inhabitants, which puts stress on existing recreational landscapes, while the challenge of making room for new recreational facilities in the compact city prevails. As this thesis introduction suggests, a large share of the infrastructure that makes up the public provision of recreational opportunities in Sweden today are a direct legacy of recreational planning from the late modernist era. Furthermore, the notion of *Sport for All* has not been forgotten and still permeates the public discourse on sports and recreation, where equal access coupled with a strong belief in the benefits of physical activities is central (see e.g. Sveriges Kommuner och Landsting 2011; Norberg 2022). Therefore, the contemporary planning for outdoor recreation must be scrutinised in the light of this history, both regarding the material and discursive legacies that remain. Adding into this relation between past and future recreational planning is the inherent critique of late modernist planning permeating the contemporary urban discourse on compact cities (Valzania 2022, Zalar & Pries 2022, Braae et al. 2021).

Hence, at least two intersecting conflicts for recreational planning in the Swedish compact city emerge, between the compact urban form and sites for outdoor recreation and between the compact city discourse and the legacies of late modernist spatial planning. The thesis offers a foundation for discussing how to plan for outdoor recreation, given these conflicts.

These conflicts are firmly socio-material in their appearance, and placed in the interface between a tangible landscape and processual planning. In order to address the interplay between landscape and planning, I lean on a theoretical frame that rests on assemblage theory for its fundamental *material-semiotic* and *relational* ontology. Additional theoretical lenses from landscape planning studies and science and technology studies help decipher how planning practice *orders* space and *modifies* issues for planning; how the landscape carries *materialisations* of past discourses, and

how these historical materialisations are mobilised into contemporary planning. I expand on these theoretical lenses in Chapter 4.

## 1.1 The relevance of studying outdoor recreation

The UN Global Sustainable Development Goals define good health and wellbeing as one of the key goals for Agenda 2030. Sedentary lifestyles, contributing to cardio-vascular diseases, obesity and mental health issues are increasingly reported as acute issues for spatial and urban planning at a global scale (World Health Organisation 2019). Sallis et al. go as far as labelling physical inactivity a “global pandemic” (Sallis et al. 2016: 2207). Similar trends of declining health are also visible in Sweden, even if the aggregated overall public health is improving. An increasing health gap is visible in Sweden indicating that the benefits of public health are not equally distributed. Mental and physical health problems are increasing in certain segments of the population, often structured along levels of income, age, education, place of residency and ethnicity (Folkhälsomyndigheten 2022). The question of access to recreational opportunities thus turns into a question of health equality (Dobson et al. 2021). To cater to increased public health, in both urban and rural settlements, is therefore a key challenge for contemporary societies. Recreational activities, indoors and outdoors, are proven to benefit both mental and physical health (Bize et al. 2007; Hitchings and Latham 2017), as well as access to public urban green spaces (Chen et al. 2023). Therefore, outdoor recreation is a central piece in the urban public health puzzle.

By the end of the 20<sup>th</sup> century, the fields of public health and urban planning have drifted apart, to become increasingly specialised and separated from historically strong connections (Corburn 2004; Beaten 2021). There have been several calls to reinstate the connection between policies and planning for public health and urban planning (Crawford et al. 2010; Verbeek & Boelens 2016; Hitchings & Latham 2017; Scott et al. 2018). On an international level, we have learned a great deal from the recent Covid-19 pandemic regarding increased use, wear and density of urban sites for outdoor recreation (Scott 2020; Venter et al. 2020). In Sweden Hansen et al. (2022) have stressed a need for reconciling questions of density with the provision of urban green spaces and outdoor recreational amenities (see also e.g. Bereitschaft and Scheller 2020; Deponte et al. 2020; Hansen et al. 2022).

In light of these health challenges, and with the knowledge of the health promoting aspects of outdoor recreation, it is a vital task for urban planners worldwide to address how outdoor recreational amenities are integrated into the urban fabric, especially considering the increasingly density of these areas. It is also a fundamental task for researchers to address and scrutinise the challenges of providing outdoor recreational amenities in urban areas and cities; this is what I hope to do in this thesis.



Figure 2: A new layer of recreational use in Apoteksskogen, Upplands Väsby: a path for mountain biking. The recreational landscape is constantly changing, be it due to disinvestments of previous infrastructure or investments in new facilities.

## 1.2 Aim and research questions

The focus of this thesis is the relationship between outdoor recreation, planning legacies and urban density within the paradigm of compact city making. Previous research has shown that this relation brings several conflicts. With this thesis, I hope to build on previous research and further scrutinise the character of this relation and deepen the understanding, of interactions and tensions between outdoor recreation, planning legacies and urban compactness.

Furthermore, by exploring the legacies of past recreational planning in relation to compact city making, I hope to bring insights to the ongoing debate of the challenges of compact city making in Sweden, in a time where outdoor recreational opportunities and the services provided by recreational landscapes are essential.

The thesis is guided by the following research question:

1. How are recreational landscapes transformed in the interaction between contemporary urban ideals and legacies of past recreational planning?

In order to probe into this question, I ask three additional questions that build on the theoretical framework of the thesis:

- 1a How is outdoor recreation *modified* and made into an *issue* for planning, in municipal plans and policies?
- 1b How is the planning issue of outdoor recreation *ordered* geographically?
- 1c How are *materialised discourses* of previous planning for outdoor recreation in the landscape mobilised into contemporary planning for outdoor recreation?

While I formulate these questions in general terms, I use them to research a set of situated case studies. The empirical explorations thus direct these questions towards particular planning-historical contexts. In the discussion of findings and concluding reflections of the thesis (Chapter 7 and 8) I return to how the knowledge from the situated cases can benefit research and practice in other planning-historical contexts.

### 1.3 Outline of the thesis

Four scientific papers and eight chapters compile the thesis.

Chapter 1 introduces the thesis and presents the research aim and questions. Chapter 2 presents the research design. Chapter 3 continues to further introduce and contextualise the geographies of outdoor recreation in relation to the compact city, to historical legacies and to the Swedish planning system. Throughout Chapter 3, I introduce previous research. Chapter 4 presents the theoretical framework that supports the analysis and interpretation of the empirical material. In Chapter 5, I introduce the research methods and discuss the empirical material and its limitations. Chapter 6 presents the four papers and a summary of the main findings. The papers are reproduced in their full length at the end of the thesis. In Chapter 7, I discuss the findings in relation to the posed research questions. In Chapter 8, I offer some concluding reflections and trajectories for continued research.

## 2. Research design

Before going further, a section on research design is helpful to lay the material-semiotic and relational perspectives that guide the thesis.

I perceive the scientific endeavour of the thesis as a “process that does not aim at a final result and an end to the endeavour, but rather a continuous effort to safeguard our openness to the encounter capable of engendering thinking itself” (Somers-Hall 2012: 8). Hence, I aim for a deepened understanding that might lead further to new processes of learning.

The topic of this thesis is, as discussed in the introductory chapter, the tensions and interactions between outdoor recreation, planning legacies and contemporary urban planning for compact cities. However, given its complexity, this topic has not been easily delineated. As other scholars have drawn on a relational approach, I have repeatedly struggled with how to delimit this interaction, which is continuously “overlapping, blending, merging” (Högström & Philo 2020) with other topics, sites and conflicts (see also e.g. Metzger 2013). Yet, as the relations are brought into focus, it would not be sufficient to only study, for instance, the physical landscape and describe its composition and variation. Nor would it be adequate to study only the processes and practices of planning. What I wish to address is the interactions between landscape and planning.

In discussing landscape, I am referring to a particular understanding of landscapes as simultaneously temporal, spatial and political (Germundsson et al. 2022) and conditioned by the interaction between material and discursive elements (c.f. Marcucci 2000). As briefly discussed in relation to the concept of welfare landscape, the notion of landscape in this context is an everyday landscape where the physical and symbolic interact. This understanding could potentially be filed under a broad ‘Nordic’ way of understanding landscape, opposed to an ‘Anglo-American’ understanding

that rather stresses more abstract visual or scenery aspects of landscape (Setten 2006; Wylie 2007; Germundsson et al. 2022). Such perspectives do not necessarily disregard how materialities interfere in the production of landscapes but tend to give it lesser attention (McCann 1997).

Following Schein (1997) and Bender (2002), my view on landscape underscores its inherent process of becoming. A landscape must therefore not only be researched as a result of its lingering history, but as equally dependent on its present and, especially when researching landscape in relation to planning, as contingent on the ever occurring interaction between the stabilised materialised discourses and its emergent, in waiting, future state (Qviström & Saltzman 2006; Setten 2017). A view on landscape as a blank sheet for development is thus equally limited as a view on landscape as solely history. An ever-occurring change lies at the heart of the landscape. The change is contingent on multiple paths that have already left traces of the process of emerging.

In this thesis, I draw attention to three aspects of the recreational landscape. Namely the geographical ordering of outdoor recreation, the way outdoor recreation is modified as an issue in policies and plans and the materialised discourses of previous planning.

Several scholars seek to address the interactions between landscape and planning. Vital insights for the development of the thesis come from scholars adopting a historical perspective for discussing the ways in which landscapes and urban planning practices have co-evolved, and continue to interact through contemporary practices and imagined futures (see e.g. Qviström & Saltzman 2006; Qviström 2010; Pries & Qviström 2021; Hautamäki 2020; 2021; 2022). As shown by De Block (2014) and Hautamäki (2022), among others, landscapes are seldom unplanned and empty grounds for urban planning to unfold upon, but rather shaped by continuous tensions between planning interventions, land uses and socio-material formations. Therefore, the landscape and urban planning interface is shaped by continuities and ruptures (Hautamäki 2022) as legacies from the past are in constant interaction with contemporary practices and open futures. Hence, the landscape is not a fixed entity. Neither is planning a fixed practice. Rather, they are interdependent and changing through internal and external relations (cf. Tuvikene et al. 2022).

What these scholars share is a sensitivity towards the “notoriously heterogeneous relationships that constitute the land-shaping interplay”

(Qviström 2010:221), taking interest in the “constant interaction between the material and the immaterial aspects of landscape, as well as between nature and culture” (Qviström & Saltzman 2006: 22). They also share a view on urban planning not as rational and linear, but as given shape by the many relations between actors, documents, concrete materialisations and ideologies (see e.g. De Block 2014). I share this attention to interdependencies, relations, change and the “interwoven nature of discourse and materiality” (McCann 1997: 643). As such, the thesis fits into a broad tradition of analytical approaches interested in material-semiotic relations and how “the heterogeneous elements of the social-and-material overlap, influence one another and generally fit themselves together or not” (Law 2019: 3 see also Asdal & Reinertsen 2021). This approach is visible in the theoretical framework of the thesis that I will present further in Chapter 4.

The material-semiotic approach has also helped me move away from the uneasy feeling of being caught in a scientific borderland, which working within the discipline of landscape planning can sometimes bring. Despite this thesis being located in landscape planning, I have chosen not to use the concept of landscape planning extensively in the thesis nor in the papers. This is due to the weak official status of the concept of “landscape planning” in Sweden. Landscape planning is seldom present in the terminology of municipal urban or spatial planning. It is also a discipline and practice that is not always easy to frame as it “benefits from a rich amalgam of different theoretical and methodological perspectives” (Kidd 2013:370). Instead of chasing ‘landscape planning practices’ I have addressed the multifaceted character of landscape planning by looking for intersections between landscape and planning.



### 3. Background and previous research

In this chapter, I will discuss the background of the thesis, divided into three themes. Firstly, I discuss the compact city as a model for urban development and the role of outdoor recreation in compact cities. Secondly, I examine the historical layers of planning for outdoor recreation in Sweden. Thirdly, I discuss outdoor recreation from the perspective of the contemporary frames of the Swedish planning system.

The thesis takes an interdisciplinary approach and moves between several fields of research on compact cities and their making, on outdoor recreation, and green planning and on the welfare landscapes. I will not present one separate section on previous research. Instead, I use this chapter to continuously reference and discuss selected segments of previous research that addresses similar issues as the ones in focus for the thesis. Therefore, I use the three themes in this chapter to present previous research on outdoor recreation in the compact city, from multiple perspectives, research on the legacy of the welfare landscapes in Sweden, and research on outdoor recreation as a topic in contemporary Swedish urban planning.

#### 3.1 The compact city as model for urban development

The compact city refers to an “ideal urban model” often lifted as a direct response to the contemporary challenges of urban sustainability (Adelfio et al. 2018). Planning for the compact city entails coordinating and co-ordering high urban density with sustainability measures targeting sustainable mobilities and effective land use (i.e. non-sprawl). The hegemonic position of compact city models in contemporary urban planning could be understood as having its foundation on two building blocks, which have been well researched individually and in relation to each other. Partly, the compact city

model rests on the idea of density as a solution to sustainability challenges. In addition, partly, on the idea of the City as attractive and desirable living environment.

The compact city, as a sustainable and therefore desirable urban form, grew in popularity during the 1980's and 1990's (Burton 2002; Røe et al. 2022) primarily resting on research showing the correlations of urban density and decreased car dependency, and thus lowered CO2 emissions (see e.g. Newman & Kenworthy 1999). While there is little consensus on how density should be measured or defined (Neuman 2005), density is often framed through the nexus of material-technical descriptors that are in different ways conjoined into a dense urban environment. Key terms, such as intensity, diversity, access, form and size capture a wide range of qualities associated with compact cities (Kain et al. 2022). In more detail, infrastructural solutions, land use combinations, walkability measures or building block typology are mixed with a set of social-cultural characteristics indicating aspects such as supply of services and leisurely activities, social cohesion or liveability (c.f. Burton 2002; Westerink et al. 2013). Functional mix together with sustainable modes of traffic are regarded as the two cornerstones for reducing CO2 emissions, based on the idea that residents in a mixed use environment are less dependent on unsustainable modes of transportation and would rather utilise walking, biking or public transport (see e.g. Bibri et al. 2020).

Functional mix is also one of the cornerstones of the city as an attractive living environment. In this vein, besides being put forth as a response to issues of sustainability, the compact city ideal taps into a growing interest in new urbanism and the traditional city as a vital and ideal living environment, one with preferred aesthetics (Burton 2002; Tunström 2007, Wachsmuth 2014). Originating in the US during the 1980's, new urbanist agendas included pedestrian friendly streetscapes, mixed-developments, neo-traditional aesthetics, transit-oriented developments and increased density. These aspects have grown their influence in planning contexts throughout the world (MacLeod 2013; McFarlane 2016). Resting on scholars such as Jan Gehls and Jane Jacobs and their "idyllic descriptions of centre urbanism" (Haarstad et al. 2023:7; see also Røe et al. 2022), the growing interest in new urbanist strategies tapped into the compact city discussion, however increasingly adjusted to a neoliberal era, drawing direct relationships between the city and urban competitiveness (Wachsmuth 2014).

The compact city is often held in opposition to late modernist planning, characterised by urban sprawl, car dependency and the segregation of urban functions, often separated by large green areas of infrastructure (Qviström et al. 2016; Balikçi et al. 2022; Zalar and Pries 2022). Embedded in this critique lies a reinforcement of the compact city as more sustainable, in ecological terms (see e.g. Jabareen 2006), as more aesthetically pleasing (Mack 2021), safer and as fostering social cohesion and neighbourhood revitalisation (Mouratidis 2019b; Kain et al. 2022). In Sweden, this complex duality between (modernist) suburbs and city is often enacted through densification projects aimed at ‘connecting’, ‘healing’ and ‘build together’ neighbourhoods characterised by late modernist typologies (see e.g. Stockholms stad, 2010; 2018; Uggla, 2012; Malmö stad, 2014) to embed these in a denser, more *city-like* or *stadsmässig* (Kristensson 2003; Tunström 2007) form.

The impression of urban densities directly correlating to increased sustainability, as well as the idea of the city as an attractive and preferred living environment, have both been critiqued. Additionally, the over belief of the positive effects of compact city making have been nuanced. Røe et al. summarises the central points of the critique as focusing on the compact city proponents’ inability to engage with “social, economic and ecological factors that are fundamental to sustainability, such as affordability, segregation, urban metabolism and urban financialization” (Røe et al. 2022: 196). Therefore, recent calls for the need to diversify the view and studies of, the compact city are being lifted to highlight how compactness needs to be understood as far more complex than measurements of spatial density (see e.g. McFarlane, 2016; 2020a; 2020b; Blanc and White 2020; Keil 2020; Pérez, 2020; Kjærås 2021; Haarstad et al. 2023).

### 3.1.1 Outdoor recreation and the compact city

As a response to the pressing health challenges discussed in Section 1.1, and partly in response to the critiques of the spaciousness of late modernist planning, compact city forms and associated urban models such as Transit-oriented Development (TOD) are frequently promoted as benefiting public health and urban sustainability. In supporting active modes of transportation by providing walkable and cycle-friendly neighbourhoods and close proximity between residential areas, work places, transit nodes and other services, the compact city is positioned as more healthful than sprawled urban forms (Frank et al. 2004; Heinen et al. 2010; Thornton et al 2013;

Langlois et al. 2016; Sallis et al. 2016). Despite the arguments on the health benefits of compact cities, research on the intersections between outdoor recreation and compact cities are scarce. If searching for research on the topics of ‘outdoor recreation’ and ‘compact cities’ in the scientific online database Scopus, one receives only three papers (Jim & Chen 2006; Lo & Jim 2010; Qviström 2022). If, instead looking for intersections between compact cities and health, green space, green planning, leisure and physical activities, numerous rich fields of research appear.

A large field of research focuses on how the urban forms of compact cities are generating active movement and supports public health. By encouraging active modes of transportation (via walkable and cycle-friendly neighbourhoods and close proximity between residential areas, work places, transit nodes and other services), the compact city is often seen as more health promoting than sprawled urban forms (see e.g. Frank et al. 2004; Brown and Werner 2009; Heinen et al. 2010; Thornton et al 2013; Langlois et al. 2016; Sallis et al. 2016). Furthermore, research has been done on the benefits of outdoor recreation and access to urban green space in compact cities and dense urban environments (see e.g. Pretty et al. 2005; Hartig et al. 2014). Critical studies of compact city developments challenge the view of compact urban forms as univocally beneficial for public health, especially due to the strained geography of urban green space and outdoor recreation (see e.g. Haaland & van den Bosch 2015; Balikçi et al. 2022). Building on this, other studies address the challenges of managing and ensuring the high quality of urban green spaces in compact cities (see e.g. Khoshkar et al. 2018; Jansson et al. 2019).

Another field of research targets outdoor recreation as individual practice and experience in compact cities. Parts of this research leans on quantitative and GIS methodologies to map and model relationships between individual demands and supply of recreation amenities (Lindholst et al. 2015; Hegetschweiler et al. 2017; Komossa et al. 2019; Zhou et al. 2021; Lehto et al. 2022), or to scrutinise the distribution of access to outdoor recreational opportunities (Dahmann et al. 2010). Another aspect of individual recreational practices in compact cities can be found in qualitative research. Scrutiny of how the compact urban form infringes on individual opportunity to outdoor recreational activities shows an increased level of conflict between user groups (Flemsæter et al. 2015; Børrud 2016), displacement of recreational opportunities in the wake of densification and increased reliance

on recreational amenities outside the city (see e.g. Holden & Norland 2005; Westerink 2013; Qviström et al. 2016; Mouratidis 2019a). Reported changes in use patterns and the preferences of recreationists or the emergence of new recreational activities (Gurholt and Broch 2019) and changed engagement in and the position of sports associations (Elofsson et al. 2018) are all processes that put stress on planning for outdoor recreation in the compact city.

Another strand of research emphasizes how outdoor recreation and green planning are integrated into the urban economy. Ugglå, (2012), Gabriel (2016), Hautamäki (2019) and De Martini Ugolotti (2017) disclose how public green spaces, parks and recreational activities are continuously reassembled into “promotional tools” (Gabriel 2016) in the urban economy to attract investments, dislocating recreational opportunities for the sake of urban economic growth. A growing strand of research on green gentrification further nuances the role of green space in the compact city. For instance, Anguelovski et al. (2018) question if urban greening and investments in green space can be seen as an undisputable public good. Instead, they show how such green interventions could lead to gentrification via increasing costs, effectively creating a geography of “enclaves of environmental privilege” (Anguelovski et al. 2019: 1065). Other studies relate outdoor recreation, via urban green spaces, with issues of environmental management, environmental sustainability and ecosystem services to show the multiple potentials of recreational planning in the compact city, reaching beyond offering recreational opportunities (see e.g. Tzoulas 2007; Jansson 2014; Russo & Cirella 2018).

This short presentation of previous research shows how much scientific attention has been placed on the diverse demands for green space and outdoor recreational opportunities. A large extent of the research addresses challenges of maintenance, sustainability, quality, accessibility, preferences and experiences in relation to outdoor recreation in the compact city. Often, these studies point to increased congestion of green space causing conflicts among users, as well as between the many services that urban green spaces are thought to provide, such as ecosystem services, biodiversity and recreational opportunities. These findings highlight the need for deeper scrutiny of the systemic, legal, technical and organisational preconditions for planning and materialising sufficient outdoor recreational spaces in the compact city. Boulton et al. address what they define as a lack of research on the “practice of providing greenspace” (2018: 86) in a recent review article. Their findings suggest that increased attention should be placed on the approaches used in

green space planning in order to be able to evaluate the relationships between scientific knowledge and the need for urban green space, and the actual work of providing urban green space. In particular, they ask for deeper understanding on how “the factors influencing provision of urban green space ‘play out on the ground’” (Boulton et al. 2018: 99).

Leaning on the multiple intersecting fields of research presented above, this thesis follows Boulton et al. (2018) and seeks to deepen the understanding of the practices of providing outdoor recreation within the compact city. Thus, we shift the attention from dealing with recreation as an individual and social practice, or as a topic for maintenance, to recreation as a publicly enforced structure (see Veal 1992), defined and modified in planning policy and materialised and spatialised through planning practice.

## 3.2 Historical layers of recreational planning in Sweden

In this section, I introduce the grounds for what has become known as the “Sports for All” approach in Swedish sports policy and public debate on sports and outdoor recreation. I describe how the Sports for All approach materialised as one element of the wider recreational landscapes. I also present previous research on the legacy and reconfiguration of welfare landscapes in Sweden and the Nordic context.

### 3.2.1 Sports for All

In Sweden, the relations between public health, urban planning and outdoor recreation has deep roots. The belief in the importance of health promoting urban environments can be traced back to debates on what was described as the overcrowded, infectious and (materially, morally and socially) disorderly dense cities of the industrial era (Niemi 2016). Echoing the extensive interest in issues of public health in the early developments of town planning (Corburn 2007; Lennon 2021), the early 1900’s came with an increased attention to leisure and outdoor recreation as fundamental for policies targeting health and well-being (Franzén & Sandstedt 1993; Strömngren 2007; Baeten 2021).

During the 1960’s, the ideas of the beneficial and nurturing exercise and outdoor life increasingly interacted with another major project, that of the growing welfare society (Sandell 2008). One indication of the growing interest in outdoor recreation as topic supporting the establishment and

refinement of the welfare society, is the number of public inquiries published under the rubric of Government Official Reports (Statens Offentliga Utredningar, or SOU), (see e.g. Fritidsutredningen 1964; 1965; 1966; Idrottsutredningen). A public inquiry, or SOU, is a central element in Swedish state governing, which acts as a tool for inquiry, defining problems and offering solutions and ideas for future decisions on topical issues (Österlind & Wright 2014). While the suggestions in the final reports of each SOU do not necessarily lead to political decisions, they offer insight to the political debate of the time and “reflect how social, cultural and historical conditions render certain knowledges and truths possible at the time of writing” (Österlind & Wright 2014). One of the key inquiries during this time, called “Sports for All”, was initiated in 1965 by the Social Democratic Minister, Gunnar Lange (Idrottsutredningen 1969), as an inquiry that subsequently led to government initiatives on public funding to the sports movement (Gov. Bill 1970:79), but that also came to have an impact on the broader public debate and understanding of sports.

The main purpose of the Sport for All inquiry was to investigate and propose new forms for the public financial support to the Swedish sports movement, as an indication of the growing awareness of the social benefits of sports (Norberg 2004). Increasing urban density in the wake of residential development, a mechanisation of labour and increased leisure time due to a reduction of working hours, were explained as reasons for the need for enabling sports and leisure for all. The inquiry was motivated by “the importance of sports as preventive health care, as suitable leisure activity, and as important youth activity” (Idrottsutredningen 1969: 10). Within this incentive lies strong moral connotations in the suggestion of sports a suitable and nurturing leisure activity, especially among youth (Norberg 2004; Österlind & Wright 2014 see also Idrottsutredningen 1969: 37).

Regarding the question of defining sports, the inquiry of Sports for All puts forward a discussion that in many ways overrides many previous attempts to separate and distinguish specific activities. The authors of the inquiry do not seek to distinguish between activities of competition (tävlingsidrott) and activities of non-competitive exercise (motionsidrott) as these are, to a large degree, integrated into each other. Furthermore, they do not seek to differentiate between outdoor recreation (friluftsliv) and sport; where sport has traditionally been seen as being performed in sports facilities and outdoor activities are done in nature. Instead, as they argue outdoor life and sports

have come to “grow together as an inseparable whole, where two activities mutually supports and benefits each other” (Idrottsutredningen 1969: 22). Lastly, from being perceived as a predominantly youth centred activity, participation in sport needs, according to the public report, to be enabled for all groups in society, as a form of preventive healthcare to counteract the negative effects of an increasingly sedentary lifestyle. The inquiry, which has been described as a milestone in Swedish sport policy (Österlind & Wright 2014) had a major impact, shaping the financial support for the sports movement, and by extension also the relationship between the state and the non-governmental sports associations, during the late 1900’s (Government bill 1970:79; Norberg 2004). Furthermore, the discursive framing of an egalitarian approach of enabling Sports for All groups in society, have had a deep impact as a “guiding star” for Swedish sports politics (Fahlén & Karp 2010: 4).

The term “Sports for All” is still evoked in discussions over challenges with unequal access to sports facilities, enrolment in sports associations and sports activities (see e.g. Österlind 2016; Norberg 2018). Furthermore, in international and Swedish research, Swedish national sports politics are still described as a “sports-for-all approach”, stressing the “emphasis on universalism, stateness, and equality” (Giulianotti et al. 2019: 546; see also Skille 2011) within sports and outdoor recreation, policy and politics.

### 3.2.2 Materialising sport for all

The ideas and discussions presented in the Sports for All inquiry came not only to influence financial support to sports associations, but also to materialise into a multifaceted supply of facilities and protected natural areas. A key part in realising the new policies of Sports for All, was an increased focus on integrating planning for sports, leisure and recreation into the realms and processes of urban planning (Moen 1991; Sandell 2008; Pries and Qviström 2021).

The period of late modernist urban planning, which I see as the period between roughly 1960 to mid-1970 (Roos & Gelotte 2004; Hall & Vidén 2005), is in Sweden often exemplified with the so called Million Homes Program; a program initiated by the leading Social Democratic party with the aim of constructing one million housing units in under ten years. The program, which ran between 1965 to 1974, succeeded in reaching its goals. Multifamily houses, terraced houses and single family houses were planned

and constructed, together with infrastructural investments, schools and other public services, commercial areas, and green spaces all over the country (Hall & Vidén 2006).

As a form of “welfarist spatial production” (Pries & Qviström 2022: 186) the planning during the late modernist era was not only a question of rationalised modes of construction, but equally a way of materialising the social ambitions of the welfare state (see also Braae et al. 2020 for similar trends in Denmark), including the prevalent idea of accessible recreation. Hence, in the planning of neighbourhoods, sports facilities and recreational areas could be included from the early stages, resulting in a vast and multiscale recreational infrastructure, often built into the residential fabric or urban fringes and as part of the extensive network of public green space (see Book 2015; Qviström 2013, Pries & Qviström 2021).

Similar multiscale networks of public green space for recreation and leisure can also be observed in post-war urban areas in Denmark (see e.g. Braae et al 2020; Jessen & Tietjen 2021; Høghøj 2022), and as Hautamäki (2022) shows, recreational planning and landscape planning came also to be closely tied to urbanisation in Finland during the post-war period. In Sweden, a multitude of indoor and outdoor sports facilities, football fields, lighted running tracks, ski facilities, open fields for spontaneous activities, natural areas for hiking and a wide variety of other facilities came to materialise during the 1960-70s (Moen, 1991 see also Sandell 2008). These recreation areas are still in use and constitute the foundation for contemporary sports and recreational infrastructure in Swedish cities and towns. Swedish late modernist urban planning and urban typologies are thus closely intertwined with the recreational landscape within and around residential areas.

The legacy of late modernist planning is not just present in the form of existing housing and recreational amenities. This period, especially the Million Homes program, is also apparent in public debate as the stigmatised ‘other’ of contemporary planning paradigms (Backvall 2019), depicted as “a hatred of ‘urbanism’” (Mattsson & Wallenstein 2010:8). Harsh critiques of the inhabitability and scarce design of the neighbourhood began already before the end of the Million Homes program (Hall & Vidén 2006; Mack 2021) and targeted poor design of courtyards and the lack of plant species (Mack 2019). These critiques have not faded, but rather increased in strength and the neighbourhoods from this epoch are continuously described as deprived, and as “spaces of danger, violence, social exclusion, and, critically,

ugliness and concrete” (Mack 2021: 558). However, the wider landscape, moving out from the courtyards to the geographical layout of accessible recreational spaces of various kinds in the landscape, have until recently received little attention in public debate and in research.

New inquiries into the foundations and rearrangement of these late modernist welfare landscapes are beginning to shed light on the rich historical legacies, especially in a Nordic context (see e.g. Braae et al 2020; Hautamäki & Donner 2021; Jessen & Tietjen 2021; Mack 2021; Pries & Qviström 2021; Zalar & Pries 2022 see also Valzania 2022 for a Canadian perspective). Braae et al. (2020) shed light on the current lack of attention to welfare landscapes in both scientific inquiry and in public debates. They argue that, in effect, through schemes of densification and urban renewal “the landscapes of post-war housing estates are often changed radically without further enquiry or discussion of the specificities of those landscapes” (Braae et al. 2020: 29). Similarly, Zalar and Pries (2022), who show how green space planned in the post-war years became ‘unmapped’ and un-specified through the work of planning documents, policies and maps. Such epistemological moves enable the heavy mobilisation of green space as pristine land for development, making space for heavy densification while dispossessing residents’ right to green space. As the Zalar and Pries study indicates, a closer look at how outdoor recreation is planned in the compact city, with attention to the roles played by the materialised discourses in the landscape, can shed light on how policies for contemporary urbanity “selectively reconfigure inherited material structures” (Collier 2011: 3) of a vivid welfare landscape.

As discussed by Braae et al. (2020), Zalar and Pries (2022) and Mack (2021) amongst others, the welfare landscapes of late modernist planning is repeatedly targeted for extensive material reconfigurations. Waves of densification and extensive redesigning of public spaces puts not just the welfare landscapes in general into new contexts, but also its recreational landscapes. Furthermore, also in the public debate and in research literature, the welfare landscapes of late modernist planning is reconfigured. Framed as an indicator of social wellbeing and public health, these landscapes are increasingly described in terms of exclusion and poor living condition, and thus in ‘need’ of change towards more sustainable, often more compact, forms (Mack 2019). Hence, the current interest for compact cities should not

(only) be understood as emerging in new urban enclaves, but also indeed from *within* the modernist city (c.f. Collier 2011).



Figure 3: A new park and buildings with golden facades, emerging as part of a new compact city in the middle of a 1970's development. Blå Parken in Upplands Väsby.

### 3.3 Outdoor recreation in contemporary urban planning in Sweden

The main legal framework that regulates land use planning in Sweden is the Planning and Building Act (*plan- och bygglag*) (SFS: 2010:900). The Planning and Building Act regulates the planning process by identifying key actors and their respective responsibilities, describing key documents and processes for public participation. Furthermore, the Planning and Building Act states that both private and public interests should be taken into consideration.

On the list of public interest, one finds topics such as “appropriate structure” and “aesthetic form” of built up areas and green areas, and a “good living environment” accessible for all groups of society (SFS: 2010:900 Ch. 4 §3).

Regarding outdoor recreation, the Planning and Building Act states that, in close relation to cohesive residential areas, there should be “parks and other green areas” and “suitable spaces for play, sports and other outdoor activities”. How close to residential units, how much space per person or range of activities is not specified. Neither is spatial distribution, form or design. Beyond the Planning and Building Act, other laws also regulate land use planning. For instance, the Environmental Code (SFS 1998:808) prohibits development in specific areas based on environmental concerns. Besides laws and regulations, there are few tools for land use planning at the national level.

The primary responsibility for urban planning is placed on the 290 municipalities in the form of a municipal planning monopoly. The monopoly, defined in the second paragraph of the first chapter of the Planning and Building Act, ultimately gives the municipalities the right to decide “where, when and how” (Cars & Hedström, 2006: 157) spatial development should take place. At its disposal, the municipality has a set of predefined planning documents, of which two are mandatory for development to take place: the Municipal Comprehensive Plan and the Detailed Development Plan.

The Municipal Comprehensive Plan is a non-binding plan that spans over the municipal area, indicating political ambitions for future development. It is adopted by the local municipal government and serves as a guiding document for the subsequent Detailed Development Plans. Current trends show an increased strategic role for the Municipal Comprehensive Plan, moving beyond land use allocations, in order to merge the many topical issues that fall under municipal responsibility. As such, the Municipal Comprehensive Plan is increasingly becoming a strategic document, which functions as an instrument for negotiation between competing interests (Bjärstig et al. 2018) and seeks consensus to facilitate an efficient plan (Schmitt & Smas 2019). The increasingly strategic role of the Municipal Comprehensive Plan leaves much of the actual prioritisation between land uses to be reconciled with within each, geographically limited, Detailed Development Plan. Local planners thus have to navigate the distance between a future oriented Municipal Comprehensive Plan and a case-by-case decision making and technical prescription of each development project (Schmitt & Smas 2019, Zakhour & Metzger 2018). It is thus in the Detailed Development Plan that land uses are formalised and made legally binding. The Detailed Development Plan includes a plan map over detailed land uses

that are regulated via detailed stipulations with associated attributes and administrative regulations. With this map comes an associated planning description document, providing support for how to interpret the rather technical language of the plan map.

The National Board of Housing, Building and Planning (*Boverket*, hereafter the NBPBH) issues guidelines for how and what types of stipulations should be used. No specific stipulation exists for outdoor recreation, but recreational uses are decided through associated attributes to other, more general land uses. The land use category *park* can be specified into attributes such as, football pitch, outdoor gym or playground. The category *nature*, used to regulate green areas without demand for maintenance, can also be used for “smaller park, water and outdoor life facilities”. *Visitor facility* is used for regulating land that focuses on visitor use, including “cultural and religious activities, sports activities” (Boverket 2021). Hence, many forms of recreational uses are specified as part of the legally binding land use stipulations. However, land uses can also be described in the planning description, where judicial and binding relevance is less obvious, as the document offers interpretations of the plan, rather than legal regulations.

Outdoor recreation in Sweden has been well researched in relation to rural and natural areas (see e.g. Sandell and Sörlin 2000; Emmelin 2010; Fredman et al. 2013) and in relation to user perceptions and preferences in urban settings (see e.g. Hedenborg et al. 2022; Lehto et al. 2022; Elbakidze et al. 2022; Dawson et al. 2023). Lesser attention has been given to outdoor recreation in municipal urban planning practices and projects<sup>2</sup>. This is potentially due to its transgressive character, moving between the interests of the Planning and Building Act and the Environmental Code, which Peterson-Forsberg (2014) have explored. Peterson-Forsberg (2014) investigates the legal framework of spatial management of outdoor recreation in Sweden, showing its uneasy position in-between the Planning and Building Act, regulating land use, and the Environmental Code, regulating and protecting natural areas. Outdoor recreation appears briefly within the legal text of both the Planning and Building Act and the Environmental Code, but as seen, neither presents binding norms of frameworks for how or where outdoor recreation is to take place. Instead, outdoor recreation becomes a public interest among others, open for

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<sup>2</sup> As an illustration, a search for “urban planning + recreation + Sweden” in Scopus result in 17 articles.

interpretation and deliberation (Peterson-Forsberg 2014). Stenseke and Hansen (2014) scrutinise in the connection between outdoor recreation management and nature conservation in rural and coastal areas. Their findings suggest that while a strong rhetoric on the importance of enabling outdoor recreation in natural areas prevails, few tools and knowledge on how to actually enable outdoor recreation in natural areas exists. This leads to an “ad hoc” approach to outdoor recreation management and a strong dependence on the knowledge and interpretation of individual practitioners, which often turn out to be a biologist rather than an expert in outdoor recreation, social science or human behaviour (Stenseke & Hansen 2014).

Overlaps between a narrower definition of sports and spatial planning is offered by Book (2015). From interviews and focus groups containing representatives from spatial planning organisations in three municipalities, we see how interests from the National Sports Confederation, the umbrella organisation for Swedish sports associations, are difficult to encompass into the current planning system. The time perspectives of comprehensive planning are perceived by planners as difficult to couple with the shorter time horizons of local sports associations. Books (2015) report notices the multiple geographies within the planning system and difficulties of finding a suitable way to insert sports geographies into this multitude, especially in the rapid process of densification, indicating a need for further research. Sjöblom (2015) notices how discrepancies in knowledge and aspirations between key actors (politicians and public officers within municipalities, sports associations, state and regional organisations), hampers the development of sports integration into spatial planning. Both Book (2015) and Sjöblom (2015) take special interest in facilities for organised sports. The Sjöbloms case evaluates indoor facilities such as sports halls, ice halls, facilities for physical education and swimming halls. Hence, while providing fruitful insights into the overlaps, or lack of overlaps, between the world of sports associations and municipal urban planning, the two reports do not go deeper into the practices performed within the municipalities regarding a wider recreational landscape.

## 4. Theoretical framework

The framework I rely on in this thesis consists of three parts, that while presented separately in this chapter, share many commonalities, such as a relational and material-semiotic approach.

Assemblage theory, as one of these three parts, forms a philosophical base for how to interpret the world as always becoming, meaning never stable nor built on predefined identities or dichotomies. This approach transfers attention from seeking the ‘final points’ of planning to instead seeing planning as a way of ordering flow and relations (Hillier 2005). Furthermore, it provides another option for handling complexity rather than the conventional division of substantive and procedural theories of landscape planning (Butler 2014; Calderon & Butler 2021) and instead focuses on the intermingling of the substantial and procedural. In other words, how landscapes *come to be* and what landscapes *are*, is not possible to separate. In this thesis, I apply assemblage theory as a base for addressing the relations between the recreational landscapes and urban planning.

The second section includes the notion of materialised discourses in the landscape. I will argue throughout the thesis that this sheds light on how both compact city making and contemporary recreational planning are heavily reliant on their modernist predecessors. Furthermore, it raises the question of how materialised discourses in the landscapes can be, or are, mobilised into contemporary urban and recreational planning.

The third aspect is inspired by science and technology scholars and deepens the attention to the ordering effects of planning practices and planning techniques. Attending to the ordering effects of planning offers a methodological means to interpret the practical conditions for, and effects of, recreational planning. I will use the following sections to present these three parts and to relate them to the empirical focus of the thesis.

## 4.1 Assemblage theory

Assemblage theory was originally advanced by Deleuze and Guattari through a number of writings, most heavily cited as a theme within their seminal work “A Thousand Plateaus” (Deleuze & Guattari 1987; Deleuze 2006). Assemblage theory is becoming a well-used theoretical stance within the field of planning studies (see e.g. Hillier 2005, 2008, 2021; Tyminskyi 2022; Dovey & Pafka 2017; Purcell 2013) and is increasingly explored within landscape studies (see e.g. Dobson et al. 2021; Jaramillo 2017; Brown & Brown 2017). In this thesis, I position assemblage theory as a philosophical starting point for how to interpret the world.

The approach is attuned to performance, practice and relations rather than essences, structures or fixed identities as found in assemblage theory bears similarity with other post structural scholars writing in the same French post World War II context, as Foucault, Lyotard and Derrida. Poststructuralism here is used to denote a “loose ‘style of theorising’ (Howarth 2013:13), which foregrounds how “social structures and subjects are contingent and incomplete, whilst rejecting a commitment to positivist and empiricist conceptions of the human and social sciences” (Ibid: 85). In this vein, Deleuze, alone and in collaboration with Guattari, is not oriented towards discovering and uncovering the true nature of things. Instead, their philosophy is rather “about searching for how and why transformation takes place.” (Hillier 2005: 276). The “conceptual cartography” (Monno 2012:291) offered by Deleuze and Guattari provides one way of interpreting the “coding and decoding” (1987: 68) of the world. It is in this vein that assemblage theory has been brought into planning research.

According to van Wezemael (2017), the introduction of Assemblage Theory into planning research can be understood through critiques of collaborative planning and rational planning approaches. As he argues, assemblage theory in planning can be seen as a reaction to the idea of an essential logic of the operating of the world, and that it is possible to gain knowledge of those logics and therefore plan accordingly (as in the positivist tradition of rational planning). Furthermore, as a reaction against the communicative tradition of collaborative planning, where knowledge (and planning) are to rest on the grounds of negotiations, and where attention moves from the object of planning to the subjects of planning and their perceptions. Instead of singling out the material-technical, as in rational planning, and instead of singling out the symbolic-linguistic as in collaborative planning, assemblage theory brings

another ontological route centring on the interactions and arrangements between heterogeneous elements, as the semiotic and the material.

Assemblage theory sits in a wider nexus of thoughts, and is in itself not singular but resting on several interlinked concepts. I will not attempt to give a full description of Deleuze and Guattaris' philosophical universe, nor use their writings as a "ready-made" template for analysis (see Thompson et al. 2022). Instead, for this thesis, I lean primarily on the concept of assemblage (and contents and expressions of assemblages) and the concepts of territorialisation and deterritorialisation. The selection of these concepts is in line with how assemblage theory has been applied within planning research (see e.g. McFarlane 2011a; 2011b; Dovey & Pafka 2017; Buser 2018; Bürkner and Totelecan 2018; Taheri Tafti 2020). Some of these applications lie closer to the original texts from Deleuze and Guattari, while others seek new routes for understanding assemblages, for instance DeLanda's influential version of assemblage theory (2016; 2019). In the following section, I introduce the concept assemblage based in Deleuze and Guattari, but explained and exemplified with help from additional scholars who influence my way of approaching the concept.

#### 4.1.1 Assemblage

An assemblage is an arrangement, or ordering, of heterogeneous elements. They are "complex constellations of objects, bodies, expressions, qualities, and territories that come together for varying periods of time to ideally create new ways of functioning" (Livesey 2010: 18). I will primarily use assemblages to talk of planning as a practice that involves arrangements of both material and semiotic elements, a thought that will be developed through the remainder of the theoretical chapter.

Deleuze and Guattari describe the foundational form of assemblages as consisting of two axes, of which the first captures the heterogeneity of assemblages as an arrangement of contents and expressions, or as Deleuze also phrases it elsewhere, non-discursive formations (content) and discursive formations (expression) (Deleuze 2016:60). For Deleuze and Guattari, the axis of content and expression is always subject to processes of change working to disrupt or rearrange the relations in-between, for instance, new ideas of recreational activities, new ideas of health or proper land use. This is described as the second axis of assemblage that is characterised by the processes of territorialisation and deterritorialisation.

The terms territorialisation and deterritorialisation do not necessarily relate to a spatial form, but are far wider and relate to how “meanings, practices, and relations become stratified, formalised, and contained (i.e., territorialised) on the one hand and how they become destabilised and decomposed (i.e., deterritorialised)” (Kinkaïd 2019: 557), on the other. Figure 4 captures the two axes. I will return to a deeper discussion on territorialisation and deterritorialisation in the coming section.

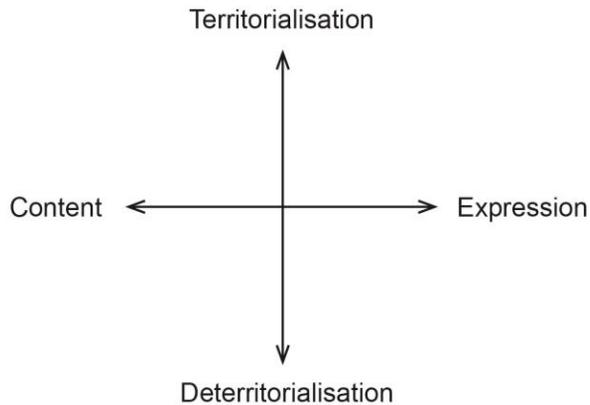


Figure 4: The two axes of assemblage, adopted from Thompson et al. 2022.

From this reading, assemblages are a specific mode of arranging elements (Deleuze & Guattari 1987; Thompsom et al. 2022), a meaning revealed by the original French term *agencement*, as opposed to the English term assemblage, used in translation. As Buchanan (2017) and Nail (2017) point out, these words indicate rather different processes. Either a process of composition (in the French *agencement*) that entails structure, as in a music composition. Or a process of compilation (in the English assemblage) that speaks of a gathering of separate things. This difference, between composition and compilation is visible in the writings of Deleuze and Guattari, where assemblages are “every constellation of singularities and traits deducted from the flow—selected, organized, stratified” (Deleuze & Guattari 1987: 406; Deleuze 2006).

In this way, assemblages are purposeful, and as Thompson et al. (2022) put it “Deleuze and Guattari’s analytic interest is not that things/materials/agents come together or form relations in space, rather they want

to know how and why these relations function, or behave, as they do, and for what purpose” (2022: 689). Purposefulness, or rather desire in their terminology, is thus a central theme in Deleuze and Guattari’s writings (Wood 2009; Dovey 2013; Briassoulis 2019; Buchanan 2021). Assemblages do not simply happen but are purposefully assembled. Now, desire and purposes are an elusive phenomenon, hard to map via the methods applied in this thesis. However, looking into the structure of the assemblage and their produced effects can give indications on rationales or purposes guiding their becoming.

Assemblage is thus not (best or only) used for saying that things are complicated as a hoc collections of things. It is rather a concept to try to gain understanding the arrangement and ordering of heterogeneous things, resting on the idea that some form of directedness guides this ordering. It is arranged not just ad hoc connected. In relation to planning, I suggest it is beneficial to talk of planning assemblages to set focus on how plans, planning initiatives or planning policies are arrangements of heterogeneous elements. Furthermore, how these arrangements are carried forth by some form of idea of change or ‘will to improve’ (Murray Li 2007), or goals (implicit or explicit) for intervening in the world (Alexander 2015). In other words, urban planning, “coordinates desire, it represents or codifies values and behaviours in an attempt to make them consistent” (Thompson et al. 2022: 686). If taking inspiration from how Savage (2020) uses assemblage to probe into the complexities of policymaking and policy implementation, a *planning assemblage* could “represent a gathering together of political imaginations, rationalities, technologies, infrastructures and agents”, and I would add, sites, landscapes and geographical forms, to fulfil, materialise or make consistent particular desires.

For empirical analysis, this implies tracing “competing and contradictory desires, logics, expectations and compartments” (Thompson et al. 2022: 691). Instead of evaluating planning intentions against planning outcomes, assemblage theory probes into contradictions, making and re-making, selections and processes of defining issues and problems to be planned. To exemplify how such perspectives could influence the analysis of planning practices I want to elevate two examples. First, of a study of cycling policies, secondly a study of housing policy.

Lea et al. (2022) uses assemblage theory for interpreting the planning policies and interventions for increased cycle commuting in Melbourne,

Australia. The study shows that cycling participation can only be fully understood if taking into account the multiple political and economic forces influencing policymaking, as well as the technicalities of infrastructure and the preferences, emotions and actions of bikers (and non-bikers). In the dynamic interactions between these heterogeneous elements, cycling becomes simultaneously framed as a solution to urban sustainability and as an interruption of existing flow of traffic, making any coherent and rational policy solution difficult to obtain. By investigating the messy mix of factors through the lens of assemblage theory, they disclose the full complexity of inherent contradictions and interactions that characterise planning and policymaking.

The second example is Leas (2020) study of the assembling of indigenous housing policy in Australia. In her study, she follows the formulation of policy text and the simultaneous work to define the limits of a house (involving questioning what basic components is needed for a building to be functioning as a residence) and the simultaneous discussion on the typical 'needs' of Australia's indigenous population occurring in the policy making process. Her case highlights how the materiality of houses, the expressions of policy and social categorisation are intertwined. What Lea (2020) shows is how planning does not work via a clearly circumscribed 'housing policy' acting upon clearly circumscribed material entities of 'houses' constructed for a generic and neutral 'inhabitant'. Instead, these elements are all co-constructed and continuously rearranged. Leas study further shows how assemblages are not a thing in the world, but are the arrangement, which makes the existence of things possible (Buchanan 2017). In this case, the planning assemblage surrounding the indigenous housing policy enables the construction of a particular *issue* (Asdal 2015), in this case a particular version of appropriate 'housing', materialised in the form of "a cheap, partly complete steel shed or copy of a house of bare utility, which looks like, but is not, a house" (Lea & Pholeros 2010: 188).

Stressing flows and becoming and working from a "radical sense of openness and possibility" (Anderson & McFarlane 2011) have raised critiques regarding the political and ethical implications of the ontological flatness underlying many applications of assemblage theory. A flatness that, according to Brenner et al. (2011), makes it impossible to decipher the relative weights of elements in the assemblage and therefore impossible to conduct an analysis sensitive to how assemblages rely on, and support,

processes of empowerment and disempowerment. If there is no “immanent principle for distinguishing relevant or irrelevant actors, whether of a human or non-human nature” (Brenner et al. 2011: 233) any perception of which elements are more critical to the emergence and endurance of assemblages becomes obscured (see also Tonkiss 2011; Saldanha 2012; Lea et al. 2022). What these critiques tend to disregard, potentially due to a limited engagement with the original writings of Deleuze and Guattari (see Buchanan 2021), is the attention to segmentation and stratification that is present in assemblage theory. Hillier and van Wezemael (2008) point to this in a discussion on the distribution of power and argues that “power operates through Deleuze and Guattari’s stratification in which social strata (often regarded by actors as ‘us’ and ‘them’, the ‘lay’ and the ‘expert’) are created by processes of subjectification and signification, underlain by a process of organisation” (2008; 196). In other words, the empirical reality shows how differences and values are continuously produced in relations and through practices (Kinkaid 2020b; Saldanha 2006). Hence, as Kinkaid (2020b) argues, the inherent attention to process in assemblage theory not necessarily needs to lead to a blindness towards difference, but rather makes it possible to discern the ways in which difference, and thus hierarchies, are relationally produced by the ordering and attribution of material and social value.

#### 4.1.2 Territorialisation and deterritorialisation

As mentioned in the section above, any assemblage can only come into being via the interlinked process of territorialisation and deterritorialisation. Territorialisation relates to the manners of “fixing the heterogeneous material flows” (Saldanha 2017: 126) into a “liveable order” (Buchanan 2021: 85). Such orderings can take a spatial and material form but can just as much regard orderings of subjectivity and feelings (ibid.). Hence, territorialisation is the process through which content and expressions are coded, connected and given consistency, while deterritorialisation would be “a coming undone” (Deleuze & Guattari 2009: 322) or a “destabilisation and ultimate removal of coding that confers fixed meaning” (Hillier 2005: 286). These concepts, territorialisation and deterritorialization, bring a terminology for scrutinising the movements of change that are always current in any assemblage. It can help one to think over how assemblages are conforming and stabilising (without becoming fully stable) or becoming de-coded and disrupted, and if so, in what direction and towards what ends.

In planning research, one example of an application of territorialisation as a concept can be found in Wood's (2009) analysis of the planning processes involved in transforming the Melbourne Docklands. His work shows how the planning process was characterised by three parallel and intertwined 'threads' or ordering of the Docklands, and ultimately different ways of producing the place of Melbourne Docklands. The project to reimagine the Docklands was initiated via a process of territorialisation aiming at stabilising and disciplining the unruly and informal semi-industrial docklands into a regulated place with an identity of a 'natural' extension of the existing ordered city, by the methods of public planning interventions. Following these initial steps, Wood describes how a subsequent process of deterritorialization worked to uproot the 'ordinary' spatial identity to reimagine the docklands as a spectacle guided by a new set of desires and "fluid dreams" of property developers (Wood 2009:193). This process worked to transform the docklands into an assemblage functioning for economic growth, rather than for the extension of the everyday city.

Woods study shows how competing planning assemblages were at play, all aiming at stabilising different versions of the Docklands. Furthermore, that these different planning assemblages took form by arranging slightly different forms of elements—from glossy marketing brochures, mapping techniques, economic incentives, land uses, to images of everyday life. Thinking with the concepts of territorialisation and deterritorialisation can therefore help put attention on the "fundamental transformations in the form and content" (Wood 2009: 191) through which planning seeks to order and re-order space. How this is enacted in practice can be addressed via the terminology of Asdal (2015; Asdal & Hobæk 2016) and Valve et al. (2013; 2022) who emphasis how issues are formulated, operationalised and rendered planable, to which I will return in Section 4.3.

#### 4.1.3 Landscapes and assemblage

The interface between landscape and assemblage theory have yet to be thoroughly explored. However, a number of scholars have begun to do so, especially by evoking assemblage as a concept for denoting multiplicities, heterogeneities and complexity. Dobson et al. (2021), Sweeney et al. (2021), Luka (2018), Jaramillo (2017), Wang and Kao (2017), Brown and Brown (2018) all offer different entry points to the interface between landscape and assemblage theory. What they share however is an attention to socio-material

relations and process, shedding light on the *creation* and *dissolving* of temporal alliances between elements (Wang and Kao 2017). Coupling landscape with the concept of assemblage brings, as Jaramillo argues, a sensitivity to process "which implies that any approach must consider not what it is but how it is, thereby opening up analysis of the multiplicities of its making" (2017: 666). To this, he adds that assemblage should not be used to 'resolve' any of the inherent tensions in the notion of landscape, but rather to "work with them" (2017: 666). Brown and Brown (2018) pose similar argument when they discuss how the inherent complexity of landscape speaks to the complexity of assemblage theory.

One point of critique towards assemblage thinking lies in its lack of a "sense of historical specificity" (Kinkaïd 2020a: 483), disregarding the historical context from which assemblages emerge. The attention to becoming (as opposed to being) and emergence in Deleuze and Guattaris writings easily deviates attention from the past and maps instead out trajectories moving forward. This, according to Kinkaïd, displays a weakness in the theory as the privileging of openness and becoming work to disconnect from the "empirical and historical realities" (2020a:483) acting as the milieu from which any assemblage is produced. An ontology of becoming, as found in Deleuze and Guattaris writings and an attention to flows and emergence thus runs the risk of losing sight of place, and of historical and situated specificities (Malpas 2012). Here could lie a potential difficulty in adopting an assemblage approach for understanding landscapes, especially if landscapes are understood as characterised as layers of inscriptions and materialised discourses, to which I will return in section 4.2. Therefore, while assemblage theory gives tools for thinking through processes and becomings, but as Saldanha (2006) argues, such thinking needs to be coupled with attention to the "viscosity" and "stickiness" of particular socio-political logics.

Hillier, argues that attention to relationality and multiplicity should not be seen as "a retreat into relativism or irrationality". Instead, she argues, it is a way to stay open for the idea that while "no event is un-conditioned [...] there is no transcendent conditioning origin" (2005: 277). Indeed, evolution and development creates paths, but there is no straight line to uncover (Khalifa 2003). One trajectory for engaging with the 'stubbornness' of materialized histories comes from coupling assemblage theory with the notion of materialised discourses in the landscape. This is a potential which

is also noted by Jaramillo (2017) and Brown and Brown (2018) when they argue that landscape brings to assemblage theory an attention to sites, and a glimpse of “past, present, and imagined futures” (Brown & Brown 2018: 41). In order to more closely interpret how the ‘stickiness’ of landscape are mobilized into planning assemblages, and how the heterogeneous elements of planning assemblages are ordered I take help from two other theoretical lenses that deepen the focus on landscape and planning and their interactions.

## 4.2 Materialised discourses

When moving in a landscape one encounters formations that are shaped by multiple material-semiotic interplays. To stay sensitive to the shadows of such interplays are vital for a deepened understanding of any landscape. This observation is not only valid for speaking of landscape heritages dating centuries, also more recent shadows are a crucial element for understanding the composition of any landscape.

If we for a moment return to Apoteksskogen in Upplands Väsby where this thesis started it is possible to detect multiple layers of past planning that in different ways have materialised shifting discourses. To start, that Apoteksskogen is maintained as recreational space is in itself a legacy of the discourses on public health and accessible recreation that permeated the planning of the town during the 1960's. that Apoteksskogen lies adjacent to Vilundaparken, a large sports field where indoors and outdoors facilities for sports are gathered is not a happenstance coincidence but tells of how the physical landscape were utilized to shape a recreational space that gathered a wide range of activities without separating competition from non-competition, or indoors from outdoors. Throughout Apoteksskogen, we see further legacies and new additions, expressing of the continuous change of this landscape, captured in figure 5 below. Some facilities have disappeared, leaving shadows in the form of lingering clearances in the forest as after two previous public ski slopes. Other facilities, as the tennis court depicted in figure 2, are still in use; though with insufficient maintenance forcing users to themselves secure functionality by, for instance, supporting the tennis net with a branch. Other facilities have been newly added, building on previous, as a new indoors football hall where it previously were two outdoor football fields. Yet others are introducing new forms of exercise and movement into the forest, as the path for mountain biking depicted in figure 3 or a new

outdoor gym at the top of the ridge. What these different material legacies tell is how Apoteksskogen as such can be understood as a palimpsest (Corboz 1983) of materialised, and materializing, discourses.

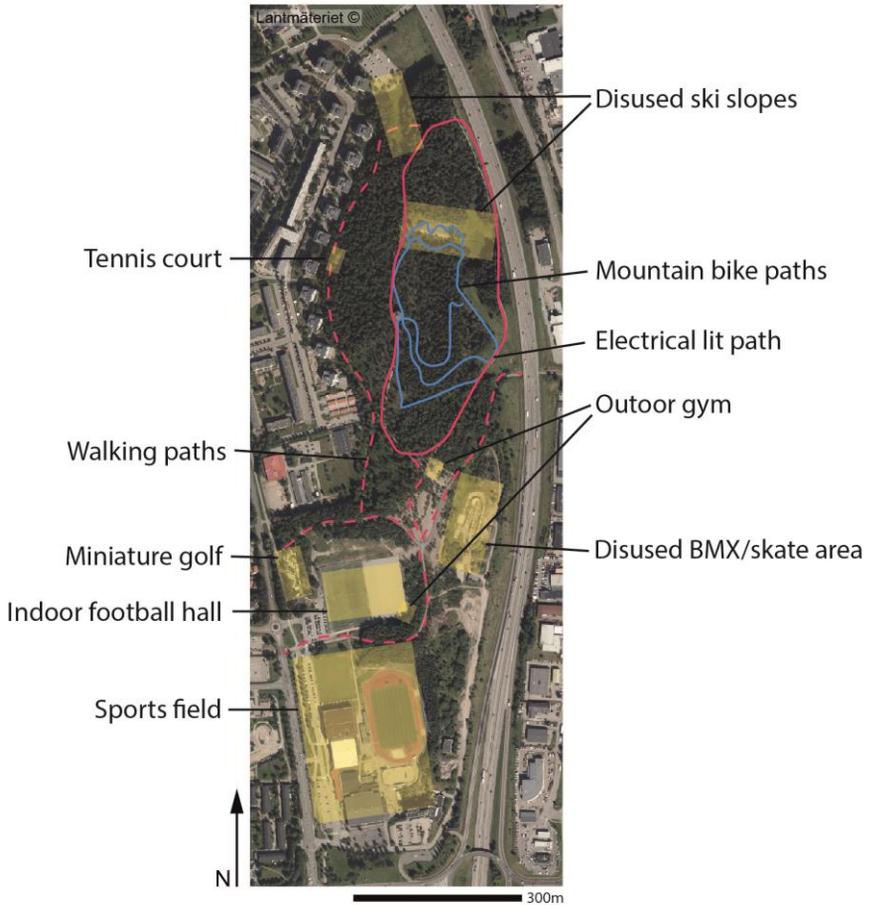


Figure 5: The many recreational facilities of Apoteksskogen, Upplands Väsby. Some are no longer in use, as the two ski slopes, yet lingers in the landscapes as shadows of past planning. Ortophoto from Lantmäteriet ©.

From Schein's perspective landscapes are one mechanism through which discourses are made tangible. Therefore, any landscape must be interpreted as both a reflection of societal ideals and well as “constitutive part of [the] ongoing development and reinforcement” (Schein 1997: 663) of societal ideals. In this way, the landscape is a construction and a project, “an

unceasingly remodelled space” (Corboz 1983: 16) in which layers of inscriptions and constructions forms a palimpsest. Carter et al. argues that palimpsest, in the meaning of “a reality of meanings and materialities that are ‘layered’ through historical-geographical practices” provides one way to illustrate how “planning discourses and practices of previous regimes have sedimented as layers of meaning and materiality, which do not completely overlay one another, but present a palimpsest saturated with contradictions as well as possibilities” (2015:2). A constant layering of materialised discourses is thus not only a way of describing features in a landscape but also as one way of interpreting the interactions between planning practice, their underlying discourses, and the landscape. The previous ski slope for kids, now lingering as a clearing in Apoteksskogen, provides one example of such a discourse materialised. The question remains to how such recreational materialisations in the landscape are reassembled in contemporary practices for outdoor recreation.

The notion of materialised discourses is central to the thesis theoretical understanding of how previous planning decisions and interventions linger as material legacies in the landscape (Schein 1997; see also Qviström 2010; Jessen and Tietjen 2021; Marcucci 2000). As such, materialised discourses influence possibilities for rearrangement, acting as both opportunities and challenges. In Schein's words, because landscapes from this perspective becomes implicated in both the materialisation and re-materialisations of planning discourses, they “serves as both a disciplinary mechanism and a potentially liberating medium for social change” (Schein 1997: 664).

It could be argued that the coupling of discourse and materialisations are incompatible as these two often are posed as moving on separate ontological levels – one of linguistics and one of materia. However, returning to the relational and material-semiotic groundings of the thesis, another position is possible, as argued for by Murdoch (2004), in which the materiality of discourse, and the geography of discourse, is acknowledged. Crucially, Murdoch draws attention to how discourse, especially visible in the work of Foucault, are by no means separated from material formations, instead, discourses become “incorporated within concrete physical arrangements” (Murdoch 2004: 51; see also McCann 1997). This is also what the notion of assemblage captures, how the discursive “forms of expression” (Deleuze 2016: 60) are consistently co-arranged with the non-discursive forms of material contents. To talk of materialised discourses in the landscape makes

these arrangements explicit and helps direct analytical attention to the instances where the social and material are co-constituted. What I want to address by drawing in the notion of materialised discourses is thus how the many legacies of past recreational planning influence and are mobilized into contemporary planning assemblages.

To exemplify such processes I want to present three studies that in different way explore how materialised discourses are influencing urban planning. In Helsinki, Finland, Hautamäki (2020), looks into how the landscape of large manor estates came influence the urban layout of the urban expansion of Helsinki, Finland. What she shows is how the landscape, which where once organised around the agricultural and economic rationales of the large manor estates were subsequently reassembled as part of new planning assemblages aiming for residential development. This process of reinterpretation and translation of landscape legacies into new urban forms were however not free from conflict. Instead, the manor landscapes became, and are still, sites for contestation between desires of conservation, desires for development and economic investments by private actors. Their geographical layout are now in large part incorporated as urban green space in the city however steadily reducing in size as new development projects pushes the edges of the built up areas into the previous green. The manor landscapes are thus acting as potential sites both for urban green space and as potential sites for urban expansion. Either way, the materialised discourses are highly central in the contemporary planning of Helsinki.

In Belgium, De Block (2014) discusses how decades of infrastructural planning for everyday commuting in the Flanders, created a semi-rural landscape of multiple interrelated urban cores. The ambition for enabling a combination of rural living in the countryside with access to nature, and everyday labour in the growing urban industries gave way for a landscape that today is described as scattered, ad-hoc, and dispersed, and as a challenge for the contemporary regional planning. The semi-rural landscapes with its geographical composition of residential areas, farming areas and railways is a source for debate in contemporary planning, an 'issue' to be handled as a perceived hindrance for cohesive urban expansion. On the other hand, as De Block argues, rather a missed opportunity for a sustainable urban-regional planning.

Jessen and Tietjen (2021) sets focus on the interplay between materialised discourses in the landscape and contemporary urban planning in a study over

the welfare landscapes of Danish post-war social housing estates. In their study they highlight how planning policies and projects “literally materialised the emerging welfare state in concrete, asphalt, plantings and earthworks” (2021: 745). These landscape legacies now play central roles in the ongoing renewal of these estates, as a canvas for densification and new developments in what is perceived as unused and non-planned sites (see also Zalar & Pries 2022; Mack 2021). Nevertheless, as Jessen and Tietjen argues, new readings of the post-war housing estates “inherited landscape connections” (2021: 491) could well prove to be an opportunity for new ideas of green connectivity, integration and community development. What Hautamäki (2020), De Block (2014) and Jessen and Tietjen (2021) show, being attentive to materialised discourses in the landscape is a way of staying sensible to how existing landscape, and all its layers of legacies, will have effects on how relations can be forged in the (re)framing of planning issues.



Figure 6: Layers of new technology in a lighting pole illuminating a running path in Apoteksskogen, Upplands Väsby.

### 4.3 Ordering effects of planning

A central aspect in thinking through planning assemblages is the work dedicated to ordering and arranging heterogeneous elements produces certain effects. In order to probe deeper into these aspects of ordering, I take inspiration from scholars working within science and technology studies (STS) and who take interest in the parallel and intertwined processes of ordering and *modifying particular issues* for planning (Asdal 2015), and the processes of *geographical ordering* through planning interventions and regulations (see Valve et al. 2022). Through these ideas runs a sensitivity towards how “words and materialities, the material and the semiotic, must be handled together” (Asdal 2015: 75), which resonates clearly with the philosophical base found in assemblage theory.

In particular, I lean on Asdal's work on issue-formation (Asdal 2015; Asdal & Hobæk 2016; 2020; see also Asdal & Reinertsen 2021) and the notion of plan-ability put forward by Valve et al. (2013; see also Valve et al. 2022). Asdal builds her work on issue formation and issue modification on a longer tradition in STS, where what emerges as a political *issue* has been described through the emergence of collectives, sharing matters of public concerns, outside the formal political process. Hence, issue formation has foremost been located as external to policymaking and political work, later to be brought into the political realm and stabilised (Marres 2007; Latour 2007). What Asdal (2015; Asdal & Hobæk 2020) does is draw attention to how the work of formulating issues and modifying issues to large degree also happens *within* the everyday and ordinary practices of public servants and politicians. Via the ways in which elements are assembled, or arranged to formalise a policy, the particular issue that the policy is to address also becomes formalised. An *issue* is therefore not an external, a-priori or stable thing but a produced issue. To take notice of how issues are modified and reassembled thus allows questions of how issues are changing and why, and how such modifications influence outcomes of policy (Asdal 2015).

This perspective on policies as enacting different versions of reality is a critical aspect of studying land use planning as a technology that not only works to modify textual versions of reality but that is also involved in processes of material ordering. This line of thinking is related to Bowker and Stars work on classifications and standardisation, where they show how classification is more than solely symbolic, they are highly material and as such “built in and embedded in every feature of the built environment”

(1999: 39). Therefore plans, policies and programmes are not merely describing possible futures, they are actively involved in an ontological work of defining versions of reality and its spatial configuration (Law & Mol 2001; Mol 1999).

Asdal and Hobæk (2016) talk of ‘assembling work’ to describe the practices involved in forming issues for policymaking. Through an analysis of the controversial issues of whaling in Norway and via close attention to the “ordinary technologies and offices of politics” (ibid.: 97) they show how diverse entities such as expert reports, graphs, whales, species, draft papers, transcripts of public meetings, statements from industry become part of the parliamentary procedure of assembling the whaling issue. Through this ‘assembling work’ the whale, and its specific nature, became available for politics, became possible to govern. By following the ordering of the whaling assemblage, they disclose how policy making actively contributes to identify, define and make issues and schemes of implementation emerge through policy work. In this way, policy and policy making carries both ontological and epistemological weight. Via knowledge-making technologies such as charts, measurements, mapping techniques, auditing and assessment tools, planning policies set frames for how the world can be known and represented, thus proposing a certain epistemological stance (Roy 2005; Zalar & Pries 2022). In addition, Asdal and Hobæk (2016) show that policy, and planning policy, is equally doing ontological work, in defining what version of reality that is to be addressed in any particular policy (see also Mol 1999).

Valve et al. (2013) uses the concept of plan-ability to denote this process of making issues possible to plan. As they argue, issues do not just “appear from nowhere” (Ward 2006; 70), ready to be inserted into a scheme of implementation for planning. Rather, issues need to be sorted out for planning, to be made planable. Valve et al. (2013) sets focus on two ‘platforms’ in the process of stabilising plan-ability, being (1) to focus analytical sight, i.e. formulating a policy-relevant definition of the issue at stake, and (2) translate the analytical formulation of the issue into operational arrangements, i.e. translate the issue into action. In similarity with Asdal (2015), building of an analytical platform entails delineating the boundaries of the issue, and demarking what elements are proper within such boundaries. Via making associations and disassociations with other policy issues and with certain materialities, sites or geographies, a planning issue is

thus mobilised into planning assemblages (see also Callon & Law 2005; Murray Li 2007). This work of formulating planning issues could therefore, as Valve et al. (2013; 2022) argue, be seen as an ontological work in that it “produces a specific configuration” of the issue and “indicates what exists and counts for policy making” (Valve et al. 2022; 68). In order to stabilise the ontological work done via analytical arrangements a process of translation needs to modify the ‘issue’ into schemes of implementation, in other words, be operationalised. The process of translation is crucial as issues are seldom transported in a stable fashion but rather destabilised and transformed, taking new shapes when entering into other settings of decision-making and practice (Latour 1984; Czarniawska 2002; Adolfson et al. 2021).

Expanding on the topic of plan-ability, and building on Asdal (2008; 2015; Asdal & Hobæk 2016) Valve et al. (2022) uses the case of agricultural nutrient loading to discern how processes of delineating and formulating planning ‘issues’ come to be enacted, and how issues are translated into schemes for implementation and ordered geographically. Firstly, through their study, they disclose how nutrient loading gets circumscribed and defined via processes of modelling water systems and water quality, via couplings to local forestry and industry sectors or via scientific calculations on particular mixes of nutrients. These processes of formulating the issue do also concern how a relational and complex geography of agriculture becomes constructed as identifiable sites, a place possible to order and manage. In the terminology of Deleuze and Guattari, the smooth space of intricate relations between farms, fields, cattle, earth and manure becomes reduced, equated and made into homogenous and measurable surfaces. This process of striation and classification enabled the establishment of a manure-to-field-ratio as means for measuring and calculating acceptable levels of nutrient loading, effectively excluding other factors or relations that could influence the effects. What Valve et al. (2022) shows could be read as an example of what Turnhout et al. (2014) denotes a logic of measurementality. A logic fostered under neoliberal governance that “emerges from privileging scientific techniques for assessing and measuring the environment as a set of standardised units, which are further expressed, reified, and sedimented in policy and discourse and which, in turn, render the environment fungible” (ibid.: 583). Secondly, the now ordered and striated space of manure-to-plot calculations operationalisation can take place, translating the identified issue and its form of being into schemes for implementation. In the cases from

North Savo region in Finland, they show how this involves allocating action space to certain actors and therefore identifying whom should take responsibility (individual farms and national actors), and freeing other actors from liabilities (regional actors). Furthermore, as they argue, “rendering the region amenable to intervention is the intervention” (Valve et al. 2022: 75, emphasis in original). In other words, the work of analytically defining the issue, and making the regional complex geography amendable to planning is one of the main outcomes of the policy work, as it opens up certain trajectories of change, while closing others.

#### 4.4 A multifaceted framework

The theoretical frame presented above provides a fruitful base for approaching the conflicts and tensions between outdoor recreation, planning legacies and urban compactness within the paradigm of compact city making. The three parts, assemblage theory, ordering effects of planning and attention to materialised discourses speak a similar language with attention to material-semiotic arrangements and an interest in how realities are becoming ordered in various ways. If assemblage theory acts as the frame through which it is possible to detect the many heterogeneous arrangements in the world, the inspiration from STS and landscape studies of planning history acts as the prism that directs attention to materialised discourses and ordering effects of planning, as dimensions of the many arrangements in planning.

Assemblage theory, as a philosophical base, opens up for complexity, heterogeneity and continual change, while also staying attentive to processes of “codifying, territorialising, representing and fixing” (Hillier & Abrahams 2013:67). It encourages a view on planning as a complex process of arranging desires, rather than a neutral, linear and disinterested technology. In Deleuze and Guattari’s words, planning entails “a laying-out of territories, a substitution of space for places and territorialities, and a transformation of the world into the city; in short, an increasingly rigid segmentarity” (Deleuze & Guattari 1987: 212).

Attention to materialised discourses reinstates a sense of historical and situated “stickiness” (Saldanha 2006) to this complexity. Working with such situated stickiness also sets limits for how I can apply assemblage theory, as it firmly places a material dimension into assemblages, which needs not

always be the case (Buchanan 2021). Within the frame of this thesis, this approach helps interpret how past planning, materialised in the landscape, is mobilised into contemporary planning assemblages for outdoor recreation.

Adding to this, attention to how planning practice and policy work to modify and define outdoor recreation helps situate the concepts from assemblage theory into the empirical context of the thesis. Tracing outdoor recreation in its modifications and translations in planning policy and regulations enables a discussion on how outdoor recreation is stabilised as possible to plan, and possible to ‘lay-out’ geographically. This is a rather different question than if treating outdoor recreation as a disinterested and pre-known land use category in land use maps.

## 5. Methods and empirical materials

The thesis' four papers are based upon different methodological approaches, and rely on different empirical material. These are summarised in the table below. This chapter is divided according to the main methodologies in each paper, despite some overlaps that I will comment on throughout the chapter. I start with addressing methods for Paper I, moving on to methods in Paper II and lastly methods in Paper III and IV.

	<b>Studied municipality</b>	<b>Methodology</b>	<b>Methods</b>
Paper I	Upplands Väsby	Structured literature review Minor case study	Literature review Document analysis
Paper II	Stockholm, Göteborg, Malmö, Uppsala, Nacka, Södertälje, Huddinge, Umeå, Sundsvall, Lund, Västerås, Örebro, Eskilstuna, Jönköping, Helsingborg, Gävle, Borås, Linköping, Norrköping, Halmstad	Qualitative document analysis	Document analysis
Paper III	Upplands Väsby	Case study	Document analysis Site visits Semi-structured interviews
Paper IV	Botkyrka (Alby Public Health Park)	Case study	Document analysis Site visits Semi-structured and unstructured interviews

Figure 7: Table over papers, studied municipalities, methodology and methods.

## 5.1 Methods in Paper I

Paper I presents a structured literature review capturing research literature concerned with recreation as a question of mobility and land use, within the influential model for compact city making called Transit-oriented Development (or TOD). The literature was collected from Web of Science and Scopus in January 2022 with the combination of the search terms recreation, leisure, sport, physical activity, active transportation and transit-oriented development, TOD. Instead of working with a predefined set of recreational activities, me and my co-author Mattias Qviström searched broadly, wanting to initially gather papers that made any connection between TOD and any form of recreation or physical movement for leisure. The search was made for any occurrence of search terms in title, abstract or keywords. Only peer-reviewed papers published in English were included.

The initial search resulted in 27 papers corresponding to only 3% of the total literature on TOD in Scopus and Web of Science. Due to the small number of papers, we were able to read all papers thoroughly to filter out papers that fell outside the aim of the review. Seven papers were excluded from further review as the connection between TOD and recreation was either too weak (only mentioned in the abstract, not in running text), focused on indoor or passive recreation (such as looking at sports, leisure as entertainment or consumption), or explicitly only targeted non-leisure mobility.

The collected 20 papers were described and summarised thematically based on close reading. No statistical meta-analyses were performed. Thus, while the search inquiry and inclusion criteria were predefined, taking inspiration from systemic literature review methodology, the analysis of papers lies closer to the exploring of commonalities and difference, as in a narrative review form (see Petticrew & Roberts 2006; Pae 2015).

To this structured literature review, the paper also adds a minor case study of Upplands Väsby municipality. This entailed document analysis and site visits in order to ground and exemplify the findings from the literature review. The case study methodology is presented more closely in Section 5.3.

## 5.2 Methods in Paper II

Paper II rests on qualitative analysis of planning documents in the 20 largest municipalities in Sweden. The paper leans on Asdal and Reinertsen's (2021)

practice oriented method for document analysis that is presented in Section 5.3.2.

In the paper, we aimed to show the range of different techniques through which green planning is enacted in the 20 largest municipalities. This implied reading each comprehensive plan to collect definitions of green space, problem definitions of green space in relation to urban densification, and operationalisations of these definitions. The reading of the 20 comprehensive plans was divided among me and the other authors of the paper. To assure that our readings kept a joint focus, we defined a set of questions to answer while reading:

- How does the comprehensive plan describe the urban development (overarching idea)?
- Does the municipality address densification?
- How does the comprehensive plan describe the green space values and access today?
- How does the comprehensive plan describe the green space values and access in relation to the development?
- Which techniques/arguments/methods of systemising and categorising the value of green spaces are employed in the comprehensive plan?
- On which methods or on what grounds are the evaluations in the comprehensive plan made?
- Which sections of the comprehensive plan addresses trade-offs and evaluations of green space?
- Which of the areas selected for development will significantly affect the access to green space within/adjacent to existing urban structures?

Based on the results from the last question in the list above we could identify a number of geographical areas in which densification was taking place, where exiting green space might be effected. In these areas we searched for recently developed detailed development plans to find illustrative examples of how green planning was enacted.

The inspiration from Asdal and Reinertsen's (2021) practice oriented methods for document analysis lies in our approach to read the planning documents, not only as textual representations of the discourse on green planning but to trace how sites, geographies and green planning techniques

are co-emerging. In this way, we put emphasis not only on what the document says but also “consider what the document *does* and *enables*, including what role it plays in the bigger picture” (Asdal & Reinertsen 2021: 42 emphasis in original).

### 5.3 Methods in Paper III and IV

Paper III and IV rest on case studies of recreational planning in Upplands Väsby municipality and Botkyrka municipality, both located in the Stockholm region (see Figure 6). As spatial planning in Sweden is foremost steered by decisions and work within the municipal organisation, a consequence of the municipal planning monopoly (see Section 2.3.2), the municipality emerges as core *bureaucratic site* for planning work (cf. Asdal and Reinertsen 2021).

Case study methodology is a central research design within landscape planning studies (Francis 2001; Swaffield 2017). Case studies allow for studying complex phenomena in its “real world context” (Swaffield 2017:107 see also Yin 2009) and are therefore suitable for landscape planning research where the “real world contexts make more controlled empirical study difficult” (Francis 2001: 17). Gerring (2004: 341) defines case studies as “in-depth studies of a single unit (a relatively bounded phenomenon) where the scholar’s aim is to elucidate features of a larger class of similar phenomena”. This definition works well for describing the general purpose of case study research. However, in landscape planning studies, and landscape studies in general, a case study often implies a material and spatial situatedness (see Francis 2001).

When looking for case studies in landscape planning research, the ‘case’ is often described as one or several more or less bounded localities where the many aspects that make up a landscape interact, including a complex constellation of relations to other localities, discourses and processes (see e.g. Swensen & Jerpåsen 2008; Atik & Swaffield 2017). In this form of situated case study, the question is not only to become defamiliarised in order to detect inconsistencies or challenges in processes (Roy 2012) but equally a question of becoming acquainted with the place in question (c.f. Qviström and Saltzman ref). This duality points to what Gerring identifies as a “structural ambiguity” of case study research where “[o]ne wishes to know both what is particular to that unit and what is general about it” (2004: 345).

Such structural ambiguity does not need to be a hindrance for analysis but work to inform the analysis by enabling tracing relations between generic ideals and situated particularities. Hence, the ambiguity allows for interpreting how the ‘general’ or context-independent (as internationally circulating urban models) interact with the context-dependent (as the material and historical particularities or specific decision-making process of a locality), and vice versa (see Flyvbjerg 2006 on context-dependent and context-independent knowledge).

Following Gerring (2004) and informed by the use of case studies in landscape planning and landscape architecture research (Francis 2001), the case studies in this thesis, in Botkyrka and Upplands Väsby, are in-depth situated studies of the tensions and interactions between compact city making, materialised discourses, outdoor recreation and contemporary planning practices, bounded by the legal and organisational frame of municipal planning.

### 5.3.1 Case study areas

As a municipality in Sweden often covers a geographic area, including rural, natural and urban land, the *geographical site* of interest in both Botkyrka and Upplands Väsby municipalities are smaller than the total municipal geography. In Upplands Väsby, focus lies on the central parts of the urban environment, defined by the municipality as the emerging compact city (Upplands Väsby Kommun 2018). In Botkyrka, the site of interest is smaller, focusing on a recreational facility in the neighbourhood of Alby. The two cases, which I will present in more detail below, are not set up as comparative cases. Rather they are two single case studies, presenting two examples of the intersections between past and contemporary recreational planning and the compact city.

The selection of Upplands Väsby leans on its emergence as a compact city and the challenges this poses for recreational planning, while the selection of Botkyrka leans on its status as performing a project of ‘cutting edge’ recreational planning. Hence, both cases were selected from an information-oriented perspective where they have strategic importance in relation to the thesis aim (Flyvbjerg 2006). I argue that the findings in the selected cases resonate with challenges and opportunities for planning recreational landscapes within compact cities more broadly, and within a Swedish context of late modernist planning in particular. The case studies are based on several types of methods, primarily interviews, document

studies (including images and maps), site visits and archival studies. The combination of methods is crucial for the papers as they allow tracing how outdoor recreation is appearing in policies, plans and in the practices of practitioners, hence, making it possible to interpret how the issue of outdoor recreation is modified in these different formats. It also makes it possible to trace these issues in relation to sites themselves, their planning history and position within the growing compact cities.

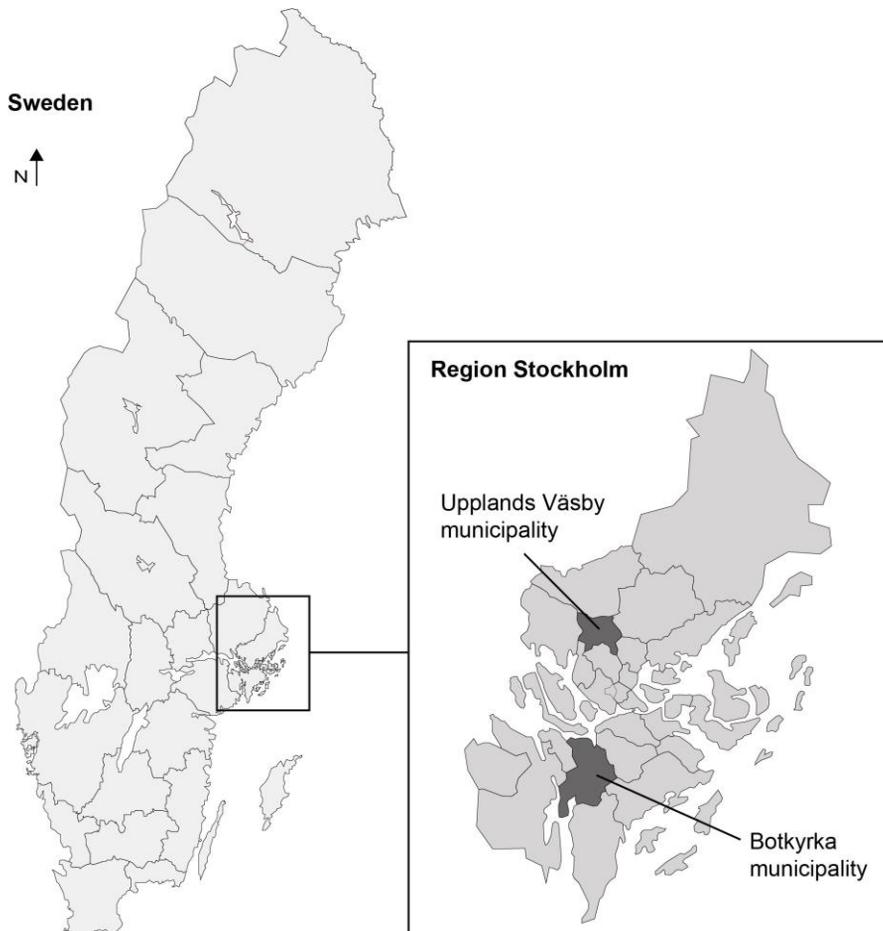


Figure 8: Upplands Väsby municipality and Botkyrka municipality in Region Stockholm. Geographical data from SCB, Statistics Sweden.

### Central Upplands Väsby

The choice of Upplands Väsby as a case study area was based on three main grounds: (1) The urban morphology was in a large part formed during the 1960s and 70s, including not only the residential areas but also green areas planned for recreational activities, positioning the area in a historical context of welfare planning, (2) Large-scale urban development projects are underway in Upplands Väsby, which is transforming this urban morphology, making it possible to study the interaction between compact city planning and active recreation, (3) The main development projects are in different stages, which opens a close analysis on the stages of municipal planning—from strategies to detailed development plans all the way to construction sites.

Upplands Väsby can be analysed as a paradigmatic case, based on Flyvbjerg’s (2006) categorisation of cases. The municipality’s ongoing densification in contrast to its well-preserved late modernist typology makes it, I argue, a paradigmatic case of a contemporary urban planning paradigm (being one of densification and mixed functions as described by Tunström (2007)), and its challenges in critiquing and reassembling post war urban environments (see Mack 2021; Zalar & Pries 2022). As such, an analysis of planning practices in Upplands Väsby can “highlight more general characteristics” (Flyvbjerg, 2006: p, 232) of the interactions between late modernist recreational planning and the compact urban planning paradigm.

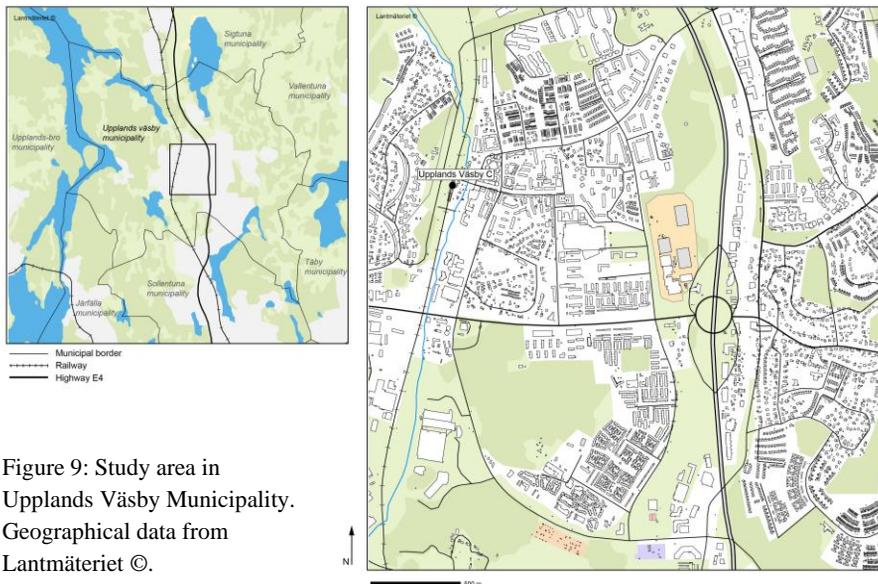


Figure 9: Study area in Upplands Väsby Municipality. Geographical data from Lantmäteriet ©.

### *Alby, Botkyrka municipality*

The neighbourhood of Alby in Botkyrka is, just as the built environments in Upplands Väsby, characterised and shaped by spatial, recreational and leisure planning in the late modernist era. In Alby, new blocks of dense urban environments, erected during the last 10 years, are slowly reshaping the landscape. Within Alby lies a sports ground (Alby IP) planned in tandem with the urban expansion of the 1970's. This sports ground has recently been renamed, rebranded and reassembled into what is now termed a Public Health Park (Fokhälsopark) and is promoted and marketed as a successful recreational planning project (see e.g. Ahlstrand 2018). The Public Health Park thus comes to the fore as an example of contemporary recreational planning. The case study of Alby is more detailed, beginning at one particular site, compared with the study of Upplands Väsby, where attention is on several sites in a larger geography.

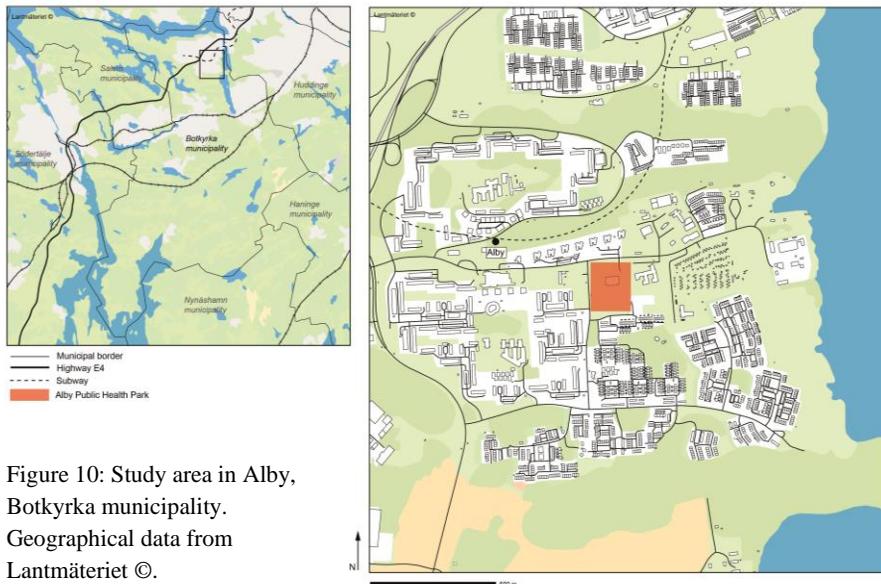


Figure 10: Study area in Alby, Botkyrka municipality. Geographical data from Lantmäteriet ©.

### 5.3.2 Document analysis

A large share of the empirical material consists of documents in various forms, such as planning documents, municipal policies and records, maps and renderings.

The contemporary planning documents include current municipal comprehensive plans from Botkyrka and Upplands Väsby. In these documents, the development trajectories of the municipalities are laid out and current and future land uses are discussed. Therefore, the comprehensive plans are central to address the urban planning in the two case areas. Additionally, detailed development plans for current and recent development projects were gathered based on their location (within central Upplands Väsby or within Alby). The detailed development plans were analysed in relation to the comprehensive plan in order to trace modification of the issue of outdoor recreation as well as measures for handling this issue. Several of these detailed development plans were situated in wider planning projects, often collected under so called planning programs (such as the development area Fyrklövern in Upplands Väsby). These planning programs were also used as empirical material. Comprehensive plans, detailed development plans and planning programs often refer to additional materials such as consultancy reports or other municipal policies. Such additional material was explored through a snowballing technique, read in relation to the statutory planning documents. Contemporary planning documents were mainly gathered digitally via the municipal websites.

Additional municipal policies that were not found via references in plans include strategy documents for sports, leisure or green space planning, as well as protocols and decisions on specific development projects. These were found via searches on each of the municipal websites and collected digitally.

Archival material includes comprehensive plans, planning programmes and policies for Upplands Väsby and Botkyrka municipalities from between 1960 and 1980. Johan Pries collected archival documents from Upplands Väsby (comprehensive plans, policies, reports) as part of the overarching Formas financed research project *The Welfare Landscape Reassembled*, of which this thesis forms one part. Archival documents from Botkyrka municipality (previous comprehensive plans and policy documents) were collected at the municipal archive with the help from the municipal archivist. All archival material was photographed and stored digitally.

Echoing Valverdes (2005) interest in the “how’s” of land use governing, and following Asdal’s (Asdal 2015; Asdal & Hobæk 2016) focus on issue

formation in policy-making, and Lea et al.'s (2022) attention to the interplay between material and discursive challenges for land use policy and planning, I have adopted a view on documents that goes beyond a textual or discursive analysis to be able to address how documents (plans, policies) have a role in shaping materialities, and furthermore, how materialised discourses in the landscape inform planning practice. In order to do so, I lean on Asdal and Reinertsen's (2021) practice oriented method for studying documents. Such an approach, in Asdal's words, enables an analysis of the "ways in which documents enact, or take part in enacting, realities – that is, how words and things go together" (Asdal 2015: 87). It is an approach that takes interest in the ways that documents, such as policies, are functioning in relation to the world beyond the text, in a "larger fields of practice" (Asdal & Reinertsen 2021: 4). Hence, documents are not analysed solely as text but through their external relations – to other documents, to sites and practices.

Asdal and Reinertsen (2021) propose a set of six methodological "moves" that can guide the analysis of documents. Of these, I lean on three in particular. Firstly, and in close connection to Asdal's work on issue formation discussed in Section 3.2.3, Asdal and Reinertsen urge attention towards how an *issue* emerges through documents, how it "'behaves' and gets its shape" (2021: 102). Through "establishing and reaffirming an issue, by drawing different elements together in a comprehensive argument, by presenting or not presenting alternatives for action, by what is being described, brought in and addressed, and by lining up how to proceed" (Asdal & Reinertsen 2021: 104) issues can be stabilised (Asdal 2015). Therefore, Asdal and Reinertsen urge us to follow the trajectories of issues, relating to the ways in which document issues can be translated, or mistranslated (Østmo and Law 2018), moving between policies and organisational levels.

Secondly, the practice-oriented perspective questions how documents *work*, and how they were meant to work (which may not be the same), putting emphasis on the performative role of documents. By asking what tools (as specific knowledge claims, graphs of economic calculations or suggestions and regulations) are at play when an issue is re-enacted into schemes of implementation, the analysis can move from the textual dimension to draw connections to other fields of governing and begin to reach an understanding of how policies work. It draws attention to where the document in question is situated within "larger political, administrative and scientific apparatuses" (Asdal & Reinertsen 2021: 41), and within a field of practice, and in the

urban geography. An illustrative example could be looking into a new municipal document stating a new vision for the municipal work on sports. An attention to how this document works could entail asking in which part of the municipal organisation is it written and where is it supposed to have influence (the same department or others). It could mean asking how it is relating to other policy documents in the municipality; is it superior or subordinate to other policies? And what are the anticipated material effects (if there are any), and political or administrative effects?

Thirdly, Asdal and Reinertsen suggest analysing documents as *sites*. This means considering how documents are produced in specific sites, considering how sites of production, in this case the offices of municipal planning and governance, with its material set up, its procedures, its rhythms inevitably shape both the process of assembling documents and the document outcome. Here one could add that the documents of interest in this thesis are not only shaped by its official sites of production (the municipal organisation's office), but also by the sites they aim to intervene in. The role of the "material aspects of sites" in planning (Rydin 2014: 592) does not only regard the ways in which planning produces material effect, but just as much how the materiality of site intervenes in, and sets constraints for, planning (Asdal & Reinertsen 2021).

Building on these perspectives, a practice-oriented method gives tools for following the relations and interplays between site and policy, a vital element in an analysis of the shaping of geographies via planning practice. Furthermore, it entails researching things "in their becoming" (Asdal & Reinertsen 2021), tracing how issues, such as that of outdoor recreation, are drawn into documents, modified and translated in-between documents, and made material through interventions in sites. Empirically, this led me to read documents both in search for how outdoor recreation was defined, in what terms and in what context outdoor recreation was mentioned, or not mentioned, and search for references to sites, particular material arrangements via design, spatial layout or particular facilities. Furthermore, I continually moved in-between reading comprehensive plans, strategic documents and detailed development plans in order to compare how outdoor recreation was described as an issue in these different types of documents, and tracing how the geographical forms these issues were given were modified between document types.

### 5.3.3 Interviews

In Upplands Väsby I conducted eight interviews with practitioners involved in recreational, environmental and spatial planning. The interviews were semi structured, with a particular focus on the following themes:

- Definition and conceptualisation of outdoor recreation.
- Description of daily work/responsibilities, including sub-themes on collaboration between departments and integration between policies in different stages of the planning process
- Local political will/priorities in recreational planning and spatial planning, and potential changes of political will/priorities
- Specific sites and projects, asking interviewees to identify and describe any particular site or project related to (their definition of) recreational planning or outdoor recreation

The interviews, ranging 40–60 minutes, were held in Swedish, recorded and transcribed verbatim. The process of transcribing the recorded interviews acted as a first step in getting familiar with the data (c.f. Brinkmann 2013). All interviewees were given pseudonyms, but as the interviews surrounded topics of their work tasks in a municipality with limited number of employees, it is not possible to secure full anonymity as it could be possible, for someone with insight to the municipal organisation, to identify individual interviewees.

The written transcriptions were analysed in a thematic fashion, loosely following Braun and Clark (2012). An initial coding was informed by the empirical observation in previous research that discloses conflicting relations between outdoor recreation and compact cities. With this in mind, I read the transcribed material looking for instances where such conflicts were addressed. To this, I also looked for additional key topics and concerns raised by the interviewees. Secondly, the multitude of codes generated by the first round of readings was clustered into themes. The themes from the interviewees were not only mapped against each other, but to documents, sites and planning processes that were mentioned (Asdal & Reinertsen 2021).

Documents in various forms came to play a central role in the interview process. Municipal comprehensive plans, detailed development plans and maps were used as reference points in discussions. By physically bringing documents to the interviews the interviewees could freely browse for specific contents they identified as important, or direct my attention to certain maps

and images of value for the discussion. To most interviews I brought a rough timeline over major policy documents and municipal development projects to get insights from practitioners on the influence of policies and plans, and on the integration between plans, discussing how they work or do not work together. This timeline became a tool for talking about and describing relations in-between policies, for discussing shifts in the handling of outdoor recreation and compact city making, and as a way of identifying ‘missing’ policies and plans. I added new policies, new important dates and other information directly to the timeline during the interviews to capture the interviewees comments. The timeline, as it came to look coming out of one interviewee is shown in Figure 4. These approaches, focusing on practices, sites, issue formulations, translations and integrations between policies and attention to how issues move in and out of documents and plans lie close to how Asdal and Reinertsen (2021) talk of ‘practice-oriented interviews’.

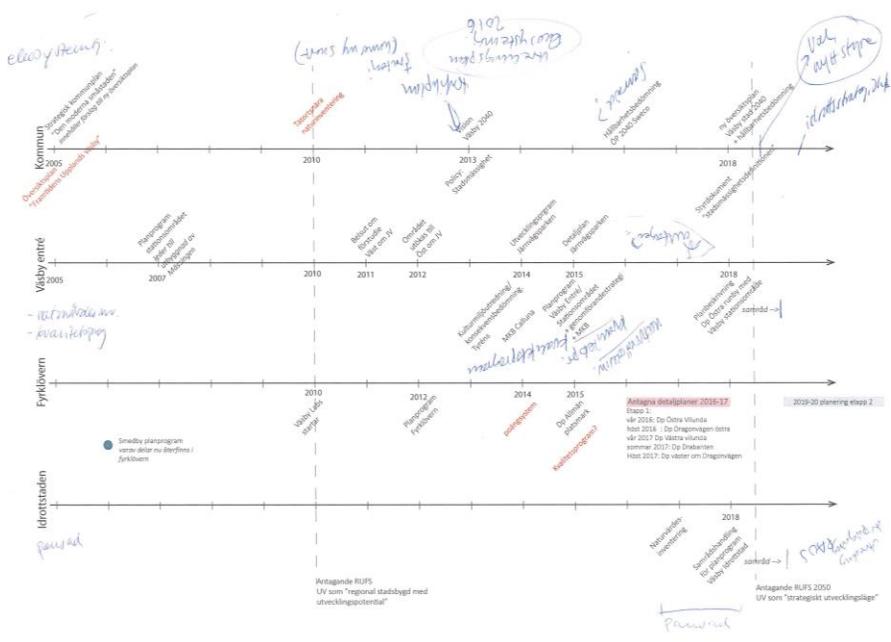


Figure 11: Timeline of municipal policies and plans, with notes from an interview.

In Botkyrka, my co-writer Neva Leposa conducted three interviews with public officials, of which one were a key actor in the Alby Public Health Park project. This interview was un-structured and concerned the process and funding of the project Alby Public Health Park. This interview was used to set the written material into context and helped us to detangle the timeline through which Alby Public Health Park was initiated and implemented.

#### 5.3.4 Site visits

Through the thesis project, I performed continuous site visits, tracing changes to sites and landscapes as they occurred. By moving in and out of the field sites in central Upplands Väsby and Alby, I could observe new neighbourhoods being built and follow the transformation of public and recreational spaces. Noticeable though these site visits were the many different paces of change, differing from one site to another. Segments of a larger recreational landscape being changed through a slow deterioration of infrastructures and the seasonality of vegetation stood in sharp contrast to the rapid transformation of other sites, bulldozed, fenced, reprogrammed and redeveloped. The site visits thus took me to places in anticipation, in waiting to become rearranged, and places in rearrangement. These continuous site visits allowed tracing the materialisation of plans and policies in real time.

Over 15 visits between 2018 to 2023 were made to Upplands Väsby, in winter, spring, summer, and autumn. The case of Alby came in late in the thesis process but was visited at least five times. The lengths of the visits varied from short stops for taking a particular picture, to full day excursions. Many visits were made alone but also together with co-authors of the papers, with colleagues from the Formas project and a network for Nordic Welfare Landscape studies. Several of the visits were made wearing sports attire, moving in between and using facilities such as obstacle courses, running paths, outdoor gyms and biking paths. The site visits were not structured as methodological observations, meaning that no structured way of keeping field notes or pre-defined structure for how, when and where to visit had been drafted beforehand. Nevertheless, they came to function as a gate into being familiarised with the particular sites and the landscape at large, and for fostering a “process of understanding” (Schultz & van Etteger 2017: 179; Qviström & Saltzman 2006). In this way, the site visits, often by foot, came to be “a test, a trial or tentative procedure; an act or operation for the purpose of discovering something unknown” (Schultz & van Etteger 2017: 179).

## 5.4 Combining methods, combining papers

One advantage of writing a compilation thesis is the possibility to probe into the topic of research from multiple angles, via separate scientific papers. In this thesis I have, as seen through this chapter, employed a set of different qualitative empirical tools to research into the tensions and interactions between outdoor recreation, planning legacies and urban compactness within the paradigm of compact city making. While the role of document analysis rests heavy as a method running through all four papers, the mix of methods is in itself important, as it give different angles into these tensions. From well-polished municipal documents, to technical language of detailed development plans, to visionary renderings, to reflections from professionals and to sweaty encounters with outdoor recreation amenities.



## 6. Summary of papers

In this chapter, I will present the four papers compiled in this thesis. I present the papers in the order indicated in the list of publication on page 9. For each paper, I describe the aims and focus, touch briefly on methods and materials used and the main findings. The papers are available in full in the end of the thesis. I summarise the main findings in Chapter 7.

### 6.1 Paper I

The paper titled *Situating the silences of recreation in transit-oriented development* was published in *International Planning Studies* in 2022. In relation to the aim and research questions of the thesis, the paper begins to scrutinise outdoor recreation in relation to compact city research and planning practice.

The aim of the paper is to scrutinise the role of recreation in the international scientific literature on transit-oriented development (TOD), one model of compact city making. The paper presents a structured review of how recreation is studied in international TOD research literature. We searched for literature in Web of Science and Scopus which resulted in 27 papers (3% of total research literature on TOD). As we argue in the paper, the small number for search results indicates a lack of interest in coupling TOD research with recreation as a question of mobility and land use. Thereafter, we situate the study with a minor case study of Upplands Väsby, building on document studies of policies for urban development and comprehensive and detailed planning documents.

Our approach of combining a structured literature review and a minor case study serves two purposes. First, it brings focus to the need for contextualising scientific reviews. Aggregated analysis of international research

may work to only represent scientific research from a small number of selected localisations. This might obscure the internal differences of the sample, and the role of local planning histories and landscape amenities, not to say exclude knowledge from places *not* represented in the sample. In this particular case our search generated research papers primarily from a North America and Western European context. Secondly, by drawing on a minor case we could discuss the way that TOD models are enacted in practice. This allowed us to discuss how the absence of outdoor recreation in the research literature mirrors a challenge for local practitioners to engage with outdoor recreation under the banner of TOD and compact city making.

The paper shows a dissonance between the TOD model, where recreation is acknowledged as a positive value, and the practical implementation of TOD, where land use planning premieres residential, commercial and infrastructural land uses before other functions. At a local level, few tools exist for local planning practices to actively engage with recreational geographies in the implementation of compact city ideals and models. In addition, the ambition to follow international models of urban development discourages productive mobilisation of historical layers of past recreational planning.

This dissonance is also found in international research on TOD where we see a similar tendency; recreation is perceived as important yet seldom addressed in any depth in research. The international research on compact city model's recreation is continuously held as an important value and potential of TODs, however, few studies offer detailed accounts of how TOD might enable recreational activities or recreational spaces. Furthermore, the scope of international research under review shows little sensitivity to local and situated preconditions for TOD. This, we argue, leads to difficulties for local practitioners to engage with recreation in the compact city in practice.

The findings in Paper I stress the need for situated and context sensitive scrutiny of compact city making. Further, findings suggest that a dominating urban ideals in TOD infringes on local planning by suggesting the prioritisation of certain land uses (residential, transport) and lesser prioritisation of others (recreational). The minor case study shows how the potentials of past recreational planning are underutilised in planning.

## 6.2 Paper II

The paper titled *Renegotiating green space for the compact city: uncovering the ontological politics of green planning in a deregulated planning system* was submitted to Urban Forestry and Urban Greening in June 2023.

The focus of the paper is to offer an overview of contemporary trends of urban densification in Sweden and its effects on urban green areas. The paper rests on document studies over comprehensive and detailed plans in the 20 largest municipalities in Sweden. The paper addresses urban green space without adding a detailed focus on outdoor recreation. As such, the paper provides a wider contextualisation on the green geographies in urban densification throughout Sweden.

The paper addresses planning in 20 municipalities and thus offers another framing of the challenges with municipal planning than the other papers (I, III and IV), which rests on single case studies. This approach is used in order to detect wider tendencies and illustrates how the challenges of green planning is occurring in many municipalities throughout Sweden. While much of the decision-making regarding urban planning is made in each municipal organisation they all work under the same legal framework that prescribes certain processes and documents for planning, while not defining any guidance or regulations in the form and function of green space.

The paper shows how green space is a central topic in municipal comprehensive planning. However, green space is not univocally defined, within or between the 20 municipalities. Instead, we detect a large number of definitions of green space. The review of planning documents thus shows a growing flora of concepts and techniques for green space planning, which obstructs comprehensive scrutiny of larger processes of change.

In these parallel definitions, or versions of green space, we discuss in terms of ontological plurality. The ontologically different versions of green space found in the comprehensive plans are subsequently translated into techniques for land use planning, to be used in detailed planning. These techniques repeatedly work to abstract the geography of urban green space via abstracting 'green' into elusive values in order to fit the rationales of the compact city. From something that requires sufficient space, green space is redefined into something that can be calculated and compensated.

The study finds that contemporary urban planning for densification needs to be scrutinised with sensitivity to site-specific changes. In other words, the study of strategic or comprehensive planning documents needs to be under-

stood in relation to material and practical implementations. A theoretical finding is thus the need of addressing not only the topological relations of the compact city paradigm as an opposition to topographical analysis, instead, the compact city needs to be addressed in its full spatial complexity. Crucially, the paper shows how a sensitivity to multiple geographies can disclose how urban green areas are made malleable enough to fit into the compact city, and that the situated spatial effects of such malleability needs to be addressed. The relativising of green space allows for the move of simultaneously arguing for the importance of outdoor recreation, while marginalising its geographies.

In relation to the thesis at large, the paper begins to scrutinise the multiple geographies at work in contemporary planning.

### 6.3 Paper III

The paper titled *Scrutinizing the plan-ability of recreation in the compact city: continuing and discontinuing modernist planning legacies* was submitted to *Planning Theory and Practice* in July 2022, and resubmitted after major revisions in July 2023. The revised version is included in this thesis.

Paper III asks how outdoor recreation becomes possible to plan within the compact city paradigm and aims to trace the planning assemblages present in municipal planning for outdoor recreation. The paper puts outdoor recreation and compact cities into the context of Swedish municipal planning, hence deepening the discussion initiated in Paper I and narrowing the scope from Paper II, where attention was put to green planning without singling out politics and interventions for outdoor recreation.

The paper touches upon some of the critiques towards the inability of compact city models to sufficiently engage in making a place for outdoor recreation. Furthermore, building on previous research, the paper addresses the need for situated studies of how compact city models are interacting with, and are enacted through, local institutional technologies. In the case of Sweden and Upplands Väsby, this means interacting with a planning system often described as comprehensive and integrative, where integration of different sectoral policy fields (such as green planning or outdoor recreation) are central to the planning process.

Empirically, the paper rests on a heterogeneous set of materials from document analysis, semi structured interviews and site visits. The materials

from the interviews, were thematically analysed and related to documents and specific sites for planning. The analysis involves interpreting how outdoor recreation is defined, modified and translated into an issue for municipal planning by local practitioners and via municipal documents. Furthermore, the paper investigates how outdoor recreation becomes possible to plan via the assembling of particular versions of definitions of outdoor recreation, via certain techniques for planning and via certain spatial logics.

The paper shows that the will to include outdoor recreation in the compact city is hard to follow in practice, where responsibility for outdoor recreation is divided between different departments. Departments that adhere to different definitions of outdoor recreation and different geographic logics. In other words, a common idea of what outdoor recreation is, how it should be geographically ordered and how the places for outdoor recreation should look, is lacking.

The absence of national guidance for how and where this integration should take place leaves the question of how to operationalise the ambition for outdoor recreation into schemes for implementation to the local practitioners. Furthermore, in competition with other policy sectors to integrate into the compact city, outdoor recreation is not the prime focus for urban planners. Instead, the responsibility for outdoor recreation is divided between departments and sub-departments in the municipality. The will to integrate outdoor recreation as an element of the comprehensive planning thus in practice suffers from the internal segmentation of responsibility. Furthermore, the lack of a common definition or understanding of outdoor recreation within the municipal organisation further obstructs integration, as does the limited site-based geography offered through land-use planning.

The paper shows how outdoor recreation is framed as possible to plan through several parallel processes of operationalisation. In other words, outdoor recreation is made plannable through several parallel planning assemblages that draw on different definitions of the issue of outdoor recreation, different geographic forms and modes of practice.

The results of the paper further indicate how materialised discourses in the landscape play an active, yet at times unacknowledged, role in contemporary planning for outdoor recreation.

## 6.4 Paper IV

The paper titled *Sports for all, reshaped, in contemporary Swedish recreational planning: the case of Alby Public Health Park* is a manuscript in preparation to be submitted to Landscape Research.

Paper IV offers an in-depth case study of the interactions between materialised discourses of late modernist recreational planning and contemporary recreational planning. Via scrutinising the process of (re)planning an existing sports ground into a 'Public Health Park' the paper addresses the question of how the material and discursive legacies of welfare planning inform contemporary planning for outdoor recreation, sports and urban development.

Empirically, the paper relies on document studies of contemporary and past planning in the form of detailed development plans and comprehensive plans. Strategy documents, external monetary applications, marketing material, project reports one qualitative semi-structured interviews and site visits were also used to support analysis of the recent process of transforming Alby IP to Alby Public Health Park.

The in-depth study offered in the paper contributes to the thesis with detailed explorations of the interactions between the materialised discourses of late modernist recreational planning and the contemporary practices for recreational planning.

The paper's results disclose a deep reliance on previous planning and previous policy developments. However, this reliance is only partially acknowledged, and, we argue could be extended and made explicit. The study shows how the mobilisation of the materialised legacy of the 1960's planning of the sports ground and its surrounding recreational landscape is splintered and selective, drawing focus to individual sites and individual projects. Further, by scrutinising Alby Public Health Park as a complex planning assemblage we show how the project rests on an intricate ordering of public and private actors, separate fields of policy making as well as the materialities of the site itself. The paper shows how the legacy of the recreational planning of the 1960's and 70's is repurposed into contemporary planning facilities by facility, and therefore loses track of the larger landscape, which gave these facilities context.

## 7. Summary of findings

Supported by Asdal (2015) and Valve et al. (2022), the thesis shows how recreational landscapes are transformed both via a re-ordering of the *geography* of outdoor recreation, and a continuous modification of the *issue* of outdoor recreation, within planning. These re-orderings and modifications enables new planning assemblages to emerge, creating new ways for planning outdoor recreation, ways that in many instances aligns to and supports a compact city idea. In this way, the findings of the thesis move beyond a traditional analysis of the substantial or procedural aspects of landscape planning. Rather, the thesis discloses that what a recreational landscape is and how it comes to be are deeply intertwined.

In this chapter, I will summarise the main findings under four headings.

### 7.1 Fragmented sectors and multiple issues

A sectoral fragmentation makes way for divided responsibility for outdoor recreation in the municipal organisations of Botkyrka and Upplands Väsby. This fragmentation, where outdoor recreation is addressed by different actors within the municipality, leads to a simultaneous existence of parallel versions of the *issue* of outdoor recreation. Therefore, by following the ‘issue’ of outdoor recreation (c.f. Asdal 2015) as it moves in-between and across disciplinary and organisational boundaries the study reveals how outdoor recreation becomes plannable (Valve et al. 2013) not as one but as many, parallel issues. The municipal organisations in both Upplands Väsby and Botkyrka distribute responsibility between management of sports associations, public health, individual facilities, green space planning and management, and urban planning. The potentially intricate relations between green spaces, sports facilities or walking paths of the existing recreational landscape become

possible to plan only after being classified according to the organisational set up of the municipality. These processes of categorisation divide the recreational landscape into separate segments of governing. In the comprehensive-integrative planning model, these diverging issues are thought to coexist within the overarching municipal planning. However, these versions of the issue of outdoor recreation rest on different spatial logics, which makes spatial integration difficult, especially when the overarching idea of urban development is urban density. This finding is primarily supported by results Paper III but also rests on results in Paper II and I.

## 7.2 Diverging operationalisations

Building on the previous findings, the divided responsibility and the lack of national regulations or cohesive recommendations for green and recreational planning creates a diverse set of methods possible to use for operationalising and implementing outdoor recreation. There is not one dominant way of materialising and geographically ordering outdoor recreation, as there is no common understanding of what the issue of outdoor recreation is. Dependent on whether outdoor recreation is perceived as an important yet non-defined quality of a compact city, or if outdoor recreation is perceived as attainable via the terms of ecosystem services, or if outdoor recreation is perceived as foremost an issue of sports associations, the geographical forms and material arrangements (Valve et al. 2017) will vary. Furthermore, international research literature on compact cities, especially in the form of transit-oriented development as seen in Paper I, does not pay closer attention to recreation in any form. Not as a form of mobility, as the focus lies on non-leisure mobility, and neither as a form of land use, as the focus lies on residential and commercial land uses and transit routes. Hence, few cues for how to operationalise and implement outdoor recreation into the models of compact cities are given from international research. This absence of shared techniques for planning, in theory, open for local adaptations, but can in practice raise uncertainty and inconclusive or ad hoc engagement with outdoor recreation through the planning practice. This finding is supported by results in papers I–IV.

### 7.3 Inescapable densities

The compact city paradigm has a vital influence on how outdoor recreation can be defined, operationalised and materialised. The results from the papers indicates how a dominating ideal of compact cities, that obscures recreation and offers few tools for adaption to material preconditions and local histories, legitimises certain planning assemblages while marginalising others. For instance, shown in papers II and III, coupling outdoor recreation with ecosystem services enables a certain malleable geography where outdoor recreation can be modified into a de-localised service, possible to measure, relocate and compensate (Robertson 2012; Barnaud & Antona 2014; Turnhout et al 2014). Associating outdoor recreation with ecosystem services makes way for schemes of implementation that can be added throughout the urban fabric, in the form of individual trees, or flower beds and even via private garden terraces that add to the ‘value’ of outdoor recreation. When outdoor recreation is assembled as a primarily immaterial value, the material ordering that follows needs less extendedness, less physical space. Planning interventions can therefore address enhancing qualities rather than providing quantities (see also Littke 2015; Åkerman 2021), despite scientific evidence on the importance of sufficient quantities both as a value in itself and for counteracting conflicts and overuse (Kristensson 2003). Hautamäki (2019) discusses similar processes in relation to green structures in Helsinki. She concludes that green structures repeatedly become “conceptualised and modified to fit in with the compact city policies and fulfil the priority of densification” (2019: 27). What the findings in this thesis show is how the hegemony of the compact city paradigm is not only relativising urban green space but outdoor recreation as well. This finding is supported by results in papers I–III.

### 7.4 Mobilising planning legacies

A limited or inconclusive engagement with materialised discourses of past recreational planning enables further scattering of existing recreational landscapes. While the planning for recreation during the late modernist era cannot be said to have been driven by one actor, or via a cohesive programme, the resulting landscape came to bind together local sports grounds with green spaces and regional roaming areas. This legacy is not entirely forgotten, neither by users nor by the municipal practitioners. Amenities

from the 1960's and 1970's are continuously used for outdoor recreational activities by residents, and as elements in planning seen in the many references to existing amenities in planning documents for new developments. However, not all parts of this legacy are mobilised in similar ways.

I want to dwell on three trajectories of change (cf. Nail 2017) though which this legacy is continually transformed and mobilised into contemporary planning; as an adapted continuation of past planning intention, as a partial reterritorialisation of a materialised legacy into new planning assemblages or as a deterritorialisation, where past linkages and relations are discontinued and dispersed.

#### 7.4.1 Adapted continuation

As the expansion of recreational facilities during the late modernist era were extensive, the legacies are multifaceted and come in many forms, within and outside urban areas. This legacy today provides a basic access to outdoor recreational opportunities also for the growing compact city. In Paper II, our reading of comprehensive plans and detailed development plans in the 20 largest municipalities detected many references to already existing sports fields, playgrounds and forests as a recreational supply to cater also to new residents and support the liveability of densifying of neighbourhoods.

Same trends are visible in Upplands Väsby where the existence of late modernist recreational planning supports the emerging compact city by offering recreational possibilities also for the new residential developments. However, the existing sites are adopted to new circumstances such as a growing population and shifting demands from sports associations. This shows how the “sedimented [...] layers of meaning and materiality” (Carter et al. 2015:2) of the late modernist recreational landscape is translated as a benefit in the contemporary planning, a planning that paradoxically rests heavily on a critique of precisely late modernist planning. It is a taken for granted infrastructure, but only in part, as other elements of previous planning are undergoing rapid change.

#### 7.4.2 Reterritorialization

If certain sites are well established as recreational sites, other sites are reimagined and reassembled in parts. This is visible in the case of Alby Public Health Park, where the legal land use regulation has not changed since the detailed development plan from 1971; it is still land for “gymnastics, bathing and sports facilities” (Botkyrka kommun 1971: 2). However, the site is fitted together with new material contents and partly new discursive framings drawing on a set of desires that partly resembles the egalitarian and accessible ideals of Sports for All. High ambitions for public participation, gender equality and accessibility are presented as novel aspects of the slumbering and worn-down site, without acknowledging how discussions of these topics were present already during the initial planning of the site. This form of partial reassembling of particular sites, but not encompassing the larger recreational landscape in which these were once situated, displays how the material legacy forms a “raw material” (Braae et al. 2021:451) for new planning assemblages to mobilise when ambitions for a wider recreational landscape is not obtainable. Furthermore, losing knowledge of the “inherited landscape connections” (Jessen & Tjetien 2021: 491), in which these sites were previously situated does not only work to single out particular points of interest, but also gives way for a deterritorialisation of the pervious multiscale landscape when the logics of connections and spatial forms are forgotten (see also De Block 2014).

#### 7.4.3 Deterritorialisation

Particular sites of recreational use are continued or reassembled to cater to the new residents of the compact city. While access to any recreational amenities are positive, this site-based planning seldom considers the drastic rise in user numbers. Furthermore, it reduces what was previously a multiscale recreational geography—based on topographical calculations of population size and accessible space—to points of interest. This reduction is further spurred by the difficulty of co-planning the multiple aspects of a landscape due to the increasing sectoral fragmentation in the municipal organisation, as discussed in Section 7.1.

New forms of spatialisation challenge a topographical approach to the recreational landscape. When a primarily topographical geography found in the leisure planning of the 1960’s and 1970’s, concerned with Euclidian measurements of distance and size of recreational amenities, is increasingly

substituted with a topological use of non-material values or indicators, outdoor recreation becomes less of an anomaly in the compact city. Following the reasoning of outdoor recreation as important 'value', even the smallest elements of urban greenery contribute to the value of recreation (rather than the practice of recreation) and thus forms a powerful technique for compact city making.

## 8. Concluding reflections

The thesis aim, as presented in Section 1.2, has been to offer an interpretation, and to deepen the understanding of the interactions and tensions between outdoor recreation, planning legacies and a dominating the paradigm of compact cities. I have addressed this aim through a selection of methods and theoretical perspectives that have made it possible to detect a number of different processes that play out in these tensions. As discussed in the previous chapter, it is possible to detect processes of geographical re-ordering of outdoor recreation, processes defining the issue, and processes of organisational or structural fragmentation. These processes are highly intertwined and, though messy, need to be addressed as precisely *intertwined*. Only by addressing the arrangement of semiotic expressions of outdoor recreation *with* the material contents through which these expressions are enacted, is it possible to understand the conditions for outdoor recreation in the compact city.

In this final chapter, I want to reflect on how the thesis can enrich and contribute to the understanding of the tensions between outdoor recreation, planning legacies and urban densification, within the paradigm of compact city making. I also want to touch upon some methodological challenges and briefly discuss potential routes for further research.

### 8.1 Contributions

The findings summarised in the previous chapter can, I argue, enrich both local practice of recreational planning in Sweden, and possibly the Nordic region. The findings can also enrich international research on outdoor recreation and compact cities.

As seen in Paper I, the international research on compact cities has, yet, to develop a more extensive engagement with outdoor recreation as part of

the urban fabric. Furthermore, as recently argued by e.g. Kjærås (2020) and Adelfio et al. (2021) the narratives of compact city planning are often de-localised to portray generic models or solutions for urban planning practice. What this thesis has brought is a situated account of the interactions between outdoor recreation, planning legacies and contemporary planning. In these situated accounts it is visible as to how outdoor recreation and compact city making are not in total opposition, rather, a myriad of smaller encounters between actors, ideas, sites, geographies and politics shape the interactions between the two. While additional cases, stories and situated accounts are needed to further probe into how these interactions can play out, and to trace their geographical effects, this thesis provides one example of how it is possible to explore intertwined processes in planning, in a situated context.

By combining assemblage theory, research on the ordering effects of planning and the role of materialised discourses in planning, the thesis brings one route of approaching the many ‘messy’ problems of planning. This theoretical frame allows following relations and co-emergence, while staying sensitive to the histories and material particularities of the sites and landscapes that are mobilised into or affected by planning. The thesis therefore disclose one way of tracing the many paradoxes in planning for outdoor recreation, as for example, how arguments can be made *for* the importance of outdoor recreation in the compact city, while simultaneously marginalising its geographies.

By attending to the planning history in the two case studies, and by thinking how the planning legacies of past recreational planning is remobilised into contemporary planning via trajectories of partial continuations—reterritorialisation and deterritorialisation—the thesis also contributes with tools for scrutinising how compact city making is interacting with material, historical and geographical particularities. Recent calls have been made to diversify the compact city model to scrutinise how the compact city is situated in “trans-urban and global flows of materials and people” (Haarstad et al. 2022: 6; see also Keil 2020). This thesis shows the importance of *also* staying sensitive to the grounded and material effects of compact city making, tracing how materialised discourses are reassembled could be one way to do so.

In relation to recreational planning and urban planning practice in Sweden, the deepened understanding of the conflicts between outdoor recreation and compact city making that this thesis discloses could function as a stepping stone for continued scrutiny of local planning practices. To empirically draw attention to the segmentation of issues and geographies is one of the contributions of this thesis, which could benefit local planning practices in Sweden.

Furthermore, an appreciation and knowledge of existing or previously existing recreational landscapes at local, regional and national levels of policymaking could inspire new thinking about the geographical perspectives of outdoor recreation for all. This contribution of the thesis could prove a vital entry point to discussing how outdoor recreation is approached in municipal planning, and how outdoor recreation could be geographically ordered. That is, re-appreciating or rediscovering the existing recreational landscape and its planning legacies, in Sweden and in the wider Nordic regions, sharing similarities in planning history (Nilsson et al. 2021), might invigorate the debate on outdoor recreation in urban planning and in compact city making. Instead of managing individual sites, via a segmented organisation, reimagining the landscape, with all the layered materialised discourses, could prove a vital resource for reassembling the urban recreational landscape.

## 8.2 Methodological reflections

Even if the building blocks of *outdoor recreation*, *compact city* and *welfare landscapes* have been constant through this thesis work, my ways of tackling and interpreting these building blocks have shifted through the work. The journey through the PhD education allowed me to probe into a multitude of intertwined subject areas. From initially approaching the thematic via the prism of mobility studies, to beginning to address the many social and cultural hindrances to participating in outdoor recreation, to engaging with the legal frameworks of land use regulation. The work has thus led me to engage with multiple specialised fields of research that, while at times appearing as radically diverse, time and again have proven to bring increased nuance to the overall theme. While nuancing one's knowledge is a key aspect in any qualitative scientific endeavour, it can also give rise to a number of challenges. Such as how to translate nuances to scientific papers and

coherent narratives, and find a hierarchy between sub-themes. My way of dealing with such challenges and/or opportunities has been to stay within a relational and material-semiotic field of thinking. The *intertwined* nature of my research topic has therefore been the constant, and the ambitions have never ceased to be to find ways of addressing and interpreting this. Nonetheless, choices have been made that centre certain tensions, and put others to the side.

“Different methods for describing landscapes involve specific sorts of reduction, with exclusion of some types of knowledge claims, clarification of some types and prioritisation of others. Hence, the method(s) chosen to assess landscapes will determine the types of knowledge that are presented” Löfgren (2020: 930) writes, referring to the practice of landscape planning. The same is true for landscape planning research. Any form of operationalisation of the multiplicity and heterogeneity of recreational landscapes will imply a reduction of empirical material, so have the methods applied in this thesis. Initially, the ambition for the thesis was to try to address both the issues and ordering effects of planning and the lived and practical use of the recreational landscape. In this way, I had ambitions to draw on a wider width of knowledge of the landscape and therefore be able to discuss the potential conflicts and tensions in between the lived and the planned. As the work continued with searching for case areas, reading up on previous research from multiple fields, the sheer complexity of the issue had to be tackled and somehow be ‘sorted out’ to fit into the time frame and scope of a thesis. My educational background in urban planning and experience from working within municipal planning offices nudged me in the direction of policies, plans and processes. For a time, I kept the idea of ‘soon’ beginning research on user perspectives. However, as time kept moving too quickly, I eventually had to abandon that idea to focus on exploring the worlds of municipal planning for outdoor recreation—a world that in itself has a highly intertwined character. Nonetheless, there are perspectives that are not seen with the use of the selected methods. Any subjective dimensions of partaking in recreation from the users of the spaces are not visible, and multitudes of other actors are obscured.

The municipal planning process is of course larger than only consisting of the municipal offices that I have touched upon in this thesis. In the work of assembling a plan, a policy or deciding, a myriad of other sources, knowledge and actors are mobilised. Consultancies and external experts,

landowners, developers and building companies, advocacy groups and associations—the list of other actors that have not been heard in this thesis is long. As is references to other places or comparisons to ‘best practice’ cases and sites. Attending to a wider set of actors and sites would all have been viable trajectories for research. However, as the thesis work unfolded I had to limit the scope to two cases and put focus on the municipal organisation. This was partly due to a limited time for empirical research, but also as I found few previous studies that dove deeper into the “practice of provision” (Boulton et al. 2018) of outdoor recreational amenities from the perspectives of municipal planning. Hence, the methodological choices have enabled me to see certain things, while excluding others. Nonetheless, the methods have brought, I argue, important understanding of the processes of planning for outdoor recreation.

One methodological challenge has been the combination between contemporary and historical planning documents. While the thesis and papers are not set up as direct comparison between one section of time with another, but rather a query into how planning legacies from a past era are mobilised today, an ambition has nevertheless been to capture how threads of planning history regarding municipal comprehensive planning and particular projects, sites and amenities runs through contemporary planning practices.

In the case of Upplands Väsby, the municipal archive proved to hold much material. There I also had the benefit of Johan Pries as a historian in the Formas financed Welfare Landscape Project who collected archival materials. In Botkyrka, the municipal archives were less extensive. With the help of the municipal archivist we, (me and Neva Lepoša), managed to gather comprehensive plans, and maps over the case study area Alby Sports Field but we and the archivist, found less documents explicitly targeting leisure, sports or outdoor recreation. This points to challenges with archival research. How archives are organised, what is collected and stored, lies beyond the influence of the researcher. Questions of selection, organisation and accessibility of archives is indeed a topic for research (Asdal & Reinertsen 2021).

### 8.3 Looking ahead

The provision of public amenities for outdoor recreation is not in itself a solution for all the public health challenges that today's urban residents are facing, briefly discussed in Section 1.1. Nonetheless, ensuring the existence of recreational amenities, and sufficient space for recreational activities to take place in the urban fabric plays an important part in the wider puzzle of planning for healthy living environments. Continued scrutiny of the potential of compact city models to cater to urban health is needed, especially as this mode of planning continues to influence planning practices in many diverse contexts around the globe.

The lack of comprehensive or aggregated knowledge of urban densification and compact city making in Swedish municipalities, for instance, which we address in Paper II, requires further attention. Not only from researchers' scrutinising the discursive bearings of such models, but also from researchers scrutinising the geographic effects on the ground.

This thesis makes visible the play between abstraction and concretisation in planning for outdoor recreation. The movements between 'dephysicalised' (Bartel & Graham 2016) abstract and elusive values and the 'stubbornness' of concrete facilities and sites speaks to the tensions within land use planning as a field of governance that seeks to simultaneously regulate the very physical land and the less tangible human well-being (see e.g. Valverde 2005 and Blomley 2017 for discussion on the multifaceted character of land use planning). This indicate a need for further scrutiny of the tools and techniques of land use planning in themselves, and what work they are mobilised to do in the making of the compact city. Furthermore, the current lack of engagement with outdoor recreation in the Swedish Planning and Building Act begs further question of how the legal tools and regulative framework can support planning for outdoor recreation, or how a framework could look to enable other ways of ordering outdoor recreation within the compact city.

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## Popular science summary

Today cities are built denser and denser. Block after block with dense structures and a mix of services, housing and jobs grow forth as new neighbourhoods. In already existing areas, new buildings and blocks are added in spaces that previously held industries, parking lots or green space. The ideal behind many of these projects of densification can be captured in an urban model called the Compact city. The compact city is often showcased as an important step towards urban sustainability. Furthermore, the compact city is also often described as positive from a health perspective as it allows for an active everyday life with walking and biking as central means of transportation. Despite these positive effects questions still remains on the possibilities for sufficient green space in the compact city, especially space for outdoor recreation.

Earlier research have shown how green space that are planned, or left intact, in the compact or densifying city often are insufficient for the increase in population. In an ever denser urban environment the outdoor recreation are continuously in competition with other functions that are to coexist in the city. To the difficulty of securing space for outdoor recreation in Sweden, one can add a historical perspective. Especially under the 1960's and 1970's an intricate recreational landscape emerged throughout Sweden, connected to the popular slogan Sports for all. Sports fields, roaming areas, football fields, electrical lit paths and ski slopes came to be weaved together with the planning and building of residential areas and cities through the country under the late modernists era of 1960's and 70's. It is often in areas such as these where densification and urban development is discussed today, with the ambition of creating a compact urban fabric in contrast to the now spacious layout that dominates large shares of late modernist housing areas.

Against this background, the thesis aims to offer an interpretation, and to deepen the understanding, of the interactions and tensions between outdoor recreation, compact city models and lingering planning legacies of past recreational planning. I do this in order to scrutinize the conditions for outdoor recreation within the compact city. The thesis is guided by a research question concerning how existing recreational landscapes are modified in the meeting between past and present planning.

Theoretically, the thesis adopts material-semiotic approach that implies an understanding of the world as rooted in interactions between physical or material elements and discursive or social. Therefore the thesis makes use of assemblage theory and takes inspiration for science-and technology scholars as well as research on landscape and planning history to scrutinize how outdoor recreation is defined, geographically ordered and materialized through Swedish municipal planning. The thesis rests on four papers.

Results from the papers indicate how the responsibility for planning outdoor recreation is divided within the municipal organisation. This, together with a lack of national guidelines for how to plan for outdoor recreation creates a diverse set of possible ways to plan outdoor recreation. Not only do this make overviews and critical assessment difficult, it also opens for creative way of marginalising outdoor recreation from the planning practice. Furthermore, a limited or inconclusive engagement with legacies of past recreational planning enables further scattering of existing recreational landscapes.

The thesis concludes that the intertwined and ‘messy’ character of outdoor recreation needs to be addressed from multiple angles, both in research and in practice. This implies a need to transgress disciplinary boundaries within planning practice, and a need for theoretical approaches that allows for tracing heterogeneous socio-material relations, while staying sensitive to the histories and material particularities of the sites and landscapes that are mobilized into, or affected by planning.

## Populärvetenskaplig sammanfattning

Idag byggs städer allt tätare och tätare. Idag byggs städer allt tätare och tätare. I nya stadsdelar växer stadslandskap fram i kvarter med sammanhållen struktur och blandade funktioner. I redan befintliga områden adderas nya byggnader och kvarter i utrymmen som tidigare vart industrimark, parkeringsplatser eller grönyta. Den täta staden framhålls ofta som ett steg mot en hållbar urban utveckling. Dessutom beskrivs den tätare staden ofta som positiv ur hälsosynpunkt då den möjliggör ett mer aktivt vardagsliv med gångtrafik och cykel som centrala transportsätt. Trots dessa positiva fördelar kvarstår flera frågor kring möjligheten att möjliggöra för tillräckligt grön offentlig plats i den täta staden, speciellt plats för utomhusrekreation.

Tidigare forskning har visat på hur de urban grönytor som planeras eller finns kvar i en tätare stadsmiljö ofta är otillräckliga för den ökade mängden invånare. I en allt tätare stad kommer utomhusrekreationen i ständig konflikt med andra funktioner som ska samsas på en begränsad yta. På spänningen mellan täta städer och utomhusrekreation i Sverige kan man även anlägga ett historiskt perspektiv. Speciellt under 1960- och 70-talen växte ett intrikat rekreationslandskap fram, kopplat till den populära parollen Idrott åt alla. Idrottsplatser, strövområden, fotbollsplaner, elljusspår och skidbackar kom att sammanvävas med planerandet och byggandet av bostäder och städer runt om i hela landet. Det är ofta i områden från samma tid som förtätning och bostadsutveckling diskuteras idag, med målet om att skapa en tät stad till skillnad från den rymliga form som nu är dominerande i många av den senmodernismens bostadsområden.

Mot denna bakgrund syftar avhandlingen till att erbjuda en tolkning, och fördjupa förståelsen, av de interaktioner och spänningar som uppkommer mellan utomhusrekreation, den täta stadens ideal och arvet av en tidigare rekreationsplanering. Detta för att kunna granska förutsättningarna för

utomhusrekreation i den täta staden. Avhandlingen styrs av en forskningsfråga som berör hur existerande rekreationslandskap omformas i mötet mellan dåtida och samtida planering.

Teoretiskt anlägger avhandlingen ett materiellt-semiotiskt perspektiv som innebär en syn på värden som rotad i interaktioner mellan det fysiska eller materiella och det diskursiva eller sociala. Avhandlingen lutar sig mot assemblaget teori och hämtar inspiration från teknik- och vetenskapsstudier samt forskning om landskaps och planeringshistoria för att undersöka hur utomhusrekreation är definierad, geografiskt ordnat och materialiserat genom svensk kommunal planering.

Avhandlingen bygger på fyra vetenskapliga artiklar. Resultaten från artiklarna visar hur ansvaret för att planera utomhusrekreation är splittrat inom den kommunala organisationen, där majoriteten av alla planeringsbeslut tas. Detta, tillsammans med avsaknaden av nationella riktlinjer för hur utomhusrekreation ska planeras i täta städer ger upphov till en mängd olika sätt att planera utomhusrekreation. Detta skapar inte bara svårigheter att analysera och kritiskt granska planeringen utan öppnar även för kreativa sätt att marginalisera utomhusrekreationen från planeringspraktiken och från den täta staden. Vidare visar artiklarna på ett begränsat engagemang med de många historiska lagren av tidigare rekreationsplanering vilket ytterligare spår på denna marginalisering.

Avslutningsvis sammanfattar avhandlingen att den sammansatta och 'röriga' karaktären av utomhusrekreation måste adresseras från flera vinklar, både i planeringspraktiken och i forskning. Detta innebär ett behov att överbrygga disciplinära gränser inom planeringspraktiken och ett behov av teoretiska perspektiv som gör det möjligt att spåra heterogena och sociomateriella relationer, men som samtidigt tar fasta på de historier och materiella förutsättningar av de platser och landskap som påverkas av planeringen.

# Papers







The importance of recreational mobilities is further elaborated on in the following section. Thereafter, we stress the need for a context-sensitive critique of TOD literature, drawing on policy mobilities research. This is followed by a literature review of TOD research and its engagement with recreation as a matter of mobility and land use. To contextualise our review and its implementations, a complementary minor case study of Swedish municipal planning for TOD is introduced. The paper ends with a discussion and concludes that there is a need for diversifying the urban model upon which TOD is based.

## 2. Recreation and the compact city

Mobilities for and as recreation are not a marginal aspect of everyday life, nor are their environmental impacts insignificant. Given the increasing volume of leisure travel, and the severe health challenges of a sedentary society, these aspects need to be addressed in contemporary urban planning (Ettema and Schwanen 2012; Freeman and Quigg 2009; Lowe 2018; Sallis et al. 2006). In addition, there are the challenges of a sustainability shift in our leisure travels, including recreational mobilities. Today, leisure travel accounts for 30% of all travel in Sweden (compared to 50% for work- and school-related travel), and it accounts for nearly 52% of total distances travelled. Moreover, almost 60% of leisuretravelled kilometres are taken by car (Transport Analysis 2017).

If a strong focus on sustainable mobilities is evident within TOD research, a specific urban norm is equally prominent and the model fits well into contemporary theories of the compact city as a sustainable urban form (Qviström, Luka, and De Block 2019). The urban norm, heavily influenced by new urbanist ideals, draws on the aesthetic features of an (often European) "traditional city". These ideals aim to contribute to a sense of community and social change (McCann and Ward 2010; Sharifi 2016) with density and compactness used as key features of a good plan (Adelfio et al. 2021; McFarlane 2015). This 'ideal type' of a traditional city reduces urban complexity to a function of physical attributes and systems, separating the city from nature or the non-urban environment (Wachsmuth 2014).

Crucially, the specific model of the city which TOD relies upon comes out of a critique of the international style, or modernist planning, especially the car-based and low-density development, which reached its peak in the 1960s and 1970s (MacLeod 2013; see e.g. Newman and Kenworthy 1996). However, this was also the golden era for recreational planning (Pries and Qviström 2021). Leisure, recreation and play were deeply embedded in modernist planning. This "space age" (Gold 1973), with vast open areas for recreation and play prepared for (and materialised) the future "leisure society", but in doing so also realised modernist planning ideas and aesthetics. With the new urbanism critique, recreation was reinterpreted as not being part of the city, but rather pushed out of it to an imagined greenbelt, thus reconstructing a divide between city and country (Qviström 2015). Urban outdoor recreation, both as land use and as an activity in itself, thus became silenced. Given this history, outdoor recreation is not just any "residual category" (Star and Bowker 2007) in the TOD model. It considers a more general critique of how the embedded compact city ideal (and its critique of modernist planning) frames the kinds of mobilities and land uses in TOD. Our question, then, is if there is an ambition today to bring recreation as mobility and land use into the conceptualisation of TOD, or does the compact city ideal (and critiques of modernist planning) still set the agenda for what kinds of mobilities and land uses could be given a place in TOD.

### 2.1. Situating the TOD literature

This study is based on an understanding of knowledge as context-dependent, and therefore at least partly transformed when assembled and implemented elsewhere (Latour 1999). As Robinson (2016) reminds us, we need to unearth this "locatedness" of knowledge production when engaging with international planning models. The implications of a situated epistemology has been explored in

contemporary planning research, in studies of how local knowledge of specific places can be incorporated into planning (e.g. Beauregard 2015; Nielsen et al. 2019) and in research on policy mobilities revealing how knowledge is being transformed when moved from one place to the other (e.g. Alfredo et al. 2022; Carr 2014; McCann and Ward 2011; McFarlane 2010; Vicenzotti and Qviström 2017; Wood 2016). Yet, despite the apparent similarities to policy mobilities, the format of the literature review has not been questioned within this discourse. Therefore, with our review we aim to spark methodological discussions on how to examine international research concerning context-sensitive practices. Following Østmo and Law, a literature review translates context-sensitive cases into a universal scheme (Østmo and Law 2018). In this process of translation, the reviewer is likely to disregard the specific importance of geography (and history) by adhering to conventions on how to sort out general (or abstract) knowledge and structure a review. Differences in place and planning history are thus easily set aside due to a modern idea of scientific progress. If we aim to gain an overview of previous research, such abstractions and translations are hardly possible to avoid. What we can do, however, is to be aware of and consider the implications of such (mis)translations, but also reestablish some of the references to specific places, projects and histories. Furthermore, we also need to be explicit about our own base for interpreting the results, in this case primarily the specific planning context within which we study and evaluate TOD projects. While such an approach is a challenge given the limited space of an article, we contextualise our review by offering a discussion on the geographic context of the reviewed papers, but also by bringing in a minor case study to situate our reading as well as the effects of the TOD planning discussed.

### 3. Recreation in TOD research

Our review aims to investigate the role of recreation as a matter of mobilities and land use within transit-oriented development. We gathered literature for the review through structured searches in Scopus and Web of Science and selection was based on the appearance of the defined search terms in the abstract, title, or author's keywords. Only peer-reviewed papers in English were selected that were published during all recorded years until January 2022. Searches were made using the terms *recreation, leisure, sport, physical activity, active transportation and transit-oriented development or TOD* (see Table 1). By drawing on these five search terms we aimed to collect a wide range of articles directly or indirectly engaging with recreation in TODs, with special attention to active recreational practices. Active transportation allows us to find papers exploring the interactions between active recreation and transportation, leisure and recreation, to grasp a broad scope of papers setting recreational mobilities into a context of leisure and well-being.

Initial compilation shows that only 3% of the papers on TOD use any of the search terms. Although this is a small number, we have observed a slight increase in papers combining TOD

**Table 1.** Summary of results from search for transit oriented-development and keywords.

Web of science:	Transit oriented development	AND	Leisure	8
			Recreation	2
			Sport	2
			Physical activity	8
			Active transportation	6
			<b>Total excluding duplicates:</b>	<b>23</b>
			% of all TOD articles ( <i>n</i> = 809)	3%
Scopus:	Transit oriented development	AND	Leisure	9
			Recreation	1
			Sport	2
			Physical activity	8
			Active transportation	7
			<b>Total excluding duplicates:</b>	<b>24</b>
			% of all TOD articles ( <i>n</i> = 751)	3%
<b>Total for review, excluding duplicates</b>				<b>27</b>

and recreation. In 2019, the same search terms accounted for only 2% of the total amount of TOD articles.

To delve deeper into the literature, we read all the papers, structuring our inquiry with three questions: What types of mobilities are represented? What geographies of land use for recreation are disclosed? And how are recreation, sports, leisure, physical activities and active recreation conceptualised? By asking these questions, we hope to unveil if and how recreation as mobility and land use are considered an element in TODs.

Seven papers<sup>1</sup> were excluded from further analysis as they only concerned indoor activities, shopping and (passive) entertainment, using the wide concept of leisure without further definition or explicitly focusing on non-leisure mobilities /activities. One of the excluded papers only mentions the search terms in the abstract. The remainder of the papers are presented and discussed under the following headings.

### **3.1. Mobilities for and as recreation**

Active transportation is either researched as a mode of utilitarian transport or daily commute that benefits environmental sustainability (Duquet and Brunelle 2020; Iamtrakul and Zhang 2014) or as a factor for health (Hu et al. 2014; Morency et al. 2020). Without differentiating between mobilities, these papers provide no way of analysing mobilities for recreational purposes.

In other papers, physical activity is rendered as a function of utilitarian transport, not as recreational activity. Again, focus is on patterns of work commutes and daily errands. Any physical activity or recreational experience is merely a positive side effect (Langlois et al. 2016; Park et al. 2019; Sreedhara et al. 2019; Thornton et al. 2013; Thrun, Leider, and Chriqui 2016; Yang et al. 2019). Similarly, regarding recreation as an issue for land use planning, we see how recreational land uses are rendered as transit corridors, rather than space for recreational activities. Again, recreation is a possible side effect but not a prime focus. As an example, Park et al. concludes that 'there is a value in constructing parks or public open spaces near rail stations for the purpose of promoting walking trips and, potentially, other physical activity' (Park et al. 2019, 6).

A number of papers do indicate that mobilities for or as recreation differ from utilitarian travels. Recreational mobilities happen at other times, such as evenings and weekends (Tan et al. 2020) and change over time (Brown and Werner 2009), depart from and target other types of destinations (Glass et al. 2020), or are conducted via other travel modes (Mamdoohi and Janjani 2016). None of these studies delve deeper into these differences, leaving recreation as an unexplored anomaly in the otherwise functional and repetitive work-commute patterns.

### **3.2. Land use, networks and places for recreation**

In several papers, the search terms appear as a general quality in descriptions of TOD. Both Meng et al. (2021) and Knowles (2012) show that access to recreational facilities are a core value of TOD as living environments, acting as a pull factor to attract new residents. Land use, or places and networks, for recreational activities are rarely discussed, but rather lost in a general description of mixed land use. However, a few exceptions can be found. Lu et al. (2018) provide a detailed description of how geography, in the form of street networks for recreational walking differs from old and new TOD neighbourhoods in Hong Kong. Meng et al. (2021) and Park et al. (2019) disclose the need for parks as places for recreational activities, an amenity that today is lacking, according to Meng et al. (2021). Deponte, Fossa, and Gorrini (2020) use the effects of recent Covid-19 restrictions to show how density poses a risk of crowding and congestion and argues for a rediscovery of the low-medium density city.

Two papers go deeper into recreational land uses in TOD. Garcia and Crookston (2019) look into the use of a recreational corridor in Salt Lake City, US, which shows that access to recreational amenities are currently unequally distributed both geographically and socioeconomically. While the

recreational corridor in the study extends beyond the TOD area, it intersects with a core transit corridor. Here, at the intersection between recreational and transit corridors, Garcia and Crookston point to possibilities for stronger integration, improving the accessibility of both corridors. The existence of a recreational landscape amenity within, or at least in direct relation to a TOD, thus strengthens equal access to recreational mobilities in ongoing development.

With the aim of displaying the limits of a one-sided focus on proximity to urban amenities, Qviström, Bengtsson, and Vicenzotti (2016) show how landscape amenities, such as natural areas for recreation, are important aspects of the everyday life of TOD residents. By showing how senior residents in a new TOD in Sweden rely on the existence of external private spaces for recreation, in the form of second homes, Qviström et al. reveal a paradox between the wish for sustainable travel within the TOD and increasingly unsustainable car transit related to recreational mobilities. Their analysis shows how recreational amenities within TOD encourage passive engagements (such as walking through a park to another destination), while private amenities provide space for a more active engagement, indicating the need for further research on the types of recreational activities enabled in TOD areas.

### 3.3. The geography of the TOD research

Geographically, North America and Asia are dominant empirical locations for the reviewed papers (see Table 2). While providing informative environments for studying TOD, these regions are internally complex. Policy frameworks, mobility patterns and recreational preferences are likely to vary both within and between locations.

We also note that a substantial part of the reviewed papers rest on an understanding of the urban model as a transferable and non-contextual mode of planning, where changes in physical structure lead to similar effects in all geographic contexts. Such a view on comparing non-contextual implementation could lead to the continuous neglect of everyday life practices and experiences of urban users (Thomas et al. 2018), as well as the neglect of the intricate spatial relations connecting TODs with surrounding landscapes (Qviström, Luka, and De Block 2019).

On the other hand, some studies challenge the generic approach and calls for an increased sensitivity towards local contexts, both in terms of locating findings in relation to continent and country and also locating them internally within the same city. Deponte et al. argue for a move towards a 'site-specific planning paradigm', looking to existing medium-density settlements for development, rather than the dominant 'site-saving' paradigm of TOD, characterized by a high concentration of residents and services in a limited space (Deponte, Fossa, and Gorrini 2020, 137). Lu et al. (2018) call for a nuanced understanding and their analysis of TOD neighbourhoods in Hong Kong shows that spatial design and planning histories create fundamentally different opportunities for walking, though align with similar TOD principles.

Lu et al. (2018) go further, discussing how the extensive TOD research from the US is difficult to compare to Chinese TODs, as scale, size and policy frameworks diverge greatly between these locations. An illustrative example can be found in Knowles (2012) analysis of Ørestad, a newly

**Table 2.** the geographic location for reviewed studies, per country/region and continent.

Country/region		Country/region		Continent	
US	8	Iran	1	North America	12
Canada	2	Italy	1	Asia	6
Canada and US	2	Japan	1	Europe	3
Australia	2	Sweden	1	Oceania	2
Mainland China	2	Thailand	1	Middle east	2
Hong Kong	2	<i>Review</i>	1	<i>Review</i>	1
Denmark	1	<i>Model</i>	1	<i>Model</i>	1
GCC region	1				

developed TOD in Copenhagen, Denmark. Knowles' analysis does not disclose that the Ørestad project was fraught with local protests, as the development took place on public green land, used for leisure and recreation (Rehling 2017). One could thus argue that this specific TOD worked to reduce the total land area for recreational purposes, even if access to recreational facilities is used as a marketing factor for Ørestad (Knowles 2012). This case is but one example, and it shows the importance of a context-sensitive approach when reviewing both TOD practice and research. Specific knowledge of other cases in the reviewed literature could arguably disclose similar complexities. Hence, research on planning models needs to be situated both geographically but also within policy framework and historical context.

#### **4. When TOD meets Swedish modernist planning**

In order to situate our reading, but also to better understand the effects of the absence of recreation in TOD research, we present a case study of a Swedish TOD. With the case study, we want to bridge the empirical question of recreation as an aspect of TOD, with a methodological question of how context-independent review approaches obscures local geographies.

By selecting a Swedish municipality as case study, we are able to conduct a critical examination of recreational aspects in TOD set in comparison to a rich history of recreational and leisure planning in earlier planning paradigms (Giulianotti et al. 2019; Pries and Qviström 2021). The selection of the Upplands Väsby municipality in particular rests on two main criteria. First, there is an explicit use of the TOD model in key planning documents. Second, the case provides an opportunity for studying how spatial contexts that are often criticised for being unsustainable, here modernist urban layouts, are being translated (or as we will discuss, mistranslated) in the current planning paradigm. We do not attempt to 'control for difference' compared to the reviewed papers (see Robinson 2016), but to illustrate how TOD models filter through local preconditions, creating local-specific outcomes.

As it is the municipal government that holds responsibility for most land use planning in Sweden (Schmitt and Smas 2019), we examine local planning from a strategic comprehensive planning standpoint, encompassing both natural, rural and urban areas, as well as legally binding detailed development plans. The empirical material consists of a selection of municipal policies, plans and documents from several municipal departments and sub-departments. By comparing statements and ambitions set on a strategic level with what becomes materialised in detailed development plans, we focus on the geography of land use emanating from the planning process. Teasing out the chronology (see Meyer 2001) of a planning case study is not always easy, as planning is far from being a linear process moving from idea to implementation (Carr 2014). Nonetheless, to understand the consequences of planning influenced by a TOD discourse, we need to begin to decipher how ambitions, geographies and strategies are drawn together to assemble Upplands Väsby as a TOD.

##### **4.1. Upplands Väsby: from green suburb to mixed use city**

Upplands Väsby Municipality with its 44 000 inhabitants is located in the north part of the Stockholm region in Sweden. The municipality has a long history of integrated transit and residential development. From being a small village along a new rail line in the late 1800s, Upplands Väsby went through a rapid process of urbanisation starting in the 1950s and culminating in the 1970s with a new residential and commercial centre and commuter train station. These historical transit-oriented developments (see Knowles, Ferbrache, and Nikitas 2020) are now being converted into a contemporary TOD, pairing a dramatic rebuilding of the station area with extensive urban regeneration. Below, we trace the development from green modernist suburb to compact TOD.

#### 4.1.1. The making of a green suburb

Upplands Väsby Municipality was encompassed in the national interest in health, outdoor life and recreational planning, captured in the slogan of "Sports for All", that permeated Swedish public governance in the 1960s and 1970s (see also Giulianotti et al. 2019; Moen 1991; Statens Planverk 1977). Active forms of recreation and outdoor activities were focal points, deriving from dominant nationalistic discourses on sports, health and nature, coupled with concerns about sedentariness in modern society (Pries and Qviström 2021). During the 1960s leisure planning became a prominent topic in planning the urban geography of Upplands Väsby. From primarily focusing on rural areas or urban fringe zones as areas for recreation, recreation now became embedded at the neighbourhood scale within the urban area. Ambitions for leisure planning culminated with the 1976 leisure plan in the which political goals of equality were combined with a careful inventory of the well-developed recreational geography (Upplands Väsby Kommun 1976).

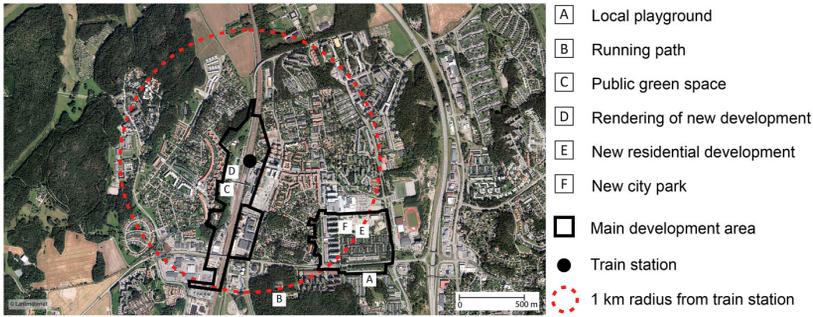
The materialization of this planning ambition can still be seen across Upplands Väsby. An intricate structure of urban green spaces meander through and between residential areas. Small-scale football pitches, tennis courts and playgrounds are distributed at regular intervals throughout the neighbourhoods. Places for diverse recreational activities are merged with recreational corridors for mobilities such as walking, running and skiing. Together with larger sports facilities, both within the urban area and beyond, the recreational geography in Upplands Väsby comes to the forefront as a detailed network, deeply entangled in the everyday geography of the district and transgressing the rural/urban divide (see also Pries and Qviström 2021). Even if not all elements of the legacy of modernist recreational planning have been maintained over the years, this recreational infrastructure still forms a fundamental part of the provision of outdoor recreation facilities in Upplands Väsby.

#### 4.1.2. From suburb to city

The building boom of the 1960s and 1970s faded during the following decade to and almost standstill during the 1990s. In order to revive the municipality and its economy a new strategy of moving 'from suburb to small town' was launched in 2005 (Upplands Väsby Kommun 2005). This claim for the future becomes bolder in a 2013 policy, updated and refined in 2018, aiming to move from suburb to city (Upplands Väsby Kommun 2013a, 2018b). The very concept of a city, and the aim to "build a city", is set in sharp opposition to what is described as the existing suburb typology. In these policies a city is compact, but the compactness is not a goal in and of itself, rather it 'helps to fill streets and squares with *human life* as basis for a rich cultural and commercial supply, it offers *housing* for many and an *effective infrastructure*'. (Upplands Väsby Kommun 2018b, 5. Italics in original).



**Image 1.** Examples of modernist planning for outdoor and active recreation in Upplands Väsby showing local playgrounds in a multi-family housing neighbourhood (a), and a running path in an urban forest. Locations are indicated on Map 1. Photos by Nik Luka and Amalia Engström.



**Map 1.** Aerial view of Upplands Väsby. Letters indicate the location of photographs in *Image 1* and *2*. Aerial photo from Lantmäteriet.

Via a definition of the elusive Swedish concept of *Stadsmässighet*, often used in contemporary Swedish planning debates to denote a "city character", in line with the recent trend for compact cities in Sweden (see Tunström 2007), the municipality sets out a list of qualities for the future city. Mirroring the urban ideal also found in the TOD model, Upplands Väsby should be filled with lively public spaces, have clear delineations between private and public land, have varied architecture and good connections for walking, biking and public transit (Upplands Väsby Kommun 2018b). Recreation is also a quality of the future city, in the form of 'parks that are the lungs and rooms for recreation of the city' and the city should 'create opportunities for [...] leisure time, play and places for informal sports' (Ibid., 3). Even if important for the future city, such 'space-consuming' qualities like recreational facilities are also described as being in conflict with the overarching goal of density (Ibid.,



**Image 2.** New and planned developments in Upplands Väsby; (c) current view of the location for Väsby Entré, (d) rendering of future Väsby Entré (image by Urban Minds, Betty Laurincova in Upplands Väsby kommun 2018a), (e) new residential buildings in Fyrklövern adjacent to the new city park (f). Photos by the authors.

5). As a solution, the policy asks for careful considerations when prioritising land uses. Actual strategies presented for reaching these urban qualities do little to offer support for such considerations. Morphology, architecture, physical structures and street grid patterns are dominant tools for making the future city, according to the municipal policies (Ibid). Hence, recreation is acknowledged as a valuable quality for an urban environment, but no measures are presented to create strategies for strengthening or preserving this quality in actual implementation.

In June 2018, the municipal council adopted a new comprehensive plan (Upplands Väsby Kommun 2018c), which emphasizes the importance of the train station area as a driver of attractiveness and as a place for services and other activities. Here the TOD ambition comes forefront as a central method for urban regeneration. The comprehensive plan mentions and recognizes the importance of a diversified supply of recreation amenities and the need to safeguard recreational areas ‘close to where people live’ (Upplands Väsby Kommun 2018c, 21). Careful mapping of existing recreational infrastructures, of which the majority stem from planning in the 1960s and 1970s, is described as a precondition for planning. However, few actual strategies for the future planning of recreational amenities are offered, nor is there any strategy for how to preserve and develop existing amenities.

In municipal strategy documents on transport and mobility (Upplands Väsby Kommun 2013b, 2017b), networks of contemporary and planned paths for recreational biking and walking are described and illustrated. However, these networks exclude the urban core, and local scales are not examined. Neither are the locations of recreational facilities in relation to residential areas or transit nodes. A recent municipal sport policy (Upplands Väsby Kommun 2019) shows an ambition for planning for recreation and leisure. As the first comprehensive document on the subject since 1980, the policy indicates a revived interest in strategic thinking regarding sports and leisure. The policy, which was developed by the municipal Department for Culture and Leisure, does not engage with the spatiality of sports and recreation. The absence of spatial concerns in the sport policy and the abstract language of recreational qualities in comprehensive planning indicates a disciplinary divide between land use planning and the governance of the leisure sector - division in stark contrast to the interplay between leisure and urban planning in the modernist era.

#### **4.1.3. TOD materialised**

With the ambitions for catering to a population increase from today’s 44 000 inhabitants to 63 000 inhabitants by the year 2040 (Upplands Väsby Kommun 2018c), development of new dwellings is of pressing concern. The most recent comprehensive plan adopts the TOD-circle and suggests densification projects within a 1000-metre radius of the train station. A number of projects are ongoing within this radius, with emphasis on two major locations.

In direct connection to the train station, Upplands Väsby is planning for an extensive development under the project name Väsby Entré. From the current land use as green open space and road infrastructure, the area surrounding the train station will be transformed into a dense urban neighbourhood with up to 1 500 new dwellings and 30 000 square metres for offices and commercial use (Upplands Väsby Kommun 2018a). The plan’s ambition is to create a mixed, integrated urban area, with a strong identity and strengthened transit node depicted by renderings of landmark buildings designed by internationally esteemed Zaha Hadid Architects as potential features of the future skyline of Upplands Väsby. Recreation is foremost secured by a number of recreational paths whose width or form are not defined, only their routes stretching through green areas and in places merging with the streetscape. Three major parks, and additional smaller spaces for nature and playgrounds, will be located in the area and most new dwellings will have a maximum of 300 meters to the closest park. Throughout the detailed development plan for the project, recreation is consistently described as a passive activity (parks for resting) or as a way to have experiences (of culture, nature and local history). In the assessment of the plans social effects, the municipality takes note of the relatively few neighbourhood parks. ‘Access to larger areas for roaming is relatively good, but for local parks there is a risk that the parks’ area will be relatively limited in relation to the number of users. The wear is likely to be great’ (Upplands Väsby Kommun 2018a, 59). The assessment

continues with its appraisal of the positive effects of the project with regards to housing, workplaces and services.

West from the station area, one finds an infill project, Fyrklövern. New residential buildings with up to 2 000 dwellings are aligned to a new grid street pattern, inserted within a previously pedestrianised public area (Upplands Väsby Kommun 2015, 2017a). A public park, a football field and parking lots have been demolished to make space for new developments. However, a new park is already in place, containing a variety of activities from spaces for play to benches for resting and a pond that doubles as storm water basin. The park, described as a "city park" (Upplands Väsby kommun 2015) is hoped to attract residents from the whole municipality.

Both of these projects are establishing a denser typology than the existing one, building on both public green space and parking lots. The very form of the new establishments also brings about a new aesthetic, in the form of closed building blocks, fine grid street patterns and fewer open green spaces integrated with residential areas.

## 5. Discussion

Through this paper we have used recreation, as a matter of land use *and* mobilities and as a critical lens to examine the contemporary TOD discourse. We have done this via a literature review and a minor case study. The literature review shows how TOD research contains few, or only brief, engagements with recreation as a matter of mobilities or land use. Attention is paid to work commute and proximity between place of residence and place of transit, even if mobilities for and as recreation are acknowledged as being something different from the everyday work commute, and access to recreational facilities is argued as a central aspect of TOD as living environment. Hence, recreation is advocated as a positive quality of TOD areas. However, where recreation should take place is obscured via abstract language about mixed land uses. There appears to exist a dissonance between the conceptual TOD model, where recreation is thought of as an integral part of the livability of TOD, and its spatial implementation where travel routes and residential and commercial land uses are premiered. As Knowles, Ferbrache, and Nikitas (2020) point out, aspirations and reality seem not to go hand in hand. Similar dissonance is also visible in the tension between the aspirations of comprehensive strategic planning in Upplands Väsby and the reality of detailed planning. On a strategic level, recreation is recognised as an important quality in urban environments. However, recreation is largely disregarded in the detailed development plans (compare Petersson-Forsberg 2014). The search for urban qualities that drive the development of Upplands Väsby can be interpreted as a policy practice influenced by an ideological idea of the city, reducing urban complexities into elements of physical form (see Qviström, Luka, and De Block 2019; Wachsmuth 2014). Thus, the exclusion of recreation is built into the very foundation of the development process. We recognise that the importance of recreation is known by the Upplands Väsby Municipality, and recent work with the new sports strategy shows growing ambitions for public health and equal opportunities for recreation. Nonetheless, the general and abstract language of strategic policies leaves local planners the task of negotiating the geography of recreation in each individual development project, and against other powerful interests. TOD thus seems to omit recreation both in theory and in practice, creating a persistent feedback loop. If the model in practice does not sufficiently cater to recreational needs, these needs will be less represented in research on the model – and vice versa.

Finally, the case study shows how a translocal critique of modernist planning facilitates a mistranslation of the Swedish heritage of modernist recreational planning. Public spaces for recreation, as established in the 1960s and 1970s, are not safeguarded and their potentials are rendered invisible in the critique of urban spaciousness. This mistranslation loses sight of both the previous ambitions of recreational planning and its multiscale geography. Instead, an increasingly scattered recreational geography is planned to provide for a rapidly increasing urban population. Not only is recreation silenced in general but the silence also obscures potential local variations and local planning

histories relating to recreation (see Robinson 2016). Only by making local preconditions known can we reach a deeper understanding of the workings of the TOD model.

## 6. Conclusions

This paper reveals a blind spot in research on TOD: recreation as a matter of mobilities and land use. As our literature review has shown, the bulk of research on TOD does not take recreation into account.

Furthermore, our study argues for the importance of context-sensitivity when performing a literature review within planning, or any other field in which the local conditions are of key importance. We argue that geographic, societal and spatial particularities need to be acknowledged in order to scrutinise the implementation and effects of TOD and other internationally used planning models.

We situate our understanding and interpretation of the research with a minor case study of Swedish local Swedish. The case illustrates how strategic municipal planning acknowledges recreation as an important feature of a future, sustainable, urban life. Nonetheless, this acknowledgement becomes obscured as the focus is shifted towards building compact neighbourhoods and street connectivity in the detailed development plans. The models and methods for developing a compact city, including the TOD model, do not provide local planners with incentives, nor sufficient tools, for planning for recreation. This strengthens a separation between urbanity and recreation.

The case revealed, for instance, how modernist planning from the 1960s and 1970s in Sweden does not show the same deficiencies as mentioned in the international literature. On the contrary, planning for leisure and recreation was an important part of the agenda, although partly embedded in a car-based mobility. The disregard for modernist planning within the TOD discourse risks neglecting the potentially positive qualities of post-war recreational planning, which could benefit future sustainable urban living.

Finally, the paper shows the need to bring recreation into the TOD model, in both research and practice. However, we have also argued that this absence is not incidental, but is tied to the particular urban ideal within the TOD discourse. Therefore, as a focus on recreation as mobility and land use seems to run counter to the urban ideal that informs TOD, it is not simply a matter of inserting a new theme. Rather, it could inspire, or even require, a revitalisation of the very understanding of the urban that informs the model. Thus, we argue that the question of recreational mobilities provides a critical lens for the current planning discourse. If we add this complex set of mobilities and activities to contemporary urban models, we might see the need for another urban future.

## Note

1. Ahmad, Ahmad, and Aliyu (2021), Burke and Woolcock (2009), Zacharias, Zhang, and Nakajima (2011), Langlois et al. (2015), Tayarani et al. (2016), Lang et al. (2020), Lyu, Bertolini, and Pfeffer (2020).

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Outdoor recreational activities, in nature and urban green areas, benefit both mental and physical health and are therefore crucial for the well-being of urban citizens, also when cities are becoming denser. This thesis takes interest in conflicts between outdoor recreation and the dense geography of compact cities. With a historical perspective on past welfare recreational planning in Sweden, the thesis discusses how past planning legacies inform, and could further enrich, contemporary planning for outdoor recreation in the compact city.

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