Chapter 12

Sletten: Rethinking Urban Habitats Through Creative Management and Social Engagement

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Abstract Landscape laboratory is a concept for citizen involvement in the maintenance and development of urban forests. The concept has been developed and refined since the mid-1980s and now counts for four such places in the Scandinavian countries. It is widely recognized that the yet not peaked urbanization poses challenges for natural habitats in urban areas; landscape laboratories as urban forests are a response to that.

The chapter reports on the experiences of establishing an urban forest as a landscape laboratory simultaneously to developing a housing project, called Sletten situated in Holstebro, Denmark. The chapter brings forward three emblematic exemplars of how the place is appropriated by the people living there. Sletten is both an actual suggestion for novel neighborhood design and a full-scale experimental platform where scientists and practitioners with different or no professional backgrounds can meet and collaborate on testing and developing new concepts for the design, establishment, and management of urban forests.

Keywords Urban forest • Landscape laboratory • Stakeholder engagement • Community resilience • Decentralized responsibility

12.1 The Context

The Danish municipality of Holstebro established Sletten, a combined suburb and urban forest, in 1996. In addition to eight small, village-like clusters of houses, Sletten is part of a network of landscape laboratories in the Nordic countries

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started by the Swedish University of Agricultural Sciences (SLU) in the late 1980s. Landscape architects Roland Gustavsson from SLU and Carl Aage Rasmussen from Holstebro Municipality were two of the key people responsible for the initiative in Holstebro.

The first landscape laboratory of such a kind was established in 1986 in the SLU campus in Alnarp. There are currently landscape laboratories in Alnarp (Sweden), Snogeholm (Sweden), Holstebro (Denmark), and the new landscape laboratory being established by the Aarhus School of Architecture in Aarhus (Denmark).

Sletten is a visionary urban development plan integrating new housing with new urban forest, characterized by features often associated with urban gardening. The building plan comprises private and public housing, public institutions for children and eldercare, offices, and light industry. The housing areas consist of eight small clusters, each of which encloses a green area for leisure and play. The forest area is comprised of three primary experimental methods for afforesting and a number of subordinated experiments. They create numerous spatial and natural qualities that invite wide biodiversity and (just as importantly) wide variety for appropriating and using the urban forest. Compared to contemporary Danish city development projects, Sletten is very advanced in terms of new types of forest habitats as well as social diversity regulated by ownership of housing, inclusion of private and public institutions, integration of nature and city, and in urging citizens to take part in both nature development and preservation.

Integrated into the Sletten landscape laboratory is the Millennium Garden. This is a project inside the landscape laboratory project, a citizen-driven initiative directed at giving a landscape gift to future generations – from one millennium to the next – in the form of 55 oak trees planted in a square across both urban areas and the forest. The Millennium Garden is an example of bottom-up city and landscape planning.

In Sletten two different but interwoven stories can be read. The first story concerns the overall strategy of using Sletten as the basis for testing and developing new types of urban forest in close collaboration with the inhabitants. The other regards the many different kinds of citizen-driven forest appropriations (Fig. 12.1).

12.2 The Problem

During the last decades, development within both urbanism and forestry has led to the point that new forest is now created in the image of the city, insofar as forestry is increasingly dominated by urban values, laws, and demands (Konijnendijk 2008; 205). Since 1805, when a series of laws were implemented in Denmark to save the remaining forest from overcutting, forest areas in the country have risen from 2% to approximately 14% (Danish Nature Agency 2002). Following government plans from 1989, this afforestation will continue right into the twenty-first century, until one quarter of Denmark's land surface is forest area.

Until the mid-twentieth century, a forest was essentially a productive landscape, but there has been a pronounced change in its role in Danish and other Western



Fig. 12.1 The forest is comprised of three primary experimental afforestation models: habitat model (*green*), seed source model (*yellow*) and density gradient model (*blue*)

societies over recent decades. Today, afforestation in Denmark is closely linked to an increasingly urban society and is also justified in terms of recreational amenity. This development is related to the emergence of a new urban condition, in which the city can no longer be characterized as a demarcated domain surrounded by open countryside. It is increasingly becoming part of growing urban regions comprising both city and countryside (Sieverts 2008; 253). There is a rising awareness that urban forests can play an important role in creating an insight into the contemporary urban situation as a new, but as yet unrecognized, part of our everyday landscapes. Urban forests can also reconnect society and nature in places where we work and live (Konijnendijk 2008; 123). Along these lines, afforestation and urban gardening are also part of the discussion on nature and natural habitats in urban contexts. Sletten exemplifies that it could play an important role in qualifying urban development.

It is widely recognized that urbanization which has not yet reached its peak poses challenges for natural habitats in urban areas. In an attempt to rise to this challenge, cities such as Nantes, Lyon, and others are adopting strategies that include an increased focus on natural habitats in urban areas. Such strategies are also related to mitigating climatic changes, and their success criteria are widely dependent on civic engagement. In these perspectives, new types of urban afforestation, capable of merging landscape and dense urban areas, are becoming part of new urban landscapes. They merge natural habitats, urban development, and human engagement in taking care of and using natural features as a part of the same overall strategy, helping create and establish resilient urban environments.

Sletten is both an actual suggestion for novel neighborhood design and a full-scale experimental platform, in which scientists and practitioners with different or no professional backgrounds can meet and collaborate on testing and developing new concepts for the design, establishment, and management of urban forests (Gustavsson et al. 2005; 1).

Because Sletten is a living laboratory, there are many actors involved. The most important ones are Holstebro Municipality; the people living in Sletten (as they are encouraged to actively take part in the continued management and change of the urban forest); the participating researchers and research institutes comprising SLU, Copenhagen University, and the Aarhus School of Architecture; as well as both public and private actors in forestry and civic-culture sectors that are involved in urban afforestation and urban forest management.

The two main reasons for Sletten's establishment are closely linked to the two different stories that are unfolding in the area. The first is the question of diminishing resources available for the management and care of urban forests and green areas in general. In Sletten, this question was asked: can new types of civic-based management be part of the solution for the maintenance of new urban forests? This story would at the same time offer an answer to the second reason related to public and land use. In Denmark, the allotment garden movement has diminished over the last decades, but at the same time, there has been a growing demand for other types of urban gardening and the ability for people to settle themselves into their surroundings.

The people living in Sletten have been actively involved in the development from the very beginning. Curiously enough, this has led some of Sletten's inhabitants to establish grazing guilds and animal husbandry, contributing to maintaining the open grasslands despite the lack of any farming experience and facilities.

12.3 The Strategy

First and foremost, the project is spun out of a collective passion (shared by inhabitants, scientists, and the municipality) for creating a unique place built on the participation of the people living in the area from the very first day. One simple but effective tool fostering active participation and the acknowledgment of this has been to incorporate what initially was a so-called collective zone, a 3-m area between the various private gardens and the forest. Here inhabitants are encouraged to use the forest as they see fit. In several cases, this zone has expanded further into the forest, and a large number of temporary and self-organized forest gardens have emerged (Fig. 12.2).

Example 1

An inhabitant has been creating a bamboo nursery where the collective zone is used as a bamboo plant station and test field. The bamboo nursery has slowly become part of the specific area of forest directly related to where he lives, making not only the garden but also the forest an integrated part of his everyday landscape.



Fig. 12.2 Examples of appropriation

Example 2

Drawing upon the allotment garden movement, another family decided to create an enclosed garden in the forest and in turn establish both a flower garden and a vegetable plot. This particular area is an example of how many inhabitants of Sletten interact with the forest and, on the basis of this interaction, relate with the natural processes occurring in the forest over time.

Example 3

At one time, a group of inhabitants from one of the clusters decided upon a common community celebration and used the collective zone and the related part of the forest as the backdrop for their celebration. Such celebrations are common in Denmark and are usually referred to as "road parties." This in turn changed that particular area of forest into a new habitat for other types of plants that are growing in the area over time.

Sletten is a collective project and supported by a rare breed of visionary politicians, active citizens, and strong professionals, but there would be no such thing without a key person working in difficult times as well. Carl Aage Sørensen, former head of city landscape planning and infrastructure in Holstebro, is today a self-employed landscape consultant. In the very early stages of the project in 1997, Carl Aage Sørensen recognized the necessity to have Sletten work on a different basis from an ordinary park. Based on his knowledge of the establishment of landscape laboratories in Sweden, Roland Gustavson, the Swedish initiator, was invited to join the Danish experiment. Together with Christen Nørgaard, who impersonated the project contractor, the three became the core-connecting team of the project, ensuring political and public involvement in the project all the way through.

In the establishment of Sletten, the main actors have been Holstebro Municipality and SLU which, together with the inhabitants, are continuing to create and develop new management-oriented and experimental initiatives.

Furthermore, integrated into Sletten is the Millennium Garden, which was started by the Danish land artists Jette Hansen Møller and Erik Skoven (Copenhagen) in 1998, at the turn of the millennium. The Millennium Garden is a land art project, which was set up in relation to the establishment of Sletten and has become an integrated part of the landscape laboratory. It is an artist-based initiative directed at giving a landscape gift to future generations – from one millennium to the next – in the form of 55 oak trees planted in a square across both urban areas and the forest.

12.4 The Solution

Sletten has an overall forest structure with eight integrated clusters of various types of housing in close relation to the forest. The area covers 160 ha, which includes the overall structure of the forest as well as green wedges, village greens, and local gardens between individual houses and the forest.

Sletten was established in three phases and is based on three different afforestation models. The first phase comprises 36 smaller forest lots, each of 3,500 m². It is based on the *habitat model*, where every lot has a distinct composition of species, selected from around 60 in total. The second phase is made up of three types of basic woodland, oak, birch, and pine. It is based on the *seed-source model*, where an arrangement of seed-spreading bases with nine different tree species and nine different bush species will, over time, spread into the surrounding woodland to create new, self-organized forest stands of different species. The third phase is based on the *density gradient model*, where different distances between the used species create a large spatial variety. The trees are planted on grid patterns that vary in size from 1.25×1.25 to 2.5×5 m.

All three models incorporate the previously described "collective zone," where the inhabitants are encouraged to use the forest as they see fit. Despite the fact that the Department for Technique and Environment in the Municipality of Holstebro is responsible for the management of Sletten, it is to a large extent based on the still growing initiatives implemented by the inhabitants themselves. Additionally, workshops run by SLU are occasionally carried out in Sletten using one of the common houses as a departure point for projects in the field, in which the inhabitants are included. Martin Meisler Elmholdt-Svendsen has taken over from Carl Aage Sørensen as municipality-based contact person.

The "collective zone" and the self-organized gardens show Sletten is a space of potential, open to change over time, transforming into a mosaic of forest and garden habitats in continuous development and decline, with intentional and coincidental spaces of interaction in an increasing number of spatially open, half-open, and closed areas. In Sletten, temporality and transformation can be seen as an expression

of the relationship between natural and cultural processes. While the forest itself is more permanent, the integrated self-organized gardens function as individual "experimental spaces" for the inhabitants and have a more temporary character. Despite the forest's planned structure, it is open to self-organization.

The situation originally imagined has been achieved. Sletten today is an urban forest maintained by the people living in the area – nature is a part of the life of people living there and so is the responsibility of keeping it. The municipality has acquired more forest and areas for leisure activity without great maintenance cost, and, in addition, they have fostered a civic culture in the neighborhood that shares pride in the area.

12.5 Lessons Learned

The experiments carried out in Sletten make the past, present, and future connections between individual human behavior, collective identity, small-scale complex systems, and ecological processes become visible. They show how urban forests like Sletten can (re)connect society and nature:

In the depths of cultural memory forests remain the correlate of human transcendence. We call it the loss of nature, or the loss of wildlife habitat, or the loss of biodiversity, but underlying the ecological concern is perhaps a much deeper apprehension about the disappearance of boundaries, without which the human abode loses its grounding. (Harrison 1992; 246)

As the citizens learn from Sletten, our practices and language change and our daily rhythms shift. The nature of aesthetics and ethics shift toward what Leach describes as "open to the texture as much as to the text of everyday life" (Leach 2005; 141).

In line with the achievements in Samsø (Denmark), which through civic engagement and collective force has developed an energy self-sufficient and CO₂-neutral island (Hermansen and Nørretranders 2013), and the work of Elinor Oström (1990), which points to the superiority of collaborative over competitive behavior when exploiting shared resources, Sletten also points to the concept of "commons" as strong arenas for ecologically, culturally, economically, and socially sustainable development. What is achieved in situations like Sletten is what the creators behind the Energy Academy at Samsø call "commonity" - a contraction of "community" and "common." The contraction denotes that a "commonity" is a shared common resource maintained and kept in balance by obeying to collective, communitybased rules governing the resource. Keeping the grasslands at Sletten in balance and thriving demands that every single actor with sheep, cows, goats, or other herbivorous animals does not send more animals than agreed into the fields. Imagine if a single individual stepped out of the commonity, maybe aiming at personal gain in the shape of more meat – the system's robust yet fragile ecological balance will slowly deteriorate, the field will stop being green, and the animals will all starve.

It takes little imagination to transfer the concept of commonity to other domains such as fresh air, clean water, good education, etc. It will take many Sletten and Samsø examples to change our everyday habits. However, Sletten and other similar initiatives help keep such otherwise abstract consequences tangibly alive at our doorstep and remind us of the robust yet fragile system we are all a part of and which no technology can mend without strong human action.

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