



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

Faculty of Landscape Architecture, Horticulture  
and Crop Production Science

# The Life and Death of Large City Parks

The Significance and Future of Large City Parks

Anna Maria Insulander



# The Life and Death of Large City Park: The Significance and Future of Large City Parks

Stora stadsparkers liv och död: Betydelsen av och framtiden för stora stadsparker

Anna Maria Insulander

Supervisor: Christine Haaland, SLU, Department of Landscape  
Architecture, Planning and Management

Examiner: Ingrid Sarlöv Herlin, SLU, Department of Landscape  
Architecture, Planning and Management

Co-examiner: Lisa Diedrich, SLU, Department of Landscape  
Architecture, Planning and Management

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SLU, Swedish University of Agricultural Sciences

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Cities have the capacity of providing something for everybody, only because, and only when, they are created by everybody.

- Jane Jacobs



## Abstract

Through the process of city densification, the need and significance of new large city parks seems to have fallen into oblivion. The planning of new large city parks appears to be a non-issue and few architects, city planners or landscape architects propagate for new large city parks. The aim of this thesis is to examine the significance of new and existing large city parks for future cities and investigate if new large city parks are being planned. Through interviews with architects, city planners and landscape architects in Stockholm, Malmö, Copenhagen and Berlin, this thesis illustrates professionals' view upon the future and significance of existing and new large city parks. Additionally, the interview results are mapping professionals' view on why few new city parks are being planned. Some interviewees work at internationally renowned offices such as VOGT, TOPOTEK1 and SWECO. Furthermore, a literature study examines the conflicts of urban space and benefits of urban greenery. Green spaces is shown to promote physical activity, psychological well-being and enhance the general public health of urban residents. Moreover, public spaces are socially and democratically important places within the city. Despite proven benefits of urban green spaces, the interview results show few plans for new large city parks. This development is due to an economically driven city planning, increased costs for park maintenance and competition of urban space. Consequently, a majority of the interviewees meant future city parks to be smaller and have other functions than existing city parks. Some interviewees believed in park-systems or reversible parks on demand. Although many interviewees believed city parks to be a solution to future city challenges, large city parks appear to belong to the past.

Keywords: city park, urban parks, urban green space, urban densification, benefits of urban greenery

## Sammanfattning

Behovet och betydelsen av nya stora stadsparker tycks ha fallit i glömska i samband med förtätning av städer. Planering av nya stora stadsparker tycks numera inte stå på agendan. Få arkitekter, stadsplanerare eller landskapsarkitekter lyfter fram värdet av nya stora stadsparker. Syftet med denna uppsats är att undersöka betydelsen av nya och befintliga stora stadsparker i framtidens städer, samt om nya stora stadsparker planeras. Genom intervjuer med arkitekter, stadsplanerare och landskapsarkitekter i Stockholm, Malmö, Köpenhamn och Berlin, belyser denna uppsats yrkesverksammas syn på framtiden för, och betydelsen av, befintliga och nya stora stadsparker. Intervjuresultatet kartlägger även de yrkesverksammas åsikter om varför så få nya stora stadsparker planeras. Några av de intervjuade personerna arbetar på internationellt kända kontor så som VOGT, TOPOTEK1 och SWECO. I denna uppsats granskas även litteratur kring konflikter om stadsrummet samt fördelar med urban grönska. Forskning visar att grönområden främjar fysisk aktivitet, psykiskt välbefinnande och ökar den allmänna folkhälsan för människor i städer. Offentliga platser är dessutom socialt och demokratiskt viktiga mötesplatser i staden. Trots de bevisade fördelarna med urbana grönområden visar intervjuresultatet att få nya stora stadsparker planeras. Denna utveckling beror på en ekonomiskt driven stadsplanering, ökade kostnader för parkskötsel och ökad konkurrens om utrymmet i städerna. Följaktligen menade en majoritet av de intervjuade att framtida stadsparker kommer vara mindre, och ha andra funktioner än befintliga stadsparker. Somliga intervjupersoner trodde på parksystem eller reversibla parker som baseras på efterfrågan. Trots att flertalet av de intervjuade trodde att stadsparker är en lösning på framtida städernas utmaningar, tycks stora stadsparker tillhöra det förgångna.

Nyckelord: stadspark, urbana parker, urbana grönområden, stadsförtätning, nytta med urban grönska



Skaters in Tempelhof Field, Berlin.



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## 1. INTRODUCTION

## Acknowledgement

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I was living in Copenhagen for one and a half year and one of my favourite everyday destination was the Frederiksberg park (31.7 hectares) with the connected Sondermarken (32.3 hectares). The two parks became romantic landscape parks in the late 1700 and have been public since 1852 (Slotte & Kulturejendomme (SLKE) 2014, English: Danish Castle and Property Agency (SLKE) 2014). Through these green parks I took my walks, did my running and brought my visiting family and friends, who greatly appreciated the beauty and tranquillity of these large city parks. As a countryside person, living in a city, I seek my peace in the quiet pseudo (designed) nature of parks and enjoy following the changing of the seasons in the always shifting vegetation. I have noticed that I always leave the park in a happier and more harmonious mood than entering.

Global urbanization will probably make cities denser through loss of important green space and I am concerned that people then lose a valuable source of well-being. I fear that cities will become denser, with perhaps more greenery such as street trees and smaller parks, but with no new large city parks for recreation or space-demanding activities.

My interest in the significance of large city parks started through a studio course during my Bachelor studies at SLU, Uppsala in 2012. The assignment was to give the old Seminar park a new design. I gradually came in contact with a conflict between the municipality politicians and the inhabitants in Uppsala regarding whether the old Seminar park should be built upon or not. Since 2009 a public debate on the subject has evoked strong feelings among the city's inhabitants. The comprehensive plan of Uppsala (Uppsala Kommun 2010, English: Municipality of Uppsala 2010) present city densification as a solution to the city's housing shortage, but many inhabitants fear that densification will lead to exploitation of green areas. Only 12% of Uppsala's inhabitants are pro-densification (P4 Uppland 2010). In an article regarding the exploitation of the Seminar park the municipality chairman of the local housing committee Liv Hahne stated "*The Seminar is not a park. It is an exploitable area.*" (Kihlberg 2014). In lokal radio, Hahne rhetorically asked: "*Where should people live?*" (P4 Uppland 2013). I guess that is the question most city planners ask in times of global urbanization. If present trends continue, approximately 70% of the world's population will live in urban areas by 2030 (Kuo 2010).

Uppsala municipality describes a neighbourhood park to have a minimum area of 4 hectares while a city park is described as a historical *fine park* without a size measure (Municipality of Uppsala 2014). Uppsala has one city park, Stadsträdgården, and the municipality does not seem to have any plans to build another one. The much growing capital city of Stockholm present strategies for new city parks outside the city centre but

the size measure ambition is humble, a minimum 4 hectares (Stockholms stad, English: City of Stockholm 2013). Uppsala municipality's goal for a neighbourhood park is both to provide different kind of activities and at the same time possibilities for recreation (Municipality of Uppsala 2014). I believe Uppsala's neighbourhood parks are too small to simultaneously serve these two purposes. The neighbourhood parks may together with Stadsträdgården meet Uppsala's present need for green spaces, but I believe the sum of parks and the size of individual parks will be too small when Uppsala is growing into a big city. The large parks of Frederiksberg in Copenhagen, Frederiksberg park with its 32 hectares and Sondermarken with the same size, appear huge in comparison. Frederiksberg park and Sondermarken are offering high quality recreation although they have a large amount of visitors. Even though Uppsala is a significantly smaller city than the Danish capital, I think it is important to plan city parks in advanced as the city is growing. It is then easier to inform and communicate the new plans to the city inhabitants. The municipality of Uppsala has a goal to provide a neighbourhood park to every neighbourhood in the city. This goal is not yet achieved (Municipality of Uppsala 2014) and according to the public debate about Uppsala's densification, the inhabitants are not pleased with the current development (Kihlberg 2014). A recent survey made in Uppsala showed that 32% of the responding thought it was a *very bad* idea to build housing in green areas while 28% thought it to be a *bad* idea (Kihlberg 2014).

I think this dissonance between the municipality politicians and the inhabitants of Uppsala is very interesting and not at all unique. This dissonance is probably present in several Swedish municipalities and I believe it to reveal a conflict within the ongoing global debate of city densification, thus a starting point for my thesis. I have been feeling frustrated when important green areas have been exploited and I am disappointed when growing cities like Uppsala define a large park as potentially no bigger than 4 hectares. The importance of large city parks is not debated enough. Instead, focus seems to be on selling out public property to solve lack of housing or creating city branding projects, which often generates blurry general sustainability strategies for these new areas.

Even though the positive effects of urban greenery and the popularity of large city parks are well known, few architects, planners or even landscape architects propagate for large city parks. Architect Tomas Lewan (2012) is one critical voice in the debate about Stockholm's city densification, which he means has become an end in itself rather than creating a good city environment. In his article Lewan (2012) also criticizes that so few new parks are being planned when the city of Stockholm densifies.

The *Green Structure and Urban Planning: Final report* (Werquin et al. 2005) illustrates the contradiction between the necessity for green environments and the benefits of

urban densification. The report also presents a risk of social segregation in connection to city densification when wealthy people move out of the city to bigger houses with more greenery, areas that often are more family friendly – a movement included in the definition of urban sprawl (Werquin et al. 2005). City densification, building new houses in the existing city, is often mentioned as a modern solution to urban sprawl but, can be counterproductive if cities become so dense that people start to move out from the cities. I believe that large city parks can play a vital role as democratic, recreational and family friendly areas in cities. I have the perception that politicians and modern city planners diminish, or to some extent even ignore, the value I amongst others find in large city parks. Are large city parks insignificant and unnecessary in modern cities? I am of the preconceived idea that few new large city parks, with some exceptions like Lindängelund in Malmö, are being planned. Is that really so? However, many cities e.g. Stockholm profiles itself as *green cities* and stress the importance of green strategies, but few concrete plans are being presented (City of Stockholm 2013). Many green plans are visionary, but the city planning often focus on densification and higher quality of existing parks rather than new parks and green spaces (City of Stockholm 2013).

I am also interested in the perspective and thoughts of professional architects and landscape architects in the matter of large city parks. With this thesis I want to investigate if my concerns are founded and through a literature study and interviews with researchers, architects, city planners and landscape architects I will try to find the answers to my questions.

## 1.1 Background

Werquin et al. (2005, p. 23) describe how the eighteenth and nineteenth centuries industrial revolution and urbanization made the cities of western Europe crowded, dirty and unhealthy. It was during this time the idea of public parks, which had to be the breathing places for the metropolis, was developed in England, France and Germany (Werquin et al. 2005, p. 23). During this period the awareness about public accessibility to these parks grew, which led to plans for an interconnected network of parks and green walks that cut through both wealthy and poor neighbourhoods. Werquin et al. (2005, p. 23) describe how Baron Haussmann elaborated with this idea in Paris, as Albert Lindhagen did in Stockholm, but these parkways and park systems first came to maturity when Frederick Law Olmsted presented them to American cities. Ståhle (2005, p.10) describe how another movement started in England when Ebenezer Howard tried to combine city density and green through satellite towns surrounding the mother city, each embedded in greenery to contain urban growth. In his book *Garden Cities of Tomorrow*,

first published in 1898, Howard described how these garden cities provided an alternative to the urban slums of London (Ståhle 2005, p.10). In the U.S. a parallel movement was developed when Daniel Burnham, designer of the 1893 World's Columbian Exposition in Chicago, proclaimed that "*beauty itself could reform society and conjure new virtue from citizens*" (Montgomery 2013, p. 23). Underlying these new approaches to green space and parks was an idea of nature that had been shifting from something aesthetic and romantic to something functional that promotes health and recreation (Werquin et al. 2005, p. 23).

After the First World War a modernistic ideal, advocated by CIAM and Walter Gropius, was ruling the European city planning with rational measurements of light, air and space (Rådberg 1988). Through modernism the city planning doctrine shifted from *parks in cities* to *cities within parks*. The new *good* society were to be created by engineering architectural efficiency which was presented as large-scale futuristic utopias as seen in Le Corbusier's *Radiant City* in 1924 and Frank Lloyd Wright's *Broadacre City* in 1932 (Montgomery 2013, p. 25). In Broadacre City, Wright imagined an urban-rural utopia where private cars would free people to escape the central city to their own self-sufficient compounds – an idea that have survived known as the suburban sprawl (Montgomery 2013, p. 26).

After the Second World War several Western European countries experienced an economic growth (Lundin 2004). Montgomery (2013, p. 94) describe post war city planning as characterized by large-scaled, high and low, social housing projects intersected by infrastructure. These areas had separated functions with large green areas in between, creating a sparse and spacious cityscape (Montgomery 2013, p. 94). The increased numbers of private cars also enabled cities to spread out (Lundin 2004). Parks, playgrounds and large green areas were created for recreational and public health purposes, but were often monotonously designed and rationally managed (Montgomery 2013, p. 94).

Montgomery (2013, p. 94) describe how different city planning movements have developed as a criticism to the energy consuming, car-depending, socially segregated and unsustainable city. Many of these ideas developed after the 1970's oil-crisis, all with a similar goal – to create a more sustainable (ecologically, socially, economically e.g.) and resilient city. The United Nations Office for Disaster Reduction (UNISDR 2010) has defined city resilient as "*to enhance awareness about the benefits of focusing on sustainable urbanization to reduce disaster risks*". Werquin et al. 2005 (p. 23) describe how the late twentieth century has promoted an ecological view upon urban greenery, stressing the importance of biodiversity and how most designs for new developments are dominated by functional views of nature. Many people still perceive urban greenery mainly as a

symbol of nature, without seeing the potential synergy in an ecologically balanced urban life based on nature (sustainability) and culture (development) (Werquin et al. 2005, p. 23).

In the late 1990's, many cities adopted a *compact city approach* to handle the negative effects of urban sprawl while other cities begun to revitalize public parks and recreation areas in the dense part of the existing city (Werquin et al. 2005). The fragmentation of the landscape and the spreading-out of cities is possible due to (and partly driven by) an increased wealth and more time for leisure. According to Werquin et al. (2005, p. 24) car trips to green areas have increased more than journeys from home to work, which could lead to a social segregation of people with less access to green areas. Many citizens are also concerned about the loss of green landscapes and poor maintenance of remaining urban green space (Werquin et al. 2005, p. 24). Alexander Stähle (Stähle 2008b) formulates the issue:

*The massive urban growth that the planet is facing demands that we engage both scientifically and politically in the dense city and the increasingly dense suburb. The parks are undeniably a key issue.*

(Stähle 2008b, my own translation)

### 1.1.2 General benefits of urban green space

Depending on the composition and design, green space can play a major role in the ecology of the city and many cities applies ecology-based maintenance practice (mostly on grasslands) that is favourable both for the biodiversity and for the maintenance budget (Werquin et al. 2005, p. 20). Werquin et al. (2005, p. 20) describe that even though ecology-based maintenance is beneficial in many aspects, it is not widely applied due to the common belief that urban green spaces should look “smooth, straight and tidy”. Werquin et al. (2005, p. 20) claim that designers and maintenance professionals are still educated according to this ideal image and do not develop enough ecological skills, leading to few good examples of ecology-based maintenance, which then leads to a preconception of wild as identical to neglect. Urban ecology is not just nature in cities, it involves processes of climate and water. Parks and green space influence the *micro-climate* and thermal comfort in a city, not only by providing shade but also by bringing moist and cool air into the city (Werquin et al. 2005, p. 20). In summer, central European cities often suffer from heat-island effect with high temperatures and dry polluted air constraining air quality in cities. Trees have the ability to create a micro-climate of controlled humidity and temperature by transpiring water into the atmosphere and thus reducing evaporation

(Grove & Cresswell 1983). Green spaces and trees may also *clean the air* by direct leaf absorption and assimilation of gaseous pollution but also provide *wind* and *noise screening* (Grove & Cresswell 1983; Escobedo et al. 2011).

To mitigate future climate change, the European Environmental Agency's (EEA) (2013) report *Adaptation in Europe*, presents ecosystem-based approaches as one adaptation response to further strengthen city resilience. “*Green adaptation actions seek to use nature to conserve or enhance carbon stocks, and reduce carbon emissions caused by ecosystem degradation and loss*” (EEA 2013). On city planning level EEA (2013) suggests green space to *mitigate flooding, rainwater runoffs and urban heat-island effect*. Green space and green roofs are also mentioned as good ways to increase biodiversity in cities. According to Fuller et al. (2007) the degree of *psychological benefits* of a green space is connected to the biodiversity of it. EEA (2013) states that climate change will mean more extreme conditions such as heat waves, flooding and drought in western European cities and even though these cities have not traditionally suffered from these problems, adaptation plans and measurements should be implemented.

Green space can, as an element in city planning, contribute to *social integration* and *solidarity* and be a part of the public space (Boverket 2007, English: Swedish Governmental Building and Planning Agency (SGBPA) 2007). Urban green spaces are *democratic places* in the city since public parks and green spaces are not influenced by commercial interests and provide recreation and activity to all people irrespective of income, age or ethnicity. Green spaces are important places for *physical activity* and accessibility and nearness to green spaces are of great importance for public health (Schäfer & Faskunger 2006). Studies show a connection between green space proximity and stress – the perception of stress increases with distance to green space (Berggren-Båring & Grahn 1995). Other research show that the longer the distance to urban green space, the fewer visits made (Grahn & Stigsdotter 2003; Nielsen & Hansen 2007). Additional other studies show significant associations between levels of stress (LS) and different types of outdoor activity (Grahn & Stigsdotter 2011). Kabisch et al. (2015b) present results showing that urban green space is *generally beneficial for the quality of life* of urban dwellers, and Richardson et al. (2013) show how physical activity is higher in greener neighbourhoods. A Danish study present that the share of people who feel stressed or are overweight (BMI over 27.5) increases with distance to green space or possible access to a garden (Nielsen & Hansen 2007). A British study confirms the significance of green spaces by showing that health differences between socioeconomic groups decreases in areas with high accessibility to green areas (Mitchell & Popham 2008).



## 1.2 Definitions

Several concepts have been used in this thesis. The usage of different concepts and classifications regarding parks and other green areas in urban settings varies throughout literature and are used differently by different interviewees. Through following definitions, the concept of city park, green structure, green space, densification, density and urban sprawl are explained.

### City park

Following definition has been used during interviews and is used throughout this thesis:

*The city park should contain open spaces for activities but the far most important characteristic of a city park is to offer a contrast to the surrounding city and its architecture. The city park should be easily accessible and have a minimum area of 30 hectares.*

The definition is inspired by a definition made by Frederick Law Olmsted in his text Public Parks and the Enlargement of Town from 1870:

*We want a ground to which people may easily go after their day's work is done, and where they may stroll for an hour, seeing, hearing, and feeling nothing of the bustle and jar of the streets, where they shall, in effect, find the city put far away from them (...) Practically, what we most want is a simple, broad, open space of green clean greensward, which sufficient play of surface and a sufficient number of trees about it to supply a variety of light and shade. This we want as a central feature. We want depth of wood enough about it not only for comfort in hot weather, but to completely shut out the city from our landscapes.*

*The word park, in town nomenclature, should, I think be reserved for grounds of the character and purpose thus described.*

(Frederick Law Olmsted 1870, pp. 189-190)

I have also taken inspiration from Grove & Cresswell's (1983) definition of what they call town parks where a measure of size is presented:

*The town park is visited by inhabitants of all parts of the town and sometimes by inhabitants of surrounding villages or towns. Town parks have, as a rule, a very large area (20-200 ha) and extremely varying possibilities for recreation. A stay in a town park has usually a longer duration (half day or full day)...*

(Grove & Cresswell 1983, p. 16)

I have concretized a number of Olmsted's (1870) parks characteristic and added a measure of size based on Grove and Cresswell's (1983) definition. The measure of size was important since the experience and function of a city park is closely connected to the size of it. I also think that the chances for a visitor to screen off the city, the way Olmsted (1870) describes it, increases with the size of a park (this can also be achieved on small spaces through design and vegetation but I believe size and vistas are qualities that cannot be accomplished otherwise). When I lived in Copenhagen, my everyday Frederiksberg Park was approximately 30 hectares and the adjacent Søndermarken had the same size, hence I chose 30 hectares to be a reasonable size for a well visited city park.

The British government has through Natural England developed Access to Natural Greenspace Standard (ANGSt) (2010) which recommend a 20 hectares green site within two kilometres from people's home. Grove and Cresswell (1983) also stated a minimum size of 20 hectares. SGBPA (2007) and Swedish municipalities, the later usually base green planning goals on the previous, seem to focus more on accessibility and proximity (300 metres standard) than on size. MIRA-S 2000 (Van Herzele & Wiedemann 2003) present guidelines for accessibility to city green space where district green should have a minimum area of 30 hectares and city green has a minimum area of 60 hectares.

Few minimum size measures are presented for large city parks but 20 hectares appears to be standard. Based on my personal experience from Copenhagen (I do not think these city parks could facilitate the same amount of visitors and activities if they were any smaller than the 30 hectares they are today) I chose a size measure of 30 hectares since it is physically familiar to me.

Another important factor why I chose to have a size measure was to clarify my definition of a large city park. To minimize the risk of misinterpretations I chose not to

only use the adjective large in my definition of city parks, because all interviewees would then have their own size measure of a large city park.

### **Green (infra)structure**

The Swedish Governmental Public Inquiries (1994), Plan- och byggtredningen, describe green structure as *“all grounds not built upon or paved such as forest and nature areas, parks, tree rows, gardens, apartment yards, cemeteries, impediment aside roads etcetera.”* (my own translation)

Accessible Natural Greenspace, ANGSt (2010, p. 36) define green infrastructure as to *“go beyond the site-specific, considering also the ‘big picture’ of landscape context, hinterland and setting, as well as strategic links of sub-regional scale and beyond. Green infrastructure considers private as well as public assets and provides a multi-functional, connected network delivering ecosystem services.”*

### **Green space**

Kabisch et al. (2015a) define green space as *“any vegetated areas found in the urban environment, including parks, forests, open spaces, lawns, residential gardens, or street trees”*. In this thesis I will use green areas synonymous to green space.

### **Density**

Higher persons, jobs and/or dwelling units per unit area (Hamin & Gurran 2009).

### **Densification**

The process of new development with the aim to create higher density in cities. New projects are often built on old industrial sites, harbours or “waste land” within the city.

### **Urban sprawl**

In this thesis urban sprawl is understood as *“a process of large-scale real estate development resulting in low-density, scattered, discontinuous car-dependent construction, usually on the periphery of declining older suburbs and shrinking city centres”* (Hayden 2004, p. 8) in combination with *“any extension of the suburban margin, the spread of development onto sensitive greenfields and agricultural soils, increases in highway congestion, the proliferation of new subdivisions of homogeneous and low density, single-family housing”* (Bourne 2001, p.26).

## **1.3 Aim and purpose**

After five years of studies in the field of landscape architecture and years of observing the ongoing debate about city densification I have noticed a lack of discussion about the significance of large city parks. Are they insignificant and unnecessary in modern cities?

I am of the preconceived idea that few new city parks are being planned. Is that really so? Finding answers to these questions is the foundation from which my main questions sprung and is also the aim of this thesis.

Through literature studies and interviews I hope to find the reason why new large city parks seem to be a non-issue. I am also interested in the perspective and thoughts of professional architects and landscape architects in the matter of city parks.

### **The aim of this thesis is to:**

- Analyse results from the literature study to hopefully bring forth an important perspective on the issue of city parks in times of city densification.
- Conduct and analyse interviews to map different views on new city parks and the future of the existing large city parks.
- Discuss the future of existing city parks and planning of new large city parks.

The purpose of this thesis is to contribute to the discussion about urban densification and green space planning, especially in regard to planning and conserving large city parks.

## **1.4 Questions at issue**

This thesis is aiming to answer and discuss following questions:

- In times of city densification is there a place for new city parks?
- How do landscape architects, planners and architects see the future of city parks?
- Why are there so few plans for new city parks?
- Do city parks, as I know them today, belong to the past?

## 2. METHODS AND IMPLEMENTATIONS





This thesis was founded up on knowledge gathered from a literature study complemented with interviews and dialogues with professionals within the field of architecture, city planning and landscape architecture. All transcribed interviews can be found as appendices.

The literature study was based on books, scientific articles and research reports accessed as digital sources on Google Scholar, Web of Science, Scopus and Primo or as printed versions. Keywords for all electronic searches on data bases were *city park*, *urban parks*, *urban green space*, *benefits of urban greenery* and *urban densification*. All data was analysed qualitatively.

## 2.1 Literature

To be able to bring a somewhat new perspective on the significance and future of large city parks in times of city densification, a literature study has been executed. The literature study gave me fundamental knowledge on research of city parks, urban greenery and city densification. This knowledge was complemented by the interview material and vice versa. I chose literature covering city planning, city densification, sustainable cities and environmental psychology etc. The process of collecting information was often based on references found in an adequate scientific article, which led me to other research reports, books or articles on the subject.

## 2.2 Interviews

Interviews with professional architects, landscape architects and city planners e.g. were implemented to map out their view upon the significance and future of large city parks. I prioritized to meet the interviewee in real life so dialogues and discussions could take place. When this was not possible the interview was held over telephone or email. These conversations were an important part of my thesis since they gave me an up-to-date insight of how professionals and practitioners reason about the significance and future of city parks. The interview also gave me a chance to discuss the phenomenon of city parks as such.

It was a natural choice to interview architects, planners and landscape architects working in Sweden but I also wanted to get a broader perspective upon the issue. Hence, I also chose to interview renowned professionals from Copenhagen and Berlin, two cities in which I have lived and experienced some of their great city parks.

The selection process of interviewees was based on my personal preferences of interesting professionals at well-known offices or at municipalities in Sweden, Copenhagen and Berlin. Other interviewees were less known but had great experience

or recent scientific knowledge of great value for my thesis. I also chose some renowned persons that I knew did not share my opinions on the subject.

To understand the interviewee's knowledge and perspective of the topic, I chose to conduct a qualitative research interview. In the book *Den kvalitativa forskningsintervjun* (English: *The Qualitative Research Interview*), Kvale (1997) describes this interview method to have a similar structure as an ordinary conversation but, at the same time, uses the questioning techniques of a professional interview. The qualitative research interview is half structured which means that it is neither an open conversation nor a strict interview (Kvale 1997, p. 72). Since this kind of interview is focused on the *experience* and *knowledge* of the interviewee, I formulated my interview questions to match the aspects of a *qualitative research interview*. The questions were open which not only gave the interviewee a chance to develop his/her thoughts and reasoning, but also gave me more material to handle, which facilitated interpretation.

The interviewee was contacted by email where I presented myself and my topic and asked for their participation in an interview. With their permission I sent my six interview questions in advanced. These questions were based on the questions at issue in this essay and worked as a core to hold on to if the subject of the conversation took other directions. The succession of questions varied depending on the flow of the conversation. The main questions were:

- 1) Can you describe as detailed as possible how you see the future of the city park?
- 2) In times of city densification do you believe there is a place for new city parks?
- 3) City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?
- 4) The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?
- 5) I have the perception that few new city parks are being planned. Do you share my point of view?  
  
Continuation of question 5; can you describe your thoughts about *why* (*why not?*) so few new city parks are being planned?
- 6) Finally, do you think city parks (as I know them today) belong to the past?

Following persons have contributed with their thoughts and knowledge:

*Tomas Lewan*, landscape architect at Nyréns Architects, Stockholm. Meeting in Stockholm, 3 November 2014. Appendix 1.

*Camilla Anderson*, landscape architect at the Municipality of Malmö. Email interview, 7 November 2014. Appendix 2.

*Niels Møllergaard*, landscape architect and head of Castle Gardens at SLKE, Copenhagen. Telephone interview, 17 November 2014. Appendix 3.

*Ola Andersson*, architect and director at Andersson Arfwedson, Stockholm. Meeting in Stockholm, 20 November 2014. Appendix 4.

*Torbjörn Andersson*, landscape architect at SWECO Stockholm. Telephone interview, 21 November 2014. Appendix 5.

*Johannes Hügler*, landscape architect and head of office at VOGT Landscape Architects, Berlin. Meeting in Berlin, 12 December 2014. Appendix 6.

*Martin Rein-Cano*, landscape architect and director at TOPOTEK 1, Berlin. Meeting in Berlin, 16 December 2014. Appendix 7.

*Ulrich Nowikow* and *Mikulas Cernik* at Green League, Berlin. Green League is a NGO working with nature and environment protection. Meeting in Berlin, 19 December 2014. Appendix 8.

*Dr. Cornelia Oschmann*, PhD in horticultural agronomy responsible for roof-gardening and vertical gardening at Humboldt University (HU), Berlin. Meeting in Berlin, 20 December 2014. Appendix 9.

*Erik Skärbäck*, landscape architect and professor in Master Planning at Swedish University of Agricultural Sciences (SLU), Alnarp. Email interview, 19 January 2015. Appendix 10.

*Rikke Hedegaard Christensen*, city planner at the Municipality of Copenhagen. Email interview, 26 January 2015. Appendix 11.

The oral interviews were recorded and afterwards carefully transcribed. All gathered answers were analysed with a hermeneutic interpretation described by Kvale (1997) as:

*A hermeneutic approach involves listening to the different sense horizon that can fit in the interviewee's statements, paying attention to the ability to continuously make new interpretations ...*

(Kvale 1997, p. 142)

Hermeneutical interpretations are seldom isolated from phenomenological interpretations which can be described as understanding the essence and nature of things. Kvale describes it as:

*The phenomenological ideal is to listen without preconceived notions and to let the interviewee describe experiences without interruption from the questioner...*

(Kvale 1997, p. 142)

As a further step to conduct a correct qualitative research interview I had to learn how to *listen* to the interviewee during the interview but also how to *analyse* their answers afterwards. The presentation of the interviewee's answers is depending on the interviewer's interpretation of them. Kvale (1997, p. 142) describes the importance of active listening and mentions different ways to approach the role as an interviewer. I chose to listen and analyse through a combination of *phenomenological description* and *hermeneutic interpretation*. The phenomenological description means listening without preconceptions and letting the interviewee describe his/her experiences without interruptions from the interviewer's questions (Kvale 1997, p. 142). To listen according to the hermeneutic interpretation means the interviewer must pay attention to the many layers of meanings that the interviewee's answers can hide. As an interviewer I must constantly be able to make new interpretation of both the interviewee's answers and of my own questions (Kvale 1997, p. 142). Through hermeneutic and phenomenological analyses I tried to receive qualitative descriptions of the interviewee's perception with the intention to interpret their meaning.

The use of the transcribed and handled interview materials were approved by the interviewee.

## 2.3 Site visits

I wanted to visit and experience popular large city parks in Malmo, Copenhagen and Berlin to understand the importance of these parks and to be prepared, with a personal experience, if they were to be brought up as examples during the interviews. The parks of interest were in my geographical proximity and I was visiting them several times doing different kind of activities. To get a reliable impression of the usage of these parks, I experienced them in different weather, days during the week, time of the day and during various time of the year.

The parks I have visited are different in style and location in the city. They also have different purposes with its origin – from the 18<sup>th</sup> century Frederiksberg park with the adjacent Sondermarken, neoclassical Pildammsparken in Malmo to the newly opened historical airport of Tempelhof Field. These city parks fit my definition since they have an easy accessible location in the city and are larger than 30 hectares.

I chose Frederiksberg Park with the adjacent Sondermarken in Copenhagen because, together, they represent one of the most popular parks in the city plus they have a long history. Pildammsparken in Malmo was chosen because it is a famous centrally located park, well visited by the city's residents. I chose the old airport of Tempelhof in Berlin since it is an exceptional example of a newly opened large city park in limbo between developing or not.

Through site visits I have created my own impression of these city parks and through several visits during a long time span I have experienced what they can contribute with in everyday life. I have also observed other people use the parks. These unscientific site visits have been performed as ocular studies without systematic approaches.

To get a deeper understanding of the connection between the past and the future, I have read the historical background of these parks. I have also asked the interviewees, depending on which city they were working in, what their opinion were regarding the future of one particular park. Hence, I have gotten a unique opportunity to hear how professionals imagine the future of city parks in general and Frederiksberg Park with the adjacent Sondermarken, Pildammsparken or Tempelhof Field in particular. Through their answers and my own experience of these parks, I have mapped the significance of these large city parks in the growing cities their located and connected these parks to a greater context in the debate of urban densification. My aspiration was to investigate the future development of these parks and to illustrate what they might mean for people who use them. The result from these site visits, in combination with the results from the interviews, shortly came to convey the history, present use and the potential future development of these parks.

## 2.4 Method, delimitations and source of errors

This thesis was thematically delimited from a landscape architectural point of view. Hence, all facts and results from literature, site visits and interviews were considered from my point of view as a landscape architect to be.

The literature study was based on literature and scientific articles mainly focusing on physical, psychological and sociological benefits of urban green space. Few researchers seem to focus on possible significance of size of urban parks and greenery. I had troubles finding scientific articles or literature focusing on benefits of *large* parks, hence is the result of the literature study mostly displaying benefits of urban green space independent of size.

The site visits were not systematically performed but rather conducted as an ocular and emotional evaluation to experience the site and to observe how other visitors were using it. Hence, the scientific validity and reliability of the result is limited.

The interviews with professional landscape architects, urban planners and architects were geographically limited to Stockholm, Malmö, Copenhagen and Berlin. Although several of the interviewees worked globally, the questions were focusing on a European perspective upon large city parks. I believe the reliability and validity of both interview method and results are high. To avoid misinterpretations among the interviewees, I clarified my view of what a city park is by using a detailed definition.

This Master thesis was bound to a time-limitation of twenty weeks.



## 3. RESULTS OF LITERATURE STUDY



Urban green space is constantly under city development pressure even though it has great significance for city dwellers' mental and physical health. Parks, green spaces and other urban green areas are also socially and democratically important places in the city.

### 3.1 Conflicts of urban green space and densification

The global urbanization has made more than half of the world's population city-dwellers (Stähle 2008a) and within 50 years the world's city population will exceed today's global population (Stähle 2008b). Post World War Two cities have mainly grown outwards through urban sprawl but since the end of the last century many big cities grow inwards through densification (Stähle 2008b). Dense cities are often presented as socially, economically and ecologically sustainable while sprawl increase car dependency and deteriorate physical and psychological health (Stähle 2008b; Montgomery 2013). Studies show that people living in inner city areas suffers from higher levels of stress compared to people living in suburban areas (Grahn and Stigsdotter 2003). However, this has no significance if the use of urban green areas is taken into account.

Precious city green space is under high exploitation pressure and Stähle (2008b) describe this conflict between densification and green areas in all major cities. London, Beijing, Moscow and San Francisco are cities with high exploitation pressure on the green areas surrounding them (Stähle 2008b). According to Stähle (2008b) architects and city planners have a challenging task to increase city density *and* spaciousness to maintain the attractiveness of urban environment. Stähle (2008b) present the sustainable future city as both dense and green.

The Swedish Governmental Building and Planning Agency (SGBPA) (2007), has published a script, *Bostadsnära natur* (English: *Nature-near Residence*) with guidelines for preservation of green space in future city development. Nature-near Residence also describes the complexity connected to densification and city growth. SGBPA (2007) presents two main trends within Swedish city development and planning affecting the possibilities to create good built environment with nature-near residence. The first trend is city growth which occurs through sprawl parallel to densification and affects people's accessibility and vicinity to green areas. According to SGBPA (2007) city densification often means exploitation of green area and green space near people's home. City growth will also increase the already high pressure of visitors on existing green space (SGBPA 2007). The second trend is the shift from public to private ownership and maintenance of green space but also the reduction of public space and public land in cities. SGBPA (2007) describe how deteriorating economy of many Swedish municipalities during the 1990's has led to decreased maintenance of many green spaces, leaving them with



declining quality. To deal with this problem, detailed city planning decreases public land and common grounds in benefit for privately owned land. The municipalities are responsible for public interests in new project planning, but the responsibility sometimes end up with construction companies (SGBPA 2007). The result is densely built residential areas with small and poorly designed courtyards providing few possibilities for play or recreation. Cities and towns are growing with residential areas without sufficient public space, parks or shared courtyards even though these places have a major significance for health, integration and social coherence (SGBPA 2007).

Some debaters mean parks and public places to be the most democratic space in a city. Ståhle (2008a) describes urban squares and urban parks as symbols of social interactions and democracy, places which often have a revolutionary history and play a central political role in modern cities. Former mayor of Bogota Enrique Peñalosa (2001) express the importance of public spaces as:

*Higher income groups always have access to nature at beach houses, lake cabins, mountain chalets, on vacations - or in urban settings at golf courses or large gardens. Parks allow the rest of society that contact as well. [...] For the poor, the only alternative to television for their leisure time is the public space. For this reason, high-quality public pedestrian space, and parks in particular, are evidence of a true democracy at work.*

(Peñalosa 2001, see Ståhle 2008a)

Many researchers, architects, city planner and landscape architects debate urban densification issues, keen on presenting their own perspective on future city planning. In *Compact sprawl*, Ståhle (2008a) investigates potential contradictions concerning urban densification, such as user vs. planner, quality vs. quantity and user's space vs. abstract space. Ståhle (2008a) also discuss whether less open (green) space, due to densification, means lower accessibility to these areas. He means it is often the contrary (Ståhle 2008a).

A Swedish article written by six municipal city delegates from different political parties and the general directors from the Swedish Road Administration, the Swedish Rail Administration and the Swedish Building and Planning Department, state that a dense city produce less carbon dioxide and use less undeveloped natural land. Skogö et al. (2007) describe different positive aspects of city densification, from more efficient

heating to less impact on lakes from sewage purification. They summarize this positive development as:

*A compact and functional city produces less greenhouse gas emissions. Densified buildings take less natural land space and utilizes existing investments.*

(Skogö et al. 2007, my own translation)

Three landscape architects, Brunge et al. (2014), express their concerns about the effect of densification on children's environment in the city. They mean city densification should not only focus on the housing shortage but also on the city environment that it is creating. Brunge et al. (2014) state that "the long-term effects of these dense environments are yet unknown." and call for national guidelines regulating the size of preschool yards. They compare Malmo's municipal guideline of 30 square meter per child with newly developed high density areas in Stockholm where a child have to make do with approximately 3.4 square meter preschool yard.

Danish landscape architect Stig L. Andersson (2011) notes that today's cities are not working and presents his ideas of Process Urbanism as a future dense and green solution. Andersson (2011) describes how modernistic ideals have created *friction-less cities* that are geometrical, well-functional and pretty. Andersson (2011) writes that the effects of modernist city planning, where nature was put outside the city, are still noticeable today. The nature and all of its processes has to move back into the city. Andersson (2011) emphasizes the importance of public space, which not only should provide space for activity and recreation, it should also regulate the city's indoor and outdoor climate. Nature and its processes should be woven into the city and not be considered as hierarchic elements fighting for space in city planning. According to Andersson (2011), Process Urbanism does not picture the design of future cities, because cities are ever changing processes of dynamic elements creating systems based on nature's process principles.

A model in international city densification is the development in Vancouver, which is so popular and profitable for developers that it has got its own name, *Vancouverism* (Chamberlain 2005). To minimize the impact of a high density population, the municipal planning (on new development) makes community benefits from developments in exchange for the right to build higher – developers can only build more floors if they repay the city with a public park, a plaza e.g. (Chamberlain 2005).

### 3.2 Benefits of urban greenery

Research from the last ten years has presented powerful evidence that touching, being in or simply viewing nature make us humans feel good (Montgomery 2013, p. 110). A study made by Ulrich (1984) show that hospital patients with windows overlooking nature need less pain-relieving medication and get well faster than patients with windows overlooking a house wall. A study made by environmental psychologists Kuo and Sullivan (2001) shows a connection between local crime rates and local greenery. Kuo and Sullivan (2001) had been struck by the vivid contrast of social life between the many courtyards in a social housing project in Chicago – some courtyards were green while others were deserts of concrete. Kuo and Sullivan (2001) describe the courtyards with trees and grass as always full of activities, while the barren ones were empty. They also found a psychological difference between tenants with only concrete views and those with green views:

*People with bare views told us they were psychologically fatigued, and more likely to be rude, to fly off the handle, more likely to slap someone in anger. They just had a hard time coping.*

(Kuo & Sullivan 2001, see Montgomery 2013, p.112)

When Kuo and Sullivan (2001) began to examine police records they found a hard data connecting lack of greenery in courtyards to local crime rates. Tenants living in buildings overlooking trees and grass experienced approximately half the crimes of buildings overlooking concrete courtyards. The more green the environment, the lower the rate of violent attacks, robberies, murders and assaults (Kuo & Sullivan 2001, p. 355). This result is to be compared with the insecurity people feel in during dark hours in areas with a lot of bushes and low vegetation, and that vegetation is often pointed out as convenient cover for illegal activities (Montgomery 2013, p. 112).

Psychologists at the University of Rochester present a study where almost hundred volunteers were presented slide shows with either *nature scenery* slides or slides depicting *human-made scenes* (Weinstein et al. 2009). Through this study Weinstein et al. (2009, p. 1316) show that natural environments, in contrast to human-made environments, increase people's valuing of *intrinsic* aspirations (e.g. intimacy, community and achieving personal goals) and decrease valuing of *extrinsic* aspirations (e.g. fame, money and success). Similar result was achieved when volunteers filled in a number of surveys in a room furnished with plants or furnished without plants (Weinstein et al. 2009, p. 1325). In the room with plants people were more generous towards others and reported lower extrinsic aspirations

compared to individuals in the room without plants (Weinstein et al. 2009, p. 1325).

In their final discussion Weinstein et al. (2009, p. 1327) describe these results as interesting since *“they suggest that nature, which is inherently unrelated to human intervention, brings individuals closer to others, whereas human-made environments orient goals toward more selfish or self-interested ends.”*

These results are supported by another study made by Kuo (2010), revealing that people who live in areas with parks are more trusting and helpful than people who live in areas without a lot of parks – regardless of income and race. Montgomery (2013, p. 113) writes that nature is not only good for us, it seems to bring out the good in us.

It could be easy to dismiss these results as biases, relying on small self-selected groups of nature-lovers with certain education or income, but Kuo (2010) means that recent study results are being measured objectively through hard-data such as police crime reports, physiological measures of immune system functioning and blood pressure. In *Parks and Green Environments*, Kuo (2010) describes how scientific research about the connection between health and greenery always takes income differences, and other advantages associated with green neighbourhoods, into account and still find green areas beneficial for human health. Kuo (2010) describes that wealthier people tend to have both better physical health outcomes and greater access to nature, but in comparison with people with the same socio-economic standard, people with greater access to nature have better physical health outcomes. The strength, consistency and convergence of the diverse and rigorous tests done upon the nature-human health hypothesis is, according to Kuo (2010), remarkable. Parks, street trees and other green environments are not only pleasant and beautiful elements in urban areas, they are essential components of a healthy human habitat and a source to what Kuo (2010) calls *Vitamin G*.

According to a Dutch study, of more than 10 000 households in the Netherlands, the less green a person's living environment is the more likely that person is to report not having adequate social support and feelings of loneliness (Maas et al. 2009). Green areas give different people opportunities to meet which can have positive effects on the social connection within a neighbourhood (Statens folkhälsoinstitut 2009, English: The Swedish Institute of Public Health 2009).

Kaplan et al. (1998, p. 17) describe that when people concentrate they focus their attention to a specific event or task – this is called *directed attention*. The capacity to directed attention is limited and wear us down. This state of mind is called mental fatigue and expresses itself in several ways (Kaplan et al. 1998, p. 17). Not only will people suffering from mental fatigue have difficulties focusing, it can also be expressed in their actions. Kaplan et al. (1998) also describe that mental fatigue is likely to affect people

to be impulsive and impatient, take more risks or be easily irritated. A person who is mentally fatigued may feel tired but the tiredness is connected to the directed attention so the person can easily do activities that are exiting, fun or fascinating. In contrast to the requirements of directed attention these activities involves attention that does not demand effort (Kaplan et al. 1998, p. 18). Recovery from mental fatigue can be provided by many activities and settings but Kaplan et al. (1998, p. 18) emphasize how readily nature settings or activities that involves natural environments can favour restoration. Simply observing the natural rhythm in the change of seasons have a calming effect on humans since we know we lack power to hasten it (Pálsdóttir 2014). The natural environment demands nothing from us and it has its own rhythm which we can enjoy with fascination. Nature or nature-like environments are well endowed with processes of fascination such as succession, predation (hunting or fishing) and growth (Kaplan et al. 1998, p. 18). According to Kaplan et al. (1998, p. 67) nature cannot be overemphasized; the natural setting can be of varying size, the exposure does not have to be long and it is not even essential that a person is in the setting to receive restoration. Restoration is used as being *“the process of renewing, recovering or re-establishing physical, psychological and social resources or capabilities diminished in ongoing efforts to meet adaptive demands”* (Hartig, 2004, p. 273).

Pálsdóttir's (2014) PhD thesis *The role of nature in rehabilitation for individuals with stress related mental disorders: The Alnarp Rehabilitation Garden as a supportive environment* also describes the important restorative abilities of nature. Pálsdóttir (2014) writes that mental fatigue, exhaustion, depression, anxiety, burnout or adjustment disorder are all stress-related mental disorders caused by psychosocial stress. Individuals suffering from stress-related mental disorders are likely to isolate themselves into their own world and change their daily-routines risking disengaging from everyday-life (Pálsdóttir 2014). In her result, Pálsdóttir (2014) describes how the profound non-verbal communication with nature, in this case Alnarp Rehabilitation Garden, is a source of restoration. The participants showed a strong need for undisturbed solitary engagement with nature in a self-chosen supportive place in the garden (Pálsdóttir 2014). This important quality of supportive environments is defined as *social quietness*. Pálsdóttir (2014) describes social quietness as a state when people shun presence of another person or unwanted human noise. The participants also described how nature had an *“all-embracing role when it was not shared with others”* (Pálsdóttir 2014, p. 62). Solitude with nature is crucial in recovering from stress-related mental disorders like mental fatigue. Pálsdóttir (2014, p. 74) also mention the size of a natural setting (park) as being an important factor for the participants restoration process and conclude that space is something to consider when designing a restorative

environment.

Nature can also give the perception of *being away* which together with extent, fascination and compatibility are important characteristics of a restorative setting (Kaplan et al. 1998, p. 18). It is important to be embraced by nature and have the possibility to shield out unwanted company or noise. Urban sounds like traffic noise are not perceived as restorative while sounds of nature are pleasant, calming and restorative (Pálsdóttir 2014, p. 72).

The medical records show that stress-related illnesses have increased dramatically among people in Western societies (Grahn & Stigsdotter 2003). Treatment of people suffering from stress-related illness is becoming an increasing part of the budget for medical service in Sweden. Grahn and Stigsdotter (2003) present research showing that city landscape planning may have a positive affect city-dwellers health. According to their research, more easy accessible green areas which provide restorative environments, available in everyday life, free of demands and stress, could have significant positive effects on Swedish city-dwellers' health. The stress levels have a significant relationship to how often inner city people visit urban green space (Grahn & Stigsdotter 2003). For 2001 the cost of burnout-depression syndrome for Swedish public sector was estimated to 8 billion Euro per year (Sahlin 2001). Since city planning of Western society has a tradition of involving social responsibility for the health of city-dwellers, Grahn and Stigsdotter (2003) mean city planners should address underlying causes of escalating stress-related illness in their work. As city planners of yesterday fought against spread of diseases, landscape architects and city planners of today must focus on stress-related illnesses (Grahn & Stigsdotter 2003).

In their study Grahn and Stigsdotter (2003) have mapped *“How often do people visit urban green space?”*. Answers show that people, on average, visit such spaces at 150 occasions and an estimated 220 hours per year. This result did not show any significant relationship between the use of urban green space and age, sex or socio-economic index. The same study show that 70% of the respondent wished they visit urban open green space more often than they normally do (Grahn & Stigsdotter 2003). In this case, a significant relationship was found; the persons responding that they wish to visit urban green areas more often than they currently do, were more likely to feel stressed (Grahn & Stigsdotter 2003, p. 10). The frequency of people's visits to urban green space was mostly depending on the distance (making these places seem less accessible). Grahn and Stigsdotter (2003) describe that if the distance is 300 metres, such place is visited 2.7 times per week, while green space in a distance of 1000 metres is only visited once a week.

Studies of the Japanese phenomenon *shinrin-yoku*, taking in the forest atmosphere or “forest bathing”, show that a 15 minute session of walking in a forest environment reduces stress (lower concentration of cortisol, lower pulse rate and lower blood pressure) more than the same experience in a city environment (Park et al. 2010). Studies also show that children diagnosed with attention deficit/hyperactivity disorder (ADHD) performed better in terms of concentration if they had been guided a safe and quiet 20-minute walk in an urban park (Taylor et al. 2001).

The size of a green space is important because the possible number of characteristics for mental well-being increases with increased size of an green area (Skärbäck et al. 2014). In *Nordic Journal of Architectural Research*, Skärbäck et al. (2014) describe some characteristics to not fit together e.g. the social may disturb the serene, hence large green space provides increased possibilities to several simultaneous characteristics. Kaplan et al. (1998) also emphasize the importance of separation from distractions and writes that “*The sense of being in a different world is easily undermined by intrusions and distractions.*” Large areas can peripherally be divided in distinctive regions with differentiated characteristic providing a sense of mystery or enclosure (Kaplan et al. 1998, p. 116). Large parks and green areas facilitate active experiences and are associated with characteristics like wild, lush, specious and serene (Berggren-Bärring & Grahn 1995).

Nature and green areas are often associated with walks or other physical activities which have great impact on public health by reducing cardiovascular disease, cancer, obesity and high blood pressure (Swedish Institute of Public Health 2009). Bell et al. (2008) present results of a study connecting higher greenness with lower body mass index (BMI) of children. Through statistics Bell et al. (2008) equated 3800 children on factors likely to impact their weight—age, sex, neighbourhood income, neighbourhood density and family income. Children living in greener neighbourhoods had lower BMI than their same-age, same-sex counterparts living in less green neighbourhoods and were less likely to show weight gains over a two-year period than their same-age, same-sex peers, living in less green neighbourhoods (Bell et al. 2008). These results are confirmed by Wolch et al. (2011) who examined the relationship between park proximity and childhood obesity. Also similar study results present children at preschools close to nature to have better motoric ability, better concentration, less sick-days and be healthier than children at preschools less close to nature (Grahn et al. 1997).

### 3.3 Proximity matters

According to Montgomery (2013) there is no denying of the benefits of an expansive nature view or a large park, but merely adding up a city’s total park space does not tell much about its accessibility and proximity. Ståhle (2005) investigates the two most commonly used measures of public (green) space, *density measurement* (space/inhabitant) and *accessibility measurement* (minimum space within maximum distance). Ståhle (2005) means these measurements seldom include visual accessibility, easy orientation or barriers but instead define distance (straight line) in metres. According to Ståhle (2005) city planning should organize the city structure to maximize accessibility to public (green) space. The Urban Green Space Taskforce (DTLR) (2001) summarizes this vision as:

*The success of parks and green spaces is highly dependent on the quality and security of the routes used to access them. This is one reason why urban green spaces and play areas should be regarded as part of a continuum of public space (including streets and foot-paths).*

(DTLR 2001)

Kuo (2010) agree by saying “*Nature has to be a part of life. It has to be a part of your daily habitat and routine.*” In order for people to receive the benefits of nature, it has to be integrated into the urban fabric (Montgomery 2013). According to Kuo (2010) daily exposure of nature is essential and if you cannot touch it or see it, then nature cannot do much good – proximity is crucial. ANGSt (2010) present improved access, naturalness and connectivity as the three main principles for their work with green spaces. Cities need large, immersive destination parks but also medium-sized parks, community gardens and pocket parks within walking distance of every home (Montgomery 2013). Ståhle (2005) present a study of Stockholm’s inhabitants perception of green space, showing that people living in the dense inner city block structure perceive nature and parks more accessible than people living in green modernistic suburbs. The Swedish Investigations and Statistical Office (2002) presents a study showing large parks and large green areas to be Stockholm’s most popular green spaces, something Ståhle (2005) connects to the multiplicity of characters large areas offer.





## 4. EXAMPLES OF LARGE CITY PARKS IN COPENHAGEN, MALMO AND BERLIN

After visiting large city parks in Copenhagen, Malmo and Berlin I asked some of the interviewees about their thoughts regarding the future for one particular park in their city – Frederiksberg Park together with Sondermarken, Pildammsparken and Tempelhof Field.

### 4.1 Frederiksberg park and Sondermarken, Copenhagen

Situated in central Copenhagen, surrounded by the city, is a separate municipality named Frederiksberg. Just at the south municipality boarder is Frederiksberg park and Sondermarken, two adjacent romantic landscape parks. These two parks create a total park area of approximately 60 hectares which is most intensively used by the city’s dwellers.

<b>Design:</b> Hans Heinrich Scheel 1697 with reconstructions made by Johan Cornelius Krieger 1720 and redesigned by Peter Petersen 1780	<b>Size:</b> 30 + 30 hectares
<b>Category:</b> Romantic landscape park	<b>Main observed activities:</b> Walking, running, dog walking, picnicking and playing children.
<b>Open for public:</b> As a park 1914	<b>Future:</b> Preserved as historical city parks complemented with modern elements to retain people’s use of the park.



Fig. 1. Frederiksberg park viewed from the castle.



### Short history

During the beginning of 18<sup>th</sup> century King Frederik IV established Frederiksberg park has a baroque garden in connection with the construction of his palace (Danish Castles and Property Agency, SLKE 2005). Between the years 1798-1804 King Frederik VI transformed the baroque garden to a romantic landscape park designed by Peter Petersen. SLKE (2005) describes how Frederiksberg park was open for public use in 1749, while the adjacent Sondermarken was open to the public 100 years later. These two parks are considered to be cultural heritage and the design should represent a specific historical park style, the romantic style, but their use should be up-to-date and developed over time (SLKE 2005).

### Uses to day

Frederiksberg park is together with Sondermarken a popular stop for Copenhagen's tourists but also a beloved outing spot for Copenhageners (Visit Copenhagen 2014). A lot of people walk or run around the two parks while others enjoy a stroll or a picnic in one of them. The Frederiksberg park is only open during the light hours of the day while Sondermarken never closes. Sondermarken has a new lighted path much loved by the city's runners. SLKE (2005) present the annual visitor numbers to be 3 million people and a survey made 2004 showed that 99% of the respondents were satisfied or much satisfied with their visit in these parks.



Fig. 2. Sondermarken.

### The future

The municipality of Frederiksberg is constantly working to keep these two parks well maintained and preserve them as qualitative representatives of a historic area (SLKE 2005). Even though Frederiksberg park and Sondermarken have a historical main expression, Niels Møllgaard, landscape architect at SLKE stressed the importance to balance this interest against the uses of today. Both Frederiksberg park and Sondermarken have got modern elements like outdoor-gyms and playgrounds. Møllgaard explained how the amount of visitors in Frederiksberg park and Sondermarken is increasing every year. Møllgaard thought this development to be mainly positive but were concerned that high visitor pressure will increase the maintenance costs to go beyond budget.



Fig. 3. Frederiksberg park.



4.2 Pildammsparken, Malmo

Pildammsparken, with unique neoclassical design, is situated in central Malmo and is the city’s largest park (Hallemar & Kling 2013, p. 6). The city of Malmo (2014) describes the area to have had an important recreational function even before the park was planned. Malmo city’s water reservoirs were early situated in this area and the name Pildammsparken (English: Willow Pond Park) originates from the willow trees once planted on the levees around the reservoirs (City of Malmo 2014).

<b>Design:</b> Ferdinand Boberg and crown princess Margareta 1914, Erik Erstad-Jørgensen 1915 and Erik Bülow-Hübe 1926	<b>Main observed activities:</b> Cycling, walking, running, dog walking and playing children
<b>Category:</b> Classical and neoclassical	<b>Future:</b> Preserved as a central city park complemented with modern elements to retain people’s use of the park.
<b>Open for public:</b> As a park 1914	
<b>Size:</b> 45 hectares	



Fig. 4. Pildammsparken’s dense ”forest area” surrounding the largest open grass field ”The Plate”.

Short history

In the beginning of 1900 the area around Pildammarna, the willow ponds, (Fig. 5) was decided to be the site for the Baltic exhibition 1914 (City of Malmo 2014). The famous architect Ferdinand Boberg designed the exhibition area together with swedish crown princess Margareta. After the exhibition the danish landscape architect Erik Erstad-Jørgensen redesigned the area as a landscape park (City of Malmo 2014). In 1915, half of the design was implemented around the small reservoirs. Malmo’s first city planner, Erik Bülow-Hübe, modified Erstad-Jørgensen’s plan in 1926. Bülow-Hübe described his design, based on the fact that Malmo lacks a natural forest, as a “dense forest areas integrated by open grass fields” (Fig. 4). Hallemar and Kling (2013, p. 6) describe that the trees in Pildammsparken were planted as in forestry, with beech trees nursed by birches. The location of the flower beds in *Margaretas blomstergata* (English: Margareta’s flower walk) is saved from the Baltic exhibition. In 2014 Malmo arranged different activities to celebrate the 100 years anniversary of Pildammsparken.



Fig. 5. Pildammsparken. From upper left: ”The Plate”, the willow pond, the amphitheater and the willow pond viewed from the amphitheater.



Uses to day

As the largest park in central Malmo, Pildammsparken is much loved by inhabitants in general and the city’s runners in particular (City of Malmo 2014). During summers the city of Malmo arranges different kind of activities such as live music performances or other cultural events in the park. These events are often free of charge (City of Malmo 2014). The city of Malmo (2014) also describes the popularity of the annual flower beds in *Margaretas blomstergata* which have different theme every year. Overall the well-visited Pildammsparken is mostly used for recreational and social purposes.

The future

Camilla Anderson, landscape architect at the municipality of Malmo described how the city is working with a green structure plan to give people of Malmo easy access to different sized public parks. Malmo city define a city park as *“A multifunctional park bigger than 10 hectares which can be reached within 2 kilometres from one’s home”*. C. Anderson stressed the importance of city parks in future cities since they can help people handle mental fatigue and stress. C. Anderson explained that people lose contact with nature as the world urbanizes. Due to the clear connection between mental as well as physical health and green environments, city parks will play a crucial role in future cities. According to C. Andersson large parks like Pildammsparken have possibilities to simultaneously include several activities and characteristics which are needed when more people are moving into cities. Malmo constantly update functions and possibilities for different activities in Pildammsparken and the most recent contributions are two new outdoor gyms (City of Malmo 2014).

4.3 Tempelhof Field, Berlin

To be able to grasp the ongoing debate about the future of the old airport site of Tempelhof, I had to understand the area in a historical context. The Tempelhof Freiheit’s (English: freedom) website refer to the area as being *pioneers’ ground* and this statement signalize that this area is not to be a traditional park (Tempelhof Berlin (THF) 2014). Tempelhof Field is instead seen as a place where new ideas and community arrangements develop without conventional rules and management. Tempelhof Field is located 6 km south from the city centre.

<b>Design:</b> The airport opened 1923	dogs (special areas), skateboarding, windsurfing and kite surfing.
<b>Category:</b> Public space, pioneers’ ground	
<b>Open for public:</b> 2010	<b>Future:</b> Preserved as an open area and pioneers’ ground with possibilities to do sport activities impossible elsewhere.
<b>Size:</b> 386 hectares	Future exploitation projects are possible on parts of the area.
<b>Main observed activities:</b> Cycling, walking, babecue, running, roller skating, playing	



Fig. 6. Tempelhof Field with the airport building.

### Short history

The old airport site in south Berlin has a long aviation history (THF 2014). In the late 1700's the first Berlin balloon lifted from the area and in the end of 1800 the Prussian military started a airlift service that flew more than 9 tons of mail out of town (THF 2014). At weekends and on public holidays local families would swarm in thousands to enjoy their leisure time (Visit Berlin 2014). The aviation experiments continued and Tempelhof Field Airport opened 1923. THF (2014) describes the fast development of the Tempelhof airport which in 1930 by volume of passenger traffic was the biggest airport in Europe. After the Nazi takeover in 1933 Adolf Hitler arranged for an expansion of the future civilian and military airfield but due to the pressure of war the planned opening in 1939 could not take place. THF (2014) describes that during the Second World War Tempelhof Airport functioned as a forced labour camp and as a official SS concentration camp – the only one on Berlin soil. The old airport building was bombed in late 1943 while the newer concrete construction (Fig. 6) remained largely intact (THF 2014). Tempelhof Airport was occupied by the Soviet Army in 1945 and ceded to the American allies later the same year. During the Soviet Union's blockade of West Berlin Tempelhof Airport was a symbol of freedom, often referred to as Gateway to the World, since West Berlin could cope the blockade by being supplied by air (THF 2014). During the Cold War politicians, actors as well as top rock and pop stars arrived at Tempelhof which helped to revive the long-lost glamour of Berlin as a world city. In 1975 Tegel Airport took role as the main Berlin airport and in 1995 Tempelhof Airport was given protected historical monument status. Tempelhof Airport closed in 2008 and opened as a public area 2010 (Visit Berlin 2014).

After the airport closed the governing politicians in Berlin wanted to build apartments, offices and a library on the outskirts of Tempelhof Field (P1 Morning 2014). After years of protests a signature list led to a referendum in May 2014. The politicians were surprised to see that 65% of the voting Berliners were against the building plans (Swedish Radio 2014). A majority of the people wanted Tempelhof Field to be preserved. A woman expresses her feelings to a reporter from Swedish radio: *"Tempelhof should not be built. This place is a vital oasis for the vast vistas... it is an existential place"* (P1 Morning 2014).

### Uses today

Tempelhof Field is the largest urban green area in Berlin. With its 386 hectares of vast open space, Tempelhof is a unique place in any urban setting. Since the opening 2010 local initiative have created different activity areas and people have only let their imagination limit what is possible on this site. All year round people roller skate, kite surf on longboards (or anything else with wheels), enjoy urban gardening and let their dogs

play at the old airport field. A lot of people walk, run or bike around the 6.5 kilometres long lap. The take-off and landing strips (Fig. 7) are used as sprint tracks but also as shortcuts through the huge area. During the summer months Tempelhof Field is covered in barbecue smoke when families and friends prepare their dinner on special barbecue areas (Fig.8). Large parts of the field are reserved as bird nesting area but also play a vital role as hunting grounds for several birds of prey (Fig.9).



**Fig. 7.** Activities on the take-off strip.



## The future

Berlin-based landscape architects Johannes Hügler at VOGT and Martin Rein-Cano at TOPTEK 1 both described Tempelhof as a unique area where its quality is its size. Hügler and Rein-Cano also considered Tempelhof Field to be a park, something Ulrich Nowikow from the organisation Green League in Berlin did not. The different views upon Tempelhof Field might be a threat to the preservation and development of the area, since spaces not considered as parks have lower preservation status than parks. Hügler described Tempelhof Field as a good example of a modern city park – an open area with so much space that people or initiative can use it as they want. Hügler also thought the visibility of the old airport is one of the qualities of Tempelhof Field, which is lost if the field is built or redesigned. Rein-Cano agreed and stressed the importance of this kind of open space in the city. Rein-Cano also stressed the importance of enlarging people's perceptions of city parks since the beauty of Tempelhof Field is found in the roughness of the place. Beautiful parks are sometimes limiting people to move as freely as they would in more “ugly” places. According to Rein-Cano Tempelhof Field gives space to do things you normally cannot do in a city.



**Fig. 8.** Barbecue area in front of the old airport building.

Dr. Cornelia Oschmann at Humboldt University in Berlin and Nowikow do not consider Tempelhof Field to be a city park. Dr. Oschmann and Nowikow explained Tempelhof Field as an open industrial field lacking enough trees and benches to possess the qualities of a park. According to Nowikow, the micro climate would be improved if trees were planted – less windy and less direct sunlight (characters other users consider as qualities) but he was against a redesign of the area. *“The field should stay as it is, as an open activity area”*, he said.



**Fig. 9.** Some parts of the area is reserved as nesting habitat for birds.



## 5. RESULTS OF INTERVIEWS



Following results are handled from the answers gathered by interviews with landscape architects, architects and other professionals working with city green in Copenhagen, Malmö, Stockholm and Berlin.

## 5.1 The future of city parks

To frame my wish to understand how professional in the field of architecture, landscape architecture and city planning view the future of city parks I asked:

*“Can you describe as detailed as possible how you see the future of the city park?”*

The majority of the interviewees saw different design, uses and functions of city parks as the most important factors for continuous future use of these parks.

Johannes Hügler in Berlin, Camilla Anderson in Malmö, Niels Møller in Copenhagen, Erik Skärbäck at SLU Alnarp and Dr. Cornelia Oschmann at HU in Berlin described how city parks will become more important as cities grow denser. Møller also described how the number of visitors in public spaces in Copenhagen, is constantly increasing and that parks play an important role in offering public space. Hügler said city parks will become more important, especially when considering density of cities. Some cities experience population decline but many cities like London, Paris and Berlin are growing and people really need public space and green space, he added. Hügler and C. Anderson described that they definitely believe in a future for the city park. C. Anderson stressed that the need for mental recovery from demand, stress and information overdose increases as people become increasingly urbanized. Many city dwellers do not have access to nature, hence are city parks very important. C. Anderson also described that it is a clear connection between health, both mental and physical, and people’s accessibility to green environments. C. Anderson clearly emphasized the importance of large city parks since they can accommodate many different characters (Patrik Grahn’s park characters; wild, lush, specious, serene, common, imaginative, festive and essential (my own translation of Berggren-Bärring & Grahn 1995 p. 84-165)) and more space-consuming functions such as activity areas, arrangement places and urban farming. Certain park characters such as wilderness, spaciousness and tranquillity requires a certain space to achieve and accommodate good quality, C. Anderson added. Copenhagen-based Rikke Hedegaard Christensen also stressed the importance of city parks and nature areas since they offer a great selection of recreational functions, activities and culture which are frequently used by Copenhageners, especially young and children. It is in the city parks and nature areas that Copenhageners find peace and quiet from the city noise and where they do sports, go



walking, enjoy nature and much more.

C. Anderson described that when many different functions coexist on the same space, it attracts people from all over the city, making the city park an important meeting place. Additionally, urban meeting places will become increasingly important in the future city, C. Anderson added. Stockholm-based Torbjörn Andersson agreed with C. Anderson's reasoning about the significance of city parks as meeting places and added that the importance of this type of urban public spaces increases as the general interest for the city increases. T. Andersson could clearly identify different waves of densification versus greenery throughout the history of city planning. The 1980's debate about city densification was focused on making cities more socially interesting. After that came, what T. Andersson referred to as the *Barcelona-wave*, when the city of Barcelona made major investments in its urban space in connection to the hosting of the Olympic Games. House blocks were demolished to make space for small parks and squares, a process landscape architect T. Andersson described as absolutely sensational. *"This had never been seen before!"* he added. This is an example of the 1980's wave where planners and architects wanted to restore the social life of the city. Hügler described a similar scenario, though arisen from other causes, in some cities in eastern Germany. He described how for the last twenty years these cities have experienced a population decline which has led to demolition of houses transforming the site into a public space. *"But without the same qualities as a city park"* he added. Hügler said this method could be an option in dense cities, but not in the size and quality that is needed for the space to be called city park.

Today, T. Andersson continued, is another clear wave of arguments for high quality urban spaces within the city – but for other reasons. T. Andersson presented two main frequently occurring arguments for the densification of cities; first, that it is considered sustainable and second, to meet the big influx and growth of large Swedish cities. T. Andersson also added that the general interest for the city has increased. Previous demolitions, in the 1930's, had created a sparse city that people left (square became parking lots and parks were inhabited by homeless people) but now when people are moving back into cities, parks and urban spaces serve as meaningful meeting points again. While the 1980's wave of city densification was a social commitment, the ongoing city densification seems to be driven by market forces, that govern construction, hiding behind sustainability arguments, T. Andersson said.

Hedegaard Christensen argued that city parks and nature areas also have a vital role in securing Copenhagen against climate changes. She explained that, a great number of Copenhagen's parks will, in the future, be used as rain water collection and detention areas in connection to cloudburst. The city parks will play a significant role in future

Copenhagen – not just as recreational areas but also in securing the city against climate changes, guarantee biodiversity, promote inhabitants' health and to create light, airy and comfortable micro-climate in the city. Hedegaard Christensen described how city parks will develop from being recreational elements to functional elements. Copenhagen has already started to focus more on functional aspects of parks, such as rainwater management, CO<sub>2</sub> reduction, heat regulation e.g., than on beauty aspects such as historical, cultural and recreation e.g., Hedegaard Christensen added. Dr. Oschmann described the same *from beauty to function phenomenon* in growing cities that already lack urban green areas – these cities will have future problems with air pollution and urban heat islands. Future city parks will have a clear environmental significance by mitigating climate change and will serve an important function as green lungs in dense cities. Dr. Oschmann showed a diagram depicting the temperature differences in Berlin over the last 30 years. It was clear that the inner city has the highest temperature and that areas with city parks have the lowest temperature. Dr. Oschmann stressed that even though Berlin is a green and not very dense city, the temperature difference between green and city environment is clearly visible.

Hügler reasoned that new city parks can be difficult to plan and build due to economic interest and lack of urban space, hence future city parks might have to look different than the ones we know today. It is important to analyse how the existing parks and public green spaces can be put together, he continued. The future city park may not be one large park but several small parks connected in a green system. In his argumentation, Hügler stressed the importance of a movement continuity, movement without barriers. He mentioned Gleisdreieck park in Berlin as an example of a modern city park with movement continuity, though it is crossed by roads and several public transport tracks. T. Andersson agreed by saying *"you should be able to go for a decent walk without having to meet too many pedestrian crossings"*.

Møllergaard and Tomas Lewan, landscape architect at Nyréns in Stockholm, both meant today's city parks are under high pressure of changing since there are a lot of new activities fighting for urban space. It is natural, Lewan said, that the design of the city park, which is a historical late 1800s phenomenon, will change. Lewan described older city parks as non-viable and how new functions like skateboarding, sport and recreation will take over the usage of these parks. He believed the design of future city parks to be more activity based. Møllergaard agreed that the increased numbers of visitors will demand more activities and functions in the parks but it is a difficult balance between different functions and activities. Møllergaard also said that the future *problems* connected to new city parks and new functions comes from a short-term economic thinking.

On urban planning level almost every new project is seen as a quick profit – to not build houses on the urban land simply cost too much, Møllergaard added. Hügler also mentioned this value-dilemma when cities sell their grounds to *make* money (on buildings) while it *cost* money to build and maintain public spaces (green areas). The citizens and politicians should say “*Come on, we need more open space! Money is not everything*”. Hügler added that this reasoning might be a bit idealistic but it is a serious issue that cities lack the balance between density and open green space.

Lewan thought city parks as such definitely have a potential to survive but, added that in newly developed urban areas, new parks will look different. Lewan also recounted how the name city park is mostly used in smaller towns with one major park, while larger cities often have several parks. City parks like Pildammsparken in Malmö has classical values for the branding of the city, so the city has an interest to safeguard it from exploitation. Other city parks are at risk, Lewan continued, when the densified surrounding city starts to grow into the park’s edges.

Berlin-based Martin Rein-Cano agreed with Lewan and Møllergaard on the changed use of existing city parks, but stressed the *social changes* that city parks are experiencing. Today, people use the public spaces in more private manners by bringing out their computers to work in the park or have family dinners e.g. City parks, Rein-Cano continued, are no longer spaces where you only go for sports or recreational purposes – they are an integrated part of the function space inside the city. The city park has become an extended living room where people have their dinners, parties and in some ways “live”. Rein-Cano said this behaviour is no longer an exception, it is a use.

Rein-Cano also believed that new city parks must offer more possibilities of use and said that landscape architects might have to enlarge their vocabulary in terms of park use. He mentioned his project Superkilen in Copenhagen as a good example of social use of public space, where the design inspiration sprung from the surrounding city and current issues around different cultures and integration. The use of public spaces also differs between Northern and Southern countries, he said. Rein-Cano described how the Mediterranean countries use the public space and city parks in private ways (socializing) while Northern European countries enjoy the sensorial pleasures (loneliness) of city parks. Rein-Cano emphasized that new city parks need to have more programmed activities and less of the sublime. Stockholm-based architect Ola Andersson reasoned similar to Rein-Cano, saying that he does not believe in a fundamental human need for nature-like areas in the city. “*Seeking tranquillity is not a basic human need, rather a preference,*” he said.

O. Andersson also described how Swedish urban planning during the 1920’s went from

working with *parks in city* to *city within a park*. The city park as such vanished during this era. Urban planning then had a new ideal where buildings were scattered in green areas which, in Stockholm, has left the city with good potential to densify many central located green areas within reach of public transport. These green areas have never been parks in that sense, O. Andersson continued, they were intended to be maintained as natural land, but since it has never been public finances to support the maintenance, these spaces were abandoned to their own fate of overgrowing. O. Andersson meant these abandoned green areas should be built and replaced with small intensively used high quality parks



**Fig. 10.** Frederiksberg park will be preserved as a romantic landscape park but adjusted to modern activities by additional elements such as outdoor gym.



**Fig. 11.** Tempelhof Field is a contemporary city park creating great community engagement.

within the new densified area. Ulrich Nowikow and Mikulas Cernik at Green League in Berlin agreed with O. Andersson that maintenance costs will be a serious future problem for cities. Nowikow and Cernik presented a win-win situation; allotments and possibilities for city-dwellers to take care of their own small plot. The interest for urban gardening is a growing movement in Berlin and people show interest in caring and maintaining a green area rather than just use it for traditional activities such as jogging or dog-walking. Nowikow and Cernik mentioned Tempelhof Field, a great example of this engagement, where people have started community gardens and other common activities on a public space.

## 5.2 City densification, new city parks and urban sprawl

The future of new city parks is unavoidably connected to city densification which is mainly perceived as a sustainable option to urban sprawl. I asked the interviewees following two questions on the subject:

*“In times of city densification, do you believe there is a place for new city parks?”*

*“City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?”*

The majority of the interviewees had clear opinions that urban sprawl is a more serious environmental threat than city densification. Most of the interviewees described a complex balance between urban green space and densification and saw this city planning conflict as more complicated than *right or wrong*. Others did not see a conflict, rather mainly positive city aspects of city densification. Many also described the social advantages of city densification, a view where large parks or green areas often are considered as barriers. Also this relationship is presented as a delicate balance between urban density and open space.

Martin Rein-Cano said he believes in a future for the city park but said it is important not to recreate the romantic parks of the 19<sup>th</sup> century. He emphasized that the public spaces should create, “cool conflicts“, interactions, where people can watch each other and socialize. Public places should also offer people to do activities that are impossible to do elsewhere. *“We do not need public spaces to be living cemeteries”* he said. According to Rein-Cano a city is a place where different people from different cultures meet, while a park often just adds to the beauty of a city. He emphasized that a park has to contribute with something to the city so its urbanity remains. The popularity of a park is connected to the density of the surrounding city and when planning a new park, this has to be considered since the area around the new park is usually not that dense. *“With parks, you really have to think in advance...”* Rein-Cano said.

Torbjörn Andersson described how the modernistic building doctrine, with a lot of greenery, has created cities which have lost their social qualities. A compact city has advantages but it is important that all people can enjoy life in this type (dense) of city, he added. T. Andersson emphasized that dense cities should provide green areas where people can move freely from traffic. Parks are built for many reasons but enhanced

public health is one argument for parks – people need space to move. The public health reasons for having parks have changed but the issues certainly remain today with child obesity, mental fatigue and cardiovascular diseases, he continued. T. Andersson mentioned a sinister side of today’s city densification: strong forces from construction companies (who often lack morals). According to T. Andersson these companies want to make money out of building more houses, hence they take even the most respectable arguments like immigration, segregation and biodiversity to fight for their cause. T. Andersson described what he thinks is a problem: Parks often represent an unexploited area in the eyes of many construction companies. Dr. Cornelia Oschmann described the German nature conservation law to be a good solution to this problem. Some of the new parks in Berlin are created as a result of this nature conservation law that obligate building companies to pay and replace lost green values on the construction site or in connection to it. Dr. Oschmann considered this system to be useful and wished to see it elsewhere.

T. Andersson, recently back from a long visit in New York, mentioned an American expression, “if you would like to increase the value of your property you should renovate or maintain the nearby park”. This expression is based on the fact that proximity to parks can increase the value of homes. T. Andersson describes properties near a well maintained or popular park to increase more in value than properties far away from a park. T. Andersson also said New York city would make a total financial loss if the entire Central Park was built, since the properties now surrounding the park would lose so much of its value. Recent estimations show Central Park to have a real estate value of \$528,783,552,000 (<http://matrix.millersamuel.com>). It is a progress if companies that only care about their own profit, realize that their properties are worth more if included in a city context, T. Andersson said. In that case, qualitative urban spaces and urban green areas get a monetary value.

Camilla Anderson described trends within urban planning where large parks are seen as barriers and waste of urban space – trends that will make urban parks decrease in size. *“I am convinced that there must be large parks in future dense cities”* she said. To get away from city noise, enjoy relaxation and find recreation will also be a human need in the future, C. Anderson added. Erik Skärbäck agreed with C. Anderson and described city parks to be even more important in the future since they truly can offer a break from city life. Rein-Cano and Ola Andersson opposed this “need to get away-feeling” to be a preference rather than a fundamental need. *“We should ask ourselves if this need is relevant”*, Rein-Cano said. He added that today’s society has so much mobility that, maybe, these precious parks should be for socializing and not for sublime experiences. Rein-Cano also said it is



important not to romanticize the importance of parks. According to Rein-Cano, a park should be something precious. He said it is not good to have too many parks in dense cities because it gets boring, and not enough density is created. It is a balance between parks and density, he added. *“What I hate about the romanticization of parks, is the celebration of loneliness”* Rein-Cano continued. He described the Nordic countries as a place where *“everyone is alone and have difficulties to socialize... They have to drink to do it”* and since Rein-Cano means public places are created to socialize, they cannot be too big. *“If it is you and the nature – that is not good”* he said. Rein-Cano described it as *“an incredible luxury to give away pieces of the city to create lonesome experiences that people can have if they go 30 minutes with the metro”*. O. Andersson agreed with Rein-Cano meaning that people in dense cities do not have a need for large green areas. The reason why people migrate to the dense city is because they want to live in the dense city and avoid the green areas, O. Andersson said. *“Green areas are often something that dictates life outside the city centre”* he continued. O. Andersson said it is clear that not everyone wants to live in a dense urban environment but the demand for dense housing outstrips supply in today’s Sweden. That is what makes housing prices in central Stockholm so high. O. Andersson described green areas to be as those mentioned by CIAM, who divided the city into four different zones for housing, work, transport and recreation. The zone for recreation was then named green space, all according to the modernist urban planning doctrine, he said. *“Few people believe in these ideals anymore”* O. Andersson added. He also described that green space is different from the artificial and designed structure of a city park. O. Andersson described the 18<sup>th</sup> and 19<sup>th</sup> century parks, like Central Park in New York and Humlegården in Stockholm, as integrated parts of the urban ideal that prevailed then. Today it is different, he stated.

Contrary to Rein-Cano and O. Andersson, Erik Skärbäck emphasized the importance of urban greenery by describing research (Björk et al. 2008) showing that people living in apartments are more dependent on having access to several of “Patrik Grahn eight characters” within 300 metres than people living in villa areas. The correlation is particularly strong for women, Skärbäck added. Skärbäck mentioned other research showing that large parks have greater chances of including more characteristics than small parks. Additional other research show that large parks have greater chances of getting several characteristics in the park.

Rein-Cano stressed the importance of having an open space strategy when planning future cities. According to Rein-Cano densification is more important than greenery but it is all about the context. *“Sometimes street life is better than a park”*, he added. Rein-Cano also said *“the bigger the park the better”* but meant the issue to be more complicated than that. *“It is impossible to say that we need big parks and that densification takes away all the green*

*areas”*, he continued. Rein-Cano said landscape architecture is about the ability to tune in what is needed and what is wished for. *“You have to define what kind of park is needed in new neighbourhoods, how many people live there and what kind of activities do they do?”*, he said. On one hand, many new dense areas are in direct connection to the surrounding landscape, on the other hand, some new areas not dense enough, he continued. *“This is a question of scale and differentiation of the public place”*, Rein-Cano said. *“What kind of people live in the area? If people in the area have allotments and summerhouses, will they then use the park in the same way as people with big families living in small apartments?”* he reasoned. Rein-Cano stated that new parks in new housing areas are always completely empty. *“Maybe you can say, the poorer the people the more they have a need for a public space”*, he continued. According to Rein-Cano some areas are, like villa areas, not in need of parks, because rich people take a holiday when they need to visit nature. *“Like Swedish people who go to Thailand”* he added.

Rein-Cano and T. Andersson meant there is a limit to the density of cities and T. Andersson emphasized that small pocket parks cannot replace new city parks, something that Dr. Oschmann on the contrary suggested. She said it might be difficult to find spaces for new large city parks and thought it is more important with small green areas near by people’s homes. Hügler also reasoned about the opposite nature of density and open space. Hügler described difficulties to find space for parks larger than 30 hectares within the city, and added *“if big parks are built outside the city is there really a use for them there?”*. Hügler agreed with Rein-Cano by saying that the size of a park correlates with the density of the city, hence is there no space for new large city parks. Hügler mentioned the newly planned and partly developed Harbour City of Hamburg where the density is very high, hence there is no space for a city park. Hügler repeated his thoughts about some kind of park system, or at least finding other solutions to the lack of space for new large city parks. Niels Møllergaard agreed with Hügler and said that there is clearly a conflict between densification and urban greenery, where Møllergaard pointed out city parks as losers since so few new ones are being planned. If the number of visitors increases, it is much harder to get the recreation and tranquillity that some visitors wish to experience due to lack of space, children playing or many people around. Consequently increasing the wear which makes it difficult for parks to live up to the recreational requirements, Møllergaard added. Since it is difficult to build new parks in the city, urban planning should instead facilitate green links with restricted traffic accessibility where people can walk or bike to the parks, he said. Møllergaard explained this to not replace a city park but perhaps give a green transport to the nearest park. Dr. Oschmann agreed by saying existing city parks have to be protected and cities have to, due to lack of space, find new ways for urban greenery e.g. vertical gardens and roof-top greenery.

C. Anderson described how city densification often means densifying the city with buildings. Instead, the method should be to densify the city with features and experiences that are lacking and thus also include parks and urban spaces. O. Andersson agreed with C. Anderson that densification is not only to densify with buildings. *“When a project is built in green areas you build streets and houses but it also means that you should build parks”*, O. Andersson said. He also emphasized that if an area is put aside as park, not to be built on, it requires reservation of an annual maintenance budget of the space. If this is not done, he continued, the area cannot be considered as a park, it is then a green space or an undefined recreation area without any financial support to be maintained. *“These areas are often overgrown and become forests”*, he added. O. Andersson said that there is no possibility to protect these areas from exploitation in the long-term. The only protection is that the green area is planned as a nature reserve, but this protection should not be used that way, he added.

C. Anderson has noticed a conflict between green areas and densification based on which approach you have towards large parks – if you see them as barriers or not. In Malmö, there currently a plan to densify the edge of Kroksbäck park, a plan C. Anderson described as reprehensible. There is a risk that Malmö chooses to densify on park space because it is easy accessible exploitation ground, she said. C. Anderson explained that there is plenty of leftover land in and adjacent to residential areas and alongside roads, but these surfaces are not in the control of the city. O. Andersson, who sees green areas as barriers, opposed by saying that there is no conflict between densification and urban green areas. *“Parks are not threatened by densification”*, he added. According to O. Andersson, one must distinguish the difference between parks and green areas. *“There are no cases where parks have been built on”*, he said. O. Andersson described that the previously main function of a green area was to isolate neighbourhoods from each other. *“City planners simply wanted to avoid the big city’s social environment. So today, these areas have no function”*, Andersson said. *“The cherished city greenery and parks is one thing”*, he said and describe the undeveloped land, such as recreational areas where you can take a “walk in the woods”, as quite another. O. Andersson described these recreational areas as unmanaged and “left to their fate”, which often is to overgrow and then be exploited. *“One must ask, why do people move to the city?”* he said. O. Andersson explained how the demand of dense urban environment is increasing and how the entire process of urbanization is due to a demand for areas with little green space. *“The less green space a neighbourhood offer – the more coveted it is on the market”*, he added. O. Andersson believed that architects and planners have to decide what land to save and what land to exploit, and then focuses on that.

Rein-Cano described that European countries do not face the same densification problems as mega-cities. He explained the dense city to be more sustainable and ecological etc. because there are more people using the infrastructure and the space of the city. Rein-Cano also described that increased traffic is not a problem in European countries, thus Europeans have no problem traveling outside the cities in search of green environments.

T. Andersson said urban sprawl occurs if a city becomes too sparse, as during the 1930’s to 1950’s, and loses its social qualities, when it becomes neither dense nor green. When this happens people start moving out of the city, to where they can have their own gardens but still access the services provided by the city, he said. Ulrich Nowikow and Mikulas Cernik considered urban sprawl to be a more serious problem than densification since the city is spreading out in green areas and make people automobile dependent. In Berlin, as in other cities with a lot of free space, there will be possibilities to have both city densification and city parks, Nowikow and Cernik explained. In the matter of urban sprawl, Hügler also described it as a more serious problem than city densification. He described that city densification is a good answer to urban sprawl since the sprawl is stealing areal from nature, but it is a complex issue due to lack of open space in the city. Dr. Oschmann agreed with Rein-Cano, Nowikow, Cernik and Hügler saying it is important to find a system where both urban densification and green space can coexist. Dr. Oschmann explained the conflict around city densification when many small green areas get claimed for urban use and housing, but added that urban sprawl reduces even more green areas as the cities spread out. Tomas Lewan thought urban densification and parks are a delicate balance in each city. If this balance is changed, it will hit back sooner or later, he added. Skärback, on the other hand, described urban sprawl to be an American phenomenon which is not an issue in Sweden. *“Thank goodness for that”*, he added.

In city planning, Hügler said, it is difficult to keep the balance of good level of densification and at the same time avoid urban sprawl. He mentioned Manhattan, New York as a good example of a highly densified city with a balance between open space and dense cityscape, where people have access to greenery in the 300 hectares large Central Park. Hügler said that when this balance breaks, if the density gets too high, there is a risk that people start to move out from the cities again. It is good to have a dense and high quality city but it is also important to have open public space, he said.

O. Andersson said that it is probably difficult to build denser than an exploitation ratio of 2.5 (2.5 times as much floor space than land) but Norra Station area in Stockholm is currently being built denser than that. *“We have to see how it goes”*, he said. *“Perhaps a role model? Or something to avoid?”*, O. Andersson stated.

This complex densification balance was also described by Rikke Hedegaard Christensen who explained the municipality of Copenhagen to be different from other cities since it only consists of an inner city core without any undeveloped open area or available exploitable space. However, population growth leads to an increased need for establishment of new housing, schools, institutions and businesses. Accordingly, increased pressure on using the city's park ground which often offers useful space in popular places. This applies when new institutions are established and when infrastructure is being expanded, she added. *"Densification is not a major problem since Copenhagen already is a very dense city"*, Hedegaard Christensen said but added *"when we come to live denser the city's green areas are even more important"*. She described it to be a constant fight of space in Copenhagen and how difficult it is to find space, within the city, for new parks – especially parks larger than 30 hectares. Instead, Copenhagen municipality is focusing on existing parks, pocket parks, green court yards and green connections, Hedegaard Christensen said. She described how the Finger Plan, adopted in 1947, regulates urban development and regional landscape features in the metropolitan area. The outer developing areas of the city are the only places where new city park projects are possible to realize and these areas are not owned by the municipality of Copenhagen. Hedegaard Christensen said Copenhagen municipality has to buy land if a new park should be built, unless a private investor are willing to pay for a park project. Hedegaard Christensen said that in order to ensure preservation of Copenhagen's parks and nature areas, the majority of these are totally or partially protected through various laws. This law protection ensures green areas to remain undeveloped, natural contents to be maintained and that changes are in accordance with the protection law provisions, she stated.

Nowikow and Cernik said that even though Berlin is densifying, it is not a threat to the existing parks in the city. They described how allotment gardens lack the protection parks have, which has made these areas more threatened by densification. Parks are often included in the development of an area while allotments often are based on a community engagement, they said. Cernik said that Berlin have a lot of old industrial areas like brown fields which will be developed with both parks and buildings. Nowikow and Cernik stressed the importance of local community participation in debates about new projects which increases the chances of a desirable result.

Møllergaard said that he does not think there is a place for new city parks. *"Not in the extent that I think is important"*, he added. *"Many new projects often have small parks or small green spaces, but I have never in my nearly 30-year-long career experienced that a whole new city park have been planned"*, Møllergaard said. *"It would then be necessary to demolish houses in the already*

*dense city to make space for a new city park"*, something he said will never be done. Lewan agreed with Møllergaard, hoping that new plans for city parks will come. *"But the question is when?"*, he added. *"In modern time, there has not yet been any new city park project in Stockholm, as it has in Paris and surely in other cities as well"* Lewan said. He described how cities require city parks not to be perceived as monotonous and destitute. The politics in Stockholm is distinguished in the city's urban planning, he continued, and the last eight years of right wing politics is visible in the cityscape. O. Andersson did not share Møllergaard's or Lewan's wish for more parks, on the contrary he wished cities had fewer. O. Andersson explained it to be a question about the need for new land that growing cities need for exploitation. He believed that smaller parts of land should be reserved as parkland, not as green space, so cities can focus on maintaining them. *"Then these areas could be kept up to park standard"*, O. Andersson added.

Lewan talked about a new project in Stockholm, Norra Kungsholmen, which he believes has an inadequate park planning with too less green space. *"It will never be enough"*, he stated. Densification is somehow an utopia and has become an end in itself which overrides the ambition to make a good city, Lewan continued. According to Lewan, YIMBY-movement in Sweden seems to lack ambition and city densification reflect an image of a politics that lack democratic ideals.

### 5.3 Can size of a city park be compensated by high quality?

In the comprehensive plan for Stockholm, *Den gröna promenad staden, The Green Walkable City* (City of Stockholm 2013), the city explains the densification development including following argument: "To connect and develop the city, some park and green areas between buildings have to make space for the new development. At the same time, Stockholm investing in quality of the remaining parks and green areas..." (my own translation). I asked following question on the subject:

*"The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?"*

All, except one of the interviewees, responded that they think quality is more important than size when it comes to city parks. Some interviewees described it as a complex issue, while others seem to have a more certain opinion on the matter.

Torbjörn Andersson said it to be very one-dimensional to compare size and quality since it is not possible to replace larger parks with small ones. *"Because there are so many people wanting to use the parks, size does matter"*, he said. T. Andersson mentioned the current



increased interest for urban farming which demand space in public parks. The size is obviously important, he continued, but a large area without other qualities are probably worse than small parks with high qualitative values. *“The size of a park has obviously a shielding effect which I think is important to people”*, he said. According to T. Andersson a park must have a certain size in order to function especially in dense cities. *“Some parks in Stockholm are so popular that the city is considering adding artificial turf in order to maintain its quality”*, he added.

Camilla Anderson also mentioned visual screening with vegetation as the most important element of a park. She said studies have shown that the most important element of a park is to visually screen off the urban environment, houses and traffic. This may be more important than noise shielding and size of a park. According to C. Anderson park quality is often perceived as “what one can do” and measured in the amount of functions and activities a park can offer. C. Anderson described the risk (which also is the trend) with increased programming of activities and more built areas within the parks when they become smaller. *“With such approach vegetation risks to be simplified as decoration or unwanted elements”* she added. C. Anderson described how vegetation and greenery consequently could be perceived as maintenance demanding and sensitive to intense use, or how big trees provide unwanted shade or simply does not fit into a small place. C. Anderson explained that if quality is “what one can do”, there are many features that do not fit in a small park.

Niels Møllergaard agreed with C. Anderson and T. Andersson that a small qualitative area has better possibilities to offer visitors a foreclosed oasis-feeling. *“But the size of a park is of course something that cannot be compensated by other qualities”*, he added. Møllergaard explained how city parks must constantly develop and adapt to contemporary usage to maintain its value.

According to O. Andersson it is not possible to combine people’s wish to live in a dense city and at the same time have possibilities to shield it off in large nature-like areas – it is a paradox. *“Then you are against what is shaping a dense city”*, he added. O. Andersson described these two desires as contraries people have to choose between. *“If you want to have it (it is not something that everyone needs) then you can seek it out of the city centre where you have access to greenery”*, he said. *“The city is for those who like to live in the city. People who want their loneliness does not have to live in the dense city”*, O. Andersson added. He described the dense city to not be for everyone and that it is probably 50-50 if you would like to live in the city or close to nature. *“It is not possible to reconcile these requirements. If you want to live in a dense city you must accept to travel to visit a big park”*, he said.

Johannes Hügler meant that in highly densified city centres, a high quality park is more



**Fig. 12.** Tempelhof Field offers vast vistas and space to do activities impossible elsewhere in the city.

important than a large park. The size of a park is important to facilitate different options of usage, for example both place for play and relaxation. However quality is also important to prolong the life of a park, Hügler said. *“If a large park is overgrown and untidy, people will not use it the same way as a smaller well-maintained park”*, he added. Hügler said the maintenance and quality of a park is generally more important than the size of it, but mentioned Tempelhof Field where size is the quality. Tempelhof Field is situated in the centre of the city and offers kilometres of almost nothing to surround the visitor. *“That is quite unique”*, he added. Hügler described how a small park has several conflicts concerning space-use, with more visitors per square metre and how it is often more intensively maintained, while a large park can be left with more extensively maintained areas. Hügler stressed the importance of these questions since maintenance cost of a park often is higher than costs of buildings. *“The larger a park is, the more options are there to leave areas extensively maintained”*, he said. Martin Rein-Cano agreed and described that less formal qualities are needed in larger parks. He described how large parks are more accepting with design “mistakes” while small spaces demand more precise work. *“The smaller a park is the more programming issues are there, but the larger a park is the more extensive you (as a designer) can be”*, he added. Rein-Cano said a small park has to be designed so that the experience

intensifies, due to less space.

Tomas Lewan agreed with Hügler saying that quality is important and added that *“size is also a quality when it comes to city parks”*. Lewan mentioned Vasaparken and Humlegården in Stockholm, as parks not built for motoring and contemporary urban life, were the visitor is *“surrounded by traffic and noise”*. *“The reasoning about size and quality is very conventional”*, Lewan added. He described that quality, to some extent, might be more important than size, but these are not replaceable factors. When a park is more centrally located in a city, the visitor pressure increases and investments are made in quality rather than size. Lewan said it to be a natural development. *“To maintain a park in good quality it cannot be too big”* he said. Lewan described how neighbourhoods change over time and how it suddenly can be a completely different city surrounding the park – people who use the park will have a completely different lifestyle. Lewan also described how proximity to green areas increases the value of a property, but added that this green area does not necessarily have to be big. *“This argument is used by contemporary ideologues to prove that green spaces do not have to be big. But such is not the case”*, he said. Lewan explained how people with a certain lifestyle move into certain areas, which means that they only need a small park because they get their recreation elsewhere. *“When they need relaxation they go to Thailand. This is people who can afford a specific lifestyle so the argument about size is often very hollow”*, Lewan added.

In the matter of size Rein-Cano reasoned about the necessity of the experience of going for a walk in the city park. He described that this walk could be important, but believed that this moment has to be balance towards other space use and moments a city can offer. *“I love to go for a walk in the city too, I love the quietness and emptiness of the city. On a Sunday, the park is far too boring”*, Rein-Cano stated. According to Rein-Cano size is not a quality per se, but a large park can be nice, depending on the context. Rein-Cano said it is important with long vista, but it is a waste of space to have large parks just for these sublime experiences. And a waste of money to maintain it, he added. *“A park has to serve social purposes. I have the impression that parks many times are more interesting for dogs than for people”*, Rein-Cano said.

Ulrich Nowikow and Mikulas Cernik said it to be difficult to choose quality over size but agreed that a small qualitative park is preferable over one large park. They agreed with Rein-Cano by saying that a park should be socially interesting, but disagreed by saying large parks to be more socially interesting since more people can be there simultaneously.

Dr. Cornelia Oschmann also discussed how to define quality. *“Generally I would say that high quality on a small space is better than less quality on a large space”* she said. Dr. Oschmann reasoned that one quality is the ability to meet different user needs, another quality is to meet the expectations on maintenance of a park. She stressed the importance of

maintenance and described the downward spiral of a park in bad condition; people stop using it, and the condition deteriorates. Dr. Oschmann described park maintenance to be expensive and how the local authorities seldom put enough money aside for this purpose. *“As I said, I believe in easy accessible smaller or even private parks and gardens rather than big parks”*, she added.

Rikke Hedegaard Christensen agreed with Dr. Oschmann's reasoning and believed that from a recreational perspective the quality and proximity of a park is more important than the size of it. *“Studies from Copenhagen's parks show that the majority of the park users live in the area and other studies show that a park is most used if it is situated 300 meters or less from your home”* she added. Hedegaard Christensen described how Copenhagen has small intensively used parks and great nature areas (Amager Common and Kalvebod Common) that are less intensively used. According to Hedegaard Christensen a small local pocket park or a green backyard can offer as great value for Copenhageners as the city's large parks and nature areas. *“But we need the large parks from a nature conservation perspective”*, she added. Hedegaard Christensen explained how large parks serve as habitat for countless animal and plant species and are an important resource for ensuring high biodiversity in Copenhagen. *“We also need large parks in relation to recreational functions, as football fields, playgrounds and other space demanding activities”* she stated. Hedegaard Christensen said that the most visited park in Copenhagen is Fælledparken, a large park with high quality.

Ola Andersson pointed out that he as an architect does not design parks but said it is important for parks to have paths, intensively managed lawn areas and pruned trees. *“A park is based on cultivation and management so it is not taken over by nature”*, he added. O. Andersson mentioned cut lawns as good in that perspective, but said that its use is very restrictive since lawns cannot withstand wear and tear. He explained that a park has to be built the right way, with paths, mowed grass and managed trees in order to meet the expectations of a park. *“It is the foundation of a park – the way a piece of land is managed. The quality is absolutely more important than size”*, O. Andersson added. He explained that the quality demands on parks will increase as more unexploited land is claimed for exploitation. O. Andersson thought future maintenance costs will increase as park management become more intense.

Erik Skärbäck shortly answered my questions by saying: *“We have scientific evidence that size is the most important quality - see my (Skärbäck et al. 2014) article in the latest issue of Nordic Journal of Architectural Research.”*

## 5.4 Few plans for new city parks

I wanted to find hear what professionals in the field of city planning, architecture and landscape architecture think about the current park planning. Are they satisfied? If not, I wanted to know their explanations why. I made the statement: *“I have the perception that few new city parks are being planned.”* followed by the questions:

*“Do you share my point of view?”*

*“Can you describe your thoughts about why (why not?) so few new city parks are being planned?”*

Johannes Hügler, Camilla Anderson, Erik Skärbäck, Torbjörn Andersson, Tomas Lewan, Niels Møllergaard, Ola Andersson, Martin Rein-Cano, Rikke Hedegaard Christensen and Dr. Cornelia Oschmann all shared my perception and described the reason of this issue to be lack of space within the cities. Ulrich Nowikow and Mikulas Cernik were satisfied with Berlin's park planning.

*“The problem is that you do not have the space to plan for these large parks”*, Hügler said. He described how VOGT's 4.5 hectares park in Hamburg's Harbour City is the largest park in the project. *“There is no option to have large parks within the city anymore”* he added. Hügler emphasized his thoughts about new areas having systems of small parks rather than one large city park. He added that the dimension of new city park are not as they were 200 years ago, the new city parks are smaller.

Camilla Anderson described how developing areas like Sorgenfri and Västra Hamnen in Malmö are driven by economic interests. Since the land is private property, a high exploration ratio gives the owners as much short-term economic profit as possible. *“Economy and development interests are first priority”* C. Anderson stated. She described how the vision of dense cities seem to stand in contrast to large parks (which are considered to be barriers). C. Anderson said that during the last years, Malmö has built a couple of major parks and recreation areas. C. Anderson explained Lindängen, a new 100 hectares large recreational area in southern Malmö, which shall have the character of both a city park and a nature area and Gyllins garden, a 24 hectares large nature park under development in eastern Malmö.

Erik Skärbäck agreed with C. Anderson and explained how he has debated a lot about transforming one or two blocks in the area of Sorgenfri into a large city park in the eastern part of Malmö. *“Malmö municipality think this proposal is too expensive”*, he said. Skärbäck described how the municipality needs to sell this land expensive to get their budget together. He referred to the article in Nordic Journal of Architectural

Research (Skärbäck et al. 2014) describing why it is planned so little greenery surrounding apartment buildings. Skärbäck continued to describe how outdoor environment quality is not counted as a factor when setting the rents since exploitation calculations does not include green quality. *“This is an unnecessary shortage”*, he added. *“Good green environments are proven to affect housing prices so why would it not affect rent levels? This should work as incentives for improvements to be made”*, he said.

Torbjörn Andersson mentioned the park planning of Malmö as cocky and farsighted, due to some good politicians pursuing these issues. With the exception of Lindängen, T. Andersson cannot recall any large parks being constructed since his involvement in the team that designed the Dania park in Malmö 15 years ago. T. Andersson also stated economic interests as the reason for not planning new city parks. *“You cannot rent out parks per square meter”*, he added and explained that all available green urban space is tempting to build profitable projects on.

Tomas Lewan described plausible ideological reasons for not planning more parks in Stockholm. He agreed that few new parks are being planned and mentioned that increased communication to a park area may be as effective as planning a new park. *“It is difficult for a municipality to finance a park project with the existing ideology and land prices”*, he added. Lewan also mentioned Lindängen outside Malmö and said *“maybe that is the way to do it.”*

Niels Møllergaard agreed with Hügler, C. Anderson, T. Andersson and Skärbäck and said that large city parks seem to be a non-existing concept due to short sighted economic interests. Ola Andersson also shared my perception that few new city parks are being planned and said that cities have to decide if the unexploited land should be built or saved as a park. He emphasized that park land should have a reserved long-term budget to secure maintenance of the park. *“Then there should be lawns, fountains and raked paths... The whole thing! This is not done today”*, O. Andersson added. He described city and park as a one unit but, again, not city and green space.

Martin Rein-Cano agreed that few new city parks are being planned and explains it to be caused by the changed hierarchy in society. Historically, the society was centrally ruled by a king who had money and power to decide what to build. Today, it is too expensive to maintain these areas, he explained. Rein-Cano repeated his beliefs on small well maintained areas or temporary solutions. *“The cities have to use its space better, but maybe not all the time. More space on demand”*, he added. Rein-Cano described it as a balance between different interest-groups and their need. He said it is important to rethink the spaces within the city since *no one will build large city parks anymore*. Rein-Cano did not think there is a lack of public places and described the development of space (parks) on demand as a



challenging testing-ground that is more flexible than building one large park.

Rikke Hedegaard Christensen said that only few new parks will be built in Copenhagen and mentioned Mimer park as the latest addition; a 3.8 hectares big park located on old rail facilities. In addition, Copenhagen is constructing pocket parks and small green spaces. She described lack of space to be the primary reason for not establishing new parks in Copenhagen but also privately owned urban developing areas. Hedegaard Christensen explained that if Copenhagen is to establish a new park in an urban developing area, the local authority must purchase the area. Copenhagen municipality has not had a tradition of doing so, she added. Hedegaard Christensen said that a park is often perceived as “nice to have” and not as “need to have” which means that when politicians must prioritize municipal money, they prioritize new schools, institutions, renovation of roads etc. which is considered as “need to have”.

Berlin-based Dr. Cornelia Oschmann said few new parks are being planned because the city is growing and need the urban space for new housing and public buildings. Ulrich Nowikow and Mikulas Cernik were to the contrary satisfied with the current park planning which they believed met the wishes of people in Berlin. *“It is enough plans for new parks”*, they said.

## 5.5 Do city parks belong to the past?

Even though a majority of the interviewees thought city parks would have a more vital role in the future, the answers varied. Many interviewees thought new city parks will look and function differently from today. I asked:

*“Do you think city parks (as I know them today) belong to the past?”*

Johannes Hügler said large parks are important to cities because they have a great significance for people living there. Ulrich Nowikow and Mikulas Cernik agreed by saying that all types of parks play a vital role in the city. Hügler believed that without city parks, people would start to leave the city. *“It is very important to have green, wide and open areas like city parks within the city where people can relax and recover or do activities that they cannot do at home”*, he said. Hügler also explained city parks to be very important for the climate in the cities since they have capacity to filter polluted air, mitigate high temperature and accommodate rainwater. *“I think city parks are the future of cities, not the past”*, he stated. Camilla Anderson agreed with Hügler, Nowikow and Cernik and mentioned visionary Swedish municipalities such as Kumla, who plan the city’s parks before building new houses. Erik Skärbäck

thought parks will always be built because people (voters) clearly increasingly demand parks. He explained modern cities to be built differently today, which unavoidable changes the expressions of the parks.

Ola Andersson meant unexploited centrally located land (green areas) within easy reach of public transport will be needed for exploitation. According to O. Andersson cities should not have large extensively used green spaces, rather density and intensively used urban parks which should be built, managed and designed. These parks do not have to be bigger than Humlegården in Stockholm, which is approximately 12.5 hectares. *“I do not think size is what matters the most. The quality is most important. I cannot think of any park in Stockholm that feels too small, except during summer in the parks close to the beaches”*, he said.

Rikke Hedegaard Christensen thought city parks are more important than ever before. She described that the increasing influx to Copenhagen will also make the city’s green space more important. Hedegaard Christensen explained that the future view of parks will probably change from focusing on the recreational, scenic and cultural aspects towards focusing on park utility, nature and biodiversity values. Because of population growth and land shortage, the usage and user relationship will become more complex, she added. *“The city parks will be included as part of the efforts to adapt Copenhagen to climate change and are also intended to serve as schoolyard and outdoor areas for schools and institutions and must be able to accommodate several sports facilities”*, Hedegaard Christensen explained. She indicated far more intensive future use of city parks hence focus will be on multifunctional solutions.

Tomas Lewan believed the image of a classical city park belongs to the past but the idea as such, is very much alive. He thought that city parks are quite the opposite of past city planning and said that *“city parks are a topic again”*. Lewan meant that cities increase their attractiveness by densifying but will eventually be so dense that a park has to be built.

Niels Møllergaard disagreed with Lewan by saying that there are many indications towards that city parks do belong to the past. *“The existing parks will be preserved but, unfortunately, probably no new city parks will be built”*, he stated.

Dr. Cornelia Oschmann said city parks may belong to the past but emphasized the importance of preserving existing city parks since they have great significance for the city climate. *“We have to do everything to conserve and protect our existing large parks and make sure that they are not used for other purposes”*, she added. Dr. Oschmann thought future parks will be smaller and in near vicinity to housing areas. *“You might have to travel, with public transport, to visit a large park”*, she added.

Martin Rein-Cano definitely believed existing city parks belong to the past and

described them to be more like museums. *“The past is wonderful and it is good to have these parks but do we have the money and the power to recreate them? I do not think so”*, he said. Rein-Cano repeated his thoughts about temporary and reversible parks on demand.

*“Is there even a will to create these places, I mean would people use them and be willing to pay for them?... If the parks end up being used only by dogs... I would not like to pay tax-money for a shitting ground for dogs”*, he said. Rein-Cano meant existing large city park should definitely be saved, and new ones should be created, but the reason why and where new parks are created should be clear. *“I think taxpayers today are more interested in getting a better Internet-connection to the rest of the world than have these public spaces for encounters. Things change, so what do we need on a daily basis? I mean, Thailand is the park of Sweden, people travel when they want to experience nature”*, he added.

Torbjörn Andersson partly agreed with Rein-Cano by saying that city parks do, in away, belong to the past. T. Andersson described the constantly changing reasons for having city parks; the historically public health grounds of fighting TBC, that we now have vaccines against, have been replaced by public health issues like obesity. He described how green areas are safeguarded by many people and that this must be taken into consideration when building in the city. *“All people have a place in the city”*, he added. According to T. Andersson it is important not to strictly program the city’s public spaces to facilitate spontaneous activities. He believed that parks should have, what he calls, general landscape architectural values such as safety, comfort and experience. *“These values do not need to be superfluous or expensive... But when parks lack these values they often become ‘worthless and unused’”*, T. Andersson said. Then, there is a risk that architects and builders see these “worthless and unused” parks as exploitation areas of economic interest, he added.



## 6. DISCUSSION



This thesis has highlighted positive benefits of large city parks and investigated the significance of existing and new large city parks. The aim of this thesis was to answer and discuss following questions:

- In times of city densification is there a place for new city parks?
- How do landscape architects, planners and architects see the future of city parks?
- Why are there so few plans for new city parks?
- Do city parks, as I know them today, belong to the past?

Though my definition was detailed, some interviewees were critical of what aspects and characters I had chosen to include or exclude in the definition of a city park. Hence, were some answers contradictory. Through hermeneutic and phenomenological analysis of the answers I have tried to minimize the risk of misunderstandings or misinterpretations. My intention with the analyses was to present the interviewee's perception on the subject of large city parks. I think my interpretation of the answers was reliable, with reservations for any misinterpretations. All the handled interview materials were sent to the interviewees for a final approval which strengthens the reliability of the result.

Throughout the process of this thesis I have discovered several complex issues and contradictions concerning the significance and future of large city parks. Many interviewees shared my opinion of the importance of large city parks and thought existing parks will be preserved, but few interviewees believed future new city parks will have the size or the appearance of the city parks we know today.

## 6.1 The future of large city parks

When discussing the future of new and existing city parks, it is unavoidable to not include a discussion about design, size and function of these parks. Obviously, there is no simple answer to future development or appearance of city parks, but through literature and interviews, different aspects of future city parks have been highlighted. The answers varied depending on what aspects were taken into account and how city parks were defined by the interviewee. Discussions about the future of new and existing city parks did also include what park quality really is and what type of quality future large urban parks will have.

The literature study presented several studies showing positive psychological, physical and social aspects of public urban green space and greenery (Grahn & Stigsdottir 2003; SGBPA 2007; Maas et al. 2009; Weinstein et al. 2009; Kuo 2010; Pálsdóttir 2014)



which partly consist with the interview results. Many interviewees agreed that large city parks have a great significance for increasing the resilience of cities against future climate change, promoting public health and improving the recreational qualities in cities. Both the literature and the interview result presented city parks as democratic and socially important spaces in cities (SGBPA 2007; Ståhle 2008a; Montgomery 2013). Some professionals disagreed on the social aspects of large city parks and stressed the importance of city density rather than city parks to create social environments in the city. This difference in opinion seems to be based on personal preference rather than scientific evidence. Some interviewees saw social qualities in *having* large city parks, while others saw social qualities in *not having* large city parks. I think large city parks are socially important elements in dense cities. However, I partly agree with the argumentation when concerning small towns. Initially, small towns might not be dense enough to create a socially interesting environment in large parks. But, when these cities grow, increased density around existing large parks would enhance the social environment within these parks. This reasoning is complex since many cities are currently growing and becoming denser, which means that a large city park can transform into a socially interesting place as the surrounding city changes. As several interviewees, I think the significance of a large city park increases as the users also increases. I also believe, in contrary to some interviewees, large parks have a great significance outside of cities. A large park, or green area, situated in the city periphery could end up being surrounded by the growing city, like the old site of Tempelhof Airport. Since the opening 2010 the usage of and the community engagement in Tempelhof Field has increased and the result of the referendum clearly showed that people care about this site. I think the process of urban green space in transition is a delicate matter for city planners who have to weight city development against people's wish of preserving these areas. I can imagine some city planners regretting that Tempelhof was open to the public since the chances of city developments on the site decreases as people get accustomed to having this large public space in their city. On the contrary, Malmo use large parks as a motivation and direction of city development. Lindängelund is a new large park area outside Malmo with the intention to provide urban greenery to future citizens when Malmo is growing. Thanks to progressive city planning Lindängelund will be an already established large city park when the city development of Malmo reaches the area.

Regardless of the opinion of having large city parks or not, all interviewees thought that the social benefits of parks are depending on the density of the surrounding city, not on the size or the quality of the park. Some professionals claimed that small parks, per se, create more social interactions, hence they are more socially interesting. However,

other interviewees claimed large parks to be more socially interesting due to more users and better possibilities for several activities. One interviewee also claimed that too many parks become “boring”. This statement demonstrate how the interview result about quality versus size of city parks mainly was based on personal taste, preference or belief of the interviewee, when few referred to research on the subject. Some interviewees meant new large city parks would function as isolating, non-social elements in a social dense city environment, and advocated small qualitative parks instead of one large park. This reasoning was based on the assumption that large parks automatically have poorer (aesthetic) qualities than small parks because they are more expensive to maintain, but also on the presumption that large parks have the same quality standards as smaller parks (which they usually do not have), leading to fewer people using these poor quality parks. The interviewees who stated this were not against large parks as such, they were just clear on the point that a park's quality is more important than its size and that city density and social qualities are more important than recreational qualities. Other interviewees disagreed by underlining biodiversity, recreational and environmental benefits of large city parks. The significance of the recreational benefits with large city parks divided the interviewees and some answers did not correlate with result from the literature study. Martin Rein-Cano and Ola Andersson said the need to shield off the city for recreational purposes is a preference, not a fundamental human need. However, several studies show positive psychological and physical aspects of urban green areas (Ulrich 1984; Kuo 2010; Richardson 2013; Skärbäck et al. 2014; Kabisch et al. 2015b). O. Andersson explained that the demand for dense urban environment is increasing because people want to live in the dense city. He also described that the entire process of urbanization is due to a demand of areas with little green space, and said “*The less green space a neighbourhood offer – the more coveted it is on the market*”. In my opinion, this statement does not show the whole perspective on which area people want to live in. I think inner-city areas (with little green space) are the most coveted, due to their central location, not because they lacking green space.

This result puts light on possible problems if cities' park planning were to be influenced by practitioners' personal preferences or what seems to be trends, rather than research on the area. A common characteristic among the skeptics of large city parks were their own preference of seeking recreation in city environments rather than in nature-like areas or city parks. These skeptics admitted that city parks could have great significance for cities and their inhabitants, but stated that these parks do not have to be large to serve their purpose. Hence, there is no need for new large city parks in dense cities. Again, public resources should rather be put on small high quality parks. According

to research made by Skärbäck et al. (2014) size is the most important quality of a park. Skärbäck et al. (2014) showed a connection between increased size and possibilities to fit many different characters into the park. In addition to the study made by Skärbäck et al. (2014) and Pálsdóttir (2014) few studies were focusing on size. Most research seems to focus on the importance of proximity and quality (biodiversity, recreational e.g.) of parks and public green space. Several studies acknowledged multiple different characters within a park as the most important recreational quality (Kaplan et al. 1998; Grahn & Stigsdóttir 2003; SGBPA 2007; Pálsdóttir 2014). I mean a park should have a certain size to provide multiple characters and offer different qualities to many users, but it seems to be an absence of profound discussions on the subject. Since solitude with nature is crucial in recovering from stress-related mental disorders (Grahn & Stigsdóttir 2003; Kuo 2010; Grahn & Stigsdóttir 2011; Pálsdóttir 2014) ought large parks offer better possibilities for lonely contemplation than small ones, especially in densified urban areas with many people using the parks. The discussion about size and quality risks to be self-fulfilling if large city parks are seen as unsocial isolating units. Consequently, they may not get the desirable maintenance, leaving these parks with empty, neglected or even unsafe appearances. This may lead to even fewer people visiting these parks and the downward spiral has begun. The worst-case scenario would be if a park in bad condition is perceived as an exploitable area due to short-sighted economic equations excludes possible restoration. I believe this process of decay was what happened to the Seminar park in Uppsala (P4 Uppland 2013).



**Fig. 13.** Tempelhof Field is a great example of a brown field converted (through a referendum) into a large park much loved by its visitors.

Additional results from interviews and the literature study show the various views upon city densification. The majority of the interviewees and the literature viewed city densification as a sustainable way of building future cities (Skogö et al. 2007; Ståhle 2008a; Ståhle 2008b; Montgomery 2013). Some interviewees agreed with literature skeptical towards short-sighted economic interests hiding their agenda behind sustainability (socially, economically and ecologically) arguments (Andersson 2011; Montgomery 2013; Brunge et al. 2014). A few interview responses were contradictory, e.g. Rein-Cano claimed that dense cities are more sustainable but then said people could drive to nature when they need it. Is that really ecologically and democratically sustainable? I find it interesting that Rein-Cano, who detested the romanticizing of nature and the celebration of loneliness, in his reasoning admit that if people want nature, they can find it outside the city. In my opinion, this type of argumentation is rather extreme and excludes those who believe city life is possible to combine with large city parks. However, also O. Andersson seems to belong to those who does not believe a dense city is combinable with large parks or green areas. He frankly stated that dense cities are built for a certain type of people and said:

*“The dense city is not for everyone. It is probably 50-50 if you want to live in the city or in a suburb close to the forest. It is not possible to reconcile these requirements. If you want to live in a dense city you must accept to travel to visit a big city park.”*

I wonder what type of city O. Andersson envisions? Today's city planning embraces diversity but appears to exclude the possibility for alternative to the dense city. I am not in any way against city densification, but I do not think it is a healthy debate climate if city densification is viewed upon as the only way for future cities to develop. I believe city planning to be more complex than having one solution to the diversity of challenges that future cities are facing. In my opinion, cities should facilitate possibilities for all people, not only 50%, to enjoy life in cities. I do not think it is 50-50 if you like living in dense cities or in the suburbs close to forest. For me, a dense city with possibilities for recreation in large city parks is the ultimate combination.

## 6.2 Few new plans for large city parks

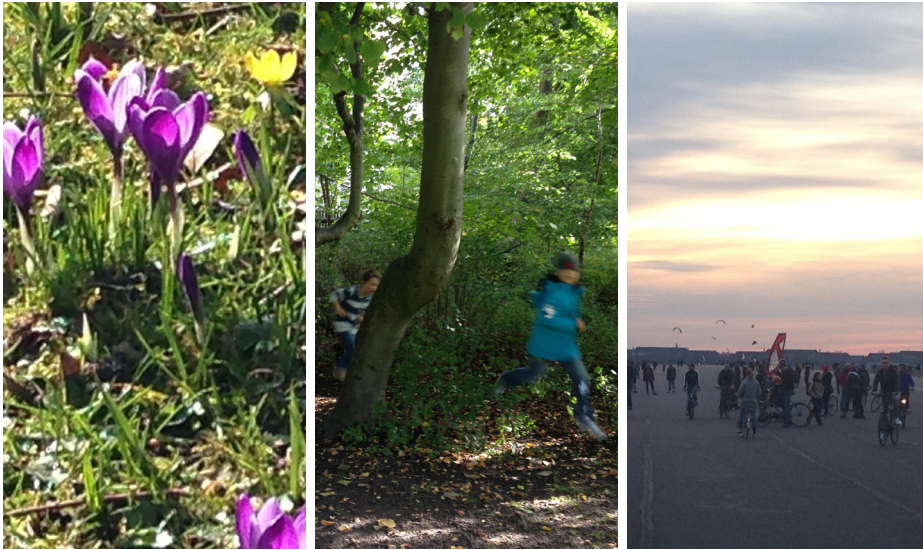
Few interviewees thought new large city parks will be planned in future cities but a majority believed that parks as such, is the solution of future city planning problems. The design and size of existing city parks appear to belong to the past and few interviewees thought large city parks will ever be designed again. The discussion around new plans for large city parks was ambiguous and depending on how the interviewee defined city parks. Many stated that parks, green spaces and other urban greenery are necessities for

dense cities to cope with future climate change, but few meant large city parks will be prioritized in the competition of urban space. Some interviewees stated that future cities could become so dense that a large park eventually must be built, while others believed in *park-systems* or *reversible parks* on demand within dense future cities. Even though several interviewees did not see a future for new large city parks, they emphasized their wish that these parks would be planned. I consider size to be a valuable quality to protect as much as any other quality of a park. A dense city should be able to provide both small high quality parks and large more extensively managed parks. The size of a park decides what type of activities can be performed (Skärbäck et al. 2014) and I truly believe that people living in cities need large un-programmed areas to perform activities impossible elsewhere.

This thesis have presented several positive aspects of urban green space and city parks (Grahn & Stigsdotter 2003; Kuo 2010; Skärbäck et al. 2014; Pálsdóttir 2014; Kabisch et al. 2015b) and the general perception of the future for urban parks (not large city parks) among the interviewees were positive. However, the discussions were focusing on design appearance, functions and size of future city parks. All interviewees meant city parks to be highly significant in dense cities but few thought there will be space for new large city parks. Johannes Hügler described how connecting existing green areas into a park-system, with unobstructed movement, can substitute a large park in a dense city environment. Rein-Cano presented future city parks to be reversible and on demand. These park-systems and parks on demand could play a significant role in people's everyday life but I doubt they could provide the quietness, diversity of characters and recreational quality that research show people need (Kuo 2010; Skärbäck et al. 2014; Pálsdóttir 2014; Kabisch et al. 2015b). The smaller a park, the fewer characters it can provide, leading to more people sharing activity space, which then may lead to more conflicts of use and increase the wear and tear of the park. The possibility to fit several qualities and characters increases with increased size of a park (Skärbäck et al. 2014) but a large space does not necessarily provide more qualities and characters than a small park (Kaplan et al. 1998; SGBPA 2007). I believe park-systems or reversible parks on demand could complement existing and newly designed parks, not substitute. Small green spaces and parks play an important role as residence near greenery or neighbourhood parks which people can visit on a daily basis. I doubt these small parks could replace large city parks endowed with vast vistas or small areas of forest which people can enjoy for hours (SGBPA 2007; Skärbäck et al. 2014). Many professionals described how small parks, park systems or other non-green public spaces could replace the function of a large city park. Due to competition and lack of urban space, the majority of the interviewees

said future city parks to not have the size or design of existing city parks. These results confirm my preconceived idea that few new large city parks are being planned and strengthen the image of large city parks belonging to the past. Niels Møllergaard, Camilla Anderson, Tomas Lewan, Torbjörn Andersson, Erik Skärbäck and Hügler described this development to be a consequence of a city planning driven by interests to create economic profit. Further, newly developed dense urban areas might not meet the required quality and quantity of public green spaces in close vicinity from people's homes. Increased distance to large parks or other green areas could become an issue of democracy equality, when socio-economically weaker inhabitants do not get the same access possibilities to these areas. This result correlated with results from the literature study (SGBPA 2007; Skärbäck et al. 2014; Kabisch et al. 2015b). Lewan and Rein-Cano indirectly mentioned this democracy problem by stating that it does not seem to be a need for new large parks since "*Thailand is the park of Sweden*". With this argument Lewan and Rein-Cano highlights, what may be a common perception among urban planners, that the middle-class finds their recreation elsewhere. I agree that large city parks do not have the same significance for the broad majority of city inhabitants today, as they had almost 100 years ago, but I definitely see a democracy problem in a city planning based on the lifestyle of the middle-class. Rein-Cano mentioned that immigrants, often living large families in small apartments, seem to be those who utilize Berlin's parks the most. I think a city is for everybody, independent of income, hence I do not believe a sustainable city is created by planning according to a certain lifestyle of some people. Additionally, parks and other public places are the true democratic spaces in a more privatized city (SGBPA 2007; Peñalosa 2001, see Ståhle 2008a). What will be consequences for future cities if city planning is based on economically profitable outcomes and the (current) lifestyle of the middle-class? Can cities become ecologically, economically and socially sustainable if they are not planned in accordance with research on the significance of parks and green spaces? City densification is a new phenomenon, of which impacts we still know little (Brünge et al. 2014). Except for the fact that cities earn money on selling properties and losing money on constructing parks (in the short-run), I do not see a contradiction between new dense city development and new large city parks. Rather the opposite. I think the need for urban green space and parks will increase as cities grow denser. I also think future cities could be built denser if large parks were included in the process. A large city park can provide possibilities for recreation, social interaction and physical activities. Additionally, a large city park can increase city resilience against future climate change. Møllergaard and C. Anderson described green spaces and parks in Copenhagen and Malmö as much popular and reported a constant increase in the number of visitors.





**Fig. 14.** Small, medium and large. Small parks with high quality, medium sized parks with space for several characters e.g. play and recreation and large parks that offers space to activities impossible elsewhere. Parks of all size have significance for humans, city climate, biodiversity and much more.

If few new large city parks are being planned, a more intense use of the existing parks will increase the wear and tear, which then increases the maintenance costs. City parks may then appear expensive and cost inefficient, which ultimately may lead to even fewer plans for new large city parks. This result puts light on the conflict of urban space use among park users and city planners (developers) who do not value city parks the same way. Developers see monetary values (Lewan 2012) in areas where users find recreational values (Grahn & Stigsdotter 2011). I mean city planning according to short-sighted economic profits may be expensive in the long run. The value dissonance about city parks may increase the long-term economic costs for society. General health deterioration and stress-related illnesses could increase medical expenses. Additionally, stress-related illnesses are estimated to increase society costs when affecting the working population (Sahlin 2001). I agree with Grahn and Stigsdotter (2003) that city planners should address underlying causes of escalating stress-related illness in their work and I am convinced that city planning have to be based on other aspects than primarily monetary values. I think large city parks could play a vital role in not only decreasing stress-related illnesses but also enhance general public health and improve life-quality for city inhabitants. Finally, I mean large city parks could improve city climate, biodiversity and increase city resilience against future climate change.

### 6.3 Conclusion

Based on the results of this thesis, I have summarized a possible scenario of the significance and future of large city parks by presenting following general conclusions. In times of city densification new city parks will become smaller than existing city parks. Instead of focusing on size, cities will facilitate easy accessibility to existing parks by connecting them into park-systems with green connections between parks. Proximity, higher (aesthetic, ecological and recreational) quality and better access to small parks will be prioritized over large city parks. The existing large city parks will be preserved with additional functions to meet the need for various activities. Existing large city parks will also be redesigned to enhance regulatory ecosystem services and mitigate future climate change. The significance and popularity of large city parks will increase, but few new large city parks will be designed. Accordingly, large city parks seem to belong to the past.

### 6.4 Suggestions for further studies

Through the process of this thesis I have come across research and literature describing the importance of proximity and quality of parks and urban green spaces. The interview results also showed professionals' opinions that quality is more important than size. I am interested in studies showing the user perspective on the matter of size and quality. Is it beneficial for user activity to have large parks? I would also find it interesting to read scientific reports focusing on transforming positive aspects of large city parks into monetary value. How much money can a society earn on providing large parks for city inhabitants? What are the direct and indirect costs of lost ecosystem services, climate change and denser cities? With this thesis I hope to have illustrated the complex and unsure future of large city parks. By putting light upon the significance of large city parks and how professionals view the future of these parks, I also hope to bring forward an important perspective on the subject. The discussion and research about existing and new large city parks must be intensified so city planning can take these results into account when planning densification.



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## 8. APPENDICES

Interview with Tomas Lewan, landscape architect at Nyréns Architects, Stockholm.

3 November 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

Right now, the city park has a sort of renaissance because traditional elements of the city has to be utilized. There is a high pressure of changes in city parks, where a lot of new activities are fighting for urban space, so I guess cities try to maintain their parks. The long-term form of the city park, which is a historical late 1800's phenomenon, is not viable. Functions such as skateboarding, sports and recreation will eventually take over the use of the park.

*Do you mean more like activity parks?*

Yes, that is correct. The name city park is mostly used in smaller towns since larger cities often have several parks. City parks will probably still exist but will be eaten into by the surrounding city. For example, Pildammsparken, has classical values for the branding of Malmö city, so the city have an interest in safeguarding it. City parks as such definitely have a potential to survive, but in newly developed urban areas parks will look different.

*So you think that existing city parks will be safeguarded, and perhaps altered activity wise, but no new city parks will be built?*

New parks will of course be different. Vasaparken in Stockholm has changed quite dramatically, while Humlegården has changed a less - I do not know why it is. But these are two good examples of how parks change and develop over time. An other example is Kungsträdgården in central Stockholm, which also has changed a lot. It also depends on who is owning the park, it can be a royal, private or national park. Parks change for different reasons, this is nothing new, they always have and will always do so.

2) *In times of city densification do you believe there is a place for new city parks?*

Yes, I think it is coming but it is more a question of when. In modern time, there has not yet been any new city park project in Stockholm as it has e.g. in Paris and surely in other cities as well. Cities require city parks not to be perceived as monotonous and destitute - the politics in Stockholm is distinguished in the city's urban planning. You can see the last eight years of right wing politics in the cityscape but it will probably be different after the last election.



- 3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

If you are building for public transport, gap arises in between the core of the public transport network. This is classical planning design, that is almost forgotten today, but if you have a rail line, it creates a certain pattern which the public transport can feed and the gaps in between will not be as attractive to build on. If you do not attach importance to this, cities can be built with great density. But I definitely believe that densification and parks is a delicate balance in each city. Trying to change this balance will hit back sooner or later.

*I have read somewhere that city people use their car more often to visit nature than to commute to work. That makes city parks a question of availability. What are your thoughts about that?*

The park planning of Northern Kungsholmen's (new housing project in Stockholm) feels inadequate and will never be enough. Densification is somehow utopia and becomes an end in itself which overrides the ambition to make a good city. The YIMBY-movement in Sweden seems to lack ambition and city densification could be an image of politics that lack democratic ideals.

- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

I do agree that the quality is important, but size is also a quality when it comes to parks. If you are in Vasaparken or Humlegården in Stockholm, you are surrounded by traffic and noise because these parks are not built for motoring and contemporary urban life. The reasoning about size and quality is very conventional. Quality might be more important than size to some extent but it is not replaceable factors. But, when a park is more centrally located in a city the visitor pressure increases and you will have to invest in quality rather than size. It is a natural development. To maintain a park in good quality it can not be too big. Besides, neighbourhoods change over time and suddenly it is a completely different city that surrounds a park. Then people who use the parks have a different lifestyle.

Closeness to green areas increase the value of a property but this green area does not necessarily have to be big. This argument is used by contemporary ideologues to prove that green spaces do not have to be big. But such is not the case. People with a certain lifestyle move into these areas which means that they only need a small park because they

get their recreation elsewhere - when they need relaxation they go to Thailand. This is people who can afford a specific lifestyle, so the argument about size is often very hollow.

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

I think Stockholm is getting there. It is probably ideological reasons that not much has happened. Increased communication to a park area may be as effective as planning a new park. It is difficult for a municipality to finance a park project with the existing ideology and land prices. Malmö does build a park outside the city... maybe that is the way to do it.

- 6) *Finally, do you think city parks (as I know them today) belong to the past?*

The image of a classical city park belongs to the past but the idea as such is very much alive. I think it is quite the opposite - city parks are a topic again. Cities have to increase their attractiveness by densifying but they will eventually be so dense that a park has to be built.



Email interview with Camilla Anderson, landscape architect at the municipality of Malmo.

7 November 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

The green model of Malmo means that all Malmo residents should have access to parks of various sizes (gardens, pocket park, block park, neighbourhood park, city park and natural and recreational area) within a certain distance from their dwelling. City parks are defined as large, multi-functional parks that are of interest to the entire city. City parks should be bigger than 10 hectares and all Malmo residents should be able to reach a city park within a distance of 2 kilometres.

I think city parks are extremely important in future cities, especially as cities increase their population and become densified. As people become increasingly urbanized, the need for mental recovery from demand, stress and information overdose increases. Many city dwellers do not have access to nature. There is a clear connection between health, both mental and physical, and access to green environments. A large city park can accommodate both many different characters (Patrik Grahn's park characters) and more space-consuming functions such as activity areas, arrangement places and urban farming. Certain park characters such as wilderness, spaciousness and tranquility requires a certain space to achieve good quality. When many different functions coexist on the same space, it attracts people from all over the city making the city park an important meeting place. I believe these types of meeting places will become increasingly important.

2) *In times of city densification do you believe there is a place for new city parks?*

There are trends within urban planning of seeing large parks as barriers and waste of urban space - trends that will make urban parks decrease in size. I am convinced that there must be large parks in future dense cities. To get away from city noise, enjoy relaxation or recreation, will also be a human need in the future. City parks will perhaps be even more important since they really can offer a break from city life.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

Densification is often seen as to densify the city with buildings. Instead, the method should be to densify the city with the features and experiences that are lacking and thus also include parks and urban spaces. There is absolutely a conflict based on which

approach you have towards the large parks (if you see them as barriers or not). Here in Malmo, there are now plans to densify the edge (parkland) of Kroksbäcksparken, which I think is reprehensible. The risk is that Malmo chooses to densify on parkland property because it is easy. There are lots of leftover land in and adjacent to residential areas and along roads, but these surfaces are not in the control of the city.

4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

There are studies showing that the most important thing is that a park is visually screened with vegetation, screening off the urban environment, houses and traffic. This may be more important than the size of the park or its noise shielding. I have the perception that "quality" in a park is often "what one can do" measured in the amount of functions and activities that a park can offer. The risk, and the trend, when the parks become smaller is that programmed and built areas increase. With such approach vegetation risk to be simplified as decoration or unwanted elements since, on one hand vegetation and greenery are more sensitive to intense use and demand more maintenance and on the other hand could a big tree provide too much shade or simply does not fit into a small place. If "quality" = "what one can do" there are many features that do not fit in the smaller park.

5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

It is difficult to find space for large parks in developing areas in dense cities. Developing areas like Sorgenfri and Västra Hamnen are driven by economic interests and since the land is private property high exploration ratio gives the owners as much economic short term profit as possible. Malmo have built a couple of major parks and recreation areas the last years. Lindängelund, which shall have the character of both a city park and a natural area, will become a new 100 hectares large recreational area in southern Malmo. In eastern Malmo is a 24 hectares large nature park called Gyllins garden developed.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

I think I have pretty much answered that question, see above. Economy and development interests are first priority. The vision of the dense city seems to stand in contrast to big parks, which are considered to be barriers.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

No, not if I can decide. There are visionary municipalities such as Kumla who plan the city parks before building new houses.

Telephone interview with Niels Møllergaard, landscape architect and head of Castle Gardens at SLKE (Castles and Property Agency) Copenhagen.

17 November 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

The number of visitors in the public space is constantly increasing and parks play an important role in offering public space. The increased numbers of visitors demand more activities and functions in parks. This is a difficult balance between the different functions and activities.

The “problems” connected to parks and new functions comes from short-term economic thinking. On urban planning level almost every new project is seen as a quick profit. To not build houses on the land simply “cost” too much.

2) *In times of city densification do you believe there is a place for new city parks?*

No, I think not. Not to the extent that I think is important. Many new projects often have small parks or small green spaces, but I have never in my nearly 30-years long career experienced that a whole new city park have been planned. It would then be necessary to demolish houses in the already dense city to make space for a city park - and this you do not do.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

There is clearly a conflict where the city parks are the losers, since so few new ones are being planned. I mean, for example, if the number of visitors increases, it is much harder to get the recreation and tranquility that some visitors wish to have due to lack of space, children playing or many people around. There will also be increased wear that makes it difficult for the parks to live up to the recreational requirements. Since it is difficult to build new parks in the city, urban planning should instead facilitate green transportation to and from the parks. Green links with restricted traffic accessibility and with planted greenery where people can walk and bike. This will of course not replace a city park but perhaps give a green transport to the nearest park.

- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

The better quality a small area have the better one can feel foreclosed and inside an oasis. But the size of a park is of course something that can not be compensated by other qualities. City parks are projects that must develop and be adapted to contemporary usage to maintain its value.

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes I agree. It seems to be a non existing concept.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

I have already described my thoughts about this – a shortsighted economic view.

- 6) *Finally, do you think city parks (as we know them today) belong to the past?*

Yes, there are many indications towards that. The existing parks will be preserved but, unfortunately, probably no new city parks will be built. In this sense one can say that city parks belong to the past.

Interview with Ola Andersson, architect and director at Andersson Arfwedson, Stockholm.

20 November 2014.

- 1) *Can you describe as detailed as possible how you see the future of the city park?*

Sometime in the 1920's Swedish urban planning went from having worked with "park in city" to "city within a park". Then the city park at such vanished. Urban planning had a new ideal where buildings were scattered in green areas. If you look at Stockholm the city has good potential to densify with many central green space within reach of public transport.

*Do you think that is good?*

Yes, that is good. It makes it easy to find new land to build upon without building new public transportation.

*So you do not see a bright future for city parks?*

The green areas have not been parks in that sense, since there has not been finances to maintain these "natural lands" as it was intended. They have then been abandoned to their own destiny. And now when these lands are utilized for new development, I believe in building more small parks with a more intensive use. So rather a small park of quality than a larger unmaintained green area.

*So green areas, which are often perceived as barriers, should be built on and then rather have small qualitative parks?*

Yes, exactly. I think you get a better city that way.

- 2) *In times of city densification do you believe there is a place for new city parks?*

Yes, I think so. When a project is built in green areas you build streets and houses but it also mean that you should build parks.

*What I have read about densification debate, big parks are not mentioned so often. While densifying green space, sometimes even parks are cut in the edge and I have not seen so many plans for big parks...*

No, that is often the case. To put aside an area, a park, to not be built on it requires reservation of an annual maintenance budget of the space. If you do not reserve money it means that the area is not a park, it is then a green space or an undefined recreation



area without any financial support to be maintained. These areas are often overgrown and become forests.

*And these areas have no protection against exploitation?*

Ever since the city plans were removed from Swedish legislation in the 1980's, there is no possibility to protect these areas from exploitation in the long-term. The only protection from exploitation is that an area is designed as a nature reserve and this protection should not be used that way.

*Do you think densification areas should plan for more large parks than they do today?*

No, rather fewer. It is a question about the need for new land that growing cities need for building on. I think you should reserve smaller parts of the land as parkland and then focus on maintaining them. Then these areas could be kept up to park standard.

*You do not think people moving into the dense city have a need for green areas?*

No. The reason why people migrate to the dense city is because they want to live in the dense city and avoid the green areas. Green areas are something that dictates life outside the city center.

*Cities with a major city park, or more urban greenery are more inhabited by example families with children...*

It is clear that not everyone wants to live in a dense urban environment. But the demand for dense housing outstrips supply in today's Sweden – that is what makes the housing prices in central Stockholm so high.

When I say green areas I think of those mentioned by CIAM (the International Congress of Modern Architecture, Athens 1930's. Completed by Le Corbusier). They divide the city into four different zones for housing, work, transport and recreation. The zone for recreation was then named green space, all according to the modernist urban planning doctrine. Few people believe in these ideals anymore...

*In my thesis I want to focus on large city parks such as e.g. Central Park ...*

That is something else. It is an artificial structure.

*If you, through densification, remove green spaces to instead collect the larger qualitative areas. What do you think about that?*

Central Park and for example Humlegården in Stockholm were an integrated part of the urban ideals that prevailed then (1800-1900's). Today it is different. It is probably difficult

to build housing areas denser than an exploitation ratio of 2.5 (2.5 times as much floor space than land). But Norra Station area here in Stockholm is currently being built denser than that ... We have to see how it goes. Perhaps a role model? Or something to avoid?

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

I think there is no conflict. Parks are not threatened by densification. There are no cases where a park has been built on. One must distinguish between parks and green areas. Previously the main function of green areas had been to isolate neighbourhoods from each other. City planners simply wanted to avoid the big city's social environment. So today, these areas have no function.

*You do not think so?*

No. The cherished city greenery and parks is one thing and the undeveloped land as recreational areas where you can take a walk in the woods, is quite another. These recreational areas are not managed and left to their fate.

*And its fate is to be exploited?*

Yes, I think so. Or its fate is to overgrow.

*Are not these areas are important for people?*

No, I find it hard to see the point of it. You have to decide what land you want to save and what land you want to build - and then focuses on that.

4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

Yes, I think so too. I am an architect so I do not design parks but I think it is important for parks to have paths, lawn areas (intensively managed) and pruned trees. A park is based on cultivation and management so it is "not taken over by nature". Cut lawns are good in that perspective but have very restrictive use since they cannot withstand wear and tear. In order to meet the expectations of a park it must be built the right way – path for people to walk, mowed grass and managed trees. It is the foundation of a park – the way a piece of land is managed. The quality is absolutely more important than size.

*I get the impression that you have an old-fashioned view of what a park is. Today we talk more of managing parks in a much more extensive way (cheaper and to increase biodiversity).*

*How do you picture a modern park?*

I think the more unexploited land we claim for exploitation the higher the quality demands will be on our parks. I think that maintenance costs will rather increase and that park management will become more intense.

*But I think that is a dangerous argument ... The remaining parks will have a increased use and wear as more people move into the dense city. This will increase the maintenance cost and the argument can then be used against parks as "parks are expensive to maintain so we can not afford to build any new ones". The parks will also lose their recreational functions and value since there will be more people in one space.*

But one must ask: "why do people move to the city?". The demand of dense urban environment is increasing, people want to live in the city. The entire process of urbanization is due to a demand for areas with little greenspace. The less green space a neighbourhood offer – the more coveted it is on the market.

*But a city like Stockholm have Haga park and Djurgården where people can jog, walk and get away from city life for a moment. It is something fundamental in seeking tranquility of nature-like areas.*

I do not think it is fundamental. I believe that is a perception people have. I do not think there is a need for nature-like areas. It is not a basic human need, rather a preference. If you want to have it (it is not something that everyone needs) then you can seek it out of the city centre where you have access to greenery. To both want to live in a dense city and at the same time have possibility to visit nature to shield off the city is a paradox. Then you are against what is shaping a dense city. It is not possible to reconcile dense urban living with a wish to be able to take lonesome walks in the wood. The two desires go against each other – you have to choose. The city is for those who like to live in the city. People who want their loneliness does not have to live in the dense city.

*So you mean cities should be planned for a certain type of people?*

Yes, I think so. The dense city is not for everyone. It is probably 50-50 if you want to live in the city or in a suburb close to the forest. It is not possible to reconcile these requirements. If you want to live in a dense city you must accept to travel to visit a big city park.

5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes, I agree with you.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

You have to decide if the unexploited land is to be built or saved as a park. If you save it as a park a long-term budget has to be reserved so you can afford to manage it. Then there should be lawns, fountains and raked paths... The whole thing! This is not done today. I see city and park as a one unit but not city and green space.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

No, I think not. As I said, I believe on the contrary that the pressure on the unexploited centrally located land within easy reach of public transport will needed for exploitation. We should not have large extensively used green spaces, rather density and intensively used urban parks which are built, managed and designed.

*How large should these parks be? Humlegården is 12.5 hectares.*

Humlegården is big enough, bigger than that is not needed. I do not think size is what matters the most. The quality is most important. I cannot think of any park in Stockholm that feels too small... except during summer in the parks close to the beaches.

Telephone interview with Torbjörn Andersson, landscape architect at SWECO.  
Stockholm.

21 November 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

One can clearly see different waves of densification versus the green in the city. In the 1980's we discussed densification of cities to make them more socially interesting. Then came some sort of "Barcelona-wave" when Barcelona made major investments in its urban spaces. One of these initiatives came when the city was hosting the Olympic Games. House blocks were demolished to make space for small parks and squares. We (landscape architects) thought this was absolutely sensational! It had never been seen before. This is an example of the 1980's wave where planners and architects wanted to restore the social life of the city. Today there is also a clear wave of arguments for high quality urban spaces within the city but for other reasons. Today there are two frequently occurring main arguments for the dense city. First, that it is considered to be sustainable and second, that the larger towns in Sweden have large growth with a big influx. The general interest for the city has increased.

In summary, the 1980's wave of city densification was a social commitment while today's densification is more about sustainability and market forces that govern construction (which hides behind sustainability arguments). Previous demolitions, in the 1930's, had created sparse cities which people left (square became parking lots and parks inhabited by homeless people) and now when people are moving back into cities, parks and urban spaces serve a meaningful meeting point again.

2) *In times of city densification do you believe there is a place for new city parks?*

Yes, absolutely ... but the issue is complex. On one hand, we have parks for many reasons but one is public health, people need space to move. You should be able to go for a decent walk without having to meet too several pedestrian crossings. But there are also historical reasons that are not antiquarian (it is not primarily park historical reasons but rather city planning reasons), such as give light and air to dense cities. Parks was formerly used as "lungs" in the dense city where people could get sun and rest. Today, parks are perhaps more used for exercise and recreation. The public health reasons for having parks have changed but the issues certainly remains today (child obesity, fatigue and cardiovascular diseases). On the other hand, there are strong forces from construction companies who often lack morals and just want to make money out of building more houses. They even take the most respectable arguments like immigration, segregation and biodiversity to fight for their cause. Many new neighbourhoods are dense and it

is then said that there is neither money nor space for new parks. In the eyes of many construction companies parks represent an unexploited area. And this is a problem.

The financial aspects of having parks has been shown in the U.S. where properties near well maintained (popular) parks increase more in value than properties far from a park. In the U.S. they even say that "if you would like to increase the value of your property you should renovate/take care of the nearby park". Another interesting financial example is that New York city would make a total loss if the entire Central Park was built upon, since the properties that now surrounds the park would lose much of its value. It is great that even companies that only care about their own profit have realized the value of qualitative urban spaces and urban green areas. Maybe they have realized that "my property is worth more if it is included in a city context ..."

I believe there is a limit to how dense a city can be built and I do not believe that city parks are replaceable with small pocket parks. People already alarm the lack of space for children in the dense city. Today it is usual to only built small fenced areas outside kindergartens where the kids are gathered before they go to the nearest park to play.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

I believe that if the city become too sparse, as during the 1930's to 1950's, it loses its social qualities and becomes neither dense (like a city) nor green (as the countryside). Then people move where they can have their own gardens and easily go into the services provided by the city, thus urban sprawl. The modernistic building doctrine with a lot of greenery has also created cities which lost their social qualities. A compact city has its advantages, but it is important that all people can enjoy living in this type of city. The compact city should definitely provide green areas where people can move freely from traffic.

4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

It's very one-dimensional to say so, it is not possible to replace larger parks with small ones. Because there are so many people wanting to use the parks, size does matter. Think of kindergarten kids again ... Where will they otherwise go?

There is also a great interest in urban farming at the moment which then also demand space in these parks. The size is obviously important but only a large area without other qualities are probably worse than small parks with high qualitative values. The size of a park has obviously a shielding effect which I think is important to people. You



should check out what Erik Skärbäck and Patrik Grahn have written about this. A park must have a certain size in order to function, especially in a dense city. Some parks in Stockholm are so popular that the city is considering adding artificial turf (!) in order to maintain their quality.

5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes. We (SWECO) were involved in the design of the Dania park in Malmö 15 years ago and no large parks have, as far as I know, been constructed since.

*Yes, Lindängelund outside Malmö is an ongoing park project. Is Malmö farsighted on that point?*

Absolutely. Malmö has always been cocky on that front since they have had some good politicians pursuing these issues.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

Economic interests. You cannot rent out parks per square meter. All free (unexploited) green urban spaces are tempting to build profitable projects on.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

Well, in a way. The reasons why we need parks in the city are constantly changing and historically it has been on public health grounds like TBC etc. that we now have vaccines against. But today we need parks for physical activities as we face new health problems, like obesity. All people have to have a place in cities and the green areas are safeguarded by many people. This must be taken into consideration when building in the city. It is also important that the city's public spaces are not strictly programmed so that spontaneous activities are facilitated. Many architects are so used that all spaces should have a function such as kitchen, bedroom, bathroom etc. When an outdoor environment is not programmed for a particular activity it can be used as an argument that the space has no value. Obviously, parks should have general landscape architectural values. I usually say there are three general values: safety, comfort and experience. These values do not need to be superfluous or expensive, it may sometimes be suffice with good lighting and good benches for the visitor to be offered an experience. But when parks lack these values they often become "worthless" and unused. Then, there is a risk that architects and builders see such parks as exploitation areas, of economic interest.

But to answer your question, I do not think that city parks belong to the past.

*Today we see a huge health trend, do you think it could increase demand for larger parks?*

Trends come and go, but certainly. We already see that parks are more coveted among the younger population.

Interview with Johannes Hügler, landscape architect and head of Office at VOGT Landscape Architects, Berlin.

12 December 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

I think city parks are more and more important, especially when you look at the density of cities. Some cities experience decreased numbers of inhabitants but most cities are growing now a days. If you look at e.g. London, Paris and Berlin there are more people who really need the public space and green space. So the future of city parks are absolutely there. On one hand, city parks are really important when you look at the density of cities, on the other hand, it is difficult to build new parks. So when you discuss these issue you have to look at the existing public spaces and how they can be put together, perhaps into a park system or something. Maybe not just one large park but several small parks that are connected in a kind of green system. In the future we might have to change our view of city parks and think in an other direction.

*Is it important that this park system is not cut of by traffic?*

Yes, it is quite important. If you look at Gleisdreieck park here in Berlin, traffic lanes and train tracks cut through the park but there are interesting ways to cross over these barriers. It is important that a park user can walk or go by bike without constantly meeting different kinds of barriers. The continuity of a walk should be held open.

2) *In times of city densification do you believe there is a place for new city parks?*

Thats a different question... Density and space, it is two opposite things. It is difficult to find space for parks bigger than 30 hectares in the city, but at the same time, if you build large scale parks outside the city, is there really a use for them there? The size of the park has to work together with the density of the city, hence there is no space for new big city parks. It is a problem to build new city parks in the centre of cities. Take Hamburg's Harbour City as an example, a newly planned and partly developed part of the city where the density is very high. Here, there is no space for big city parks. So I think, like I said before, that you have to work more with park systems or at least find other solutions to large city parks.

*Do you think city densification can reach such high density levels that houses in the future will be torn down to leave space for parks?*

Well, I think that is happening in some shrinking cities with population decline. For the

last twenty years, cities in east Germany has experienced population decline which has led to some building demolishing where the space as transformed into public spaces. But without the same qualities as city parks. This could be an option, but not in the size and quality that is needed for a space to deserve the name city park.

*How do you define a city park?*

A city park should have many different options in ways of how to use it. In Germany we call them Volkspark and they should be open for everybody and should offer many different ways for people to use them. You can play football, have a walk or just relax under the trees. These kind of parks usually have small cafés as well. The most important quality is that the park is an open space which can offer activities for every visitor.

*Do you consider Tempelhof Field, as it is today, a city park?*

Yes, it is a good idea of a modern city park. It is open and offers so much space where people or initiatives can freely use the park. There are barbecue areas, an urban gardening area and big areas for kitesurfing. You can do different kind of activities but also find intimate places to play chess.

*So Tempelhof Field does not need to be landscaped or designed in any way?*

No, I think one of the qualities of Tempelhof Field is that the old airport is still visible. To build or design on it will be change the expression of it.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

Urban sprawl is a bigger problem than high city densification. The sprawl is stealing areas from nature, so I think city densification is a good answer to urban sprawl. It is more or less the right way but the at the same time, there is a lack of open space in the city. It is difficult to keep the balance in city planning – to keep a good level of densification and to avoid urban sprawl. But there should also be a balance between open space and dense cityscape e.g. New York (Manhattan) is a highly densified city but the people there have Central Park.

*But Central Park is over 300 hectare so many visitors can be there simultaneously. Few cities plan for these large city parks today...*

No, you are right and it is often a question about money. Cities sell their ground and make money on buildings but it cost money to build public spaces (green areas). It is a

dilemma. The citizens and politicians should say “Come on, we need more open space! Money is not everything”. It might be a little idealistic but it is a big issue that cities lack the balance that I have been talking about.

*Could the city densification be contra-productive, I mean if the cities become to dense and people start to move out again?*

This could happen when the density get to high and when there is no open space anywhere for people to have a walk or just sit under a tree. This could happen when the urban balance is broken between density and open space. Density is not everything, though it is good to have a dense and high quality city, it is important to have open public spaces.

4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

In highly densified city centres a park with high quality is more important than a large park. It is important that you have different options to use the park e.g. play and relax. It is also important to maintain the quality of the park so it can last a long time. If a large park is overgrown and untidy people will not use it the same way as small well-maintained parks. I would say that the maintenance and quality of a park are more important than the size of it.

*Do you agree that the size is a quality?*

Yes, size is quality. When you look at Tempelhof Field the size is the quality, because you are in the centre of the city and have kilometres of almost nothing surrounding you. That is quite unique! Size is of course important but not everything in case of city parks. Small parks have of course more conflicts of space-use, often more people per square meter and are often more intensely maintained. Some areas in large parks can, on the contrary, be left with more extensive maintenance. These are important questions since maintenance costs of a park often is higher than costs of buildings. The larger a park is, the more options are there to leave areas extensively maintained.

5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes, I think so too.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

The problem is that you do not have the space to plan for these large parks. Another example from the Hamburg's Harbour City is our (VOGT) park, which is the largest, that have a size of only 4,5 hectares. There is no option to have large parks within the city anymore. I think new areas will have systems of small parks rather than a large city park. The dimension of new city park is not as they were for 200-300 years ago – the new city parks are smaller.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

No, of course not. I think large parks are important to cities because they have grate significance to the people living there, otherwise you will only have one option; to leave the city. It is very important to have green, wide and open areas like city parks within the city where people can relax and recover or do activities that they cannot do at home. City parks are also very important not only for the people, but also for the climate of the cities. City parks have capacity to filter polluted air, mitigate high temperature and take care of rainwater. I think city parks are the future of cities, not the past.



Interview with Martin Rein-Cano at TOPOTEK 1, Berlin.

16 December 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

You have to differentiate the question, I mean, is it the future of the existing city parks? Almost every city has an old city park that sprung from different sources like being royal hunting ground, the king's garden or designed public garden/park. In which aspect do you mean future? Is it the new parks that are developing in changing parts of the city like industrial areas and harbour areas or is it the change of use of existing historical parks?

*It is an open question, I mean both of these aspects. Historical parks, that may have to be changed in use, and new city parks.*

Starting with the old ones, we can see a development in how the historical parks are being used as an effect of the general social changes that we are experiencing. We are using the public space in a more private (social) way, people do things in the parks that they did not do earlier, for example work. People bring their computers out to work in the public space. Parks are no longer the place where you only go to play sports, enjoy the green or take a walk, the parks are becoming more of a function space inside the city - for certain uses that was not there before. Most parks have a recreational background, but not all of them, and now they become productive space. Maybe this development goes as far as to, let's say living in a park. Before, people never barbecued in parks, it was even forbidden, and now people go out and "live" in the park, as an extension of their homes. This is no longer an exception, it is a use.

Regarding new parks, we have to, which is my experience, depending on the context, offer more possibilities of use. The vocabulary that we use for parks is quite reduced, it is playground, sports and green. This is good but maybe we have to enlarge this vocabulary. One example of my own project Superkilen in Copenhagen, where we used immigration and different culture as a foundation to the design. The use of the public space differs from the Northern and Southern countries, I mean in the Mediterranean countries the idea of the private use of the public space is almost standard. For us is this new. We were more used to the nature aspect of these spaces, where we had different shades of green, reduced noise levels and privacy. The joy of parks was more a sensorial pleasure.

*You seem to see a future for the city park?*

For me, the new parks need more programming and less of the sublime. I like the idea of combining these two aspects, which I think Superkilen has - the nordic view of nature but at the same time multiple uses. New things as barbecue, boxing and other activities

that were not allowed in public spaces before can take place here. The use is crucial.

2) *In times of city densification do you believe there is a place for new city parks?*

Yes I do. With parks you really have to think in advance because when you build them the areas around them are usually not that dense. You have to think of the guarantee of quality for the future. How much can cities grow? How much of the strategies for open space, that we use from the 19<sup>th</sup> century can we apply on future cities? The 19<sup>th</sup> century strategies were hierarchic with a central square, a central park and a central building. The mega-cities of today do not have this hierarchy of main places anymore, there is more multiplicity of spaces. There is no simple answer to this question. Our European cities are barely growing (London might be an exception) if you compare to Shanghai or Rio de Janeiro. We do not have the same problems as mega-cities do, especially with traffic, I mean there is no problem for us to travel outside the cities in search of green. Stockholm for example has so much water that you just jump on a boat. I mean the whole of Stockholm is a park.

*But what about the effects of transport...Is that a sustainable solution?*

I do not think it is a simple answer to that either, but look at the southern cities, they barely have parks and we love them anyway. In the end we have to be careful not to romanticize the importance of park. A park should be something precious. In dense cities it is not good to have too many parks. A park is like jewellery, if you put on too much it is obscene. With parks it is the same, if you have too many it is boring and you do not create enough density. It is a balance. The problem is also that we do not build as dense as we use to which means that we have a lot of leftover spaces in between.

*So a park should have a certain amount of visitors to be popular?*

Absolutely. The problem is not the parks, it is the density of the surrounding buildings. The building regulations are too generous with the space which create a lot of leftover in-between space. Not everyone can live in a perfect apartment with windows in all directions, but these conflicts are how you create urbanity. To solve these conflicts the city needs to cultivate the in-between spaces. If these spaces are "for everyone the same" (social-democratic) you will destroy this interesting conflict. For me, density is more important than green. The densified city is more sustainable, ecological etc because there is more people using the infrastructure and the spaces of the city. What I hate about the romanticization of the parks is the celebration of loneliness. In the Nordic countries everyone is alone and has difficulties to socialize. They have to drink to do so. I think public places are created to socialize, that is why these places can not be too big. If it is

you and the nature - that is not good.

*What if people have a need for that (you and the nature) feeling in dense cities?*

We should ask yourself if this need is relevant. What need do we have? Today we have such mobility in society that maybe this precious parks should be for socializing and not for the sublime experience. This is an incredible luxury - to give away pieces of the city to create lonesome experiences that you can have if you go 30 minutes with the metro. One has to balance this question.

*But when you say dense cities do you picture them with parks?*

Yes, but we have to think if it is the same romantic parks of the 19<sup>th</sup> century. I think no. Every generation has to do different, we should not just repeat in that sense of designing parks. Today, many new parts of the cities look similar and have the same kind of people. Then there is no mixture, no urbanity. If you create too many of these neighbourhoods you create ghettos. The public spaces can balance this a bit. Public spaces should create cool conflicts where people can see each other and socialize. These places should also offer you to do activities that you can not do in other places. We don't need public spaces to be living cemeteries. A city is a place where different people from different cultures meet, while a park often just adds to the beauty of a city. You have to make sure that the park contributes with something to the city.

*But a park is said to be the most democratic place for these different people to meet and interact...*

It should be, but if the park is too big, this is not the case. A society only works when these different people merge... to a certain extent. There will always be differences between class, gender, generation and whatever but if they never meet, because our cities have a certain order or the parks are too big, this is a problem. The best activity is to watch other people but if you look at the romantic landscape parks these were created to look at the nature. So future parks have to be formed differently to create encounters between different groups of people.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

The bigger the park the better but, as I said, it is more complicated than that. It is impossible to say that we need large parks and that the densification takes away all the green areas. I think it is all about the context. Sometimes street life is better than a park.

One has to tune in what is needed and what is wished for... You can not say that we should have large parks everywhere. You have to define what kind of park is needed in new neighbourhoods. How many people live there and what kind of activities do they do? On one hand many new dense areas are in direct connection to the surrounding landscape and on the other hand some new areas are not dense enough. This is a question of scale and differentiation of the public place. What kind of people live in the area? If people in the area have allotments or summerhouses, will they then frequently use the park in the same way as people with big families living in small apartments? New parks in new housing areas are always completely empty. Maybe you can say, the poorer the people the more they have a need for public space. Some areas, like villa areas do not need a park because rich people take a plane when they need to go to nature. Like Swedish people who go to Thailand.

*Do you consider Tempelhof Field as a city park?*

Yes, definitely. But it is not going to be better than it is now so I think they should leave it as it is. Tempelhof gives space to do things you normally can not do in a city and its beauty is in the impediment. Sometimes when parks are too nice people feel that they can not move as freely as they can in a more "ugly" place. These places are needed in a city. Again, I think we have to enlarge the way we see city parks.

4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

Yes, I think so. The size matter of course, the bigger a park is the less formal qualities are needed. On a larger scale you can make more mistakes and the smaller the distance the more precise you have to work. The smaller a park is, the more programming issues are there, but the larger a park is the more extensive you (as a designer) can be. In small parks you have to intensify the experience because you have less space.

But I believe you have to rethink the necessity of this experience of going for a walk in the city park. The walk can be important but we have to balance this moment to the space that we use, and to all the other moments a city can offer. I love to go for a walk in the city too, I love the quietness and emptiness of the city. On a Sunday, the park is far too boring.

*Do you agree that size is a quality? Could be the quality?*

No, I do not think so. A large park could be nice, but again not in all situations. I think it is important with long vista but sometimes, like in Stockholm, you have the water instead. I think it is a waste of space to have large parks just for these sublime walks. And a waste

of money to maintain it. A park has to serve social purposes. I have the impression that parks many times are more interesting for dogs than for people.

5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes, I completely do.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

Again, we do not have the hierarchic society anymore with only one centre. Historically, we had a king who had the money and the power to decide what to build. Today it is too expensive to maintain these areas since we do not have the culture to put money in to these things. We use our money for other things and I rather have small areas that are well maintained.

I believe in more temporary places like streets where you close for traffic in the summer or generally more places for temporary use. The cities have to use its space better, but maybe not all the time... More space on demand. You have to balance the interest-groups and see what is needed. No one will do large parks, so we have to rethink and reuse the spaces within the cities. That is more fun, more of a challenge and more like a testing-ground because when you decide to make a large park, it is a decision for generations. But I don't think there is a lack of public places.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

Yes, definitely. They are more like museums, I mean the past is wonderful and it is good to have these parks, but do we have the money and the power to recreate them? I do not think so. It is then better to work with temporary places that are reversible and not forever. Is there even a will to create these places, I mean would people use them and be willing to pay for them? If the parks end up being used only by dogs... I would not like to pay tax-money for a shitting ground for dogs. We should definitely keep the large parks we already have, and it is good if we get a change to create new ones but the reason why we create them should be clear. I think taxpayers today are more interested in getting a better Internet-connection to the rest of the world than have these public spaces for encounters. Things change, so what do we need on a daily basis? I mean, Thailand is the park of Sweden, people travel when they want to experience nature.

In the future we have to really analyse where a park is needed and I do not think the size of it is a quality per se.

Interview with Ulrich Nowikow and Mikulas Cernik from Green League, Berlin.

18 December 2014.

1) *Can you describe as detailed as possible how you see the future of the city park?*

Maintenance costs are a big problem for cities, so I think allotments and possibilities for people to take care of their own small plot is a win-win situation for the future. The interest for urban gardening is growing in Berlin and people show interest for maintenance rather than just jogging or dog-walking in a green area. Tempelhof Field is a great example of this engagement in public space where people have started community gardens and other common activities.

*Do you consider Tempelhof Field as a park?*

It does not have the status of a park. For an area to be considered as a park there should be more trees. Tempelhof Field is more of an open industrial field. The micro climate would be better if there were trees on the field - less windy and less direct sunlight. But I think the area should stay as it is, as an open activity area.

2) *In times of city densification do you believe there is a place for new city parks?*

Maybe. In cities like Berlin where there are plenty of free spaces there will be possibilities to have both densification and parks. Berlin also has a lot of old industrial areas like brown fields which will be developed both with parks and with buildings. The chances for a desirable result increase if the local community is participating in debates and projects. The city densification pressure is not that high in Berlin so there will be space for new city parks. The problem with new parks is that they are not established properly with the local community.

3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

As in the last question I think it is possible to have both densification and green areas. Urban sprawl is the biggest problem since it is spreading out in green areas around cities and people are traveling back and forth with cars. Even though Berlin is densifying it is not a threat to the parks we have in the city. The allotment gardens in Berlin are more threatened since they do not have the same protection as parks do. The parks are often included in the development of an area while the allotments often are based on a community engagement.



- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

It is difficult to choose quality over size but for me a small quality park is more worth than a large one with less quality. But the larger a park is the more people can be there at the same time and that is what makes a park interesting.

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

No, I think it is enough plans for new parks.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

I think park planning meets the wishes of people in Berlin.

- 6) *Finally, do you think city parks (as I know them today) belong to the past?*

No, I do not think so. All types of parks play a vital role in the city.

Interview with Dr. Cornelia Oschmann Humboldt University, Berlin.

19 December 2014.

- 1) *Can you describe as detailed as possible how you see the future of the city park?*

I think city parks will be more important in the future since our cities are growing. In Berlin there is a competition between public space and buildings, but we have a lot of green areas compared to other cities. In growing cities where there already is a lack of green areas, there will be a problem with pollution and urban heat island. City parks must exist to function as green lungs.

*So you believe that future city parks will have more of an environmental significance?*

Yes, I think so. There is a interesting graph that I often show my students, describing the temperature differences in Berlin over the last 30 years. On the graph it is very clear that the inner city has the highest temperature, more than 3 degrees higher than the surrounding landscape. The city areas where the parks are have the lowest temperature difference, only 2 degree warmer than the surrounding landscape. The most clear example of this temperature contrast is around Tiergarten in central Berlin, the city area is orange (+ 3 degrees or more) and the park is yellow and green (+ 1.5-2 degrees warmer than the surrounding landscape). This show us that city greenery can mitigate urban heat island effects.

- 2) *In times of city densification do you believe there is a place for new city parks?*

I think we have to protect our existing parks and maybe find new ways for urban greenery, not only city parks but also vertical gardens and roof-top greenery. I think it is difficult to find space for big parks in mega-cities like Rio de Janeiro or Tokyo.

In Berlin we have a nature conservation law that obligate building companies to pay for the “replacement” of lost green values on the construction site or in connection to it. This often leads to new parks in connection to new constructions areas. Mendelssohn-Bartholdy Park here in Berlin was created with nature conservation money from building Potsdamer Platz. I think this replacement system could be used elsewhere to create new city parks.

*Do you consider Tempelhof Field to be a city park?*

I do not know... It depends on the definition. Is it a park or not? I think a park should have more trees. Tempelhof Field is more of an open space, a green area and recreational area, but park no. It may become a park in fifty years.

- 3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

Through city densification we have lost a lot of small green areas for urban use and housing. So of course it is a conflict but I think we have to find a system where both densification and green can coexist. I think other green spaces and urban greenery are becoming more important, so this issue is not only concerning city parks. It might be difficult to find space for large city parks so I think it is more important for people to have smaller green areas nearby their homes.

Urban sprawl is of course also a problem since green areas are reduced as cities spread out.

- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

Generally I would say that high quality in a small space is better than less quality on a large space. A quality could be the ability to meet different users needs but also the level of maintenance. If a park is in a bad condition and people stop to use it, the downward spiral has begun and the park is getting even worse. Maintenance of parks is expensive and the local authorities do not usually put enough money aside for this purpose. As I said, I believe in easy accessible small parks or even private gardens rather than large parks.

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

Yes, I agree.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

Berlin is growing and the city needs more houses and public buildings.

- 6) *Finally, do you think city parks (as I know them today) belong to the past?*

Yes, maybe... I think the future parks will be smaller and close to where people live. You might have to travel, with public transport, to visit a large park. But of course, we have to do every thing to conserve and protect our existing large parks and make sure that they are not used for other purposes. They are important for the city climate and have other positive effects.

Email interview with Erik Skärbäck, landscape architect and professor in Master Planning at SLU Alnarp.

19 January 2015.

- 1) *Can you describe as detailed as possible how you see the future of the city parks?*

Yes, see below for details.

- 2) *In times of city densification do you believe there is a place for new city parks?*

The denser the city, the more important are city parks. Our research (Björk, Albin, Grahn, Jacobsson, Ardö, Wadbro, Östergren & Skärbäck 2008) show that people living in apartments are more dependent on having access to many of “Patrik Grahn’s eight characters” within 300 metres than people living in villa areas. The correlation is particularly strong for women. Other research show that large parks have greater chances of including more characteristics than small parks. Additional other research show that large parks have greater chances of getting several characters in the park.

- 3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

Urban sprawl is the name of the American phenomenon with huge villa areas where people have far to service. This is not a issue in Sweden. I have no personal experience of the phenomenon. Thank goodness we do not have it in Sweden.

- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

We have scientific evidence that size is the most important quality - see my (Skärbäck, Björk, Stoltz, Rydell-Andersson & Grahn 2014) article in the latest issue of Nordic Journal of Architectural Research.

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

I share that perception.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

I have debated a lot about transforming one or two blocks in the area of Sorgenfri into a large city park in the eastern part of Malmö. Malmö municipality think this proposal is too expensive. They need to sell the land expensive to get their budget together. In the article above, we have also described why so little greenery surrounding the apartment building is planned: Outdoor environment quality is not counted as a factor when setting the rents. Green quality is therefore not counted in exploitation calculations. This is an unnecessary shortage. Good green environments are proven to affect housing prices, so why would it not affect rent levels? This should work as incentives for improvements to be made.

6) *Finally, do you think city parks (as I know them today) belong to the past?*

No, I think that parks will always be built. Not least because of the people, voters, household consumers, you and I clearly increasingly demand parks. But the cities to day are build in new ways so the parks will also get new expressions compared to our parks from the early 1900's.

## References

Björk, J., Albin, M., Grahn, P., Jacobsson, H., Ardö, J., Wadbro, J., Östergren, P.O. & Skärbäck, E. (2008). Recreational values of the natural environment in relation to neighborhood satisfaction, physical activity, obesity and wellbeing. *Journal of Epidemiology and Community Health*, 62(e2) (e-publ.). <http://luur.lub.lu.se/luur?func=downloadFile&-fileOID=1056501>.

Skärbäck, E., Björk, J., Stoltz, K., Rydell-Andersson, K. & Grahn, P. (2014). Green perception for well-being in dense urban areas. *Nordic Journal of Architectural Research*, 2014:2.

Email interview with Rikke Hedegaard Christensen, city planner at the municipality of Copenhagen.

26 January 2015.

1) *Can you describe as detailed as possible how you see the future of the city park?*

Recent prognoses tell that Copenhagen will grow with approximately 100.000 inhabitants until 2025. At the moment we see an inhabitant growth of 1000 people a month. The current numbers also show an increase of families and young people between 19-26 years old moving into Copenhagen. This trend is expected to continue.

The city's parks and nature areas offers a great selection of recreational functions, activities and culture and are frequently used by Copenhageners. It is in the city's parks and nature areas, Copenhageners find peace and quiet from the city noise and where they take their walks, do sports, enjoy nature and much more. The increased numbers of inhabitants have increased the use of the Copenhagen's city parks and nature areas. These areas have to contain more sports facilities, recreational functions and culture but above all more Copenhageners, especially children and young. City parks and nature areas also have a vital role in securing Copenhagen against climate changes. In the future, a great number of the city's parks will be used as rain water collection or detention in connection to cloudburst. The city parks will play a significant role in future Copenhagen – not just as recreational areas but also in securing the city from climate changes, guarantee biodiversity, promote inhabitants health and to create light, airy and comfortable micro climate in Copenhagen. The city park will go from being a recreational element to a functional element in the city. We have already started to focus more on the functional aspects of parks (rainwater management, CO2 reduction, heat regulation e.g.) and not only on the beautiful aspects (historical, cultural, recreational uses e.g.).

2) *In times of city densification do you believe there is a place for new city parks?*

The municipality of Copenhagen is different from other cities since it only consist of a inner city core without any open areal or available exploitation space. It is a constant fight of space in Copenhagen and it is difficult to find space for new parks – especially parks bigger than 30 hectares. In Copenhagen we focus more on existing parks, pocket parks (small local parks), green court yards and green connections. The only place where new city park projects are possible is in the outer developing areas of the city. These developing areas are not owned by the municipality of Copenhagen so the land has to be bought by the municipality or a private investor (willing to pay for a park project) if a new park should be built.

There is no space for new parks in inner Copenhagen so we focus on making spaces



greener outside schools, institutions and to improve accessibility and quality of existing parks.

See more about the developing areas here:

<http://www.kk.dk/da/om-kommunen/indsatsomraader-og-politikker/byplanlaegning-og-anlaeg/byudviklingsomraader>

- 3) *City densification is often mentioned as an answer to urban sprawl but might be a threat to urban green areas. What is your view on the conflict between city densification, urban sprawl and urban green space (city parks)?*

Population growth leads to an increased need for establishment of new homes, schools, institutions and businesses, which increases the pressure on using the city's parks' ground which often offers useful space in popular places. This applies for example when new institutions are established and when infrastructure is being expanded. In the municipality of Copenhagen densification is not a major problem, since Copenhagen is already a very dense city. Densification occurs primarily in the suburban areas. When we come to live denser the city's green areas are even more important. It is therefore important that urban development work is strategic and focused on preserving the city's parks and nature areas and to ensure that they remain unbuilt.

The Capital Region (Copenhagen is a part of that region) adopted the Finger Plan in 1947.

The directive land plan for the metropolitan areas, the Finger Plan, regulates urban development and the regional landscape features in the metropolitan area. Forests, protected nature areas, conservation areas and lakes, streams and coasts are central elements of the regional green structure and designated as green wedges and transverse green rings. The purpose of the Finger plan is to focus urban development and ensure that the green wedges remain undeveloped and unbuilt.

You can read about Finger Plan here:

<http://naturstyrelsen.dk/planlaegning/planlaegning-i-byer/hovedstadsomraadet/fingerplan-2013/>

In order to ensure that the city's parks and natural areas are preserved, the majority of Copenhagen's parks and natural areas are totally or partially protected through various laws. Law protection ensures that the green areas remain undeveloped, natural contents are maintained and that changes are in accordance to the protection law provisions.

- 4) *The quality of a park is often mentioned as more important than the size of it. Describe your thoughts or experiences around this?*

Seen from a recreational perspective the quality and nearness of a park is more important than the size of it. Studies from Copenhagen's parks show that the majority of the park users live in the area. Other studies show that a park is most used if it is situated 300 metres or less from people's homes. In Copenhagen, we have small parks that are used a lot and great nature areas (Amger Common and Kalvebod Common) that are not used as much. The small local pocket park and the green backyard can have as great value for the people of Copenhagen as the city's parks and natural areas have.

But, we need the large parks from a natural conservation perspective. The large parks serve as habitat for countless animal and plant species and are an important resource for ensuring a high biodiversity in Copenhagen. We also need large parks in relation to recreational functions, as football fields, playgrounds and other space demanding activities.

The most visited park in Copenhagen is the park which offers a variety of recreation possibilities. With more than 11 million visitors a year Fælledparken is Copenhagen's most visited park. Fælledparken is a big park with high quality.

You can read more about Fælledparken here:

<http://www.kk.dk/da/brugbyen/brug-steder-i-byen/groenne-omraader/parker/oesterbro/faelledparken>

- 5) *I have the perception that few new city parks are being planned. Do you share my point of view?*

In Copenhagen there will be only few new parks. One newly build park is Mimer park located on an old rail facilities. Mimer park is approximately 3.8 ha. In addition, pocket parks and small green spaces has been constructed.

*Continuation of question 5; can you describe your thoughts about why (why not?) so few new city parks are being planned?*

The primary reason for not establishing new parks in Copenhagen is that there is no space and that the urban developing areas are privately owned. If Copenhagen is to establish a new park in urban developing areas, the local authority must purchase the area. The municipality has not had a tradition of doing so. Besides, I have the perception that a park is often seen as "nice to have". When politicians must prioritize municipal money the construction of new parks are mostly downsized in favour for new schools, institutions, renovation of roads etc. which is considered more as "need to have".

6) *Finally, do you think city parks (as I know them today) belong to the past?*

I think city parks are more important than ever before. When we become more Copenhageners, the city's green spaces will be even more important. In the future, I think that our view upon parks will have changed. Previously there has been much focus on the recreational, scenic and cultural aspects of parks, but I think the focus will change towards park utility and their nature/biodiversity values.

Because of population growth and land shortage, the use and user composition of the parks will become more complex. The city parks will be included as part of the efforts to adapt Copenhagen to climate change and are also intended to serve as schoolyard/ outdoor areas for schools and institutions and must be able to accommodate several sports facilities. We can count on a far more intensive use of city parks and we need to look at more multifunctional solutions such as ball fields that can be used as rainwater basins etc.





A coffee carriage at Tempelhof Field, Berlin.





