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A Landscape of Possibilities: On Landscape Urbanism in Danish (Sub)Urban Development Projects

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*On Landscape Urbanism in Danish (Sub)Urban Development Projects
Methods, Implementation, and Practicability*



The Royal Danish Academy of Fine Arts,
Schools of Architecture, Design and Conservation
Institute of Architecture, Urbanism and Landscape

PhD thesis by Tina Maria Roden

The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation

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Author: Tina Maria Roden

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The Royal Danish Academy of Fine Arts

Schools of Architecture, Design and Conservation

Institute of Architecture, Urbanism and Landscape, Centre for Urban Planning

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This PhD thesis is dedicated to
Villiam and Max

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Preface

This thesis is submitted to The Royal Danish Academy of Fine Arts, School of Architecture, Institute of Architecture, Urbanism and Landscape. The research work was carried out at Centre for Urban Planning under the supervision of Professor Jens Kvorning. First of all, I would like to acknowledge Jens Kvorning for his guidance and enriching comments throughout the development of my research work. Thank you to my colleagues at the Institute of Architecture, Urbanism and Landscape at KADK for providing me with valuable comments and advices at various seminars. My gratitude goes especially to Nina Jensen (Schønherr a/s), Mie Søgaard Rasmussen (Odense Kommune), Stig L. Andersson and Kristoffer Holm Pedersen (SLA), Jens Ulrik Romose (Hillerød Kommune), and Poul Hjere Mathiesen (Svendborg Kommune), without whom this PhD research would not have been possible at all. Also, thank you Pernille for looking after my sons during busy times. Finally, I would like to express my great appreciation to my sister for her positive spirit, optimism, and splendid layout assistance. You made it look good! Last, but by no means least, thank you to Hans Henrik, the father of our two beloved sons, for your invaluable advices, interest, patience, and sleepless nights. Thank you for mentoring me through the struggle. I finally made it!

Brede, 2017

Tina Maria Roden

CHAPTER 1:

Framing the PhD project



1.1 Introduction

The background for conducting this research is a long-standing and still persisting fascination of the city. A fascination of its spaces, buildings, and unending physical, virtual, and organisational networks and infrastructures. A fascination of its inhabitants, services, and countless narratives. To me, the city is a framework for life. As a trained planner and urban designer, I am especially curious about the city's spatial manifestations. How it develops and transforms over time. Admittedly, when I first started at Arkitektskolen Aarhus in the early 2000s, I equated urban planning with pipe-smoking corduroy-dressed men in dusty municipal offices. Besides the grandiose (or scandalous) Ørestad project in Copenhagen, I imagined urban development in Denmark as something that primarily took place in the suburbs as endless repetitions of single-family standard houses. As my architecture studies progressed, I got wiser. During my time of study at Arkitektskolen and TUDelft in the Netherlands, it was as though the city gained a renewed academic and professional attention. In Copenhagen and Aarhus, imported Dutch architects such as Adrian Geuze, Sjoerd Soetters, and Raoul Bunschoten shook things up with their new pragmatic approach^[1] to the transformation of Copenhagen's Frihavn, Sydhavn, and Aarhus harbour front. In the Netherlands, the SuperDutch^[2] practices like those of OMA, MVRDV, Neutelings Riedijk, West 8, and others set the tone with writings, exhibitions, and innovative urban projects. Clearly, the ideas of how to conceive and plan the city were changing. The consensus was that due to the increasing complexity of the urban processes and

1 Thomas Leerberg (2000) describes the Copenhagen/Aarhus harbour redevelopment projects as reflections of a 'new pragmatism'; An approach that accepts that urban planning basically relates to a changeable and unpredictable future. According to Leerberg, the pragmatic method uses 'the diagnosis', 'the strategi', and 'the model' in a way that imitates a possible architectural practice. The diagnosis seeks to describe the existing by operationalising collected site-specific data. The strategy condensates the diagnosis' multiplicity of data into a catalogue of themes. The model is the tool through which the diagnosis and the strategy is communicated. The model is one amongst many opportunities for presenting the strategy; The model does not represent a definitive answer – but merely a suggestion of a possible opportunity.

2 The wave of SuperDutch architects emerged in the Netherlands in the 1990s, spawned from Rem Koolhaas's Office of Metropolitan Architecture (OMA). In the 2000 publication *SuperDutch: New Architecture in the Netherlands*, Bart Lootsma's gives a thorough overview of the discourse and a series of constructed examples.



Figure 1: Collage by author (2013). Illustrations from the Lisbjerg competition (EFFEKT, 2002; Transform, 2002; Force 4, 2002; Hansen, et al., 2002) in Aarhus Kommune Stadsarkitektens Kontor (2003).

the extensiveness of the urban landscapes^[3], one could no longer simply plan the city trusting that it would follow the intended plan. Unpredictable development trends, altered societal needs, and constantly shifting urban functions required new thinking. In the same time, new concerns and themes such as altered environmental prospects, climate deterioration, sustainability, and public involvement came to characterise the debates in the Danish academic planning community. In many ways, the turn of the century was a time of optimism and progress. The national economy boomed, and the urban development took speed. In the early 2000s, particularly the redevelopment of Aarhus harbour but also two large-scale idea competitions, i.e., *Den nye forstad* (2001)^[4] and *Ny Lisbjerg* (2002)^[5], prompted much debate at Arkitektskolen Aarhus' planning department. Especially, the winning and purchased entries in the *Ny Lisbjerg* competition inspired my own way of thinking spatial planning and urban design. Interestingly, the judging panel divided the *Lisbjerg* entries into two groups: 'project-orientated' and 'process-orientated'. Whereas the project-orientated entries represented a more formalistic approach by suggesting specific development patterns and concrete housing structures, the process-orientated entries (including *EFFEKT*'s winning entry) deviated from the order-establishing and building-orientated conception of urban planning by describing a process rather than an actual result. Also, the relatively new-introduced computer-based visualisation techniques, which most of the process-orientated entries made use of, also reflected changing times. As I saw it, the computer-based graphic in itself mirrored the pace and temporariness of contemporary urbanism. The classic drawing techniques and aquarelles were hard to master, slow to produce, and hard to change by sudden impulse. The computer could generate seducing images, diagrams, sections, plan drawings, and glossy collages at

3 The urban landscape covers approx. 10 % of Denmark's total area (Levin and Normander, 2008). In this measure, the urban landscape covers non-farming areas that are clearly affected by human activities, i.e., settlements and built-up areas, roads and railways, and raw material extraction areas (Ejrnæs, et al., 2010).

4 In *Idékonkurrence om den nye forstad* (Hansen, 2001).

5 In *Arkitekten*, No. 5, 2003, pp. 10-16.

an until then unknown speed^[6]. It was cool, it was new, and we liked it. Yet another interesting aspect, introduced by the Ny Lisbjerg competition, was a more landscape and ecologically inspired thinking. For example, one of the entries suggested not to build on Lisbjerg hill. Instead, the entry suggested that the existing (scenic) landscape and green structures should be left alone and the new residential development should be built in relation to the existing fragmented built-up areas that surrounded Aarhus. In more than one way, the Ny Lisbjerg competition became a turning point for my understanding of the urban profession. The Ny Lisbjerg competition indicated that urban planning was so much more than creating pleasant and functional urban spaces and efficient infrastructures. Urban planning was more about creating open-ended strategies and frameworks for an indeterminate future. Instead of actual spatial design, urban planning became performance-based, research-orientated, logistics-focused, and networked^[7].

While the development in the Danish planning practice primarily was expressed via a series of architectural competitions, the academic planning community acknowledged the rising complexity of the urban realm by including a series of international publications that introduced new attitudes towards the city's formation. In Arkitekt-skolen Aarhus, the students became on familiar terms with names such as Koolhaas, Marot, Sieverts, Allen, Corner, Mostafavi, Geuze, Weller, Waldheim, Czerniak, Wall, and several other theorists and urban practitioners, who argued for new ways of conceiving and shaping the contemporary city. Despite their perhaps slightly different outlooks (more of which later in this chapter), their ideas generally reflected a more processual and multi-scalar understanding of the urban realm, which inevi-

6 Professor Nils-Ole Lund upheld the opposition. In his (2003, p. 17) comment to the Ny Lisbjerg competition, he declares that the Lisbjerg competition has been a failure. The distinction between process and project excludes what he considers as the obvious solution: to combine them. Diagrams are not enough; a successful process has to be based upon an actual proposal that can be processed and discussed, Lund argues. Also, in his concluding remarks (as a final resigned sigh), Lund accuses the entries' computer-generated graphic for being insipid and uninspiring.

7 See, the judging committee's comments in *Resultatet af Byplan-idék konkurrence om et nyt byområde i Lisbjerg* (Aarhus Kommune Stadsarkitekens Kontor, 2003).

tably called for a practice that aimed for adaptable and flexible solutions rather than fixed and static structures. In this more dynamic understanding of the city, the notion of landscape became a useful ‘lens’ and ‘model’ for conceiving and describing the conditions of contemporary urbanism. Correspondingly, landscape architecture came to represent the methodical reference frame for how it should be constructed. The idea of landscape as a viable framework for understanding and designing the contemporary city – variously described as landscape urbanism – gave rise to animated academic discussions and homespun urban design experiments, which were based on landscape instead of built structures. In the succeeding years, several MA projects from Arkitektskolen’s planning department, including my own^[8], clearly mirrored this more open-ended, landscape-orientated approach.



Figure 2: (Author, 2017) Collage of selected book covers.

During my time of study, I admittedly spent little time worrying about how (or if) my designs and visions could be satisfactorily implemented into a physical reality – not to say within the framework of Denmark’s spatial planning system. Reality hit hard. After my graduation, I began to work in an urban planning office. Although themes

8 Published in Arkitekten, No. 5, 2007, pp. 46-47.

such as sustainability, biodiversity, and green restructuring were part of the practical-professional discussions at the time, few of my senior colleagues really cared for complex urban processes, open-ended design strategies, or landscape-induced urbanism. Nevertheless, despite my own professional frustrations, a series of landscape-orientated competition entries began to stand out. Apparently, these projects utilised many of the perceptions and methodical suggestions described in contemporary landscape urbanism literature. In these projects, the landscape had seemingly changed status from being ‘background’ to ‘foreground’. Some of these entries even replaced the built structures with landscape as basic urban building component^[9]. In 2010, I got a PhD scholarship at Kunstakademiets Arkitektskole. Determined to study the landscape-orientated approach and its practical implications in relation to the Danish urban planning context, I began to look into Danish projects and practices that apparently applied an ‘inverted optic’ and focused on landscape instead of built structures as primary element in designing and planning the city. At that time, Danish landscape architects were increasingly performing as planners and urban designers. Numerous Danish architectural offices marketed themselves as professional hybrids between landscape and urbanism. The combined landscape-urban practice was clearly gaining ground. Accordingly, I somehow expected that the practical incentives and methods were consistent with the academic planning theorisations related to the discourse surrounding landscape urbanism. All the same, when I first began to dig into the concrete landscape-orientated manifestations and ask questions of the landscape-urban professionals, I found an unsatisfying discrepancy between landscape urbanism’s academic terminologies and methodical concepts versus the understanding and practical approach the landscape-urban professionals seemingly employed. This apparent inconsistency between the academically defined ‘landscape urbanism’

9 In this context, I refer to the winning entries in contemporary Danish architectural competitions for large-scale urban developments such as Ullerødbyen (2002) by SLA (DAL’s konkurrenceseekretariat, ed., 2003, pp. 6-9); Hornshøj Øst (2007) by Kristine Jensens Tegnestue (AA Konkurrencer, ed., 2007, pp. 6-8); Tankefuld (2007) by Nord Arkitekter (Bølling, ed., 2008, pp. 10-11; 21-24); Nordhavn (2008), the three winning entries by COBE; 70°N arkitektur; Studio Irander (AA Konkurrencer, ed., 2008, pp. 30-55).

and the urban professional's practical understanding of landscape-induced urbanism has formed the central basis for the discussions throughout this thesis. This leads me to another little-discussed and yet important aspect of the recent orientation towards landscape in contemporary Danish urban development projects. That is, the 'meeting' between the landscape-orientated project proposal and the concrete spatial planning reality. Knowing that landscape and biotic structures transcend administrative and politically defined demarcations such as municipal boundaries, area delimitations, and zone divisions – and neither confine themselves to spatial planning regulations and statutes – I find that the possible problematics related to the concrete implementation of landscape-urban projects into municipal and local plans need to be clarified and discussed more thoroughly. These preliminary thoughts and considerations have formed the starting point for my research work, the basis for questioning landscape urbanism's methodical aspects and significance to Danish landscape-urban professionals, and not least for discussing the practicability of landscape urbanism in relation to Denmark's spatial planning system and planning-administrative apparatus. Against this background, the overall objective of this PhD research is to look into the practical articulation of landscape urbanism in Denmark. Accordingly, the main research questions are as follows:

- *How does landscape urbanism manifest in contemporary Danish urban development projects?*
- *To what extent has landscape urbanism, as a theoretically defined discourse, been accepted among Danish landscape-urban practitioners?*
- *Can landscape-induced planning and design strategies be successfully implemented in relation to Danish planning legislation and custom?*

This PhD thesis is structured in five chapters. In chapter one, I outline the background and intentions of the research project; Chapter one clarifies the PhD thesis' theoretical basis, and it identifies the objectives, develops on the research questions,

and frames the research design. In chapter two, I introduce and discuss the current discourse surrounding landscape urbanism with a specific focus on landscape urbanism's methodical aspects and practical aspirations; Chapter two forms the research project's theoretical setting, and it functions as a landscape urbanist reference frame throughout the PhD thesis. The third chapter focuses on the research project's empirical study; In this chapter, I present the practical setup for the empirical inquiries; the associated qualitative methods; the selected empirical material (i.e., Bellinge Fælled, Ullerødbyen, Tankefuld); and the delimitations and limitations associated with the empirical study. In chapter four, I prepare and discuss the data obtained from the empirical inquiries; Each of the three cases is discussed separately and in relation to each other. Finally, in chapter five, I elaborate on the empirical findings and discuss my conclusions in relation to landscape urbanism theory and in relation to the PhD thesis' main research questions.

1.2 Urban metamorphoses and new agendas

One of this PhD thesis' overall themes is the understanding that the contemporary city^[10] is in a state of transformation. During the last 50 years, dramatic changes have occurred in Danish and European urban areas. The globalisation process and factors such as extended mobility, improvements in means of communication, altered urban hierarchies, and changes in business and industrial structures have widened the possibilities for human settlement and localisation. Normally, an urban area was identified by its historical central city. Today, this understanding is changing. As described by Andersen and Andersen (2004), the built environments are no longer simply a city in its traditional sense; they are increasingly larger urban conurbations, which are made of development clusters and linked by continuous networks and transportation routes.

10 According to Encyclopædia Britannica, a city is a relatively permanent and highly organized centre of population; The concept of city refers to a particular type of community, the urban community, and its culture, known as 'urbanism' (Lampard, 2007). Edmund D. Bacon (1967, p. 13) writes in his iconic *Design of Cities*: "*The building of cities is one of man's greatest achievements. The form of his city always has been and always will be a pitiless indicator of the state of his civilization*".

As a result, the inhabitants must accustom themselves to a more dynamic life than before. People move around, live in one place, eat in another, and look for entertainment and recreation in the entirety of the urban conurbation. Business and production partners are spread all over the world, and employees settle outside the urban centres. Even though the historical city still exists as an urban typology, the attractiveness of the city, as a concentration of economic activity and human settlement, is in state of transformation. To a wide extent, the city has to offer something else in order to survive and to attract taxpayers and businesses. Here, the attractiveness of the city is no longer only subject to traditional urban facilities, e.g., jobs, manpower, infrastructures, and services. The experience of urban life, e.g., cultural activities, sport, recreation, and shopping is increasingly important. Cities must provide suitable frameworks for settlement and business by offering meaningful environments and experiences for both people and companies.

Re-framing urban design

French sociologist and economist François Ascher describes the post-modern, post-industrial urban development as ‘a third modern urban revolution’ (2004, p. 24). According to Ascher, the expansion of a city to include its surrounding areas with the formation of new types of urban space in very large multi-centred conurbations also calls for a more ‘reflexive’ urbanism in order to create efficient and attractive urban environments within the new urban dynamics. Previously, modern urbanism has outlined the long-term urban project broadly in order to ensure its capability to include and integrate future realities within a predetermined framework. In this understanding, Ascher (2002, p. 33) argues, the plan is merely a remedy to reduce the uncertainty. Nevertheless, as the urban complexity increases, the premises for designing the urban environments must accordingly change. Here, Ascher introduces the idea of a ‘meta-urbanism’, which basically seeks to meet the uncertainty of contemporary urbanism by a strategic management that considers the events and occurrences when they occur. The strategic management is not a procedure to reduce uncertainty, but to ‘live with’ the uncertainty (Ibid.). By avoiding simplification of complicated realities, meta-urbanism embraces the complex to obtain efficiency and durability through var-

iation, flexibility, and reactivity. As such, the meta-urbanist project rejects conventional (modernist) master plans in favour of coherent territorial development plans; It equalises the analysis and the project itself, and it opens up for new forms and aesthetic choices by considering the complex urban processes and by continuously revising and adjusting its means and purposes (Ascher, 2002, pp. 33-36; 2004, p. 25). In line with Ascher, architectural thinker Rem Koolhaas also points to a more open-ended approach in order to meet the current urban realities. In his S,M,L,XL (Sigler, ed., 1995) article *What Ever Happened to Urbanism*, Koolhaas states that if there is to be a new urbanism;

[...] it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form (Koolhaas, 1995, p. 969).

According to Koolhaas, urbanism in a redefined version will not only be a profession, but a way of thinking that accepts what exists.

This, so to speak, ‘acceptance’ discourse is continued in German architect Thomas Sieverts’ *Cities without cities: an interpretation of the Zwischenstadt*. Here, Sieverts (2003, p. xii-xiii) calls for acceptance of the new dispersed urban form. According to Sieverts, the changes in urban processes and the fact that the contrast between city and nature has dissolved lead to a profound transformation of the city as we know it, but it also opens up for entirely new design perspectives. In order to spatially deal with this city-country continuum, urbanised landscape, or simply the ‘Zwischenstadt’, Sieverts (Ibid., p. 121-122) argues that we need a new planning culture. Here, the

landscape should become the actual connecting element^[11], and the open space of landscape will become the actual creative field^[12].

The [...] tradition of urban design [...] must be united with the tradition of garden and landscape architecture [...], and both traditions must be combined with the traditions of forestry and agriculture, which have always been orientated towards 'sustainability' and long-term thinking and acting (Sieverts, 2003, p. 121).

Summing up, I find that Ascher, Koolhaas, and Sieverts all, albeit in various wrappings, direct attention to the necessity of a 'new' or, at least, modified urban practice; a practice that embraces the urban complexity, rejects the fixed form, and emphasises flexibility and adaptability. Whereas Ascher's meta-urbanism primarily focuses on urban governance, coordination between public and private actors, and procedures for composing and negotiating solutions (2002, p. 35-36), Koolhaas and Sieverts point more directly to the role of the urban practitioners. In Koolhaas' (1998, p. 969-971) optic, urbanism becomes more of an 'imaginative' project that can help us accept the existing and redefine our relationship with the city. Here, Koolhaas (Ibid.) enhances "*the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions*". Here, it is, so to speak, the urbanists' role to nurture and stake out the ground to accommodate unknown future changes and interconnections. In the Zwischenstadt-thinking, Sieverts similarly points to a shift in the way we look at the urban practice; a shift from 'an impossible order to a possible dis-

11 Sieverts (2003) describes how landscape becomes the actual 'glue' of the dispersed city. The open spaces of landscape come to replace the idea of the built as central element in urban planning and design.

12 Odgaard (2014), presents some interesting reflections on Sieverts' Zwischenstadt versus landscape urbanism. According to Odgaard, Zwischenstadt (as a domain) and landscape urbanism (as an approach) complement each other. Whereas landscape urbanism's main focus is on performative and processual urban landscapes, Zwischenstadt has its main focus on human settlements and these relations to overlapping landscape and urban themes (pp. 86-87).

order' (Sieverts, 2011). As I see it, this expression reflects the same acceptance of the uncontrollable urban processes as well as new urban-architectural focus on processes, 'in-between'^[13] spaces, and connections between overlapping spatial qualities.

Landscaping the city

As indicated above, the re-thinking of the city as stable terrain towards a more open-ended and dynamic conceptualisation does not only affect our understanding of the city as a physical constellation, it also calls for a revision of the very methods and procedures, we use to plan and design the city.

The fail to fulfil stipulated expectations problematises with great precision the epistemic methods, which the architectural profession has used so far in the planning of the city. Methods that take it as a read that the city is a stabile terrain with permanent functions and a predictable progressing development. Legitimately, one could ask if these methods are still capable of solving the city's complex problems. If not so, the 'urban crisis' is more far-reaching than simply a crisis in the city as a constellation of physical objects and mental spaces - then the crisis is also to be found in the very methods that the architects use to plan the city (Leerberg, 2000).^[14]

Overviewing the development within the urban practices, it appears that the understanding of landscape and its role in urban development and transformation is evolving. Correspondingly, the way that the urban practitioners understand and treat the

13 Dutch architect Marcel Smets points to the 'in-between' spaces as a potential cohesive force in the spatially illogical and unmanageable urban environments; "Because of the isolation within the programmatic and typological requirements of the individual building, the space "in between" the pockets of development becomes all the more relevant as the site for a potential strategy to build coherence" (2002, pp. 88-89).

14 Translated from Danish by author.

relationship built and unbuilt, city and country^[15] is also changing. Here, Charles Waldheim (2006b, p.15) claims, “*landscape has become a lens through which the contemporary city is represented and a medium through which it is constructed*”. As indicated by Waldheim’s phrasing, the notion ‘landscape’ is used in a widened understanding. In Waldheim’s phrasing, landscape appears as both a ‘metaphor’ and ‘artefact’ (cf., Bach and Clemmensen, 2005b). As if this is not enough, I find that the word landscape continues to be used in various meanings throughout the current urban-architectural discourse.

Landscape is in the Air! Landscape is everywhere! The word “landscape” has so much zipped into the recent architectural discourse, that it is even more used than Americans use the word “fuck” (Maas, Rijs, and Koek, 2006, p. 96).

As indicated by Maas above, the use of the word landscape has become so extensive that the exact meaning and use have become somewhat difficult to frame exactly. Down through the ages, landscape has been subject to various interpretations and understandings (see, Corner, 1999c). Even though the word is simple enough, everyone seems to have a different understanding (Jackson, 1997 cited in Bach and Clemmensen, 2005b). Seen in relation to the urban-architectural interests of this PhD thesis, a more comprehensive review of the origin and meaning of landscape, which would include a variety of fields and disciplines from philosophy and the humanities to social and natural science, is simply beyond my field of knowledge and research focus^[16]. However, as my own research work concerns landscape urbanism and the

15 Country and city as contrary terms are highly valorised. To a wide extent, the city is regarded as a world of tumult and chaos in opposition to the country’s repose and refreshment. However, the two opposites are sometimes reversed so that the country represents the place of stagnation and underdevelopment in opposition to the modernity and progressiveness of the city (Stefánsson, 2009).

16 See, *Recovering Landscape: Essays in Contemporary Landscape Architecture* (Corner, ed., 1999a) for a more thorough review of the landscape in landscape urbanism.

Danish combined landscape-urban practice, at least this PhD thesis' use and understanding of the word landscape obviously needs to be staked out. Seen in relation to landscape urbanism, which I discuss more thoroughly in chapter 2, *landscape* is used to understand the relationship between natural environments and the urbanisation processes. Here, landscape urbanism describes a 'disciplinary realignment' in which landscape replaces architecture's (or simply the built) historical role as the basic building block of city making (Waldheim, 2002, p. 10). In this outlining, the landscape is introduced as an organising principle capable of reorganising the traditional urban categories (cf., Sieverts' *Zwischenstadt*). From being 'background' for the built, the landscape becomes the 'foreground' or primary order. In this understanding, landscape urbanism implicitly criticises traditional landscape practice's seemingly uncritical reproduction of stereotypical 'aestheticised' images (e.g., Corner, 1999c; 2003; Waldheim, 2002). Instead, Corner (1999c, p. 159) suggests to consider the landscape as a strategic 'instrument' that can lead the way away from "*ameliorative and scenographic designs toward more productive, engendering strategies*". Here, it is more about how things work, what they do, and how they interact;

A return to complex and instrumental landscape issues involves more organizational and strategic skills than those of formal composition per se, more programmatic and metrical practices than solely representational (Corner, 1999c, p. 160).

Whilst the origin of the word landscape can be found in the Dutch (*landschaft*) and Middle English (*landskip*) terms, which basically denote an identifiable tract of land influenced by human activities (even if it is simply the act of viewing) (Corner, 1999c). As such, landscape literally describes the state of altered land as distinct from virgin land before human influence; landscape is a construct, a phenomenon of nature and a product of culture (Spirn, 1996). As geographer Dennis Cosgrove points out, "*landscape is not merely the world we see, it is a construction, a composition of that world*" (1984, p. 13). In Corner's (1999c) aim to abandon the 'scenic' landscape and to allow the term to be used more freely, both Corner and architectural theorist San-

ford Kwinter each proposes terms that might accommodate a ‘recovered’ landscape more precisely. These are, German ‘landschaft’ (Corner, 1999c, p. 154) and ‘territory’ (Kwinter, 2002, p. 6). According to Corner, “*landscape comprises a deep and intimate mode of relationship not only among buildings and fields but also among patterns of occupation, activity and space*”. This definition makes an immediate acknowledgment of human impact on land and implies (in order to understand landscape urbanism) a crucial shift from object to active field. Also, Kwinter’s concern is processes that work on land. According to Kwinter (2002, p. 6):

‘Territory’ exceeds ‘landscape’ in both expanse and depth; it is wider because what it denotes extends far beyond the reach of the eye, and because it is organized by a multiplicity of forces without obvious formal unity (Kwinter, 2002, p. 6)

Both Corner’s and Kwinter’s alternate words hold organisation as key to their definitions. To favour changeability over fixed image or scenography is characteristic of both landscape and territory. This ‘new’ conceptualisation of landscape suggests a more operational mode of landscape urbanism than the original landscape definition; a more action-oriented urban practice that accommodates landscape’s inherent instrumentality. In this optic, it is not surprising that landscape architects are entering the urban scene. Their ability to incorporate changeability and uncertainty in their works that must be said to be a natural part of landscape architect’s core competences. As Dutch landscape architect Adriaan Geuze (West 8) also formulates it:

[Landscape architects] know that their designs are continually adapted and transformed. We have learned to see landscape not as a ‘fait accompli’, but as the result of countless forces and initiatives (Geuze in Lootsma, 1999, p. 260).

Rooted in the discussions above, this PhD thesis deploys the word landscape in three ways: 1. Landscape as a ‘metaphor’ for describing and verbalising the state of con-

temporary urbanism (the urban processes function as a landscape); 2. Landscape as ‘artefact’ (an accumulated totality shaped by local culture and nature)^[17]; 3. Landscape as ‘instrument’ (landscape’s ability to re-engage issues of site and ecological succession in the formative role of urban projects)^[18].

Suburbia, the largest city in Denmark

From these overall considerations on urban mutations and landscape as model and mediator of contemporary urbanism, I will return to Denmark and the urban situation from a homelier perspective. As this PhD thesis aims at discussing landscape urbanism’s relevance and influence on the Danish urban practices, the following sections give a brief overview of the urban context in which the landscape-urban approach primarily unfolds in Denmark. As indicated already in the introduction, the Danish suburb has been a focal point throughout my academic activities. Here, the ‘inferior’ city has come to represent both a fascination and a thorn in the flesh. Because, what is it? Is it an urbanised landscape or a landscaped city?

I call this Zwischenstadt, meaning the type of built-up area that is between the old historical city centres and the open countryside, between the place as living space and the non-places of movement, between small local economic cycles and the dependency on the world market (Sieverts, 2003, p. xi)

Obviously, the suburb is highly dependent on the central city’s facilities, and it only exists as part of an adjacent city - or as a separate community within commuting distance of the city (ODS, 1923). In this optic, the suburb comes to represent both the extension of the city as well as its anti-thesis (Sverrild, 1992). Whereas the suburb’s obvious ‘unruliness’ troubles the urban profession and challenges, as described in

17 See also, Braae, 2013.

18 See, Reed, 2006

previous sections, the traditional idea of an order based upon the built, the suburb simply seems to follow its own rules (see also, Sieverts, 2011).

As a product of the industrialisation and the emergence of the modern city, the Danish suburbs were constructed in about 150 years creating an entirely new urban form outside the city walls. In the pre-industrial city, employees were members of the household. Along with the industrialisation in Denmark (c. 1850), the duality ‘home and work’ began to separate, and new social classes and groups emerged^[19]. This development and a general increase in population and city-dwellers, called for a re-organisation and extension of the Danish cities. The result was new strongly segregated and class-specified ‘suburban’ areas^[20] (Dragsbo, 2008; Sverrild, 1992). Ever since, the suburban areas have expanded and the suburban milieus have developed; From the working class building societies (c. 1800s), the garden cities (c. 1910s), the social housing projects (c. 1930-40s), to the industrialised blocks of the 1970s - along with the increasing construction of single-family house with a private garden (c. 1950s) in the urban fringe (Jensen and Partoft, ed., 2010). Despite of its distribution, the definition of ‘suburb’ as a concept has remained a bit ambiguous. Previously, the suburb was defined administratively as an urban extension to the city outside its juridical area - or simply an urban development outside the town wall or fortification. Nevertheless, the old suburbs of working class quarters and areas of upper middle-class blocks have been annexed by the city during the last couple centuries. Today, these areas are widely accepted as part of the central city displacing the suburb even further out. As a result, the contemporary understanding of suburb widely covers residential (or mixed-use developments) outside the central part of the city or separate developments in the outskirts of the central city (ODS, 1923; Dragsbo, 2008). Particularly, the extensive post-war developments, which primarily consist

19 The working class, the bourgeoisie, and the still growing middle-class of public employees and office workers (from c. 1900).

20 Working-class houses, the bourgeoisie villas, and the bourgeoisie blocks of flats.

of detached single-family houses (with a private garden) that encircle most Danish cities, have become synonymous with the term.



Figure 3: (Photo by Author, 2017) Danish suburban development in Bredballe, Vejle Ø.

Spatially, the post-war Danish suburbs are characterised by a more open and segregated structure than the one of the central city. Typically, the suburb display a clear segregation between urban functions (e.g., housing, business, shopping, and recreation) and division between different housing types (e.g., enclaves of detached single-family houses, row houses, and large areas of apartment blocks). Also, most suburbs feature a highly-developed car-based infrastructural network. In many ways, the Danish suburb is a historical framework as well as a typological framework. The suburban expansion has changed, not only, the Danish landscape, but it has also created new urban structures and shaped our way of living.

In the shadow of the city, the suburb created new forms, frameworks, functions, and living conditions. The suburb was a success; it handled the challenges it was designed for but in the same time, it created a physical and social geography, which is problematized by the posterity (Sverrild, n.d.b)^[21].

Until the 1980s, the suburb was the primary stage for the physical development in Denmark (Sverrild, 2014b) and like no other place, the suburb constituted the scene for various housing policies and ideals; From housing policy as a socio-political instrument to the visions for the future Denmark. “*Here, the speculator, the social reformer, the urban planner, the politician, and the individual resident have left their respective marks*” , Sverrild (2008)^[22] says. However, in the wake of the paradigm shifts of the late 1960s and the following financial crises, the suburb slowly became the image of a degenerating welfare society. After the crises, the societal dynamic was primarily relocated to the city centres, and the suburb was left behind as a confused urban framework, equally loved and scorn (Sverrild, n.d.b). Nonetheless, whereas the suburb was no longer ‘en vogue’ amongst the professional elite, it remained attractive to those who lived there.

For many Danes, the post-war suburb located in the fringe of the old cities is still associated with the good life. From the 1950s until now, more than 700.000 single-family houses have been constructed in Denmark, which make a total of more than one million detached single-family houses in Denmark (Danmarks Statistik, 2015a; 2015b). Accordingly, the post-war suburban areas make up more than half of the existing building stock in Denmark and area-wise, they occupy the majority of the Danish urban areas (Jensen and Partoft, eds., 2010; Kvorning et al., 2012). Today, more than half of the Danish population live, work, and move about in the suburbs on a daily basis (Miljøministeriet, 2012). Interestingly, the suburban areas have experi-

21 Translated from Danish by author.

22 Translated from Danish by author.

enced a constant demand for new homes. According to Realdania (2012), more than 65% of the Danes would prefer to live in a freestanding, single-family house with a private garden.

Qualifying the suburb

The Danish suburban areas were constructed in a time where consumption increased, segregation between housing and business was highly favoured, and private car transport escalated. The result is widely extended urban areas that are characterized by a strong segregation between functions, low density, and car-dependent mobility. Today, the increased focus on environmental, societal, and financial imbalances have caused a reordering of priorities, and the post-war suburban areas have come to represent an excessive consumption of energy; its social and functional segregation has proven inefficient, and the suburban areas are widely associated with environmental degradation (Kvorning et al., 2012, pp. 10-19). As such, the suburb represents an obvious contradiction to the current political environmentalism and societal ambition for sustainable development^[23], which are dominated by themes, in Denmark at least, such as ecology, carbon-neutrality, livability, and health (Sverrild, 2014a).

In the spring of 2011, Naturstyrelsen (Danish Nature Agency) and Realdania appointed an independent ‘think-tank’ (forstædernes tænketank) in order to verbalize the problems and potentials of the both loved and criticised Danish post-war suburbs^[24]. By changing the focus from the city centres to the suburban areas, the think-tank was to investigate and discuss the possibilities for developing sustainable suburbs in relation to the altered environmental and climatic prospects (Kvorning, et al., 2012). The result of the think-tank’s work was presented in 2012 as a series of recommendations regarding environmental, social, and economic sustainability.

23 The latest *Landsplanredegørelse* (National Planning Report) (Miljøministeriet, 2013) focuses on ‘green conversion’ (grøn omstilling).

24 The results of the investigation and the think-tank’s recommendations were published in 2012 in *Bæredygtige Forstæder: Udredning og Anbefalinger* (Kvorning, et al., 2012).



Figure 4: The eleven recommendations from the suburbs' think-tank (Kvorning et al., 2012, p. 118) (Translated from Danish by author).

The think-tank's recommendations discuss both the public and political coordination of initiatives as well as possible actions directed towards social interventions and transformation of physical and spatial structures. According to the think-tank's recommendations (Kvorning et al., 2012, pp. 111-115), the green structures and public open spaces come to play an important role in achieving some of the described sustainability objectives. In this setting, the potentials of green open spaces seem numerous; On the one hand, they offer a wide range of possibilities for leisure activities and aesthetic experiences; while on the other hand, they can be utilized in relation to water resources, rainwater drainage, storm water storage, wildlife corridors, etc. As such, the large and small green areas in suburban developments represent both a recreational value as well as a functional value. Further, as the green areas represent

one of the primary attractions in the suburbs, the relevance of utilising their potentials as ecosystem services seem obvious (cf., Braae, 2013)^[25]. In this context, one of the main challenges is to ensure public access to the green areas while, in the same time, developing the green areas' ability to support biodiversity, protect water resources, and ensure the connection within the natural systems. Ironically, even though Realdania's campaign and the think-tank's report focus primarily on renewal and transformation of the existing suburban developments it is, however, still the demand for detached single-family homes especially in relation to the urban growth centres that challenges the municipal regulation of the local housing markets (see also, chapter 3). Here, the desire to live in relation to nature and green surroundings combined with good job supply is still the main reason for settling in the suburbs, and the reason why the demand for new single-family houses in the suburbs is persistent (Vestergaard, n.d.).

Sustainability

When discussing Danish urban development and transformation in the 00s and 10s, it is crucial to discuss, at least, one buzzword that flourishes among urban professionals, i.e., sustainability. Everything is, as I see it, currently related to sustainability: the sustainable city, sustainable neighbourhood, social sustainability, sustainable land management, sustainable climate adaptation, sustainable mobility, and so on.

25 Braae's (2013) use of 'ecosystem service' remains unfolded in the mentioned article. I therefore refer to TEEB's (The Economics of Ecosystems and Biodiversity) definition, which is summarised and used by BISE (n.d.) (The Biodiversity Information System for Europe): "*Ecosystem services are the direct and indirect contributions of ecosystems to human well-being [...]. They support directly or indirectly our survival and quality of life. [...] Ecosystem services can be categorized in four main types: Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fiber, genetic resources and medicines. Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control. Habitat services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools. Cultural services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values*". In this thesis, the term 'ecosystem service' primarily refers to regulating and cultural services. Here, I focus on the designer's use of ecosystem services as spatial parameters in the forming and organisation of urban projects.

In *Landsplanredegørelse 2013*, which contains poor seventy-four pages, including cover and back, refers to ‘sustainable’ something about fifty times. In many ways, sustainable has become the predominant adjective when it comes to describing goals and visions associated with the existing and future city. Sustainability is, however, not a homogeneous concept. We all have a slight idea of its meaning (probably groundless), but it seems that there is a general consensus of sustainability as somewhat positive. Nevertheless, in my view, the exact definition remains vague or at least unreflective in the Danish debate; In more cynical terms, the term sustainability seems to be easily re-designed for the specific purpose at any given time and context. Here, I particularly refer to promoting certain services and initiatives as more ‘green’ or environmentally sound than others (Samuelsen, 2013).

A key publication in defining the modern concept of sustainability is the UN report *Our Common Future: Report of the World Commission on Environment and Development* (also known as The Brundtland Report) from 1987, which addresses the 1980s’ growing concern about the consequences of accelerating deterioration of human environment and natural resources. UNWCD’s report and the idea of sustainable development called attention to the disturbing relation between human society and natural environments by focusing on institutional, economical, and social aspects (UNWCD, 1987).

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental re-sources and by the ability of the biosphere to absorb the effects of human activities (UNWCD, 1987, pg. 27).

In UNWCD’s report, sustainability is closely connected to the idea of continuous economic growth, which seems conflicting already in its formulation. On a global

scale, one might claim that the expansion of industrial civilisation can no longer continue as environmental and ecological problems mount, and the idea of constant economic growth collides with non-negotiable natural limits (Heinberg and TPCI, 2011). Nevertheless, this contradictory constellation of ‘sustainable’ and ‘development’ is, according to Hill (2000), an intentional oxymoron made by UNWCD and Gro Harlem Brundtland. By putting together two apparently opposite terms, man-made versus natural, UNWCD challenged the preconception of the 1980s and created a conceptual dissonance in order to bring polarised groups together in formulating new visions - just as Ebenezer Howard did when he challenged the 1900s’ preconception with his ‘Garden City’ and Charles Waldheim and his kindred spirits when coining ‘Landscape Urbanism’ in the mid-1990s. Despite of the good intentions, UNWCD’s idea of sustainability has, ever since, been a controversial concept, and it is often criticized for being ambiguous, anthropocentric, or even so abstract that no one can really disagree about it. In praxis, sustainable development has to be considered in relation to local context and socio-political factors; as such, it seems more relevant to understand sustainability as a normative concept to organise complex political discussions towards a more coherent understanding between human and natural surroundings (Agger, 2008).

Undoubtedly, the idea of sustainability increasingly influences today’s urban designers; Here, the programme is in centre of attention and parameters such as carbon neutrality, local rainwater drainage, zero energy, climate adaptation, etc. characterise the urban discussions. In many ways, sustainability has become a goal in itself. According to Stephen Wheeler (2000, p. 490), *“to be absolutely self-sustaining, an urban region would need to wall itself off from the rest of the world and produce all food, energy, and materials locally. Such an autarkic model is generally infeasible and would be seen as undesirable by most residents”*. Instead, he argues, it is more useful to speak of cities as moving towards sustainability by developing and improving the long-term health of the city’s social and ecological systems; Here, main directions for urban sustainability can be seen to include: compact efficient land use; less automobile use (yet better access); efficient resource use, less pollution and waste;

restoration of natural systems; good housing and living environments; a healthy social ecology; a sustainable economy; community participation and involvement; and finally, preservation of local culture and wisdom (Ibid., pp. 490-94). Brought together in the conceptualisation of sustainability, Wheeler's wide array of actions may, not only, suggest a framework for sustainable development, it also indicates that sustainability, fundamentally, is about acquiring basic knowledge and acceptance of local human and natural resources and limitations in order to consider long-term perspectives and maintain a systemic outlook while adapting to a local reality and situation. In my opinion, Wheeler's idea of cities as 'moving towards sustainability' offers a more, realistic approach to working with sustainability. In acknowledging that the self-sustaining city is utopic, we are forced to maintain a forward-looking dialogue in order to innovate and develop new models and yet more sound solutions. Hence, it is also meaningless to speak of more or less sustainable^[26] solutions. It is all about the process.

1.3 Research design

As outlined in this chapter's introduction, this PhD thesis focuses on the current orientation towards landscape as vector for design seen in contemporary Danish suburban development projects. The investigations address the theoretically defined discourse, variously described as landscape urbanism, that argues for replacing architectural form with landscape as the primary medium of city-making; more of which in chapter 2. In recent years, landscape urbanism has attracted much attention within Danish academic planning community. In the same time, Danish landscape architects have increasingly gained ground in designing urban projects. Green open spaces and ecological features have to a great extent come to play a prominent role in contemporary Danish development projects (cf., Braae, 2013). However, whereas landscape urbanism, as a theoretically defined discourse, arguably has made its entry into the

26 See also, Samuelsen (2013) *Fri os fra mere bæredygtighed*.

academic discussions, the extent of its influence on Danish urban practice remains relatively undiscussed. From this, it is my intention to study landscape urbanism's practical articulation in Denmark, and its relevance to the Danish urban professionals. In order to clarify the objective of the research work, the main research questions (cf., chapter 1.1) are supplemented by a series of assertions and related guiding research questions.

- *Q 1: How does landscape urbanism manifest in contemporary Danish urban development projects?*

Whereas landscape seemingly has become subject to considerable attention in contemporary Danish urban development projects, its legitimacy and efficiency in Danish urban projects remains relatively little discussed; *This PhD thesis questions whether landscape urbanism, as a concrete practice, is applicable to all types of sites and situations and by which means?*

- *Q 2: To what extent has landscape urbanism, as a theoretically defined discourse, been accepted among Danish landscape-urban practitioners?*

Although landscape urbanism theory argues for using the landscape as a unifying backdrop for determining the spatial character of urban development, it does apparently not pay much attention to practicalities such as concrete design methods or implementation procedures; *This PhD thesis questions whether landscape urbanism primarily thrives and develops within the academic milieus?*

Even before the introduction of landscape urbanism, several Danish development projects have arguably introduced landscape and green structures as primary spatially structuralising elements; *This PhD thesis questions whether the understanding of landscape's ability to structure and address the uncertainties of contemporary urbanism has been at the centre of Danish urban practice and tradition for so long that it precedes landscape urbanism?*

- *Q 3: Can landscape-induced planning and design strategies be successfully implemented in relation to Danish planning legislation and custom?*

Moving from formalist models of ordering the city towards more open-ended landscape-based strategic models, landscape urbanism necessarily exceeds local administrative demarcations and legislative planning regulations; *Due to the restrictions of Danish spatial planning legislations (e.g., nature protection regulations, the zone division, administrative limitations, etc.), this PhD thesis questions whether landscape urbanism can be fully unfolded in Denmark?*

Theory and empirical inquiries

In order to answer the research questions, the PhD thesis is unfolded as a close interaction between a focused literature review and an empirical study of relevant practical examples. By balancing the research project between, on the one hand, an investigation of landscape urbanism as an academic-theoretical phenomenon, which provides the framework for verbalising and discussing the complexity of contemporary urbanism, and, on the other hand, analysing concrete urban projects and their respective makings, it becomes possible to discuss landscape urbanism's relevance to Danish urban professionals, and evaluate its practicability in relation to the Danish planning system and tradition.

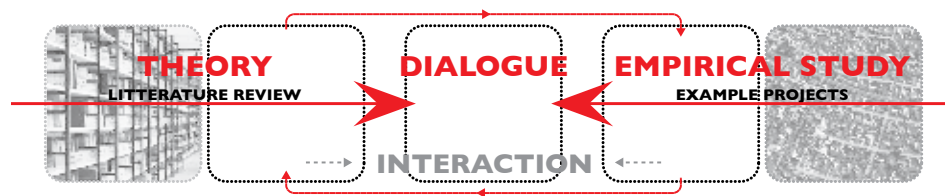


Figure 5: (Author, 2012) Diagram of research design.

In order to establish a solid theoretical basis, the PhD thesis's chapter 2 introduces landscape urbanism's key positions with a distinct focus on its methodical-practical aspects. This theoretical basis serves as a reference frame throughout the entire the-

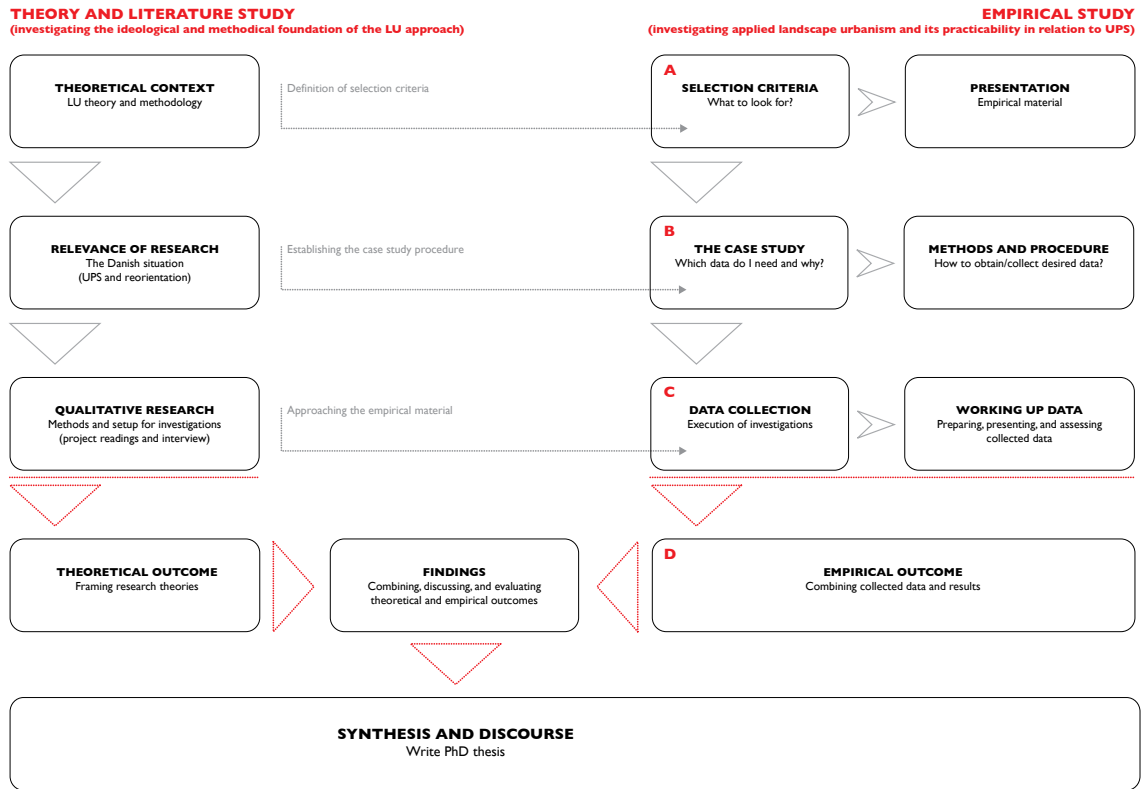


Figure 6: (Author; 2012). The project key illustrates the research project's investigations. First part focuses on framing landscape urbanism's theoretical and methodical basis. Second part focuses on applied landscape urbanism and its practicability in relation to the Danish planning system. The project key reflects the structure of the PhD thesis and illustrates the construction and interrelations between the theoretical and the empirical study.

sis. Following, the empirical study investigates the practical articulation of landscape urbanism in Denmark. Here, it is the intention to: (1) scrutinise selected representative Danish cases in order to expose their landscape urbanist potentials and methodical agents (project analyses); (2) explore the respective designers' practical aspirations and incentives for applying landscape and natural processes as vectors for design (interviews); (3) explore the plan-implementation process at municipal level (survey of municipal and local plans and interviews with key persons) in order to discuss if landscape urbanism is practicable within the framework of the Danish spatial planning system. Finally, if a project is carried out, the build result (manifestation) will be evaluated considering the spatial outcome and the efficiency of the landscape urbanist design strategy. The setup and methods for the empirical study are outlined in chapter 3.

Discourse and synthesis

The study of literary sources combined with the study of concrete practical examples constitutes the basis for elaborating on the research objective and research questions towards an argued theory. The closing chapter (chapter 5) of the PhD thesis focuses on analysing the collected data and empirical findings in order to discuss the potentials and problematics related to the practical articulation of landscape urbanism in Denmark. In the wake of the primarily theorised discussions associated with landscape urbanism, I use this PhD thesis' final chapter to take the discussions down to earth. Here, I seek to contribute to a clearer framework for understanding the practical and implementation challenges of applying landscape as primary vector for design in urban projects in Denmark.

CHAPTER 2:

Theoretical framework

2.1 Landscape urbanism

In this chapter, I intend to outline and discuss the idea of ‘landscape as urbanism’ as both a conceptual framework for understanding the contemporary city and as a way to innovate at the level of urban design practice. First part of the chapter introduces the discourse’s primary theorists and literary sources and traces the background for putting together the obvious opposing terms of landscape and urbanism into ‘landscape urbanism’. In the second part of the chapter, landscape urbanism’s methodical aspects, as defined by its key literature, are outlined. Finally, I introduce a series of constructed key designs in order to discuss landscape urbanism as a professional framework and beginning spatial-material practice. At the end of the chapter, some of the controversies and critical voices, which surround the current landscape urbanism discourse, will be outlined^[27].

Pocket history and key literature

As I first began to write the chapter on landscape urbanism, I had to dig into an enormous quantity of writings. Books, scientific and non-scientific papers and articles, Internet blogs and fora, webpages, conference materials, newspaper articles; Everyone seems to have an opinion about the conception. Further, when going deeper into landscape urbanism’s theory and arguments, it proves to be a minefield of positions with internal conflicts and agreements, controversy, enthusiastic followers, and utterly dedicated critics. Unreflectively, one could simply label landscape urbanism as a theory of urban design that replaces architectural form with landscape as the primary medium of city making. However, as one delves into landscape urbanism, it appears to be much more complex. Whereas landscape in urban development pro-

27 Whereas this PhD thesis is dedicated to investigate landscape urbanism’s more methodical-practical rationales in relation to contemporary tendencies seen in actual Danish urban development projects, I will encourage the interested reader to retrieve: *From emergence to divergence: modes of landscape urbanism*, master’s thesis (Edinburgh College of Art) by Christopher D. Gray (2006) and *Landscape Urbanism from a methodological perspective and a conceptual framework*, master’s thesis (Swedish University of Agricultural Sciences) by Hanna Assargård (2011) for a more general and theoretically angled overview of landscape urbanism’s key literary sources, theoretical position, and numerous related academic writings

jects has become subject to considerable attention (in particular in relation to brown-field transformation and suburban development projects; more of which later), and landscape has changed status from being background to foreground as implied in previous chapter, the discourse surrounding landscape urbanism remains its academic and enigmatic allure. Despite impressive amounts of publications and debates, nobody quite knows what landscape urbanism involves in practice? This intriguing incoherent character of landscape urbanism makes it difficult to frame exactly and, as this chapter will demonstrate, allows for several perspectives and interpretations.

Landscape urbanism is a relatively new theory that took more solid form from the mid-1990s. From its lineage of proponents and key literature, it is apparent that landscape urbanism, primarily, is an initiative born in North American academic milieus. Generally, it is described as a discourse or nexus of ideas that came together at a conference at the Graham Foundation in Chicago in 1997. Whereas the term ‘landscape urbanism’ is usually directed to Charles Waldheim, who coined the term in 1996 to describe the emergence of landscape as the most relevant medium for the production and representation of contemporary urbanism (Waldheim and Santos-Munné, 2001, p. 110), Waldheim (2002, p. 12) himself claims that James Corner was the first to formulate the notion ‘landscape as urbanism’ in a series of conferences in the mid-1990s, which dealt with ‘constructing landscape’ and ‘recovering landscape’ (Gray, 2006). Others would agree that since Waldheim’s introduction of the term in 1996, landscape urbanism has taken various forms, which makes it difficult to trace exactly. Australian landscape architect, Peter Connolly (2004, p. 77), claims that landscape urbanism generally ‘was in the air’ in the mid-1990s, and that he himself coined the term two years earlier than Waldheim. The most influential practitioners and theorists in articulating and spreading the ideas of landscape urbanism are, undoubtedly, the trinity of Charles Waldheim, formerly Associate Professor at the University of Toronto and currently Chair of the Landscape Architecture Programme at Harvard Graduate School of Design; James Corner, Chair of the Landscape Architecture Department at the University of Pennsylvania and founder and director of James Corner Field Operations; and Mohsen Mostafavi, formerly Chairman of the Architectural Associa-

tion (AA) in London and currently Dean of the Harvard Graduate School of Design. Over the past decades, the practical and theoretical themes of landscape urbanism have been introduced to its audience through a series of constituting publications. The literature most often referred to in landscape urbanism writings (and therefore also appearing repeatedly throughout this PhD thesis) circles about a small handful of anthologies containing essays by recognised American and European academics and landscape practitioners, i.e., *Recovering Landscape: Essays in Contemporary Landscape Architecture* (James Corner, ed., 1999); *Landscape Urbanism: A manual for the Machinic Landscape* (Mohsen Mostafavi with Ciro Najle, eds., 2003); *The Landscape Urbanism Reader* (Charles Waldheim, ed., 2006); and *Large Parks* (Julia Czerniak and George Hargreaves, eds., 2007). In 2007, *Kerb Journal*, produced by the School of Architecture and Design at RMIT University, Melbourne, devoted an entire issue (No. 15) to landscape urbanism, which included interviews with Mohsen Mostafavi and Charles Waldheim along with writings by Richard Weller, Kelly Shannon, Kongjian Yu, and other prominent landscape urbanism proponents. Later, the reputable German landscape and urban design review, *Topos Magazine*, also devoted a themed issue to landscape urbanism also including contributions by Waldheim, Corner, and Mostafavi (No. 71, 2010). For the most part, the articles in the later publications reiterate themes laid down in the earlier publications. Looking towards more descriptive writings on the practical aspects of landscape urbanism, Richard Weller: *An Art of Instrumentality: Thinking Through Landscape Urbanism* (2006); Peter Connolly: *Embracing Openness: Making Landscape Urbanism Landscape Architectural* (2004); and Chris Reed: *Public Works Practice* (2006) should be mentioned. Finally, landscape urbanism has been developed and distributed to the public through a few high-profile design competitions, i.e., *The Downsview Park Competition* (Toronto, CAN, 1999), *The Fresh Kills Landfill Competition* (NY City, USA, 2001)^[28], and some very visible public commissions such as *The Highline* by

28 See, *Case: Downsview Park Toronto* (Julia Czerniak ed., 2001) and *Praxis, Issue 4, Landscapes* (Reeser and Schafer, eds., 2002).

Corner/Field Operations in New York City. These designs have in particular played an important role in propagating landscape urbanism to a broader audience around the globe.

The origin

According to its key-literature, the origins of landscape urbanism can be traced back to the earliest postmodern critiques of modernist architecture and planning in the late 1970s and 1980s. These earliest critiques were based upon writings by pioneers such as Jane Jacobs (*The Death and Life of Great American Cities*, 1961), Robert Venturi (*Complexity and Contradiction in Architecture*, 1966), and Kevin Lynch (*A Theory of Good City Form*, 1981). These critics charged modernism for its inability to produce meaningful and livable public realms, its failure to come to terms with the city as a ‘historical construct of collective consciousness’, and its inability to communicate with multiple audiences (Waldheim, 2002, p. 12). Overviewing landscape urbanism’s key literature, with its abundance of imagery and voluminous language, the historical background for the postmodern critique and the state of contemporary urbanism is most figuratively explained by Patrick Schumacher and Christian Rogner (2001) in the essay *After Ford* (in *Stalking Detroit* by Daskalakis, Waldheim, and Young, eds., 2001a), which also according to Shane (2006, p. 57) provides “*a most convincing explanation for the relation between modern urbanism and Fordist economic imperatives, as well as the surreal spectacle of decay and abandonment found today in many North American cities*”. Schumacher and Rogner’s (2001) essay maps three phases in the evolution of *Fordism*^[29] as both a technical and, more importantly, spatial-organisational system. The first phase introduced the rational and vertical organisation based upon scientific management principles, efficiency, and the flow of production;

29 From Encyclopædia Britannica Online: Fordism, a specific stage of economic development in the 20th century. Fordism is a term widely used to describe (1) the system of mass production that was pioneered in the early 20th century by the Ford Motor Company or (2) the typical postwar mode of economic growth and its associated political and social order in advanced capitalism. Henry Ford helped popularize the first meaning in the 1920s, and Fordism came to signify modernity in general (Jessop, 2016).

The city with its workers and related facilities was spatially centred around the factory's 'vertical organization', which enabled the production of the first complex assembly-line product: Ford's Model T (Ibid., p. 49). According to Schumacher and Rogner (Ibid., p. 49), the traditional industrial city's deconstruction began in, what they term, Phase 2, when "*the assembly line concept is applied to the overall urban complex*", creating a miniature 'city as machine', which was later proclaimed by Le Corbusier and other ideologues of modernist urbanism. In this phase, the production line flows and assembly points in single-story buildings were dispersed across enormous suburban areas, which dissolved the industrial city into the landscape. Later, in Phase 3, Ford's complete decentralisation of production patterns began to implement – first regionally, then nationally, then globally.

The problems of the more open, decentralized urban organisation into the landscape became increasingly clear in the 1990s'. While the postmodernists indict modernism for devaluating the traditional urban values and the importance of the human dimension, Waldheim (2006, p. 39) claims that the postmodern impulse to "*commodify architectural images for diversifying consumer markets*" can be equally accused for its dependency upon "*sympathetically styled and spatially sequenced architectural objects*". These cannot be upheld, he says, "*given the rise of mobile capital, automobile culture, and decentralization*. Nevertheless, "*the very indeterminacy and flux of the contemporary city [...] are precisely those qualities explored in emergent works of landscape urbanism*". According to Waldheim (2002, pp. 13-14; 2006, p. 39), some of the best examples of such works are Barcelona's many projects for large-scale infrastructural landscapes, as for instance, Battle and Roig's Nus de la Trinitat (1990-1993) along with Dutch projects such as Geuze/West 8's Borneo-Sporenburg Harbor Redevelopment project (1993-1996). These projects, Waldheim (2002, p. 14) says, "*reveals the role of large-scale landscape as an element of urban infrastructure*". In this context, Waldheim (2002, p. 13) explains, landscape urbanism recommends the use of infrastructural systems and public landscapes as "*the very ordering mechanisms of the urban field itself, capable of shaping and shifting the organization of urban settlement [...]*". A reference point for such contemporary projects is Koolhaas/OMA's unbuilt competition entry for the Parc de la Villette (1982). According

to OMA (n.d.), “[t]he proposed project is not for a definitive park, but for a method that – combining programmatic instability with architectural specificity – will eventually generate a park”. Essentially, OMA’s design involves the conceptual and metaphorical turning on its side of the section of a Manhattan skyscraper, as described in *Delirious New York* (1978), with its programmes spread horizontally rather than vertically. OMA’s entry for Parc de la Villette includes a rethinking of the relationship between architecture and landscape, through a suppression of the three-dimensionality of architecture. By using the artifice of landscape (layered, non-hierarchical, flexible, and strategic), OMA’s Parc de la Villette orchestrates the urban programme as a landscape process for the transformation of the former 125-acre slaughterhouse area. The operative design procedure undertaken by OMA (and also by Bernard Tschumi’s in his winning entry), underlines the potentials of applying landscape as the most suitable medium to order complex urban processes over time. In this optic, OMA’s la Villette strategy represents an important step in the articulation of landscape urbanism (Waldheim, 2002).

Perceptions and inventions

The idea of ‘landscape as urbanism’ draws upon a range of ideas from Rem Koolhaas’ questioning of programmatic architecture (and his fascination with the large scale and his embracement of the uncertainty of urban life), Peter Rowe’s writings on housing and urbanism, Alexander Tzonis and Liane Lefaivre’s terming of ‘critical regionalism’, which was popularised by Kenneth Frampton in his 1983 essay, *Towards a Critical Regionalism: Six Points for an Architecture of Resistance* to Ian McHarg, whose *Design with Nature* (1969) introduced an ecological view and understanding of layering different parameters in the design of landscape^[30]. Also, European academics and architecture professionals such as Sébastien Marot, Thomas Sieverts, and

30 As this PhD thesis primarily focuses on the methodical-practical aspects of landscape urbanism, I have not gone into details with describing the nexus of ideas that have contributed to the development of landscape urbanism. Instead, I have focused on the incentives and understandings that have inspired the emerging landscape urbanist practice.

Marcel Smets have contributed to the ongoing development of the landscape urbanism discourse (Waldheim, 2002; 2006; Shannon, 2006; and others). Having said that, this chapter still remains to answer the simple, yet endlessly complicated question: *what is landscape urbanism, altogether?* Returning to the landscape urbanism literature's own definition of the term, Ciro Najle (2003, p. 9) offers one of the most easily understandable^[31] descriptions compared to elsewhere in landscape urbanism's extensive literary documentation.

Landscape urbanism develops methods for effectively synthesising constraints from different disciplines and domains of production into an operative framework, absorbing knowledge that ranges from environmental engineering and landscape studies to urban strategy and the development industry. Yet it exceeds hybridisation as it simulates environmental, social, and economic processes in abstract systems of relationships, attempting a shift from technological programming to open diagramming, from techniques of imposition to techniques of interposition, from ideological positions to a fluent yet consistent browsing across contingency and from deliberate manipulation of typological configurations and regulatory conventions to the systematic management of virtually open relational assemblages. The understanding of landscape is central to this project, as it allows the integration of natural processes and urban development into the unfolding of an artificial ecology (Najle, 2003, p. 9).

In these words, landscape urbanism is holistic and interdisciplinary; It is rooted in landscape processes but it is not naturalistic, nor is it utopian modernism, critical regionalism or new urbanism (Weller, 2007). By involving theories and practices,

31 Most people will agree that landscape urbanism is filled with exuberant formulations and somewhat incomprehensible phrasings. A humorous comment to this is presented by the satirical: *The Landscape Urbanism Bullshit Generator* at www.ruderal.com/bullshit/bullshit.htm (www.ruderal.com.).

which have so far been either juxtaposed or isolated from one another, landscape urbanism breaks down the traditional dualism between urban and wild, synthetic and natural. In landscape urbanism, natural systems and ecologies are privileged over form, and landscape urbanism enhances landscape as the most able organiser of post-industrial urbanity (Tully, 2013, p. 438). In this context, landscape urbanism employs the term ‘landscape’ (see also, previous definition of landscape) in several ways: 1. Landscape as as a *metaphor*; 2. Landscape as *artefact*; 3. Landscape as *instrument* (see also, section on systemic thinking). In the essay, *Global Theory, Local Practice*, Richard Weller (2007, p. 67), outlines landscape urbanism as a combined position that binds together previous landscape architectural groupings such as landscape planning, landscape design, and landscape ecology. Weller (Ibid.)^[32] attempts to ‘fix its coordinates’ by listing six of landscape urbanism’s defining characteristics and nine rejections. In my estimation, Weller says, landscape urbanism claims to:

1. align itself with contemporary scientific paradigms of nature as a complex, self-organizing system, conceptualize, interpret and directly engage the city as a hybrid ecology; 2. emphasise the creative and time-developmental agency of ecology in the formation of urban life as opposed to envisaging an ideal equilibrium between culture and nature; 3. include within the purview of design all that is in the landscape-infrastructure and buildings etc. and do this at scales which bridge the divide between landscape design, landscape ecology and landscape planning; 4. experiment creatively with computer driven methods of mapping social and ecological forces which affect a given site so as to get closer to the complex dynamics of the landscape; 5. aim for structural efficacy and instrumentality by design and to appre-

32 According to Weller (2007, p. 66), “[m]ost writings on landscape urbanism seems to get carried away on the Koolhaas tide from which it originally came”. Here, Weller (Ibid., p. 71) refers to Koolhaas’ descriptions of “the shift in interests from objects to fields” presented in *Whatever happened to urbanism* (in S, M, L, XL, 1996, p. 971), which originally gave form to landscape urbanism.

hend both site and program as creative subjects and opportunities but generally privilege a rational understanding of site forces, not the designer's subjectivity 6. foreground the landscape as the ultimate system to which all goes and from which all comes, a template for urbanism.

Inversely, landscape urbanism rejects:

1. the Garden (paradise) as landscape architecture's ur-metaphor – (replacing it with the City); 2. the landscape as urbanism's other, as a repressed, gendered, and passive layer; 3. a puritanical nature that needs to be reinstated as such to effect equilibrium between nature and culture; 4. designing toward fixed and final objects or aesthetic intuitions regarding formal composition; 5. style, image, scene, and symbolism as dominant aspects of design; 6. neo-conservative new urbanism on the one hand and avantgarde originality on the other; 7. architectural and landscape architectural design as the production of isolated objects, superficial contextualism and commercial styling of places either aloof to, or in some way merely compensating for the instrumentalities of the world around; 8. modernist planning and its pretence to control and contemporary planning which is devoid of the creative processes common to design processes; 9. a McHargian binary coding between nature and culture (Weller, 2007 p.67).

Weller's exercise of listing landscape urbanism's main characteristics is also done by Ian Hamilton Thompson (2012) in the essay: *Ten Tenets and Six Questions for Landscape Urbanism*. By a close and comparative reading of the essays in *The Landscape Urbanism Reader* (Waldeim, ed., 2006) and *Landscape Urbanism: A Manual for the Machinic Landscape* (Mostafavi with Najle, eds., 2003) with additional analyses of seminal texts, Thompson introduces 'ten tenets', which in many respects represents a well-argued continuation of Weller's original propositions: *1. Landscape Urbanism Rejects the Binary Opposition between City and Landscape: The target*

of the landscape urbanist critique is the ancient notion of ‘*rus in urbe*’; landscape urbanism rejects the opposition of nature versus city, and it rejects any pastoral ideas of landscape and nostalgic forms of environmentalism. According to Thompson (p. 10), “*this ‘tenet’ is as close to an axiom as it is possible to get*”. 2. *Landscape Replaces Architecture as the Basic Building Block of Cities. Corollary: landscape urbanism involves the Collapse, or the Radical Realignment, of Traditional Disciplinary Boundaries*: Landscape urbanism is thought of as ‘an ethos, an attitude, a way of thinking and acting’ and a ‘response to the failure of traditional urban design and planning to operate effectively in the contemporary city’. The horizontality of contemporary cities requires a shift in which landscape supplants architecture as the basic building block. The city developed, it was not created; It was a process, not a design. Landscape holds the capacity to link the city together. 3. *Landscape Urbanism Engages with Vast Scales – Both in Time and Space*: Landscape urbanism is inherently outward looking, always seeking connections with a wider context. Landscape urbanists must concern themselves with areas much larger than any interconnected site, encompassing multiple ecological systems. It must consider the globally interconnected scale. 4. *Landscape Urbanism Prepares Fields for Action and Stages for Performances*: The word ‘field’ sometimes refers to ‘a horizontal urban surface’, but sometimes as a term for ‘a place where forces act’. Preparing the ground refers to things which must be done to prepare the way for activity. 5. *Landscape Urbanism is Less Concerned with What Things Look Like, More with What They Do*: Landscape urbanism is interested in systems, but asserts that it is not concerned with the aesthetic qualities of space. 6. *Landscape Urbanism Sees the Landscape as Machinic*: Landscape urbanists focus upon the functions which landscapes perform and the services which they provide. According to Thompson, it is difficult to define exactly what is meant by ‘machinic’, but he attributes the use of the ‘machinic’ to Gilles Deleuze and Felix Guattari’s (1987) *A Thousand Plateaus* in which the metaphor of the machine is stretched out. 7. *Landscape Urbanism Makes the Invisible Visible*: Landscape has traditionally been in the background, even though it has performed vital functions to the city. Infrastructure has been hidden and kept away from landscape. Instead, landscape urbanism foregrounds infrastructure, whether mechanical,

green or hybrid. This foregrounding results in a reversal of traditional urban priorities and the invisible and stigmatic elements of the landscape are pushed centre stage (e.g., sewage farms, landfills, railway, motorway spaces, flyovers, etc.). 8. *Landscape Urbanism Embraces Ecology and Complexity*: Landscape urbanism draws upon the vocabulary and conceptual apparatus of ecology for understanding site and city. It employs the language of flows, shifting populations, succession, patches, dynamic systems, matrices, self-organisation, instability, etc. According to Thomson (p. 14), “*landscape urbanist distances themselves from ‘hands-off’ ethics of many biocentricists and strive for a synthetic future of constructed ecology*”. 9. *Landscape Urbanism Encourages Hybridity between Natural and Engineered Systems*: Landscape urbanism promotes hybridity between natural and engineered systems. Here, Thompson refers to the push for environmentally sustainable design, which has already introduced such features as SUDS (sustainable urban drainage systems) and reed-bed water purification systems into urban areas. 10. *Landscape Urbanism Recognises the Remedial Possibilities Inherent in the Landscape*: Thompson refers to landscape urbanism’s momentum. According to Thompson, it is not surprising that landscape urbanism emerges at this particular moment in human history. The US was the world’s dominant industrial power, but today, America is rapidly de-industrialising. At the same time, America is simultaneously urbanising faster than at any other time in modern history (Thompson, 2012, pp. 9-15).

Methodical aspects

The variety and divergence of landscape urbanism in combination with its broad approach on the urbanistic agenda, makes it somewhat difficult to trace and define precisely. However, the concept of using landscape as a model for urbanism apparently holds the framework together. Overviewing the previous section, it appears that landscape urbanism, so far, primarily is defined by what it is not, but merely presents generalities about what it actually is. As I see it, landscape urbanism presents an interesting framework for discussing and conceiving the contemporary and future city, but when it comes to describe landscape urbanism as a concrete design practice, the literature remains sparse and rudimentary.

Overviewing landscape urbanism's key literature and related writings, a small handful of landscape urbanism proponents have sought to codify its methods from overall classifications and frameworks (e.g., Wall, 1999; Corner, 2003; 2006) to more concrete design principles (e.g., Waldheim and Santos-Munné, 2001; Smets, 2002; Xaveer De Geyter, 2002; Van Beek and Vermaas, 2011). In the following, a short introduction to Corner's (2003) 'five themes of landscape urbanism as a practice' as discussed and concretised in Bach (2008), Waldheim and Santos-Munné's (2001) four-stage 'decommissioning' principles, Smets' (2002) 'taxonomy', and finally, Van Beek and Vermaas' (2011) 'landscapology' will be overviewed. In this context, the four selected and described methodologies, as outlined by some of landscape urbanism's key figures, come to represent a general basis for identifying and discussing landscape urbanism's operational aspects and scope.

Surface strategies

In *Landscape Urbanism*, Corner (2003) describes five general themes of landscape urbanism as a practice: *Horizontality*, *Infrastructures*, *Forms of Process*, *Techniques*, and *Ecology*.

[The] structuring of the horizontal surface becomes a predominant concern for landscape urbanism, for the surface is the organizational substrate that collects, distributes and condenses all the forces operating upon it. Land division, allocation, demarcation and the construction of surfaces constitute the first act in staking out ground; the second is to establish services and pathways across the surface to support future programmes; and the third is ensuring sufficient permeability to allow for future permutation, affiliation and adaptation (Corner, 2003, p. 60).

In *'Surface Strategies'*^{33]}, Bach (2008, p. 53) argues for a possible landscape urbanist method by focusing on the three 'layers' of Corner's (2003, pp. 59-60) first theme, 'horizontality', i.e., demarcation, infrastructure, and adaptation. According to Bach (2008), the two first layers are analogous to conventional spatial planning: a site is parcelled out and registered for future use, and infrastructure is established to support the desired development. Both layers are amplified throughout Corner's (2003) description of the five themes. Of the third layer (adaptation), Bach (2008, p. 53) says, "*constitute the extra dimension that [...] embraces the landscape urbanist approach as it holds both the ecology and process thinking and call for the dynamic and flexible development model*". The third layer can be characterised as a more conceptual layer that holds the very essence of landscape urbanism. Whereas the first two layers establish boundaries and prepare the site, the third layer adapts, moves, and dismantles original limits and demarcations over time. The difference from conventional planning is that these three 'surface strategies' incorporate and activate adaptation possibilities on a structural level, which directly influence the shaping of the specific project. Here, the criteria of success of the landscape urbanist project lies, not only, within the changeability of the plan over time; its future possibilities have to be integrated into the original project proposal from the beginning. From this, the primary challenge is to handle the relation between the three 'surface strategies' with a distinct focus on the third 'adaptive' layer. Here, conventional thinking in relation to 'parcelling' and 'infrastructure' is not possible, Bach claims. Adaptability and permeability have to be considered already in the conceptualisation of the two first layers in order to avoid a fixed and inflexible framework (Bach, 2008, pp. 54-59).

33 Original Danish title: "*Surface Strategies*" som landskabsurban metode. Translated from Danish author.

Landscraping^[34]

Waldheim and Santos-Munné's (2001) proposal for *Decamping Detroit* seeks to appropriate the vacant land of Detroit^[35] by 'the staging' of ex-urban landscapes of indeterminate status. Waldheim and Santos-Munné's project proposes a four-stage 'decommissioning' of land from the city's legal control i.e.: *Dislocation* (disconnection of services), then *Erasure* (demolition and initiation of native landscape ecology by release of wildlife and insertion of plants), followed by *Absorption* (ecological re-constitution through woods, meadows, marshes, and streams), and finally, *Infiltration* (the recolonization of the transformed ex-urban landscapes with new (urban) programmes). By acknowledging and setting free the forces of nature, albeit in a managed and intentional way, and ultimately suggesting a series of 're-programming proposals' each making a virtue of the zone's dismantling by opportunistically occupying the physical residue of Detroit's ex-urban landscapes, Waldheim and Santos-Munné constitutes an open-ended and long-range solution to the indeterminacy of the ground.

Grid, casco, clearing, and montage

In *Grid, casco, clearing and montage*, Marcel Smets promotes the landscape tradition in relation to configuring today's urban spaces. By defining a 'taxonomy' of spatial design concepts, Smets suggests how contemporary urban practitioners can work with the condition of 'uncertainty', which is not to be confused with lack of clarity – but as indeterminacy in relation to future development and the incapacity to shape it into a fixed form. In the outlining of four design concepts, i.e., *Grid* (a man-made and

34 *Landscraping* is the title of Corner's (2001) review of Waldheim and Santos-Munné's proposal for 'Decamping Detroit' in *Stalking Detroit* edited by Daskalakis, Waldheim, and Young (2001). Here, landscraping represents the reversal of traditional architectural approaches toward colonization and building to those of unbuilding, removal, and erasure. Corner illustrates this idea of erasure (or preservation of emptiness) by, e.g., Koolhaas/OMA's iconic proposal for Ville Nouvelle Melun-Sénart (voids) and Adriaan Geuze/West 8's strategy for the Randstad and Green Heart (empty scenarios).

35 See, *Stalking Detroit* (Daskalakis, Waldheim, and Young, eds., 2001)

superimposed form that establishes an underlying structure for pre-established regulations), *Casco* (derived from the local landscape, reflecting its constitutive form), *Clearing* (landscape as unifying backdrop, voids determine the specific character of the development)^[36], and *Montage* (radical superimposition of programmatic and compositional layers) Smets promotes a landscape orientated urbanism that grounds projects into concrete physical and geographical settings by rendering what is already there and incorporating the particular site and project into the larger coherence of the urban landscape (2002, pp. 89-101).

Landscapeology

Prefaced by Charles Waldheim, Paul van Beek and Charles Vermaas's (2011) handbook *Landscapeology: Learning to Landscape the City* advertises:

Become a true LANDSCAPOLOGY-ist: combining landscape architecture, urban planning, and ecology in a new profession. With the method explained here [...], you can make the world more and more sustainable. (Van Beek and Vermaas, 2011, p. 1).

Rooted in Dutch landscape architecture tradition and landscape urbanist thinking, Paul Van Beek, co-founder of the West 8 office in Rotterdam with Adriaan Geuze, and Charles Vermaas, a visual artist, argue that landscape architecture possesses a completely integrated approach that can help planners and urban designers to reconcile culture and nature in the best possible way and create more innovative and (not least) sustainable urban designs. The essential body of *Landscapeology* is revealed by six project stories summarised into a matrix, which, they claim, can be used for discussing existing designs but also as a concrete tool and method for the application of landscape architecture urbanism. The matrix is organized into three columns entitled:

36 According to Smets (2002, pp. 96-97), OMA's entry for the Melun-Sénart competition (1987) clarifies the essence of 'clearing'. The landscape is defined as a unifying backdrop, and the 'Chinese drawing' underlying Melun-Sénart's open spaces (voids) will ultimately determine the specific character of the area.

Place, *Partners*, and *Programme*, which are interlaced horizontally with five phase lines under the rubrics: *Initiation*, *Inception*, *Conception*, *Production*, and finally, *Construction*. It is then further defined by twelve key positions of: *Context*, *Drama*, *Correlation*, *Max-Gross*, *Confrontation*, *Ideal*, *Topography*, *Recollection*, *Ground Control*, *Contract*, *Alliance*, and *Transformation*. Every position in the matrix has to be explored and dealt with in detail for landscape architecture designing to take place. The twelve positions have no specific hierarchy, but Van Beek and Vermaas introduce a ‘fixed path’ with three crucial turning points linking the various positions of the matrix in a predefined circuit (pp. 19-44).

The agency of mapping

In designing with landscape and ecological systems every site has to be carefully scrutinised and analysed in order to produce a highly nuanced and flexible response. As the above-described approaches argue for grounding projects into concrete physical and geographical settings by emphasising existing features and landscape structures as founding in the design process and outcome, it seems reasonable to argue that all landscape urbanist endeavours inevitably have to start with a thorough analysis of site, situation, and context. Site-reading – or *mapping* as a conceptual beginning for an architectural response is encircled by James Corner’s idea ‘finding as founding’ that argues for how something found in the existing becomes founding in the design process and project proposal; In this optic, mapping is mainly an act of interpretation, and the process of mapping is less a registration and analysis of the existing than a creative process that includes present, future, and desired features (Corner, 1999b). Sébastien Marot, philosopher and critic in architecture and landscape design, argues for a similar approach by reversing the relationship between site and programme. Within the concept of *sub-urbanism*, Marot argues for site as the regulatory idea of the urban project; instead of site as surface for programme, the site gives rise to the programme. Marot describes four ‘attitudes’ (rooted in landscape architecture and garden design) that characterise this sub-urban approach: *Anamnesis*: active regard for the memory of the site; *Preparation*: a vision of site and design as process rather than products; *Three-dimensional sequencing*: an in-depth rather than merely planar

reading of open spaces; and *Relational structuring*: a conception of site and design as fields of relations rather than as arrangements of objects (Marot, 1999, p. 50-53; 2003, p. 5). In reformulating, what already exist into a qualified design response, the agency of mapping holds the capacity to unite existing physical properties and structures (infrastructure, terrain, topography, etc.) with more subjective influences (e.g., sensual impressions, operations, etc.). A site's characteristics are not simply features to be accommodated or modified; instead, site's physical and sensual properties become source for design. In *Site Citations: The Grounds of Modern Landscape Architecture* Elizabeth Meyer states:

Site concerns permeate the design process, leaving their compartmentalized role in preconceptual design analysis. These repositioned site concerns challenge the modern divide between rational site analysis and intuitive, creative conceptual design: design as site interpretation, and site as program, not surface for program (Meyer, 2003, p. 93).

By recording a site's physical, social, and ecological histories through a series of mappings, the site analysis forms a strong conceptual beginning for spatial design. As a result, the site analysis often becomes a design object in itself and in the depiction of the findings it can even be difficult to distinguish between mapping and design proposal; when the analysis stops and the project begins. The tendency is perfectly illustrated in, e.g., Corner/Field Operations' competition entry for Fresh Kills Landfill Competition (2001)^[37] and Geuze/West 8's project for Governors Island (NY). In these projects, thorough site analyses of local ecologies, habitats, flora and fauna, etc. have clearly informed the final framework of the design proposals, and more importantly, the wide array of appealing and beautifully composed diagrams actually appears more as the result than the actual plan drawings. This duality of the mapping

37 The Fresh Kills Landfill competition and Downsview Park have been extensively discussed and documented in, e.g., Czerniak, ed. 2001; Waldheim, 2001, p. 80-85; 98-99; Reeser and Shafer, eds., 2002.

in landscape urbanism as neither pure analytical instrument nor design object but simultaneous both, encircles, at least in my opinion, the instrumentality of the mapping and also constitutes the basis and methodical starting point for landscape urbanism as a concrete practice.

Systemic thinking

Overviewing Corner, Waldheim and Santos-Munné, Smets, and Van Beek and Vermaas' specifications for landscape urbanism as practice, it appears that all the described approaches have a distinct focus on systemic and holistic thinking; the urban is treated as an ecological system, and landscape as material and concept comes to define the changeability and adaptability of the urban project. Corner/Bach's idea of 'surface strategies' seeks to reflect the changeability and flexibility of ecological systems, though on a relatively abstract level, and the very idea of landscape and ecology constitutes the framework for proposing specific interventions. In *Terra Fluxus*, Corner (2006, pp. 21-33) boils his five original themes down to four: *Processes over Time*, *The Staging of Surfaces*, *The Operational or Working Method*, and *The Imaginary*. In many ways, the four themes represent an extract of the original proposed themes. In *Terra Fluxus*, 'the imaginary' is enhanced as core of the landscape urbanist practice; "*The collective imagination, informed and stimulated by the experience of the material world, must continue to be the primary motivation of any creative endeavour*", Corner (p.32) says. As such, the imaginary can be seen as a continued elaboration of Corner's original idea of 'active stirring of ecologies', which he (2003, p. 63) claims, can "*produce new combinatory mixes, new sets of effects, new trans-disciplinary alliances, and new kinds of public space*". Here, *ecology* does not simply refer to its biological and scientific reality; it is used metaphorically as a strategic model to understand seemingly unmanageable urban and natural complexities. Corner's *metaphorical ecology* with its implicit ability to evolutionary transformation is directed towards the challenges of the urban practice as a way to deal with large-scale spatial organization, open-endedness, and relational structuring (Kvisthøj, 2008, p. 39). The 'newness' of the imaginary is, in my opinion, that it represents a reversal of traditional modernist thinking, which in many ways is represented by optimisation

and rationalisation of public urban spaces to generic activities (e.g., recreation). By introducing a sort of ‘place-making’^[38] as a crucial part of the design process, Corner’s (2006, p. 32) fourth theme seems to encircle the landscape urbanist practice as an *imaginative* project that combines materiality (site and matter), representation (diagrams and mappings^[39]), and imagination (meaningful environments and spaces for social and cultural exchange) into new (urban) ecologies (2006, p. 32; 2003, p. 63). In Decamping Detroit, Waldheim and Santos-Munné point more specifically to landscape urbanist methods. By setting free the forces of nature in order to re-program existing (or depleted urban areas), ecological processes are used to generate a specific development. Also, Smets seeks to concretise landscape urbanist methods. Smets enhances the existing landscape in order to shape a site-specific and context-dependent solution that can embrace the uncertainty of contemporary urbanism. As the above-mentioned approaches identify and discreetly point to landscape urbanist procedures but without initiating a concrete design process or defining any actual tools, Van Beek and Vermaas’ landscapology matrix challenges the urban professionals by proposing a ‘standard’ method consisting of what Van Beek and Vermaas (2011, p. 472) enhance as a “*pre-determined, well-considered, categorized system of (generic) activities*”^[40].

38 Here, I refer to place-making as a sort of multi-faceted approach to the planning and design of public urban spaces. As I see it, the idea is to involve local people to collectively re-imagine and re-invent the urban spaces in order to strengthen the connection between people and public realm. Similar ideas gained traction already in the 1960s by mentors like Jane Jacobs and William H. Whyte, who introduced the ideas about designing cities for people not just cars and shopping centres.

39 Corner (1999d), enhances the agency of mapping to visualise and describe what is and what is not yet. Here, the agency of mapping is not to be confused with the agency of tracing, i.e., delineation of patterns and what is (e.g., topography, rivers, roads, buildings). According to Corner, a successful *mapping* holds a capacity to reformulate what already exists while setting conditions for new eidetic and physical worlds to emerge.

40 See also, Girot’s (2012) critical yet humorous review of Van Beek and Vermass’ *Landscapology*. Here, Girot raises questions about the (universal) applicability of landscapology as well as the ‘newness’ of the suggested methodology. As Van Beek and Vermass claim that landscapology depicts ‘what has now become standard procedure in everyday practice’ Girot (2012, p. 84) ironically asks “*Why commit to the path of Landscapology if current practice has fared so well without it until now?*”.

From overall discussions on the role of landscape in urban design to concrete landscape architectural methods, Corner, Waldheim and Santos-Munné, Smets, and Van Beek and Vermaas' writings all contribute to encircle landscape urbanism's operational foundation although resulting in different taxonomies and varied fields and scales of application not to forget geographic and planning-cultural settings. Summarising the above-described approaches, it seems that landscape urbanist designing basically is about adaptation and transformation of an existing context into a new reality. Theoretically, landscape is understood as an accumulated physical and cultural totality that offers a conceptual and physical basis in the design process. The landscape plan emerges as the foreground, and landscape comes to define a common denominator to fundamental design aspects, i.e., form (the constituting role of open spaces and new landscape-urban hierarchies), practice (cultivation and context-orientation), and process (ecology, changeability, and 'ecosystem services')^[41] (Braae, 2013). Methodically, ecology comes to represent the 'machinery' of the development process; 'forces of nature' are utilized in order to generate efficient relational systems between culture and nature, between humans and their surroundings. In this coherence, the concept of ecology is elastic and extends beyond the biological and systemic (as deployed in Waldheim and Santos-Munné's approach) towards a metaphorical understanding (as seen in Corner's 'surface strategies'), which covers a diverse set of more or less specified 'tools' for landscape urbanism as an architectural practice.

2.2 New modifiers to urbanism

Ecological urbanism

In recent years, a new 'ecological urbanism' has been proposed to more precisely describe an environmentally informed urban practice inspired by the sensibilities as-

41 The design aspects relate to the previously discussed idea of landscape as instrument (chapter 1.1).

sociated with landscape urbanism^[42]. The emergent discourse of ecological urbanism was famously presented at the *Ecological Urbanism Conference* at Harvard University in 2010. The conference was followed by the voluminous, red mammoth publication *Ecological Urbanism* (Mostafavi and Doherty, eds., 2010) that summarises the many and various conference contributions. In the introductory chapter, Mohsen Mostafavi encircles ecological urbanism and its projective potentials:

The prevailing conventions of design practice have demonstrated a limited capacity both to respond to the scale of the ecological crisis and to adapt their established ways of thinking. In this context, ecological urbanism can be seen as a means of providing a set of sensibilities and practices that can help enhance our approaches to urban development. This is not to imply that ecological urbanism is a totally new and singular mode of design practice. Rather, it utilizes a multiplicity of old and new methods, tools, and techniques in a cross-disciplinary and collaborative approach toward urbanism developed through the lens of ecology (Mostafavi, 2010, p. 26).

According to Mostafavi (Ibid., p. 28), ecological urbanism suggests ‘retrofitting’ of existing contextual and urban conditions; The specific site “acts as a mnemonic device for the making of the new. The result is a type of relational approach between the terrain, the built, and the viewer’s participatory experiences”. In this context, the key to understand ecological urbanism’s ‘juxtaposition’ approach seems to lie in its “recognition of the scale and scope of the impact of ecology, which extends beyond the scale and scope of the urban territory” (p. 29). Whereas landscape urbanism justifies itself by referring to landscape architecture theory and methods, ecological

42 Ecology: “study of the relationships between organisms and their environment. Some of the most pressing problems in human affairs - expanding populations, food scarcities, environmental pollution including global warming, extinctions of plant and animal species, and all the attendant sociological and political problems—are to a great degree ecological” (Smith and Pimm, 2007).

urbanism widens the discourse by including knowledge from disciplines such as environmental planning, landscape ecology, and a host of other fields, e.g., economics, history, public health, cultural studies, and the sciences; *“The insights found at the interface of these disciplines will ultimately provide the most synthetic and valuable material for alternative multi-scalar design strategies”*, Mostafavi (2010, pp. 29-30) claims. Charles Waldheim, who played a major part in the earliest definition of landscape urbanism, also participated in the Ecological Urbanism Conference. Waldheim acknowledges that even if landscape urbanism is relatively young, it already needs a revision; A revision that to a wide extent seeks its justification outside landscape architecture.

As a critique of the landscape urbanist agenda, ecological urbanism promises to render that dated discourse more specific to ecological, economic and social conditions of the contemporary city (Waldheim, 2010b, p. 114).

Waldheim elaborates on this search for external relevance in his 2010 Topos article: *On Landscape, Ecology and other Modifiers to Urbanism*:

This most recent adjectival modifier of urbanism reveals the ongoing need for re-qualifying urban design as it attempts to describe the environmental, economic and social conditions of the contemporary city. Equally, it acknowledges that the now well-established discourse around landscape urbanism is ripe for middle-aged reasonableness, a midlife crisis, or both (Waldheim, 2010, p. 21).

With its 656 pages, the fiery red (not eco green) Ecological Urbanism, is meant to provide a framework that can provide urban professional with the knowledge, methods, and clues of what the urban can be in the future (Mostafavi, 2010, p. 13). It can be argued that ecological urbanism basically expands the field from landscape urbanism, to embrace issues of environmental and ecological concepts, and to include the

expanded disciplinary frameworks that describe the urban condition. Others would agree that ecological urbanism is an ambitious redefinition of landscape architecture itself – albeit on a larger scale and with different design means (Farsø, 2010). Finally, whereas landscape urbanism, as suggested in previous section, focuses on ecology as a metaphor (Kvisthøj, 2008) for addressing large-scale spatial organization, open-endedness, and relational structuring, ecological urbanism remains to define its ‘ecological’ keyword. Throughout the book, ecological, green, and sustainable interchange freely, echoing the difficulty of how to define an ecological strategy - not to say design methodology^[43].

Negative planning

Negative planning – or the negative planning approach is an alternative concept and terminology raised by Chinese Landscape Architect and Professor of Peking University Kongjian Yu^[44]. The negative planning approach does not mean anti-urban planning, as the name may suggest, nor does it simply refer to green space priority as suggested by landscape urbanism. The negative approach is based on both eastern and western ecological planning theories, especially Ian McHarg’s theory of ‘Design

43 During my work on this thesis, the landscape urbanism discourse has evolved simultaneously. In 2014, *Ecological urbanism* (2010) was followed by the *Projective Ecologies* project, as proposed by Chris Reed and Nina-Marie Lister, eds. Admittedly, I have not studied the book in depth, but, as I see it, the projective ecologies project represents a continuation of landscape urbanist thinking. In many ways, the projective ecologies project builds upon landscape urbanism and ecological urbanism. In projective ecologies, landscape urbanism’s defined concept of landscape as having a focus on process and systems thinking is maintained and supported by a new understanding of the role ecological sciences play. In this context, the authors point to the understanding of nature as a dynamic system, which is permanently changing and adapting. The projective ecologies project acknowledges the interaction between humans and their environment, as expressed in the concept of ecosystem services. As such, projective ecologies proposes a synthetic understanding of ecology as a medium of thought, exchange, and representation for design just as landscape urbanism deploy the term landscape (Reed and Lister, 2014). See also, Hoefler’s (2015) review of *Projective Ecologies* for TOPOS.

44 Kongjian Yu received his Doctor of Design Degree at The Harvard Graduate School of Design in 1995. He has been a professor of urban and regional planning at Peking University since 1997. Yu founded *Turenscape*, an internationally awarded office with about 600 professionals, in 1998. He is currently a Visiting Professor of Landscape Architecture at the Harvard GSD.

with Nature' and Charles Waldheim's definition of landscape urbanism. According to Yu (2009)^[45], the negative approach is the Chinese version of landscape urbanism. Whereas the conventional approach for economic-centred urban development planning has failed to meet the challenges of swift urbanisation and current sustainability issues in China, Yu's negative approach seeks to define an urban growth pattern and urban form through the identification and planning of ecological infrastructure (EI) instead of reviewing through the projection of population and planning of civil infrastructure as seen in the conventional Chinese approach.

In this sense, the negative approach is exactly what landscape urbanism is about. I will say, the Negative Approach to urban planning is the Chinese version of Landscape Urbanism, and they were published almost at the same time but in very different situations. The Negative Approach has evolved from the pre-scientific model of Feng-shui as the backbone of human settlement, the 19th century notion of greenways as recreational infrastructure, the early 20th century idea of green belts as urban form makers, and the late 20th century notion of ecological networks and Ecological Infrastructure (EI) as a biological preservation framework (Yu, 2009).

Yu's negative approach focuses on the degrading ecological background and chaos of urban planning and development in China. Facing the challenges of today's Chinese urban growth, the negative approach focuses on the ethic of land-use in China. According to Yu, Wang, and Li (2011), the negative approach is about thinking sustainable in handling urban growth on limited land; the purpose is to develop land while maintaining the ecological and cultural integrity and to shape landscape form and urban form in a sustainable way. The overall objectives are smart preservation and

45 Interview with Conference Chairman Professor Kongjian Yu by PKU English News journalists Xiang Yunke and Han Yafei (Nov. 11, 2009) at Peking University's *Landscape Architecture Education Conference & Landscape Architects Conference*.

smart growth^[46]. In this coherence, Yu enhances ecological infrastructure (EI) as an effective tool for smart growth in the context of rapid urbanisation.

EI is composed of critical landscape elements and structures that are strategically identified and planned to safeguard natural assets and ecosystems services, essential for sustaining human society. EI is strategically planned and developed using less land but more efficiently preserving the ecosystems services (Yu, Wang, and Li, 2011)

The ideal is to meet the challenges of sustainability – including having a sustainable landscape and sustainable urban form, and to allow land to be developed without losing its ecological and cultural integrity. To accomplish these goals, Yu’s negative approach recommend the following methodical steps: 1. *Process analysis*: Systematical analysis of critical ecosystems functions or services, which are targeted to be safeguarded by EI. Preferably by using Geographical Information Systems (GIS), which efficiently simulate natural and cultural processes across the landscape, i.e., abiotic processes, biotic processes, and cultural processes. 2. *Defining landscape SPs*: (SP refers to superposition). Landscape SPs are identified for the individual targeted processes. SPs are composed of elements and spatial positions that are strategically important in safeguarding the different processes across the landscape. 3. *Defining EI*: The SPs are integrated by overlaying techniques to form comprehensive EI. Alternatives of EI are developed at various quality levels: high, medium and low. 4. *Defining urban form*: Urban growth alternatives based on regional EI. Urban development patterns are defined at the regional scale based on regional EI. Using the multiple EI alternatives as framing structures, scenarios of regional urban growth patterns are developed (Yu, Wang, and Li, 2011, pp. 1219-1220).

46 It remains unclear to me, whether Yu refers to smart growth as in generally well-considered growth principles or ‘Smart Growth’ as in the urban planning and transportation theory that argues for concentrating growth in compact walkable urban centres to avoid sprawl. See also, *Landscape-oriented New Town Development in China: Prospects and Implications for Western Design Firms*, PhD thesis by Victoria Sjöstedt, 2013.

2.3 Forming the spatial-material practice

A good strategy is a highly organized plan (spatial, programmatic, or logistical) that is at the same time flexible and structurally capable of significant adaptation in response to changing circumstances. Too rigid a strategy will succumb to a surprise or to a logic other than that for which it was designed, and too loose a strategy will succumb to anything more complex, organized, or better coordinated (Corner, 2004/2014, p. 285).

It has been more than two decades since the term landscape urbanism first appeared; in the meantime, many urban and landscape professionals have begun calling themselves ‘landscape urbanists’. Paradoxically, as landscape in urban design and planning has become subject to considerable attention, and landscape has changed status from being background to foreground, the discourse surrounding landscape urbanism remains somewhat academic. While the academic and theoretical discourse has flourished within the academic environments, there is still a lack of constructed examples – certainly outside of parks and other territories dominated by nature and conventionally belonging solely to the landscape architecture profession. Overlooking the key literature on landscape urbanism, a repetitive series of ‘flashy’ projects are usually highlighted as landscape urbanism icons. The practical themes of landscape urbanism have primarily been presented to the public through a series of North American design competitions, but few are realised – or only in their initial construction phases. It is not yet clear if the intentions of the original proposed schemes will be realised at all. Consequently, documentation on the practical aspects of landscape urbanism in real life remains relatively inconsistent. The sparse group of constructed (- or to be constructed) landscape urbanism projects appearing in the literary context often revolves around a small cohort of North American and European designers including James Corner/Field Operations (US) (also in collaboration with Stan Allen) and Adriaan Geuze/West 8 (NL). Despite Field Operations and West 8’s clear dominance

in the field, other offices can be mentioned, e.g., Stoss Landscape Urbanism (US)^[47], Hargreaves Associates (US), Batlle/Roig (E), Turenscape (CHN), and also Atelier Girot lead by Christophe Girot, who has contributed to the continuous discussion on landscape architecture in urbanism in the interface between academia and practice. Last but not least, the most important isolated design to be mentioned in relation to practically applied landscape urbanism is the *Tree City* design for Downsview Park in Toronto by Rem Koolhaas/OMA^[48] with graphic designer Bruce Mau.

Tree City

Although Geuze/West 8 has been an important player in the earliest articulation of professional landscape urbanism throughout the 1990s (Geuze/West 8 will be discussed later in this chapter), it was the Downsview Park Toronto Competition (1999) that came to represent a turning point in the design of public urban spaces. Located northwest of Toronto's downtown core, a former military airbase was intended to develop into Canada's first national urban park. The competition brief called for a

47 US-based *Stoss Landscape Urbanism* (founded by Chris Reed in 2000) has in recent years established themselves as an important new name in articulating landscape urbanism's practice. Particularly, Stoss' entry (second prize) in the *The Next Generation of Parks: The Minneapolis Riverfront Competition* should be mentioned. The competition brief (deLaittre, 2010, p. 2) called for a comprehensive (almost landscape urbanist) vision for the Mississippi Riverfront "*that addresses current demands, as well as future uses. The successful design proposal will weave together the diverse communities of the river into a unified landscape that performs, in the greatest sense of the word. It will operate at the scale of the city but adapt to local, unique sites; explore multiple functions for diverse constituents; transform and revitalize the riverfront; and inspire the community*". Stoss' entry, named *Streamlines*, introduced a "*longer-term transformation that reclaims the river as civic space, introduces new landscapes, infrastructure and urban fabrics, and weaves the multiple new and existing systems and experiences back into the city*" (Minneapolis Park & Recreation Board, n.d.). Notably, Stoss' design introduces various ecosystems services along the riverside, for instance, water purification systems and solar-heated swimming pools. Further, Stoss Landscape Urbanism won Topos Magazine's International Landscape Award in 2010. The award was announced in Topos's Landscape Urbanism issue (No. 71, 2010). Unfortunately, among Stoss' actual constructed works are mainly minor landscape architecture projects and none of their large-scale landscape urbanism visions have currently been realised (see, www.stoss.net).

48 As I see it, Rem Koolhaas himself should not to be confused as 'landscape urbanist'. Nevertheless, as discussed previously in this chapter, Koolhaas (with OMA/AMO) has, with his critical writings (e.g., Koolhaas, 1978; 1998 and architectural provocations (Parc de la Villette and Tree City), presumably unintended, contributed significantly to the development of landscape urbanism's theoretical foundation.

design that would remain open to change and growth and be conceived in stages that would be implemented over a period of fifteen years (North, 2012).

Formally, the competition was the first to exceed its predefined objectives, and perhaps most importantly, it introduced a radical change in the perception of landscapes, how they *appear*, and how they *perform*. Overviewing the five selected designs (in Czerniak, 2001a), i.e.: *Emergent Landscapes* (Brown and Storey Architects), *Emergent Ecologies* (James Corner + Stan Allen), *A New Synthetic Landscape* (Foreign Office Architects, et al.), *Tree City* (Rem Koolhaas/OMA with Bruce Mau Design), and *The Digital and the Coyote* (Bernard Tschumi Architects, et al.), it appears that all the selected designs (to varying degrees) privilege framework over form and seek to engage complex processes like ecology and cultural flows. Instead of proposing formalist schemes, the selected designs provide flexible frameworks and development guidelines that allow the park to adapt and adjust to future changes and impacts during its implementation process. The selected designs are not only flexible in a ‘programmatic’ sense; they also suggest that the geometries of the site emerge as a negotiation between the site and its natural processes (Czerniak, 2001b). Today, ‘Tree City’, the winning scheme, is well known “*as a diagram for growing a park into the city*” (Czerniak, 2007, p. 232). In many ways, it is more a formula than an actual design – a pragmatic response to unknowable conditions. Rather than designing a specific ecology for the site, Tree City uses ecological process as a model for future design, and its almost logarithm like formula goes: “*Manufacture nature + 1000 pathways + Grow the park + Curate culture + Sacrifice and save + Destination and dispersal = low density metropolitan life*” (from project presentation in Czerniak, 2001a, p. 75). Organisationally, Tree City’s strategies invert the typical figure/ground relations and promote landscape’s legibility as figural density against the park’s surrounding suburban ground. The park is suggested to emerge at two scales. ‘The site scale’, that covers the park, its vegetation, circulations, uses and water flows; and ‘The city scale’ that reaches the city and anticipate the growth of the park and it’s interweaving into the surrounding suburban fabric and metropolitan systems, creating a new urban structure (Czerniak, 2007).

Despite the good intentions and international recognition, the manifesto-like qual-

ities of the Tree City diagrams have proven difficult to realise. Even today, more than fifteen years later, the signature diagram with ‘dots’ or clusters against a white background is how Tree City is popularly recognised. As extensively documented in *Processing Downsview Park: transforming a theoretical diagram to master plan and construction reality* by Toronto-based Ass. Professor Alissa North (2012), several factors have disrupted the potential of the original Tree City project. As an eye-catching competition strategy, Tree City was strong enough to keep the jury’s attention and challenge their imagination.

The concept was a further iteration of Rem Koolhaas’s second place proposal for Parc de la Villette, where a linear banding strategy promised similarly exciting programmatic juxtapositions able to accommodate unforeseen futures. With Bruce Mau Design [...] on the team, the scheme was presented as a compelling and convincing graphic. The circle contributed to a series of visually alluring diagrams, which promised a multitude of possibilities and a high degree of flexibility based on future unknowns (North, 2012, p. 12).

However, the diagram-based project gave limited guidance on where to start, what to put where, or how to connect the illustrative dots. Further, the restrictions of the governmental bureaucracy surrounding land authority and transfer have resulted in a drawn-out implementation process. As the disconnection between OMA/Koolhaas’ image of the park’s potential and what could feasibly be enacted grew, Rem Koolhaas/OMA left the Tree City team in 2001. In 2003 after numerous delays in the decision-making processes, the project finally moved forward. Bruce Mau Design was still design lead, but due to the office’s lack of experience in large-scale landscape design, Bruce Mau was asked to include a broader set of local consultants including landscape architects. In 2004, the new team, led by Bruce Mau – now without Rem Koolhaas’s leadership and expertise in evolving programmatic complexity, divided the large design challenge into smaller design projects and redeveloped and formalised the original Tre City design into a comprehensive park plan losing the over-

all coherence of the original visionary project. No longer directly committed to the conceptual circle graphic of the Tree City diagram, each new designer brought their own vision to the park introducing new design elements. Today, thousands of consultant dollars and further delays in decision-making processes later, Downsview has changed from being a framework for complex processes to a landscape architecture project with a static master plan in its most classic sense. Even though the park has caught the interest of an international audience, and it is celebrated regionally as an articulated, functional, and pleasant landscape space with a considerable and increasing visitor volume, the chance to develop a large scale landscape park by utilizing the intertwined complexities of ecological processes, culture, and economics in innovative ways was missed along with the opportunity to test contemporary theories of landscape urbanism in real life on a large-sized site (North, 2012).

Fresh Kills Lifescape

Downsview's initial success, disregarding its later failed realisation process, in the early 00s quickly became model for similar urban sites in North American context. Already in 2001, a similar design competition for the future of the almost mythical Fresh Kills Landfill, Staten Island, New York, was initiated. The competition brief required a conceptual design and master plan of a 'phased-end-use' that would transform the former 2200 acres (890ha) landfill into public parkland. By orchestrating a long-range development based on landscape and ecological processes, it was the ambition to transform the post-industrial site into an attractive area of mixed urban programmes. James Corner/Field Operations' winning entry, *Lifescape*, outlines a three-phased 'ecological strategy' based on natural processes, agricultural practice, and plant lifecycles to the rehabilitation and transformation of Fresh Kills Landfill over a thirty-year time frame. The first phase (*seeding*) secures public access to the site, begins the restoration of native habitat, and initiates the creation of recreational amenity for the neighbouring areas; Phase two (*infrastructure*) installs new roadways, utilities, plantings, and structures necessary to prepare the site for new programs; Phase three (*programming*) conveys the way in which the landscape will be occupied. Finally, the three main development phases are supplemented by a fourth

phase (*adaptation*), which reserves possibilities for long-term adaptation and modification of the landscape and its programs responding to changing demands and needs (Field Operations, 2002).

Visible from the moon, with waste mounds the size of mountains, Fresh Kills remains the most complex land mass human beings have attempted to manipulate. Starkly elegant, artificial topography offers a unique landscape experience. As such, the site represents an opportunity to develop a new form of public-ecological landscape, an alternative paradigm of human creativity, biologically informed, guided more by time and process than by space and form (Field Operations, 2002, p. 20).

From 2001 to 2006, the City of New York (Planning Department), conducted a master planning process to turn the now closed landfill into a public park. The resulting Draft Master Plan created a blueprint for reclaiming the site and gave an outline of potential future uses and the phased implementation and scope of those uses. In contrast to Downsview, the Fresh Kills master plan is not ‘static’ but is to be implemented with concentrated locations based around local community and public access points, where the use patterns of the first visitors will inform the next phases of development to ensure the park’s relevancy over time. Also, as nearly forty-five percent of the site was once used for landfilling operations, the physical and regulatory site constraints are considerable. As this will change gradually over the next 30 years, the park will not be static, but rather it will be an evolving landscape that will grow and change responding to its recovery and the people who will use it. The construction began in 2008 and the park opening is scheduled to 2036 (NYC and Field Operations, 2002).



Figure 7: (Photos kindly deposited by Tully Construction Co., Inc.) The installation of 'final cover' (also called the landfill cap) on Fresh Kills Landfill. The final cover is composed of a series of layers of soil, synthetic textile, plastic, and grass and is complemented by construction of adequate and sometimes elaborate drainage systems and basins.

Concepts and diagrams

In many respects, Koolhaas/OMA/Mau's original project for Downsview^[49] together with Corner/Field Operations' project for Fresh Kills represents a cornerstone in the articulation of landscape urbanism. Especially, the Fresh Kills Lifescape project's almost 'scientific' reading and interpretation of the site and its graphical mode of expression have widely influenced the way urban design is presented to its audience and how western world brownfield revitalisation is conceived in general. When overviewing the projects, it appears that the conceptual view of the city inherent to landscape urbanists is essential for understanding the diagrams and visualisations. The city is thought of as a living system, adaptive, flexible, and evolving through its

49 As this section focuses on the practical aspects of landscape urbanism, I have chosen not to include considerations on James Corner with Stan Allen's second place project, *Emergent Ecologies*, for the Downsview Park competition (see, Czerniak, 2001). None the less, it should be mentioned as Corner/Allen's project, with its thoroughly illustrated ecological considerations and appealing diagrams, has contributed extensively to the development of landscape urbanism's working methods and not least graphical mode of expression. The same delicate graphic is seen in Corner/Field Operation's Fresh Kills competition entry (Field Operations, 2002).

inherent capacity to absorb and interact with its surroundings. By considering the city as a ‘metabolism’ (in theory at least) the traditional professional barriers and urban design formulas are dismantled, and the possibility for experiment with the specific combination of ideas that constitute landscape urbanism is given free reign. In this context, the ecologically based large-park designs also challenge the dominant paradigm of the pastoral park as developed in North America in the nineteenth century. Where parks such as Central Park in New York City was set up as the city’s antidote, as a retreat from the stressful urban life, Tree City and Fresh Kills Lifescape are integral parts of the city’s metabolism. Instead of a conventional park design with its smooth surfaces, minimal programme, and harmonious environment, these projects integrate geological and biological processes at multiple scales into a synthetic environment. Even if Tree City and Fresh Kills Lifescape represent a sort of designed ecology or artificial nature they are incontrovertibly urban. Another repeating feature in the presented projects is the more virtual or diagrammatic approach to both the design process and the visual representation. Whereas traditional representation seeks to give an impression of how a specific design is intended to manifest, a diagram is more likely to present a framework for how things could or should develop without proposing an exact form; As such, the inherent ability of the diagram to visualise open-endedness and visions becomes a central theme in landscape urbanism’s practice. Further, the importance of the competition format to extend people’s knowledge of landscape urbanism cannot be overstated. Without the competitions as a platform for exploring new ideas and their public and professional visibility, it is unlikely that the ideas behind landscape urbanism would ever have moved from academia to the real world.

Practical obstacles

As landscape urbanism defines itself as an approach that reformulates what already exist into a qualified design response (as discussed in the section on mapping), it is crucial to question if landscape urbanism is a universal volume applicable to all situations and sites with differing scale and nature. In practice, it is difficult to reconcile ecological systems with urban systems. Whereas ecological systems are infinite

and indisputably site specific, urban systems are mechanistic, standardised, and often generic. Most urban typologies are inflexible and governed by regulations that determine the layout of housing and its related infrastructure – an inflexibility deriving from the complex integration of many components and the fact that decision-makers, municipal authorities, developer, service providers, and ultimately the consumers all operate within a narrow financial scope. Even if landscape urbanists claim to have a holistic outlook, the urban landscape represents a complexity where much is beyond their control and outside their expertise (Ben-Joseph, 2005; Weller, 2008).

Discussing professional landscape urbanism by juxtaposing two projects of which only one is to be constructed in its original layout is, obviously, subject to considerable uncertainty. That be said, Koolhaas/OMA/Mau's original project for Downsview Park and Corner/Field Operations' Fresh Kills Lifescape project offer many lessons for urban designers wanting to link spatial design to dynamic factors such as ecological flows, human activities, landscape features, and time.

Overviewing the competition material (Koolhaas/OMA, 2001; Field Operations 2002) in relation to the present master plans for Downsview Park and Fresh Kills Lifescape (in North, 2012; NYC and Field Operations, 2002;), it appears that the translation process from diagrams and formulas to actual spatial design – or physical manifestation is a very complex and delicate affair. Corner/Field Operations has to a wide extent succeeded to develop and maintain their process-orientated project within the uncompromising format of the master plan whereas Mau's more traditional master plan for Downsview Park seems to reflect the exact opposite. As discussed earlier, several outside factors and not least a rigid decision-making process have had a negative impact on the implementation of Tree City – but other (and possibly more) compelling factors needs to be addressed as well; more of which in the following section.

The importance of the site

Taking a closer look at Downsview Park's location, it is obvious that the site, as former restricted military area, suffers from a loose connection to its suburban surroundings; the site is not linked to any sizeable natural areas, and the landscape is

compacted and without diverse or lush vegetation due to its more than fifty years of air-base use. Fresh Kills Landfill, however, is encircled by a mix of wetlands, woods, and built areas; forests, tidal wetlands, and freshwater wetlands still exist on the site, and each fall and spring migrating birds occupy the airspace above. Additionally, the waste mounds of the former NYC landfill have already provided the site with a yet more defiant and diverse topography than the flat landscapes of Downsview. The objective of the Downsview Park competition was to promote innovative design proposals that would respond to the social and natural histories of the site by utilizing natural processes. Interestingly, as stated by Detlef Mertins (2001, p. 30), professional advisor for the Downsview Park competition, “*no single “original” state has been – or can be – identified to which the natural system should be restored. [...] Instead opportunities for creative intervention may be identified in all aspects of the ecosystem [...].*” It was clearly the intention to transform the degraded site into an entirely new landscape in the city by introducing new structures and ecological features – starting from scratch. Despite their situational differences and constructed outcome, Tree City and Fresh Kills Lifescape continues to appear side-by-side in landscape urbanism coherences; they both orchestrate natural processes as catalysts for urban design, and both projects employ diagrams as their main representation form; None the less, the very understanding of the ecological aspects of the respective projects seems to differ. Whereas Corner/Field Operations’ project focuses on autonomous progression in biodiversity and life forms based on existing and new ecologies – as depicted and thoroughly illustrated via diagrams and actual sections^[50], Koolhaas/OMA/Mau’s original project and conceptual diagrams seem to reflect a more metaphorical understanding of ecology as framework for open-endedness, adaptability, and dynamic interrelations between programmes and local initiatives^[51]. Both ideas

50 In *Terra Fluxus* (2006), James Corner focuses on representation form as one of the key elements in defining landscape urbanism’s practice.

51 See, Odgaard (2014, pp. 253-262) for a thorough comparative analysis of Downsview Park versus Fresh Kills Park and their ecological aspects.

are relatable to landscape urbanism theory – but seemingly not equally useful in applying landscape and ecology as vectors for actual spatial-material design. Although the original intentions and visions for Downsview Park and the Fresh Kills Park shares many similarities, the conditions of the respective sites are different. Perhaps, the ‘site capacity’ of Downsview is simply not as adequate of generating a from-bottom-up design response to the psychological manifestation of the proposed large park as the Fresh Kills site is. The importance of the site cannot be underestimated; the existing landscape, ecological features, and surrounding fabric are the key to landscape urbanism and, in my view, also extremely instrumental in succeeding with a landscape urbanism project; more of which in chapter 5.

From brownfields to green fields

In this context, it is important to recall that landscape urbanism’s practical aspirations originate from North American brownfield transformations in the late 1990s. Landscape was sought utilized as the primary medium in the reusing of abandoned industrial sites. Here, the finalists’ entries in the competitions for Downsview Park and Fresh Kills Park came, according to Waldheim (2006, p. 46), to “*offer the most fully formed examples of landscape urbanism practices to date applied to the detritus of the industrial city*”.^[52] In many ways, thinking landscape as urbanism proved to be a viable strategy for the transformation of brownfields (e.g., Fresh Kills Park and Governors Island). Nevertheless, when overviewing its key literature, landscape urbanism still largely remains untested in dealing with other problems related to for instance larger metropolitan areas, downtowns, and residential neighbourhoods. If landscape is capable of dealing simultaneously with decreasing densities and sites of indeterminate

52 The idea of introducing landscape as an active medium – or strategy for intervention in the city’s wastelands is fully unfolded in *Stalking Detroit* (Daskalakis, Waldheim, and Young, eds., 2001); Instead of proposing solutions for Detroit’s future, the publication’s essays and conceptual projects explore how one can interpret and learn from Detroit’s unique urbanism that has been marred by decline and abandonment. While *Stalking Detroit* has contributed to the formation of landscape urbanism in general (see, chapter 2), it has also been a front-runner in redefining the traditional understanding of urban identity and inherent complexity and potentials of the city’s wastelands.

futures, the conditions recommending landscape urbanism might be found in other places as well. Ironically, the ongoing suburban and green field development in the perimeter of most western world cities brings up similar questions as the brownfield redevelopment sites. In his commentary of Waldheim and Santos-Munné's proposal for *Decamping Detroit*, Corner (2001) enhances the importance of development of open reserves of space as well as protection of existing reserves.

The Stalking Detroit Project, and Waldheim/Santos-Munne's proposal "Decamping Detroit" in particular prompt one to reflect on the reversal of traditional architectural approaches toward colonization and building to those of un-building, removal, and erasure. These are important concerns not only because of the de-population of certain urban areas, as in Detroit, but also the opposite extreme: expansion of urban areas and the need to preserve or retain sectors of empty and open space. If the former case implies de-colonization, then the latter suggests an active process of anti-colonization (Corner, 2001, p. 122).

In *The Emergence of Landscape Urbanism*, Graham Shane (2006, p. 59), continues Corner's construction by stating that "[t]his reversal of traditional processes opens the way for a new hybrid urbanism, with dense clusters of activity and the reconstitution of the natural ecology, starting a more ecologically balanced, inner-city urban form in the void". That be said, both Corner (2001) and Shane (2006) acknowledge that this strategy also raises questions. What character, programme, or identity should be assigned to such empty areas/reserves? Should they be assigned any identity at all?

Professional performance

As the emphasis shifts from design of objects to manipulation of larger urban surfaces, and landscape replaces architectural form as the primary medium of city-making, the urban designer faces new challenges. Whereas a traditional urban design process normally is initiated to generate form, the design process in landscape urbanism has a more instrumental character (Weller, 2007). In order to facilitate urban develop-

ment by the means of ecological features and unbuilt spaces, the landscape urbanist needs to position oneself as ‘urbanistic system builder’ (Reed, 2006, p. 283). In this optic, in order to juggle the comprehensiveness and considerable complexity of urban projects, I find that the experience and skills of the designer becomes of the outmost importance. For instance, it is my conviction that Fresh Kills Lifescape’s (so far) success is not just owing to its situational features (site capacity), but also due to Corner/Field Operations’s expertise in complex ecological design and landscape architecture (and probably also because of James Corner’s prominent role and strong profile in the articulation of landscape urbanism). While landscape urbanism is relatively well-defined theoretically, even describing landscape urbanism as an actual practice remains somewhat inconsistent. From this, it seems to me that the individual designer’s practice becomes key in defining how the landscape urbanist project should articulate in reality. Even though landscape urbanism theory presents some methodical considerations, its physical manifestation or spatial articulation remains relatively undiscussed. Further, some would even argue that landscape urbanism rejects any predefined form language or ‘aesthetic intuitions’ (Weller, 2007 p.67). As I see it, the theoretical avoidance of such considerations can prove both beneficial and dangerous. It all depends on the designer. It could be a good thing. It could be a bad thing. However, as I see it, one has, at least, to be conscious about it. I shall revert to this discussion in chapter 5.

Critique and intellectual controversy

Even though this PhD thesis reflects a relatively positive attitude towards landscape urbanism, it cannot be neglected that the incoherent character of landscape urbanism also provokes much professional criticism. In North America, the most vocal opposition towards landscape urbanism comes from the leaders of the *Congress of The New Urbanism* (CNU)^[53]. CNU’s objection against landscape urbanism mainly stems

53 Co-founded in 1993 by Peter Calthorpe, Andrés Duany, Elizabeth Moule, Elizabeth Plater-Zyberk, Stefanos Polyzoides, and Dan Solomon.

from their conviction that major works of vertical architecture are the most appropriate organizers and promoters of urban space, not landscape (cf., Tully, 2013). Instead, CNU promotes walkable, mixed-use, neighbourhood development, and sustainable communities. According to the CNU charter, “*cities and towns should be shaped by physically defined and universally accessible public spaces [and] urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice*” (CNU, n.d.). Even though such incentives, in my view at least, do not collide with landscape urbanism’s aspirations (see also, Weller, 2008), CNU seems to make a virtue of contrasting landscape urbanism to new urbanism. In outlining the disagreements between landscape urbanism and new urbanism, CNU member and urban planner Luke Hogan’s (2010) line-up previous to the 19th Congress of New Urbanism (where Charles Waldheim gave a presentation about landscape urbanism and duelled in the closing plenary against Andrés Duany), hits the nail on the head:

In advancing Landscape Urbanism as an alternative to New Urbanism and related planning models, Waldheim concludes that the inroads new urbanists have made in revitalizing cities, retrofitting suburbia and making mixed-use neighborhoods more vibrant and walkable are of limited relevance. His influential new movement grows out of a “frustration” with New Urbanism and dominant planning models, a conviction that it’s wrongheaded to organize places using familiar elements such as walkable streets and buildings lining the sidewalks. He asserts that it’s not a broadly applicable strategy to try to build dense human settlements or to employ urban forms that proved themselves in the 19th century or earlier. He embraces the sprawl (he calls it horizontal development) that has characterized the suburban zones of cities for at least the past half century, saying it is unrealistic to expect to control it. (Hogan, CNU, 2010)

Polemically, Hogan continues his full-frontal attack:

How urban is the movement [landscape urbanism] if it accepts the general functional patterns of sprawl? How environmental is it if it incorporates natural systems but leaves humans persisting in energy wasting, high-emissions generating patterns of living? Although LU employs cutting-edge strategies for the remediation of soil and the introduction of native plant species to sites, does LU leave human communities to function too inefficiently? How does LU propose to solve high emissions through driving dependence and spread-out single-family housing? [...] Can any urbanism with sprawl as its foundation be considered a truly ecological urbanism? (Hogan, CNU, 2010)

As the conference material is no longer public accessible (the discussion between Waldheim and Duany was live streamed), and I have not succeeded to get hold of it, the following is based on a commented review of Waldheim and Duany's closing plenary at the CDU Congress by Robert Steuteville^[54]. In Steuteville's (2011) optic, much of the discussion focused on whether landscape urbanism, which celebrates natural occurrences, specialises in expansive open spaces, and privilege ecological features over density, simply is a greener form of sprawl? As Waldheim assured the congress assembly that landscape urbanists support "*dense, low-carbon, low-emission development*" and are "*not apologists for sprawl*", Steuteville insists in his review that the disagreement between landscape urbanism and new urbanism is less about sprawl than what lies beyond everybody's front door, i.e., the street. As new urbanism praises well-ordered and walkable streetscapes and neighbourhoods^[55], landscape urbanism is, in the same time, accused for rendering park-like settings full of pedestrians. "*I really doubt that the humans that have been Photoshopped in will*

54 Editor of *Public Square* (a CNU Journal) and senior communications adviser for the CNU.

55 Here, Steuteville refers to Jane Jacobs' 1961 classic *The Death and Life of Great American Cities* that articulate the urban street, with its regular building frontages and urban liveliness.

be there in reality”, Duany said (cited in Steuteville, 2011)^[56]. Landscape urbanism’s seeming lack of attention toward the human dimension is also outlined in Emily Talen’s (2010)^[57] critical review of *The Landscape Urbanism Reader* (Waldheim, ed., 2006a).

[L]andscape urbanists are really, really good at describing things. Using terrific words like “rhizomelike” and “extensivity”, they have developed a keen ability to read a site’s potential, reaching new levels of understanding through their impressive command of vocabulary [...] Beyond the jargon and the wasting of everyone’s time, by far the most serious problem with landscape urbanism is that it completely leaves out of the discussion something many of us consider to be pretty essential: humans. This oversight makes landscape urbanists immune to social objective - the attempt to give as many urban residents as possible access to what they need for a happy, healthy, just productive life. They seem not to understand, nor care about, people going to work, looking for jobs, riding the bus, raising families, buying groceries - all those mundane, overly programmed predictabilities of everyday life that nevertheless need constant attention. There simply are no people in the world of landscape urbanism (Talen, 2010, p. 2).

New urbanism’s accusations against landscape urbanism are many. Although new

56 See also, Thompson’s (2012) *Ten Tenets and Six Questions for Landscape Urbanism*. Thompson raises a similar discussion in relation to the projects (produced by students on the AA’s Landscape Urbanism programme) illustrated in Mostafavi and Najle’s (2003) *Landscape Urbanism: A Manual for the Machinic Landscape*. “Problems arise on closer inspection, for most of them do not indicate their scale, their context or their orientation. They seem to eschew such commonplace communicative devices as labels and keys, so the overall effect is of a species of self-absorbed inventiveness which has little to do with real places and nothing to do with real people” (Thompson, 2012, pp. 20-21).

57 According to Talen (2010), her main encounter with landscape urbanism (prior to the LU Reader) was the popular ‘landscape urbanism bullshit generator’ (see, www.ruderal.com).

urbanists accuse landscape urbanism to promote sprawl, ignore environmental problematics associated with extensive green areas and increased car-dependency, and neglect the importance of the classical urban streetscape, there also seems to be a few understandings. As articulated by Steuteville (2011) and Hogan (2010), new urbanists can potentially learn from landscape urbanism especially where the demand simply does not exist for more dense forms. Also, as some cities shrink (e.g., Detroit), there is a need for revitalisation strategies of outer transect zones, site remediation, and new ways of thinking about human settlement, they argue. Here, CNU acknowledges that landscape urbanism could provide with some adequate answers. That being said, as I see it, landscape urbanism is, in many ways, directly at odds with the foundations of new urbanism, and it is hard to see how landscape urbanism's acceptance of sprawl and favouring of ecological features over urban density can be reconciled with new urbanism's prescription for dense, walkable urban form^[58].

As the controversy between landscape urbanism and new urbanism in North America appears almost like trench warfare, the critique in Europe stays subtler and more academic. In 2006, *Journal of the European Council of Landscape Architecture Schools* (JoLa) was first published featuring landscape urbanism as one of the main themes (Issue 1, 2006). Again in 2007 (autumn issue), JoLa continued the discussion on landscape urbanism through writings by, e.g., Kelly Shannon and Richard Weller. In 2011, *Topos*, an international review of landscape and urban design published by Munich based Callwey, also devoted a themed issue to landscape urbanism, organised around Charles Waldheim, James Corner, Mohsen Mostafavi, Adriaan Geuze, and other prominent landscape urbanists (Issue 71, 2010). Even though I do not consider these publications landscape urbanism key literature, they underline, as I see it, a more European understanding of the subject. Here, as I see it, the most frequent question asked is, if landscape urbanism is a meaningful new construct and conceptual

58 In 2013, Duany and Talen published an entire book to soak down landscape urbanism: *Landscape Urbanism and its Discontents: Dissimulating the Sustainable City* (New Society Publishers).

shift of substance - or if landscape urbanism is simply landscape architecture re-presented as a fashionable repacking of old ideas? (see also, the discussions in chapter 5). Others claim that landscape urbanism is some sort of ‘land grab’ by landscape architects wishing to move into new territories (cf., Thompson, 2012, p. 9). As implied in editor Robert Schäfer’s preface to *Topos*, Issue 71, landscape (architecture) urbanism is nothing new in Europe. Here, Schäfer implies that it is already widely accepted, in Europe at least, that landscape architects should play a leading role in urban planning and design. According to Schäfer (2010, p. 3), the discussion to be initiated is less about theory and origin than how these new thoughts and tendencies can be applied into a concrete and practice-based reality.

What they all [landscape urbanism, ecological urbanism, process urbanism, etc.] have in common is that, because of a presumably static view of things in landscape architectural practice, they rely on open processes and overlapping layers. Does this correspond in reality? Naturally we cannot generalise, because the American view of the profession is different from the European or the Chinese one [...] That is why there will be no true conception of landscape architecture but many different approaches and traditions, conditions and dependencies [...] Of course we all agree that landscape architects should play an important role in complex planning projects [...] But because reality lags behind, perhaps a discussion of the concept could lead to the next step, which is to consider what screws to apply at the universities and in practice in order to advance the profession in the service of what matters. (Schäfer, 2010).

Here, I will briefly refer to Kelly Shannon’s (2006) (in *LU Reader*) essay: *From Theory to Resistance: Landscape Urbanism in Europe*. According to Shannon (2006, p. 146), “the landscape urbanism discourse that has developed in Europe has on the whole emerged less as a theory than as a way to innovate at the level of design practice”. As such, the European discourse surrounding landscape urbanism may

possess, not only, a key to defining landscape urbanism as a practice, but also the original inspirations to the emergence of landscape urbanism. The idea of European landscape architecture as a point of departure for describing a landscape urbanist practice and methodology also comply with Diedrich's (2008, p. 9) assertion that the problems of contemporary urbanism have been at the centre of landscape thought and practice for so long that European (and Danish) landscape architecture already includes urbanism. Similar considerations are also presented in Christophe Girot's (2012, p. 84) thorough review of the landscape urbanist *Landscapeology: Learning to Landscape the City* (Van Beek and Vermaas, 2011). Here Girot (2012, p. 84) declares that Van Beek and Vermaas' methodology is nothing new; "*it incorporates a mode of systems analysis that has been in place since the 1960s, where process precedes design ideal and function defines aesthetics*". Interestingly, Girot underlines that the 'Dutchness' and the differing scale and nature of the described examples make it difficult to claim Landscapeology (which essentially is landscape urbanism) a universal volume applicable to other situations around the world. Girot underlines that this particular mode of practice is limited and adapted to the peculiarities of the north-western European territory and its specific planning culture. While, I assume, many urban and landscape professionals may not be aware of the on-going theoretical debates on landscape urbanism, current students (and future practitioners) at a few international top universities^[59] (and Danish architecture schools^[60]) are being steeped in these new theories. Presumably, this process alone may have some impact on future practice? Nevertheless, as this PhD thesis' empirical investigations also demonstrate, the discussion on landscape urbanism's general applicability and practicability in relation to local situations and planning traditions remain relatively unresolved and inadequately debated.

59 For example, University of Pennsylvania (US) (James Corner, Richard Weller); Harvard University (US) (Charles Waldheim, Mohsen Mostafavi); AA's Landscape Urbanism programme (UK), and others.

60 Aalborg Universitet, Arkitektskolen Aarhus, Kunstakademiets Arkitektskole, and Københavns Universitet.

A method, a practice, or a result?

Overviewing the previous sections, it appears that ever since the very phrase first appeared in the 1990s, landscape urbanism has taken many different forms and uses. As an ethos, landscape urbanism celebrates indeterminacy and systemic thinking, and it appreciates the contemporary city as a hybridised and denatured ecology. In practice, landscape urbanism conjoins the methods and scales of landscape architecture, planning, and urban design towards a shared form of practice in which landscape replaces architecture as the basic building block of contemporary urbanism (cf., Weller, 2008; Corner, 2006; Waldheim, ed., 2006a). The development of landscape urbanism as theory and practice is the result of many works and influences. Retrospectively, one may argue that landscape and green structures have been central issues in urban planning since the beginning of the Twentieth-century. From iconic planning projects, such as London's Green Belt (1935) to the central greens as organizing trait in the inter-war period's building structures (e.g., the Radburn planning principle in line with the Garden City ideals as originally described by Ebenezer Howard in 1898), and the subordinated and hierarchical classified open spaces in rational modernist urban planning (cf., Kvorning et al. (eds.), 2012, p. 111). One could also claim that examples from the history of city planning, architecture and landscape architecture, such as Boston Back Fens by Olmsted and Villa Radieuse by le Corbusier demonstrate how landscape is qualified to organize the city while contributing to the urban experience in a positive way. Also, Frank Lloyd Wright's ideas for the canonical Broadacre City (1932)^[61] as well as Ludwig Hilberseimer's *The New Regional Pattern* (1949) held a critique of the industrialized and centralized city and its disintegrating and unsatisfying life. Hilberseimer argued that the planning problems, which arose by the industrialisation, could not be solved for the city alone but required a larger area and could be solved only by regional planning. Here, the region was seen as an 'organic' entity. Seemingly inspired by the Howard's Garden Cities principles, Hilberseimer favoured the decentralised metropolis, and combined the advantages of

61 Wright presented the idea in his book *The Disappearing City* in 1932.

self-sufficient small towns with those of a metropolis as an alternative to the plan-less dis-urbanisation characterising the typical North American suburban areas (later known as sprawl^[62]). The metropolis should be located in the landscape and become a part of the landscape (Hilberseimer, 1949). Later in the 1960s, Ian McHargh wrote *Design with Nature*, one of the first books to describe an ecological approach to the planning and design of communities. Olmsted, Wright, Hilberseimer, and McHargh were, although decades apart, in very different terms, and on different scales, ahead of their time and in clear opposition to the traditional American thinking of the city, by advocating an organic urbanism defined by landscape features and ecologies as opposed to architectural structures and utilitarian infrastructure. Nevertheless, it was not until the late 1990s that the small cohort surrounding Charles Waldheim popularised the very term landscape urbanism. The following attempt to frame landscape urbanism more precisely is inspired by Michael Miller's^[63] (2013) four-part definition of landscape urbanism, i.e., landscape urbanism as *diagnosis*; landscape urbanism as *framework and process*; landscape urbanism as *green infrastructure*; landscape urbanism as *landscape+urbanism*. Landscape urbanism as *diagnosis* relates specifically to Charles Waldheim's academic analysis of post-industrial North American cities (e.g., Daskalakis, Waldheim, and Young (eds.), 2001; Waldheim, 2002; 2006b; and others). In these writings, Waldheim describes the existing condition of metropolitan dispersion and recognises the emergence of un-designed landscapes in the voids left by dispersion. Waldheim also raises the question whether the redevelopment of a

62 Suburban sprawl: “the rapid expansion of the geographic extent of cities and towns, often characterized by low-density residential housing, single-use zoning, and increased reliance on the private automobile for transportation. Urban sprawl is caused in part by the need to accommodate a rising urban population; however, in many metropolitan areas it results from a desire for increased living space and other residential amenities. Urban sprawl has been correlated with increased energy use, pollution, and traffic congestion and a decline in community distinctiveness and cohesiveness. In addition, by increasing the physical and environmental “footprints” of metropolitan areas, the phenomenon leads to the destruction of wildlife habitat and to the fragmentation of remaining natural areas” (Encyclopædia Britannica, 2012).

63 Michael Miller is associate at Pennsylvania/Los Angeles-based landscape office OLIN. He teaches at University of Pennsylvania.

dense urban cores is a possible or even desirable practice in declining post-industrial cities (cf., Waldheim and Santos-Munné, 2001). Here, landscape urbanism is used as a way to describe and discuss the symptoms and causes of metropolitan decline and dispersion. Landscape urbanism as *framework and process* has a strong academic underpinning, but asserts more pragmatically the role of ecological, economic, and social dynamics within cities. Here, landscape urbanism is used as a framework to criticise regulatory planning and fixed master plans (which traditionally dominate urban design) and favouring open-ended design strategies. In this interpretation, landscape urbanism suggests landscape as a ‘lens’ (e.g., Waldheim, 2006b; 2006c) for understanding the city - not merely because landscape concerns natural materials - but because landscape explicitly can embrace the uncertainty of contemporary urbanism by thinking in systems, processes, and infrastructure (e.g., Waldheim and Santos-Munné, 2001; Smets, 2002; Corner, 2006; and others). Landscape urbanism, as framework and process, also introduces landscape as the very material for constructing the city (see also, Mostafavi and Najle, eds., 2003; Waldheim, ed., 2006). Miller’s third definition of landscape urbanism as *green infrastructure*, focuses on achieving environmental performance through landscape measures. In this reading, Miller (2013, p. n.d.) claims, “*landscape becomes not a metaphor for urbanism but an engineered device with strictly defined functions and measurable benefits*”. Interestingly, whereas Miller uses the designation green infrastructure, I venture to assert that this definition basically corresponds to the elaborations outlined (cf., previous sections) in *Ecological Urbanism* (Mostafavi and Doherty, eds., 2010). In the final definition, *landscape+urbanism*, Miller refers to the increasingly blurred boundaries between the landscape and urban professions; Even though the work of landscape design in an urban setting cannot be argued for as something new and unique (see also, Connolly, 2004 and Levy, 2012), the emergence of landscape urbanism can also be linked to a shift in leadership, he argues.

Choices about the form and quality of urban environments have traditionally been made from a perspective of dominance, governance, or finance and therefore from the architectural view-point; minimal at-

tention has been given to the complexities of the external environment as a potential and primary generator of urban design. In the world of landscape urbanism, nuances of landscapes and their interface with architectural edges are regarded as influential in shaping urban environments at the least. When most successful, landscape becomes a primary source for making decisions about the urban environment, thereby inextricably intertwining landscapes with architecture. A direct result of this shift is the role of landscape architect as a leader or co-generator of urban design (Miller (2013) quotes OLIN partner and CEO Lucinda Sanders, 2013).

As suggested in the introduction of this PhD thesis, it seems that landscape urbanism has the ability to challenge the urban and landscape professionals to reconsider their motives and practices. In the same time, as indicated in the previous sections, one may also argue that landscape urbanism has a tendency to recycle old concepts and ideas while presenting them as new. However, as I see it, this tension between transforming and re-branding landscape architecture is not merely an unfruitful conflict. As this PhD thesis' empirical investigation will demonstrate, landscape urbanism, as an actual practice, cannot be fully understood nor discussed without consulting and acknowledging landscape architecture's tradition and practice; Reversely, one may also argue that the very idea of landscape architect as leader of urban design (as suggested above by Sanders) is inevitably nurtured via landscape urbanism; More of which in the following chapters.

CHAPTER 3:

Empirical study

3.1 Purpose and intentions

This empirical study focuses on the current orientation towards ecological features and green open spaces seen in a wide range of contemporary Danish urban development projects. Through a selection of relevant cases (Ullerødbyen, Bellinge Fælled, and Tankefuld) that somehow reflect landscape urbanism, it is the intention to explore how Danish urban professionals work in the field between landscape and urbanism and to discuss if their approach and way of practice is connected to landscape urbanism as defined in theory. Further, the empirical study looks into the selected projects' meeting with the Danish urban planning reality in order to discuss landscape urbanism's capacity to survive within the municipal bureaucracy and in relation to Denmark's planning system. Firstly, by superimposing the methodical aspects of landscape urbanism (as described earlier) onto the selected Danish urban projects that apparently utilize landscape and natural processes as generators for spatial design, I seek to decode and discuss the features that indicate that the projects may represent landscape urbanism. Following, in order to get more thorough insight into the approach and working methods behind the project designs, the readings of the selected projects will be supplemented with interviews with the respective designers^[64]. Last but not least, it is the intention to conduct a series of interviews with key persons from the respective municipalities in order to evaluate the original project designs in relation to their plan-implemented results and to discuss landscape urbanism's practicability in relation to the Danish urban production in general.

Qualitative methods and the power of example

As this study is characterised by the absence of measurable data and mathematical coherences, it reflects what is defined in theory of science as qualitative research. Qualitative research focuses on how something is done, said, experienced, developed,

64 Throughout this thesis, I seek to use the term 'designer' when referring to the artistic-creative creator of spatial design solutions. In relation to discussing landscape urbanism, which dissociates itself from disciplinary boundaries and professional distinctions between, for instance, landscape architect, planner, urban designer, and architect, I find it relevant to use a somewhat 'neutral' term that reflects this professional merger.

or manifested. Qualitative research focuses on understanding, interpreting, or deconstructing the qualities of human experiences. In opposition to qualitative research is quantitative research. Quantitative research focuses on how much of something in order to add characteristics and properties to a certain numerical value; this process makes it possible to work up one's data statistically (Brinkmann & Tanggaard 2010). Having said that, the 'case study' as research strategy, which I also intend to make use of, should not simply be confused with qualitative research (Yin, 1993). Including case studies, qualitative research faces many choices of methods to generate data, e.g., classical ethnographic methods, focus groups, participant observation, qualitative review of statistics, interviews (structured, semi-structured, or unstructured), among many others. To analyse the qualitative data, the researcher seeks meaning from all of the obtained and available data. The data may be categorised and sorted into patterns as the primary basis for organising and reporting the findings of the study. As my own research focuses on discussing theoretical deliberations made from a survey of key literature in relation to observations made from examining real-life examples and qualitative interviews, it may not be considered of as a multiple-case study in its most traditional sense (cf., Flyvbjerg, 2006). None the less, I still find inspiration in the case study methodology as defined in theory as it provides the opportunity for consecutive reflections and interpretations on this thesis' problematics. In this coherence, I lean on Robert E. Yin's (1993, p. 13) definition of the case study as a comprehensive and all-encompassing research strategy:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1993, p. 13).

According to Yin (1993), the case study as a research strategy comprises an all-encompassing method with the logic of design incorporating specific approaches to data collection and to data analysis. In this sense, the case study is neither a data collection tactic nor merely a design feature alone – but a comprehensive research strategy. Yin

classifies the various case study types into three main categories: exploratory, explanatory, and descriptive. With reference to my own investigations, the exploratory case seems relevant when reflecting on problems in a new way. This process usually takes place in a research projects initial phases when the research question is still evolving. In my view, the exploratory cases can be used as an opening to approach the selected problematic and to generate new knowledge towards encirclement of a well-defined research question. In this thesis, the reference projects have been used in order to explore the methodical-practical aspects of landscape urbanism and to point out coherences or lack of coherences between theory and practice; for instance, how landscape urbanism is utilised and manifests in practice, but also to discuss the congruities and incongruities between the hypothetically defined practice and real-life examples. As such, the exploratory cases have been part of encircling the focus of investigation and contributed to a more precise formulation of the research question. In the same time, the exploratory cases are used as reference cases as they complement the three primary cases. The reference cases are used both in the research project's initial phases in formulating the objectives of the research project – but also in the final phases in order to discuss the findings of the empirical inquiries. The explanatory cases are represented by the three primary cases, i.e., Bellinge Fæld, Ullerødbyen, and Tankefuld. This type of case is utilised when the research question has found its more precise formulation. In relation to this thesis, the explanatory cases are used in my search for causalities and as basis for elaborating on the defined research question and hypotheses.

The multiple-case strategy is chosen in order to increase the generalizability of the investigations and analyses. Obviously, more cases increase the empirical foundation for formulating more general conclusions, but as I see it, the validity of the outcome has less to do with the amount of empirical data than the thoroughness of the analyses. As such, I choose only three cases (initially four) in order to go more in-depth with the data and focus on creating consistency in the empirical material. Seen in relation to the reliability of the obtained data, I have selected comparable cases and followed a standardised procedure in relation to the processing of data. Nevertheless,

the purpose of the case study as research strategy has not been to generalise – but to explore and qualify the formulated hypotheses in order to generate descriptions and interpretations of the investigated phenomenon. Despite my attempt to categorise the selected primary and secondary cases, it can still be argued that both the reference cases and the primary cases can be regarded as both explanatory and exploratory. As I see it, this overlap is an unavoidable premise of investigating a phenomenon such as landscape urbanism. In landscape urbanism, theory and practice are closely interconnected, and the projects (hypothetical, conceptual, as well as concrete) are inevitably part of its theoretical formation. Many of its leading proponents are both practitioners and theorists (e.g., James Corner), which also reflects the indissoluble connection between theory and practice in landscape urbanism.

Qualitative interviews

The most commonly used qualitative research method is the interview. The qualitative interview can be structured, semi-structured, or unstructured. The qualitative interview investigates the respondents' experience of the questions and reality – not the actual reality itself (Vilstrup, 2001). In relation to my own empirical enquiries, the interviews will investigate the combined landscape-urban practice seen in the selected project designs seen from the interviewees' point of view. The interviews will necessarily reflect the interviewees' experiences of the project and its making; Consequently, it is not possible to report the exact making of the projects in details – nor their precise processing from project proposals to plan-implemented results. Instead, the interviews can provide an impression of the underlying discussions, choices, and decision-making processes behind the making of the projects. Altogether, the project-design analyses, examination of project documents (competition brief, judgement reports, local plans, municipal plans, etc.) supplemented by qualitative interviews with relevant key persons form the basis for elaborating on the thesis objective and formulated hypotheses.

In theory, the qualitative research interview is defined as an active interaction between two or more persons, situated in a specific historical, social and cultural coherence, which leads to negotiate and context depend answers (Kvale, 1997). Having said that,

the interview is basically a conversation, a dialogue concerning a topic of common interests between two parties where one part seeks information from the other. The interview takes place in a human-to-human context and the meaning of the interview statements depend on this given context (Brinkmann and Tanggaard, 2010). As such, the obtained information and knowledge cannot automatically be transferred or compared to knowledge in other contexts. When formulating the questionnaires, analysing the interviews, transcribing the interviews, and finally working up the gathered material it is important to be aware of this context-dependency. Interviews generate information sensitive to qualitative differences in the meaning, and the differences between the oral and the written contexts become decisive by the transcription from an oral to a written modality (Kvale, 1997). As such, the qualitative interviews are to be seen as a ‘secondary’ expression of the actual phenomenon. The interview material presented in this thesis gives a privileged insight (although processed by my own biases) into the interviewed person’s own experiences of the interview’s themes and topics. From this, the main purpose of the qualitative interviews in this empirical study is to get as close and unbiased as possible to the experiences of the interviewees in order to formulate a coherent and empirically well-informed second-person-perspective (this is I) of the interviewees’ experiences.

The interviews will be carried out as semi-structured interviews (cf., Kvale, 1997). Previous to the respective interviews, an interview guide will be developed. The interview guide is a list of themes and questions that need to be covered during the respective conversations. It is the intention to develop a common interview guide for the designer interviews and a guide for the municipal interviews. In this coherence, it is important to note that even if the respective projects share many similarities, the interview guides obviously need to be adjusted to fit the individual project. Also, as the interviews are semi-structured, it is still possible to follow topical trajectories during the conversations if it feels appropriate; This opens up for developing both the interviewees’ and my own understanding of the topic during the interviews and provide the opportunity for identifying new ways of seeing and understanding the topic at hand. Nevertheless, it is the intention to follow the same interview guides

as much as possible in order to make the obtained information as reliable, unbiased, and comparable as possible. As the interview guides contain open-ended questions with no simple yes/no answers and the discussions may diverge from the interview guide, all interviews will be recorded. This will also help me to focus on the conversation instead of distracting the flow of the interview by jotting notes. Subsequently, the interviews will be listened to again and crucial parts will be transcribed for further analysis. The structuring of the interview inquiry is based upon Kvale's (1997, pp. 94-96) seven stages of the interview investigation: *Thematizing* (why and what); *Design* (develop an interview guide by focusing on which questions to ask and how to put the questions as neutral and open-ended as possible); *Interview* (semi-structured^[65] and recorded interviews); *Transcribing* (preparing the material for analysis; only relevant passages will be fully transcribed due to the length (1-2 hours) of the interviews; non-transcribed passages will be summarised and commented, and crucial passages will be translated if cited in the thesis); *Analysis* (as part of developing the interview guide, a series of working hypotheses will be formulated in order to guide the interview discussions but also in order to avoid biased or leading questions; it is the intention to sum up on the discussions during the interviews by asking clarifying questions, e.g., “as I understand it” – or “the meaning of what you just said is...”, etc.); *Verification* (evaluate own inquiry; how consistent are the results and does the interview inquiry investigate what it is supposed to investigate); *Reporting* (the interview material is the primary empirical source of this research project; but due to the character of the interviews, i.e., semi-structured, open-ended, and informal, the processed and analysed interview material will not be reported independently in the thesis; instead, the interview material will be integrated in the thesis as the primary empirical basis or reference frame for discussing the research hypotheses and for formulating a consistent answer to the research question).

65 The interview procedure is inspired by Kvale's layout for the semi-structured interview investigation (1997, pp. 129-147)

3.2 From idea to realised project

Before introducing the Danish projects and the following inquiries, I intend to give a brief overview of the Danish urban planning system and the complexity connected to developing an urban project. Further, as this empirical study primarily rely on person-dependent information obtained from personal conversations with persons directly – or indirectly involved in the development of the respective selected projects, it is important to expose how a project meets different realities during its processing from initial visions to a possible realised result. Across scale and scope, the making of any urban design or planning project is a dynamic process. It develops continuously and in close interaction between many parties and influences. Ultimately, the final outcome is the result of many decisions and interactions. Some of the decisions may be well documented and accessible to the public (e.g., competition briefs, plans, presentation materials, committee and council meeting reports, etc.) while others may not (e.g., private conversations, personal agendas, politics, etc.). Yet another aspect to consider is the realisation time of urban development projects, which can be an impediment to obtaining first-hand knowledge of the development and decision-making processes of a given project. Designers, municipal employees, politicians, investors, and so on may come and go. Also, people comprehend things differently and things change over time. Having said that, interviewing key persons who are – or have been directly involved in the development of the projects seems to be the most direct way to obtain information on the non-visual and non-written processes and influences.

Urban design versus spatial planning

[Urban planning and urban design] are, and should remain, distinct but complementary disciplines. Urban design differs from planning in scale, orientation, and treatment of space. Its scale is primarily that of the street, park, or transit stop, as opposed to the larger region, community, or activity center, which are foremost in planning. Its orientation is both aesthetic and functional, putting it somewhere between art, whose object is beauty, and planning, whose object is utility. The

treatment of space in urban design is three-dimensional, with vertical elements as important as horizontal ones. Urban planning, on the other hand, is customarily a two-dimensional activity, with most plans visually represented in plan view, not model, section, or elevation (Ewing, 2011, p. 43)

In this PhD thesis, urban design and urban planning are referred to as two different, albeit overlapping, concepts, which can be quite confusing for a Dane. The Danish term ‘byplanlægning’, which literally means town planning, covers both the formal planning practicalities and the more creative endeavours related to designing urban spaces and structure plans. As such, the Danish term comprises public planning and government of land-use and the establishment of physical and strategic frameworks (i.e., national, regional, and local plans) for future urban development as well as the concrete work of the persons (usually architects), who in their practices work out layouts and plans for the design and furnishment of urban areas of various scales and uses. Whereas Arne Gaardmand (1993) defines the purpose of ‘byplanlægning’ as providing *order* and *beauty* to human surroundings, Arne Post’s (2009) definition is more practical:

[...] physical planning, that is, the planning that is manifested in plans for the physical surroundings. This is not only about planning of cities, but generally about public planning and management of a municipality - and the country’s - physical development (Post, 2009, p. 5)^[66].

In the following, I will separate the two terms ‘urban planning’ and ‘urban design’. Although, as indicated by Ewing (2011), the two fields are closely interrelated, they differ in two aspects: Firstly, as I see it, urban planning refers to the technical-political processes and public administration concerned with the use of land. As such,

66 Translated from Danish by author.

urban planning becomes a form of development control (utility) that is responsible for enforcing and negotiating the chosen policies at various levels in order to secure a desirable urban development (i.e., efficient infrastructural networks, attractive settlements possibilities, healthy natural environments, sustainability, etc.). Secondly, urban design focuses on designing and organising cities, urban areas, and urban spaces (see also, this thesis' definition of scales). Whereas building architecture focuses on individual buildings and objects, urban design addresses the larger scale and coherences of building structures, streets, public spaces, etc. Urban design is concerned with spatial quality, the appearance and use of places, including buildings and the spaces between them. Urban design is about connecting people and places, movement and urban form, nature and urban fabric, built and unbuilt (Britannica, 2012; Taylor, 2007; Curl, 2006). As such, urban design becomes the negotiating process that brings the urban planning visions to life. The two highly connected activities of urban planning and urban design, of course, depend on the local legislative context.

Denmark's planning system

All spatial planning in Denmark is rooted in the Planning Act (Planloven). The Planning Act dictates the administrative framework for the management of Danish towns and landscapes, and the planning system sets down the rules for spatial planning and land use.

The [Planning] Act ensures that the overall planning synthesizes the interests of society with respect to land use and contributes to protecting the country's nature and environment, so that sustainable development of society with respect for people's living conditions and for the conservation of wildlife and vegetation is secured (Ministry of the Environment, 2007a, p. 6).

Denmark's planning system, basically, operates upon a built-unbuilt dichotomy. Since its establishment in the 1970s, the zoning system has divided Denmark into three types of zones, i.e., urban zones, holiday house areas, and rural zones. The pri-

mary purpose of this zoning is to avoid uncontrolled sprawling urban developments, to protect valuable landscapes, and to ensure good production opportunities for agriculture and forestry. The planning system is characterised by decentralisation and a strong division of tasks and responsibilities. In 2007, the former liberal-conservative government (VK-regeringen) implemented a reform of the administrative structure. The former 275 municipalities merged into 98 larger units, and the existing county level was abandoned in favour of five new larger administrative regions. This restructuring resulted in a major redistribution of tasks and responsibilities between the new levels of administration; most importantly, the former counties' responsibilities were primarily assigned to the municipalities – including most spatial planning functions. After the 2007 reform, the regional level was responsible for working out long-term development strategies to ensure coherence between national and municipal planning. None the less, by the Planning Act reform in 2013, the main part of the regions' functions was omitted from the Planning Act, which, basically, deprived the regional councils from their power in spatial planning.

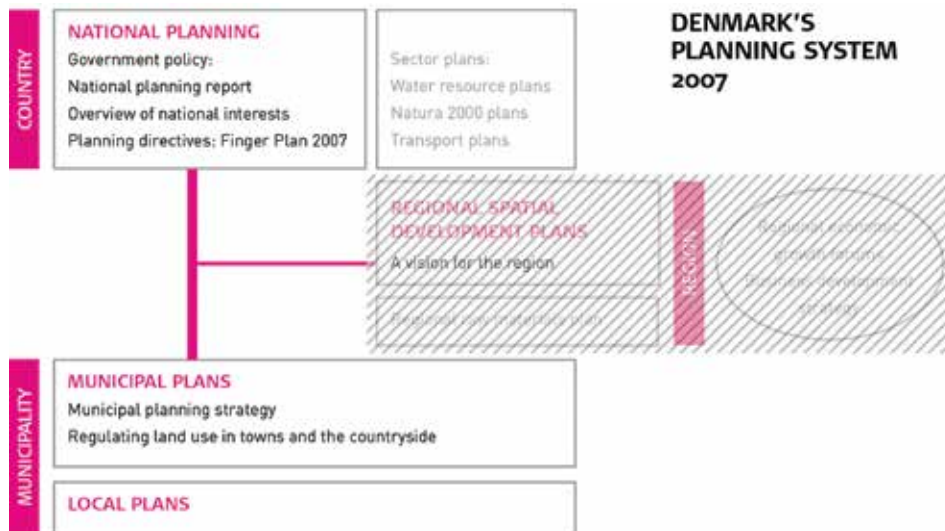


Figure 8: Edited overview of the Danish planning system after the reform of local administration structure in 2007. In 2013, the main part of the regional level's remedies was omitted from the Planning Act, and the regional councils were deprived from their power in spatial planning (Miljøministeriet, 2007b, p. 7).

Today, the Planning Act distributes the responsibility for planning between the Minister of Business and Growth and 98 municipal councils. Whereas the ministry stakes out the national visions and guidelines for urban planning and development, each municipality has the obligation to ‘translate’ the overall visions and guidelines into municipal plans and local plans. In this coherence, the municipal plan can be regarded as the main political planning instrument of the municipal councils. The municipal plan provides the linkage between national planning interests and detailed local plans, and it combines local political objectives, land use policies, and detailed land-use regulations into one document that covers the total jurisdiction. The development possibilities are being determined in the general planning regulations at the municipal level, and further detailed in the legally binding local plans. The local plan concretises the political strategies and objectives of the municipal plan by establishing rules on how land may be developed and used. It may also regulate numerous other factors related to use, size and location of buildings, roads and paths, and the architectural features of a given area. The strength of local plans is that they state what is permitted and what is not (Erhvervsstyrelsen, n.d.; Galland and Enemark, 2012; Miljøministeriet, 2007b).

In practice, development is allowed in urban zones and holiday house areas in accordance with the current planning regulations, which basically means if a project is not in keeping with the Planning Act and related regulations, it cannot be implemented. However, under certain circumstances, special permission from the authorities can be requested. As mentioned previously, the planning system is based upon the division of the country into three types of zones, i.e., urban zones, holiday house areas, and rural zones. In rural zones, which cover about 90% of the country, developments or any change of land use for other purposes than agriculture and forestry are prohibited or subject to a special permission from the municipal authority in order to prevent urban sprawl and uncontrolled developments. Having said that, a range of other rules may affect the possible use of land and thereby require permission. For instance, a permit is needed for implementation of construction works within the fixed protection zones of natural features (coastal, forests, and streams), which are

identified in the Nature Protection Act; changing agricultural land to urban purposes requires a permit according to the Agricultural Holdings Act; and implementation of development projects that have significant effects on the environment are subject to environmental impact assessment (VVM-redegørelse) according to the Environmental Protection Act. All of such statutory land-use provisions must be complied with even if a local plan is provided (Galland and Enemark, 2012).

Urban production system

In order to expose the complex nature of urban space production in Denmark and to understand why a landscape urbanism project proposal may have altered and evolved during its formal implementation, it is my intention to introduce the idea of *the urban production system*, which is not a theoretically or practically well-defined concept but rather an attempt to outline a simplified model for overviewing a project in relation to its various development phases and the professional contexts in which it has been discussed and possibly adapted^[67]. As such, the urban production system is an outlining of the primary human-to-human influences a project is likely to meet during its development towards realisation. It is important to underline that any project is indisputably context dependent and refers to a specific situation, time, and location; for that reason, it is also impossible to frame a generic model for understanding different projects. Nevertheless, the schematic outlining of development phases in relation to discussion fora is intended to make the latter case-study investigations of actual landscape urbanism projects easier to comprehend and discuss transversely.

67 The original idea of conceptualising and describing the influences surrounding the production of urban space in Denmark as a somewhat coherent system was introduced to me by my supervisor, Professor Jens Kvorning. As such, this chapter's outlining of the 'urban production system' reflects my own views and experiences as well as fellow views that have occurred during our discussions throughout my research work.

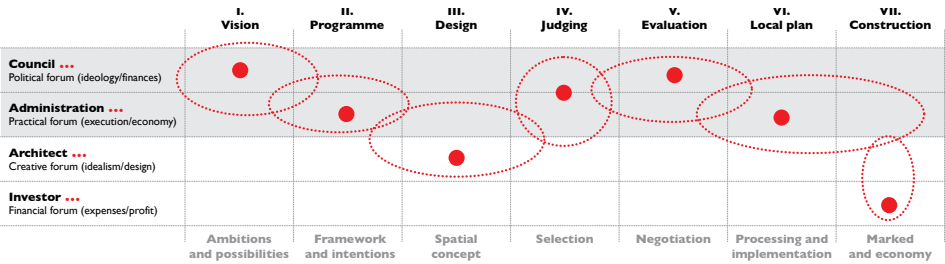


Figure 9: (Author, 2012) Schematic outlining of an imaginary project's development phases seen in relation to the various fora in which the project has been discussed, processed, and possibly altered on its way towards realisation.

Figure 9 illustrates, albeit in a simplified way, how a fictional project has been discussed in various fora during its development from initial vision to plan-implemented and possibly built result (red bubbles). The four primary discussion fora (column) each represents a professional context in which the project is discussed and possibly adapted during its processing towards realisation, i.e., the town council (political forum), the municipal administration (practical forum), the architect or urban designer (creative forum), and finally the possible investor (financial forum). The four primary discussion fora are seen in relation to seven successive development phases (row). In the first phase, the urban development project is conceptualised. In the illustrated scenario, the project is formulated by the town council. Ideally, as the town council represents a political forum, the project ought to reflect the current political discourse and embody an ambition that is thought by the politicians to contribute positively to the development of the town. Also, an idea for a project could be part of a private investor's business strategy. For instance, Carlsberg Byen, which is the largest private transaction in private property development in Denmark.

Despite the origin of the project, it must be assumed that the decisive forum in this phase generally is receptive and optimistic. The second phase concerns the more practical aspects of a project's development; In the illustrated example, it is the municipal administration's job to translate the council's vision and ambitions into a formal programme (existing conditions, assignment, challenges, delimitations, etc.).

The visions formulated in the political forum are discussed in an administrative framework with the purpose of balancing the political expectations with actual possibilities. Even though the forum is practical in this phase of development, the discussions are hopefully forward-looking and favourably disposed to the political proposal. Third phase focuses on the physical layout and plan proposal for the desired urban development. This process can be more or less controlled by the administration. If a design competition is arranged, the municipality can choose between several models, for instance, open competition or limited by a prequalification; also, the administration can choose to interact with the design process by conducting consecutive evaluations by requiring for instance partial deliveries or presentations; Another possibility is to engage two or more consultants and carry out the design process as a parallel commission; or most simply, one consultant can be hired to deliver a project that fulfil the administration's requirements. Even if the administration chooses to interact with the design process, it is primarily the design team(s) that sets the agenda; the forum is creative, and the discussions will inevitably be dominated by idealism, functionality, and aesthetic considerations. In phase four, the selection of the final project design takes place. If a competition has been arranged, the winner will typically be selected by a judging panel composed of appointed members (for instance, politicians, prominent professionals, key persons from academia, etc.). Generally, the judges are to look after the municipality's interests, but, as I see it, it is unavoidable that the respective judges are affected by their own professional and private activities. As such, the judging report reflects not only the deliberations of the judging panel and presents the winning entry; it also represents the views of a specific group of people, which have been selected to the panel due to their individual expertise and persona. Having said that, it is arguable that the judging situation primarily takes place in an approving forum. From being evaluated within a positive and approving forum, the project meets the political reality before plan-implementation can take place in phase six. In phase five, the town council are to decide whether the development proposal (plan design, development strategy, etc.) are desirable or not. Even though a project was first formulated by the council, there is no certainty that the proposal will be agreed on. Since the initiation phase, a wide range of factors may have influenced

the political discourse surrounding the project, e.g., financial restructuring, changes in the political power structure, or the public support has declined. When re-entering the local political scene, the project will be evaluated and assessed by the councilors in relation to his/her political and personal agenda here and now. In many ways, any given project can be used as a political gaming piece. From this, the outcome of the political discussion does not necessarily reflect the quality of the project but is merely a political balancing of interests and power. In this forum, the project is being negotiated, and the political opportunity to overturn the project is present. If the project is adopted by the council, and the proposal conforms to the adopted planning regulations in the municipal plan, local plan implementation can take place. If the project does not conform to adopted planning regulations, planning regulations in the municipal plan have to be formally amended or adjusted prior to approval. This process includes negotiations between the developer (if privately developed) and the municipal administration as well as public participation prior to adoption (cf., Gal-land and Enemark, 2012). A local plan is normally worked out by either the administration or a consultant firm. In this phase, the forum is practical as well as creative. Obviously, the local plan has to comply with the Planning Act and other related spatial regulations; but, as the local plan provides the basis for the later realisation of the project, the municipal administration's way of handling, adapting, and pursuing the designer's intentions is crucial for drawing up the guidelines for the future realisation of the project. The final phase refers to the actual construction and realisation of the project. This process is marked-led and the discussion forum primarily circles around demand, expenses, and profit.

The making of a project differs from case to case, and the different discussion fora have their own specific agendas and focus in each specific case. What is interesting here, is that a decision made in one forum can very easily be converted in the next and give yet another turn to the project's design, financing, development, etc. Also, even if the means of planning control are well in place, realisation may not take place as intended. While Denmark's planning system primarily is designed to prevent undesirable development to occur at any time, it cannot guarantee that politically

desirable development actually takes place. This relates to the fact that most planning intentions in Denmark are achieved through private developments and investments. However, the municipality may enforce implementation in some cases by purchase for urban development in compliance with the municipal plan – or adopt a more active role in purchasing land for the purpose of achieving planning objectives in a longer perspective, more of which later^[68].

When investigating a project from its more conceptual phases to its plan-implemented and possibly built result, a wide range of public accessible plan documents can provide general information about the project and its politically desired development. With regard to this research's focus on landscape urbanism and its practicability, the primary documents to consult would be: municipal plan(s); competition brief, judging panel report, and winning entry (if a competition was arranged), project proposal (final project design); and adopted local plan(s). Generally, the municipal plan provides background information about the project area and its politically desirable development; Depending on whether the concrete project has been plan-implemented or not, the level of detail may vary. The competition materials (i.e., brief, design concept(s), and judging report) present the municipality's (or private organiser) visions and the practical framework for the competition; the final design concept is the result of the designer in question's interpretation of the formulated assignment; and the judging report reflects the panels view of the selected project(s). The local plan represents the outcome of the design and planning endeavours; The municipal administration has interpreted and processed the selected design concept – or perhaps combined several designs into a plan-implemented result. In this coherence, the local plan is, so to say, the final bastion before setting the project free to the developers

68 The three described scenarios are also seen in the empirical study. Whereas the Bellinge Fælled area (45ha) was purchased by Odense Kommune in order to obtain fully control of the development process, Ullerødbyen in Hillerød Kommune represent typical examples of a marked-led developments. In the case of Tankefuld, Svendborg Kommune has adopted a more active role in purchasing land in 2008 (57,6ha farm land and 45,6ha forest) for the purpose of achieving planning objectives in a longer perspective. The three cases and the development strategies will be discussed more thoroughly in chapter 4.

(if privately developed). The presented documents represent, so to say, the sum of a long range of human-to-human negotiations; unfortunately, the documents reveal only little or nothing about the underlying decision-making processes, which have lead the project in the specific direction. This is also the reason why I choose to base my empirical investigations on actual conversations with key person involved in the respective projects I intend to examine.

3.3 The empirical material

In this thesis, I distinguish between primary and secondary empirical material. The first empirical study (see, chapter 3) consists of a selection of international landscape urbanism projects (Tree City and Fresh Kills Lifescape). The international projects are primarily included in order to elaborate on and illustrate the methodical and practical aspects of applied landscape urbanism as defined by landscape urbanism theory; these projects, which are only extensively analysed, are in this coherence considered as secondary empirical material – or simply reference projects. The primary empirical material consists of a case study of selected Danish projects that interconnect with a series of related interviews (designers and municipal key persons). The case study consists of three Danish urban development projects that apparently apply landscape and natural processes as vectors for design; these projects will be analysed more intensively in order to grasp the essence of the selected projects and enable the projects to be compared and discussed transversely in relation to the theoretically defined landscape urbanism features. Further, the Danish case study will serve as basis for discussing the instrumentality of landscape urbanism and preparing adequate interview-guides for the following interviews. In many ways, the Danish case study and the interview investigation supplement one another; in the same time, analysing the selected projects prior to the interviews could also turn out to be a burden in meeting especially the designers behind the respective projects unbiasedly. It is important to remember that even though the project analysis form a large part of the empirical investigation, it is still the qualitative interviews with key persons directly involved in the development of the projects that constitute this research projects key empirical material and the most direct source of knowledge. Even if the project analysis seems

necessary in order to make the projects intelligible prior to the interviews, this process will obviously be manipulated by this research's focus on landscape urbanism and not necessarily reflect the designers' own conception of his/her way of practice nor the municipality's idea of the project. Finally, I intend to include other Danish reference projects in the final discussion chapters. These projects will not be analysed in depth but will primarily be used in order to substantiate and exemplify my final findings and conclusions.

The Danish cases

First part of the empirical study focuses on selecting a representative series of projects – or cases for further investigation. From overviewing landscape urbanism theory's somewhat pretentious ideas for a possible practice, it seems reasonable to argue that landscape urbanism's characteristics in terms of design primarily are identifiable in the concept-developing phases of a given project. Even though the designer responds to a specific assignment, site, and situation, the initial plan drafts and final design concept (e.g., competition entry or commissioned project design) are obviously more freely conceived as the result of an artistic development process and as such more likely to reflect the designer's incentive and approach. From this, the projects will primarily be selected by their original structural concepts as presented by the respective designers, e.g., structure plan or illustration plan. Please note, in this empirical study, the term 'structure plan' refers to the main physical structure of a demarcated and planned area; it is not to be confused with the term used for the specific part of a municipal plan (Kommuneplan), which illustrates the principal features and structural organisation of a city and its districts, i.e., urban areas, green areas, roads, technical infrastructures, and supply of public and private services (cf., Post, 2009, pp. 148-149). Obviously, as a first criterion for selection, the project design must be exemplary and reflect a clear change in the use and perception of landscape. Secondly, the projects ought to represent a certain variation in scales in order

to establish a reasonable foundation for discussing the applicability and scope^[69] of landscape urbanism's methods; seen from an urban planning and design perspective, it would typically vary from local or neighbourhood scale to regional scale^[70]. Thirdly, as this PhD research also looks into landscape urbanism's practicability in relation to Danish urban planning practice and reality, it is a necessary condition that all selected projects are plan-implemented in accordance with Danish spatial planning legislation. Also, all project materials (at the minimum the assignment formulation or competition brief, the original project design, and the implemented plans) have to be accessible. Finally, and perhaps most importantly, the designers behind the respective projects and municipal key persons with knowledge of the respective projects' processing within the municipal systems have to be willing to participate in the planned research interviews.

The cases are selected from a survey of newer Danish urban project designs that seemingly challenge the traditional perception and use of landscape and ecological processes. Also, the recent public and professional interest in rethinking and quali-

69 In Denmark, the landscape-orientated approach is primarily seen in relation to exurban development or suburban transformation projects (e.g., *Fremtidens Forstæder*). Even if it would have been desirable, I have not succeeded to find other relevant cases that could represent landscape urbanism on the smaller urban open space scale (*byrumsskala*) or regional development scale. The discussion on landscape urbanism's scope and range will be outlined more thoroughly in chapter 5.

70 Using the term scale is obviously a biased affair. Each profession that uses the term 'scale', seems to have its own definition. For instance, urban space analysis scientifically belongs to phenomenology and the humanistic science tradition; Here, the human experience of space is essential (human scale). In this PhD thesis, I undertake and architectural understanding. Here, architectural virtues such as aesthetic, spaces, and functionality are to be considered and evaluated on various levels. In this coherence, I use a compilation of Erhvervsstyrelsen's (n.d.) and Ehlers, ed., (2016) definitions of urban scales, i.e., the local scale, neighbourhood scale, town scale, and regional scale. The local scale refers to the specific spaces of a given area, their architectural design and content; The local scale is immediate perceivable to humans (the human scale). The neighbourhood scale (seen from a helicopter) refers to the mutual organisation of an area's spaces and buildings; how buildings, housing blocks, and open space areas relate to one another. The town scale (coherences viewed from the sky) refers to the town's composition of various areas, functions, and infrastructures. The regional scale (seen from a satellite) refers to organisations of and between urban areas and towns (e.g., status, functions, size, services, networks, etc.); as such, the regional scale comprises abiotic and biotic infrastructural coherences.

fying the Danish suburb in relation to sustainability and ecological awareness has influenced my choices. Among a wide range of interesting projects, I have selected three cases for further investigations: *Bellinge Fælled* (Odense Kommune/Schønher), *Ullerødbyen* (Hillerød Kommune (with NIRAS)/SLA), and *Tankefuld* (Svendborg Kommune/Nord Arkitekter). All the selected projects are suburban residential development projects with a distinct focus on landscape and natural processes, and the projects are implemented or partly implemented into municipal and/or local plans^[71]. At first, the empirical study included a fourth case, *Svenstrup Syd* (Aalborg Kommune/ENG Arkitekter). Unfortunately, due to administrative obstacles, Aalborg Kommune has postponed the project, and at the time of writing, it is still not clear if the project will be carried out at all^[72]. Although the three selected cases represent suburban development and respond to landscape urbanism in one way or another, they also reflect individual variations in how the landscape is conceived and used. Further, the scale on which the landscape is utilised in the three projects varies. The Bellinge Fælled

71 Miljøministeriet and Realdania's Plan 09 publication *Store byudviklingsprojekter: Plan- og procesfaringer fra 4 danske kommuner* (Møller & Grønberg, et al., 2009) discusses the preliminary to the actual plan-implementation of Ullerødbyen, Hornshøj Øst, Kildebjerg Ry, and Tankefuld. Interestingly, the authors address the projects' structural orientation towards landscape as 'the suburb's new layout' – a break with the 'past logic' of the 1960s and 1970s' functionalistic planning's traffic-differentiated road systems and ideas on neighbourhood formations. Instead, the authors say, these projects apply landscape as primary structuralising element by treating the built structures as 'elements' on a common large landscape surface. Retrospectively, Miljøministeriet and Realdania's publication (published ultimo 2009) forms an interesting basis for understanding the preliminary to the respective projects' formal plan-implementation and beginning realisation. Since this thesis includes Ullerødbyen and Tankefuld in its empirical study, the publication's observations and conclusions will be included in the thesis' discussion chapter.

72 In corporation with ENGarkitekter, Ålborg Kommune is working on a catalogue of ideas for Svenstrup Syd. The catalogue focuses on landscape and site qualities in relation to future urban development south of Svenstrup. Even though ENGarkitekter focuses on framing a 'dynamic' landscape plan for Svenstrup Syd, it was primarily the project description on Aalborg Municipality's website that attracted my attention. As stated on the project's website, "*the project calls for entirely new development principles [...] In recent years, various methods to a so-called landscape urbanism have been developed; it is an urban-design method that makes use of landscape architecture theory and methods*" (Aalborg Kommune, 2012). Further, as I had a telephone conversation with the office manager, Gitte Christensen, it was clear that ENGarkitekter describe their general way of practice as 'landscape urbanistic' (Christensen, 2012, personal communication), which again would have been very interesting to go into. Unfortunately, ENGarkitekter did not wish to be part of my further investigations.

case was selected because of its extensive green, open spaces, focus on environmental sustainability, and ambitious local water management system that includes the creation of a new lake. Ullerødbyen, which also has an extensive inner, open landscape as primary organising trait, was primarily selected because of its newness and innovative character seen in relation to the time and context in which it was designed (early 2000s). Finally, the Tankefuld project in Svendborg was selected because of its specific focus on the landscape as identity-creating feature and as generator for the development of the area, which was outlined already in the competition brief (Svendborg Kommune and Akademisk Arkitektforening, 2007). Also, Tankefuld's vast scale has been an important factor. Whereas many urban development projects in Denmark, in the provinces at least, are based on budding-like extensions to the existing towns in form of minor single-family house areas, the Tankefuld area with its 825 ha. was intended to house at least 2-3000 housing units when fully developed. More on the selection process later in this chapter (see, 3.4 Delimitations and limitations). It is important to underline that the realisation process of the selected projects will not be included in this study. First obstacle in this coherence, as I see it, is the time factor. An urban development project can easily have an implementation time of ten to twenty years – or even longer, and the selected cases are not fully realised – or only in their initial construction phases. Also, the construction of both commercial and publicly owned project is a very delicate and complex affair involving many outside factors, partners, and stakeholders. The decision-making processes towards realisation are not always publicly accessible, and the administrative procedures (citizen involvement, public hearings, and political ambitions) are subject to many agendas. Further, it is my conviction that overviewing the realisation process would contribute less to the understanding of landscape urbanism as practice and its formal applicability in relation to Danish planning procedures. All things considered, the local plan with its statutory regulations (§15 in Planloven) is the final regulatory land-use tool in Danish urban planning, and as such, the formal 'last step' in working up a landscape urbanism design before construction. However, if a selected project is constructed, the built result will be overviewed in order to evaluate the correlation between original project proposal, implemented plan, and built result.

Project analysis

Second part of the empirical study focuses on reading the selected cases by their original project designs in relation to landscape urbanism's methodical aspects (as defined in chapter 2). In order to make the selected project designs comparable despite differences in scale and situation, establishing a common model for analysing the project designs is necessary. The project analysis I intend to use is inspired by Rune Christian Bach and Thomas Juel Clemmensen's (2005a) 'analytical matrix' that seeks to explain how landscape is operationalised, and how landscape manifests in a series of urban design proposals of various scales and scope (Park de la Vilette and Ville Nouvelle Melun-Sénart by OMA, After-Sprawl by Xaveer De Geyter Architects, Borneo-Sporenburg by West-8, Patchwork Metropolis by Neutelings Architects, and finally, Tree City/Downsview Park by Koolhaas/OMA and Bruce Mau Design). Basically, Bach and Clemmensen (p. 84) suggest four basic levels for decoding the role of landscape, which is referred to as the 'landscape-strategic aspects', i.e., programmatic, organisational, processual, and visual. The programmatic level describes how landscape manifests in relation to the definition of functions, e.g., distinction between traditional urban and landscape programmes. The organisational level describes landscape's role in the distribution of programmes and spaces, e.g., if built or un-built defines the overall structure of the project design. The processual level describes how landscape is part of the timewise development of a project, e.g., dynamic principles inspired by agrarian cultivation. The visual level describes how considerations on landscape are reflected in the staging of the physical environment, e.g., contrasts between urban and landscape programmes. According to Bach and Clemmensen, *"the use of the matrix as a tool for reading the projects, qualify both the understanding of the individual projects and their transverse coherences"*^[73].

Interestingly, Bach and Clemmensen continues to develop their matrix by adding an extra layer of 'landscape-strategic principles', i.e., reverse optic (landscape as the organizing element), void (intentionally 'empty' spaces), external order (introduction

73 Translated from Danish by author





















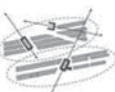

	Parc de la Villette	Ville Nouveau Melun-Sénart	Parc Downs-view Park / Tree City	After Sprawl	Borneo-Sporenburg	Patchwork Metropolis
PROGRAMMATISK						
ORGANISATORISK						
PROCESSUELT						
VISUELT						

Figure 10: (Bach and Clemmensen, 2005, p. 85) Matrix illustrating the six analysed projects and the four basic levels for decoding the role of landscape. An illustrative diagram presents each landscape-strategic aspect in relation to the respective projects.

of foreign organisational layer), programmatic equalization (traditional urban and landscape elements are equally valued), and orchestrated collision (new hybrid programmes or mix between urban and landscape programmes) (Bach and Clemmensen, 2005b, p. 16).

The principles describe, what we define as, the projects' strategic-methodical rationale in relation to the use of the landscape. Each landscape-strategic principle describes an architectural or planning operation that addresses both the landscape and can be activated in relation to it (Bach and Clemmensen, 2005a, p. 84).^[74]



Figure 11: (Bach and Clemmensen, 2005, p.85) According to Bach and Clemmensen, this figure illustrates different landscape-strategic aspects that occur across projects and levels. These aspects are condensed into a landscape-strategic principle; here it is 'programmatic equalization'.

As I see it, Bach and Clemmensen's 'landscape-strategic aspects' can be understood as a way of decoding the role of landscape in a given project design, and the 'landscape-strategic principles' can be considered of as the design initiatives – or methods that have been applied in order to obtain the specific design outcome. Relating Bach and Clemmensen's landscape-strategic specifications to the earlier described methodical aspects of landscape urbanism, it seems clear that, for instance, Marcel Smets' 'taxonomy' of spatial design concepts, i.e., grid, casco, clearing, and montage, are the equivalents to Bach and Clemmensen's principles of external order, reverse

74 Translated from Danish by author.

optic, void, and orchestrated collision; Further, Waldheim and Santos-Munné's ideas for 'Decamping Detroit' by utilizing the forces of nature in a managed and intentional way seem to be encircled by Bach and Clemmensen's third aspect (the processual level), which seems opposite of the above mentioned understanding of 'aspects' versus 'principles'; As I see it, Waldheim and Santos-Munné propose an actual landscape urbanism method. Nevertheless, even if I find it a bit difficult to figure out *why* and *how* Bach and Clemmensen distinguish between 'landscape-strategic aspects' and 'landscape-strategic principles', which also are presented within the same matrix (cf., Bach and Clemmensen, 2005b, p. 17), the idea of defining and categorising landscape urbanism's methodical 'toolbox' into an analytical framework is appealing both in relation to analysing my own case studies and in relation to discuss the instrumentality of landscape urbanism more thoroughly in relation to reality. In this coherence, Bach and Clemmensen's attempt to concretise the 'two-fold' conceptual understanding of landscape is an important step in understanding landscape urbanism's instrumental substance; On the one hand, the concept of landscape is directed towards the visual and scenic; on the other hand, it is action-orientated and directed towards how landscape *works* and *performs*. Here, Bach and Clemmensen's 'principles' concretise this idea; Whereas 'void' and 'external order' are considered as organisational and action-orientated principles, 'reverse optic', 'programmatic equalization', and 'orchestrated collision' are more about changing the perception of an area by adding new meaning (2005a, p. 92).

Even though Bach and Clemmensen's model for decoding the role of landscape in urban projects seems appropriate for analysing my own case studies, it is important to remember the environmental and ecological aspects of landscape urbanism, which are much debated nowadays (see, chapter 2). Yes, Bach and Clemmensen's 'processual level' describes how landscape is part of the timewise development of a project but, as I see it, the processual level refers primarily to the idea that a project can develop according to dynamic principles inspired by for instance, agrarian cultivation (e.g., the Tankefuld project, chapter 4.3). In this coherence, I am quite content that the absence of natural processes and ecology as 'landscape-strategic principles' (which

I define as actual methods), in Bach and Clemmensen's matrix is due to the fact that landscape urbanism has developed beyond their paper from 2005. For instance, Mostafavi and Doherty's *Ecological Urbanism* was first published in 2010 and Reed and Lister's *Projective Ecologies* came out in 2014. Further, the debate on how urban designers and planners can work with environmental, economic, and social conditions of the contemporary city has also developed since Bach and Clemmensen's paper was published. Today, for instance, the discussion on sustainability pervades the urban discussions, which I intend to discuss more thoroughly later in the thesis. Yet another aspect to consider when referring to Bach and Clemmensen's analytical model, is the fact that, besides Geuze/West 8's Borneo-Sporenburg project in Amsterdam, the projects that have been analysed to develop their matrix are predominantly conceptual projects without references to how they could actually manifest. I am not sure it would have made any difference if the analysed projects were actually constructed, but the idea of analysing primarily conceptual projects reflects, in my opinion at least, the tendency to keep the discussions on landscape urbanism within closed academic circles. However, if Bach and Clemmensen have focused on other constructed examples, their matrix would have presented an important contribution to the clarification of landscape urbanism as an actual practice and not 'just' as a framework for generating conceptual urban designs. Having said that, it is still my intention to make use of Bach and Clemmensen's matrix as an analytical framework for decoding the landscape urbanism features in the selected cases.

Setup for the interviews

First series of interviews focuses on the designers, their incentives, and their working methods. Whereas the described project analyses, guided by the previously defined categories, is an attempt to make the project designs mutually comparable and discussable in relation to landscape urbanism theory, the purpose of the interviews is to get more thorough insight into the designers' working methods and way of thinking landscape in relation to urban design. Even though the project readings expose how landscape is believed utilised in the respective project designs, the readings reveal only little – or nothing about the creative forces and decisions that have influenced

the design process from initial ideas to final project design. Most importantly, the analyses' linking between the respective project designs and landscape urbanism does not necessarily reflect the designers' own incentives. The second series of interviews focuses on the implementability and practicability of landscape urbanism in relation to Danish planning and the urban production system in general. As all the selected cases are initiated by Danish municipalities without private investors (in the first phases, at least), the obvious way to approach the respective cases is, first of all, to assess the publicly accessible materials on the respective projects, e.g., competition brief (if competition), final design proposal, reflections from judging panel (if competition), and implemented municipal and/or local plan(s). Having said that, the immediate accessible documents reveal no explicit information on the municipal and administrative decision-making processes let alone the plan-implementation work. From this, the qualitative interviews with municipal key persons (usually from the urban planning department) become the most important source to get insight into the respective project's history, the decision-making processes, the plan-implementation work, obstacles, successes, and so on. Obviously, it is possible to draw some oblique references and presumptions by comparing the project brief and original project design with the implemented plans, which I also intend to do, but in this coherence, it is important to maintain an open dialogue with the interviewees without too many biased hypotheses and questions. During the respective interviews (both designers and municipal key persons) it is not the intention to ask detailed questions about the interviewees' knowledge or conception of landscape urbanism as theoretically defined phenomenon nor is it the intention to discuss if the respective projects are considered of as landscape urbanism or not. The primary purpose of the designer interviews is to get insight into the designers' incentives for applying landscape and natural processes as vectors for design and to get an impression of their working methods. The primary purpose of the municipal interviews is to get insight into the respective municipalities' underlying intentions behind the projects, the administrative processing of the projects, and the plan-implementation work in order to discuss the implementability/practicability of landscape urbanism in relation to Danish planning in general. Additionally, it is also my intention to find out if the municipalities have a distinct

agenda or point of introducing a more landscape-orientated approach in their respective projects. Finally, it would be interesting to get an impression of the municipal key persons' understanding of and attitude to the landscape-orientated approach^[75].

Delimitations and limitations

When selecting the empirical material and the qualitative methods, a number of delimitations, limitations, and uncertainties have to be considered. First of all, in encircling the cases for further investigation, it is important to be aware that the selected international and Danish projects cannot be representatives of the entire landscape urbanism field. Obviously, several other international as well as Danish projects could be relevant to involve in this research, but in order to delimit the empirical investigation and balance the use of time, I have chosen to include only the most well-known international landscape urbanism projects (see, chapter 2) and three Danish projects. Regarding the Danish cases, it would have been desirable to include a wider variety of case types besides suburban development projects; Unfortunately, at the time of selecting the cases, it proved difficult to find other relevant examples of Danish applied and plan-implemented landscape urbanist interventions^[76]. For example, urban transformation projects or inner city developments. This lack of variety in Danish examples also causes a certain degree of discrepancy between the

75 Revised versions of the full interview guides and related working hypotheses are accessible in appendix A. The guides and working hypotheses are written in Danish as the respective interviews were carried out in Danish. The partly transcribed interviews, also in Danish, with personal notes can be accessed in Appendix C. The sound files (Appendix B) are accessible on the enclosed USB. An important note regarding Appendix B+C: The interviews were carried out as personal conversations between the respective interviewees and I. The setup was informal, and the interviewees participated subject to the condition that compromising material would go no further. I kindly ask you to respect this

76 Whereas the three selected cases were chosen several years prior to the publication of this thesis, I am very aware that a more diverse selection of cases could have been made, if selecting the projects today (2017). As I see it, this obvious conflict is an inevitable built-in source of error when working with empirical material that is to reflect a certain degree of newness. Today, I would have considered other projects as well. For example: Tåsinge Plads, Copenhagen (GBH Arkitekter); First part of Vinge, Frederikssund (Henning Larsen Arkitekter, Tredje Natur, and others); Værløse Flyvestation (Tredje Natur and COBE); and many others.

primary cases and the reference cases, which primarily are North American brown-field regeneration projects. Aside from the lack of variety in the selected Danish cases, a multitude of other differences between the Danish and international cases could be mentioned, e.g., scale, site related issues, political and social context, planning tradition, economy, etc. Most importantly, some of the projects international as well as Danish are conceived ten to fifteen years apart, which is a long span of time when investigating a seemingly flexible phenomenon such as landscape urbanism. Since the mid-1990s, landscape urbanism has in various ways managed to adapt and adjust to shifting trends and tendencies; from being mainly a theoretical framework for understanding and dealing with contemporary urbanism in North America, landscape urbanism has in principle evolved into an internationally established coherent design strategy with various new names, e.g., ecological urbanism, Landscapology, negative planning, process urbanism^[77], etc. Each new name or ‘modifier’ to urbanism refers to a specific stage of landscape urbanism’s continuous development. In this context, the general re-orientation towards environmental and ecological issues in contemporary urban planning and design has contributed considerably to increase landscape urbanism’s domain. From this, it is important to remember that even though a project reflects landscape urbanism, each of the selected projects is a product of its own time and refers to landscape urbanism on a specific development stage. Despite the obvious differences between the selected projects, it is my conviction that the introduction of varied projects will help to establish a broad foundation for discussing the subjects of this thesis and contribute to discussing the applicability and usefulness of landscape urbanism across scale and scope. Perhaps, this imbalance or incongruence in the empirical material can be regarded as an inevitable premise of the case study form or at least in relation to discussing the practical consequences of a theoretically defined and still evolving phenomenon with only few real-life examples. Besides the selection of cases for further investigations, the empirical study is subject to many possible impediments and challenges when it

77 See, Ullerødbyen, chapter 4.2.

comes to collecting the desired data. When it comes to the making of the primary cases, a series of important plan documents and person-dependent data have to be collected in order to carry out project analyses and the project evaluations in relation to the urban production system. As described earlier in this chapter, all municipal plan documents, i.e., municipal plan, project related publications^[78], and local plans are public accessible and can be obtained quite easily online. From this, the initial project overviews and project analyses of original project designs (if published by the municipality) can be completed without involving officials or designers directly. In this part of the empirical investigation, it is primarily my own subjectivity and research interests that burden the data collection; Even if the initial document overviews and project design analyses can be regarded as ‘manipulated’ in relation to this research’s focus on landscape urbanism, it seems as a necessary process in order to make the projects intelligible prior to the interviews.

When it comes to the research interviews and the collection of person-dependent data, things get more complicated. First of all, it is difficult to trace and review a project’s implementation process in details. What turns, adaptations, and alterations have been made and why? The accessible plan documents reflect the result of the design and planning endeavours but not why it ended up as such. As the plan documents do not reflect the underlying decision-making processes made within the various discussion fora during a project’s development, the interviews with key persons (municipal official and designer) directly involved in a project’s making are the most direct sources to obtain information about the discussions and negotiations that have resulted in the specific outcome. The research interviews will form the basis for discussing the transitions from one discussion forum to another and how these conversions have affected the respective project’s design and implementation. I am aware that minutes of town council meetings, meeting agendas, municipal committee meeting minutes, and so forth are publicly accessible. These documents will

78 Examples of project related publications could be: competition brief, jury report, master plan or development strategy, a quality programme, and so on.

deliberately be left out in this empirical study for the simple reason that scrutinising hundreds of meeting minutes, which are not categorised according to the subjects of this research, would be too extensive and involve an incalculable amount of time. Further, these minutes do rarely refer to discussions and disagreements on a specific topic; the minutes primarily summarise what has been debated and what has the council or committee agreed on and decided.

The interviewees are assumed to be in possession of inside information in addition to the plan documents. Further, the municipal key persons are expected to be familiar with the respective municipalities' administration and planning practice, and the key persons from the design offices are expected to know of the respective office's working methods and the incentives for applying landscape and ecological processes as vectors for design in relation to the investigated case.

As the qualitative interviews will be carried out as person-to-person conversations, it is impossible to predict how the conversation will progress and which turns and trips it will take. Whereas it is my responsibility as interviewer to guide the conversation, it is also my subjectivity and in many ways prejudiced perspective that can cause the largest impact on the data collection. An old Chinese saying goes "*There are three truths; there is my truth, your truth, and then the truth*" (cf., Dai-Byakuho, 1995). The key persons are individuals and people comprehend things differently; quite often one's perspective alters over time. This is important to keep in mind when processing and evaluating the interview material. I will round off this chapter with a passage from design researcher Bruce Archer's *The Nature of Research* from 1995. This article is one of the first organised attempts to set out the terms for practice-led research in design. Archer sets out the three-part scheme of research about practice, research for the purposes of practice, and research through practice. Despite the fact that not all my empirical inquiries focus on the very 'arts activities' surrounding landscape urbanism, it is important to keep in mind that the entire qualitative study inevitably is coloured by my own position.

Some, but not all, Arts activities are based on empirical evidence in the real world. Some, but not all, Arts activity cites exemplars in the real

world or in previous writings in support of argument leading to a postulated conclusion. Nevertheless, virtually all Arts activity is essentially subjective in character [...] In view of the subjective nature of Arts activity, any witness of a particular Arts work needs to know from which standpoint the author produced it. A popular challenge put to an author of either primary or secondary material by a witness on first confrontation with a work is: "What is your theoretical position?" This is an important question. The author's ideology and framework of values will have coloured his or her view of events, and will be embodied in his or her expression of them. Unless the witness shares the author's position, or at least recognises what that position is, he or she will not be able fully to understand the work or to judge it (Archer, 1995, p. 8).

CHAPTER 4:

The Danish cases



4.1 Bellinge Fælled (Odense Kommune/Schönherr)

The empirical study was launched by the Bellinge Fælled case. This particular investigation became a platform for developing the empirical study in general and for adjusting and optimising the selected procedures for collecting and processing data. Also, the Bellinge Fælled structure plan (cf., definition in previous chapter) was the first to be analysed and evaluated according to the described project analysis (in chapter 3). The first two interview guides (designer/municipal key person) and also the experiences gained from the respective interviews were used actively to evaluate and refine my interview procedure and the following interview guides^[79]. As such, the study of Bellinge Fælled represents both a regular empirical enquiry as well as a ‘laboratory’ for testing and optimising the forthcoming case studies.

Prior to the two Bellinge Fælled interviews, the original structure plan for the Bellinge Fælled development was analysed according to the described project analysis. Subsequently, I interviewed the designer of the spatial layout and the municipal key person involved in the administrative processes surrounding the project’s initiation and following plan-implementation. The project analysis combined with the overview of accessible plan documents and the interviews with the designer and municipal key person formed the basis for evaluating the Bellinge Fælled project in relation to landscape urbanism theory and for discussing the practicability of landscape urbanism in relation to the Danish urban production system and planning practice (as outlined in chapter 3). Fortunately, Odense Kommune (project owner) and Schönherr Landskabsarkitekter a/s saw the participation in this research project as a welcome

79 After the Bellinge Fælled interviews, I reconsidered the original idea of using somewhat generic interview guides, i.e., one common guide for the designers and one common guide for the municipal key persons. As each case responds to a specific site and situation, and its development reflects a context-dependent dynamic interaction between many parties and influences, it became apparent to me that I had to use slightly customized versions of the general interview guides (see, appendix A, CD-rom). The background knowledge for customizing each guide was obtained from carefully overviewing relevant and publicly available municipal project documents (e.g., competition brief, local plans, municipal plans, etc.) prior to the interviews (see, chapter 3 for a more general overview of the empirical enquiry, limitations, and delimitations).

opportunity to get qualified and professional feedback on the Bellinge Fælled project, which seemingly has become a flagship project for Odense Kommune^[80].

Interviewees: Mie Søgaard Rasmussen, Urban planner, architect MAA (Odense Kommune's urban planning administration) and Nina Jensen, Partner, landscape architect (MDL), building economist (MDB) (Schönherr)^[81].

The sustainable suburb

The Bellinge Fælled project is part of Odense Kommune's general focus on green restructuring and sustainable development towards becoming, as stated in Odense Kommune's *Miljøpolitik 2008*, "Denmark's most sustainable city" (Odense Kom-

80 Besides the planning documents (local plans and municipal plan), Odense Kommune promotes the area by widely referring to 'the sustainable neighbourhood in Bellinge' in several other municipal publications, e.g., *Bæredygtige sammen: Odense Kommunes Miljøpolitik* (2012) and *Bellinge Fælled: a sustainable neighbourhood* (sales material) (n.d.).

81 I found that I had to consider the interviewees' professional background and experience in order to evaluate the weight of their statements and explanations. In the case of Bellinge Fælled, Mie Søgaard Rasmussen was, at the time of the interview, a relatively newly educated architect MAA (approx. 6 years of municipal planning experience) seen in relation to Nina Jensen, landscape architect MAA and building economist MDB, who had a long-standing experience as partner in Schönherr a/s. Also, I found that I had to consider the interviewees' educational and professional background (e.g., artistic, scientific, or humanistic) and current occupation (which responsibilities in relation to the project's development) for discussing a common topic; For instance, I would expect that an experienced landscape architect is likely to view things differently than, for instance, a civil engineer or municipally employed urban planner. As such, even if the interviewees in each case study were classified as either 'designer' or 'municipal key person', their respective background for discussing the common topics of the interviews were obviously different. For instance, I found that I had to be more specific in my questions concerning landscape urbanism. As it probably was to be expected, not all of the interviewees would be familiar with the terminology. For instance, in the case of Bellinge Fælled, the interviewees, i.e., Mie Søgaard Rasmussen and Nina Jensen, were both familiar with the term 'landscape urbanism', but their knowledge on the term differed a lot. From this, I sought to sharpen the questions – or even leave out the very term during the coming interviews. Instead, I sought to describe the idea of landscape-induced urbanism in order to avoid too many misunderstandings or misinterpretations. Other minor adjustments occurred during the interviews as the conversations progressed; I tried to be open to the interviewees' inputs without leaving the chronology of the originally structure of the interview guides.

mune, 2008, p. 4). This comprehensive policy document^[82] includes a wide range of visions and concrete sub-targets; One of the visions is to develop a sustainable neighbourhood; “*Through urban development – or transformation, Odense wants to build a sustainable neighbourhood that can serve as landmark for Odense*”^[83] (Odense Kommune, 2008, p. 40). At year-end 2008, Odense Kommune purchased 45 hectares^[84] (farm) land north from Bellinge (village south from Odense) with the purpose of developing a sustainable residential area of minimum 500 homes; a mix of free-standing single-family houses and row houses (Odense Kommune and Schønherr, 2010). As formal land-owner, the municipality could adopt a more active role and obtain fully control of the development process; The Bellinge area was already designated as future housing area (Ramme nr., 6.B4) in *Kommuneplan 2009-2021* (Odense Kommune, 2009, p. 1037). In 2012, the council adopted a supplement (Odense Kommune, 2012b)^[85] to the municipal plan in order to lay down more specific guidelines for the planning of a sustainable neighbourhood in Bellinge; In the plan supplement, the original framework was altered in order to create opportunity for building higher and to accommodate more open space area for local management of rainwater. In the spring 2010, Schønherr was assigned, more of which later, by Odense Kommune’s planning administration to prepare a structure plan for Bellinge Fælled. As something quite new at the time, the structure plan was developed via a series of five dialogue-based workshops as a collaboration between the involved municipal administrations and departments (e.g., the site preparation team, the local plan team, the parcellation team, sales department) and the landscape architects from Schønherr. According to Mie Søgaard Rasmussen (2013, personal communication, 7 January),

82 Today, Odense Kommune’s environmental policy *Miljøpolitik 2008* has been replaced by *Bæredygtige sammen: Odense Kommunes Miljøpolitik 2012*. In this, Bellinge Fælled is used as a positive example, and it is referred to several times as ‘the sustainable neighbourhood in Bellinge’ (Odense Kommune, 2012c, pp., 11; 25).

83 Translated from Danish by author.

84 Unfortunately, I have not been able to obtain information on purchase price.

85 *Tillæg nr. 19 til Kommuneplan 2009-2021. Bellinge Fælled: Ændring af kommuneplanområde 6, Bellinge – Dyrup – Højme* (Odense Kommune, 2012).



the idea was to promote cross-disciplinary collaboration between normally separated groups and to encourage the involved administrations, departments, and teams to think in terms of sustainability – also in relation to internal working procedures and implementation practice^[86]. The participating landscape architects from Schønherr, including Nina Jensen, facilitated the five workshops and defined the overall themes of each workshop in relation to various aspects of sustainability. Rasmussen explained that due to the comprehensiveness of sustainability as a concept, the main challenge was to define the five themes for the workshops and balance what was realistic and implementable within Danish planning legislation. Odense Kommune had previously tried to put in a claim for environmentally sound building materials in a local plan (Nordic Ecolabel/Svanemærket). According to Rasmussen, this proved to be problematic and in conflict with current EU-legislation^[87]; From this, Rasmussen explained, the municipality wanted to focus primarily on the plan design and plan-implementable structural initiatives that could lead the development in a more sustainable direction. In this coherence, the focus was primarily on the environmental aspect of sustainability. Rasmussen explained that the workshop participants agreed on five overall themes or ‘sustainability parameters’, which were discussed

86 In working with environmental sustainability and its manifestations in the structuring of the city, I find the idea of keeping the work in-house rather potential; Instead of outsourcing the work completely to an external consultant firm, each workshop participant from the municipality has had a saying in the definition of Odense Kommune’s way of understanding and working with sustainability; this both in relation to the design and planning of a sustainable urban development and in relation to the municipal implementation procedures. As I see it, the preceding workshops and the concurrent efforts in defining the five sustainability parameters can be seen as an important training in accumulating Odense Kommune’s internal knowledge and expertise in handling sustainability in practice.

87 When I heard the interview with Rasmussen again, I was puzzled over this statement. If Odense Kommune was the formal owner of the specific project area, it would have been possible to make demands for Nordic Ecolabel/Svanemærket construction materials already in the sales literature; Perhaps, it was too controversial to make a restrictive sales procedure. Particularly, if the area was to be parcelled out and sold separately for single-family homes, but it would certainly have been a possibility. Perhaps, the municipality did not own the area, and the project was considered as an opportunity to test the local plan as a regulative tool in relation to environmentally sound materials? Unfortunately, Rasmussen did not go into further details with the Ecolabel/Svanemærket project.

thoroughly on the workshops; Also, these five parameters came to define the work with the area's structural manifestations. The first parameter was to minimise paved infrastructure; The second parameter focused on local rainwater drainage (LAR); The third parameter was to increase biodiversity and optimise ecological environments for plants and animals; Fourth parameter dictated that the terrain had to be preserved as intact as possible in order to avoid extensive transportation of soil away from the area; Finally, it was the intention to densify the built-up areas and intensify the green/blue structures. The landscape architects from Schønherr gathered the ideas from the workshops and worked up the material into concrete design elements. In 2010, the group agreed on a coherent structure plan, which was published in *Bæredygtig Bebyggelse i Bellinge* (Odense Kommune and Schønherr, 2010). The structure plan^[88] was adopted by Odense Town Council in June 2011.

The structure plan

When overviewing the structure plan, it seems quite clear that its overall organising principle based on green/blue structures is relatable to the methodical approach defined by landscape urbanism theory (see, chapter 2). The hills and valleys of the moraine terrain define the overall structuralising trait of the structure plan; by keeping the high points and the low areas clear, a coherent open landscape emerges. This open landscape divides the area into three sub-areas for housing: a northern part, an eastern part, and a southern part in relation to a new lake (extension of an existing rainwater basin). In order to establish an internal rainwater management system, the curvatures of the terrain are utilised in order to localise rainwater and overflow basins. All in all, the green/blue structures and the terrain curvatures constitute the structurally defining 'backbone' and organisation of the entire area. Seen in relation to the described project analysis (see, chapter 3), the overall structure plan embodies at least three of Bach and Clemmensen's (2005a) 'landscape-strategic aspects', i.e., programmatic, organising, and visual. Programmatically, Bellinge Fælled's structure plan reflects

88 Published in *Bæredygtig Bebyggelse i Bellinge* (Odense Kommune and Schønherr, 2010).

a clear distinction between traditional urban and landscape programmes; even if the landscape is given a special status, the urban and landscape programmes are largely separated. Organisationally, the un-built defines the overall structure of the design. Visually, the landscape and green/blue structures are used in the ‘staging’ of the physical environment in order to represent and reflect the underlying intentions (sustainable development and LAR) and programmes (housing and recreation). The lakes (a new and an extended existing rainwater basin) and open water systems visually present the local rainwater drainage initiative to the residents, and the wide open green areas stage the idea of living in close connection to and in balance with nature. Additionally, four of Bach and Clemmensen’s (2005b, p. 16) ‘landscape-strategic principles’ are identifiable in the Bellinge Fælled layout, i.e., reverse optic (landscape as the organizing element), void (intentionally ‘empty’ spaces), and programmatic equalization (traditional urban and landscape elements are equally valued).

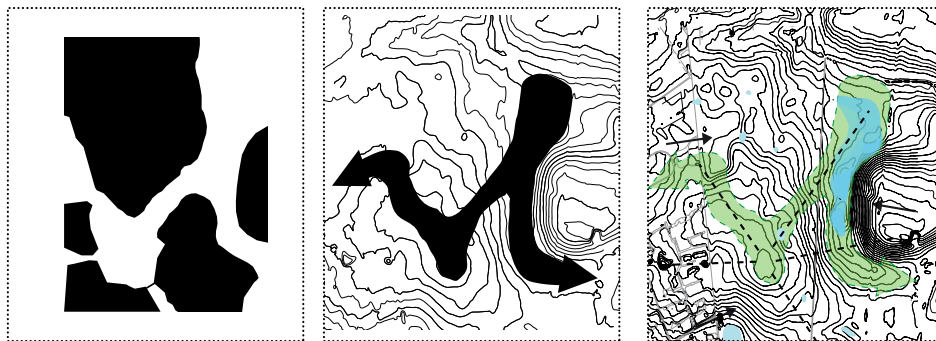


Figure 14: (Author, 2013) Bellinge Fælled diagrams. Unbuilt versus built (left). The dynamics of the terrain (middle). The unbuilt and the terrain define the overall structure of the plan. The green/blue areas, hills, and valleys draw the visual profile of the area (right).

To a wide extent, the above described landscape urbanism ‘decoding’ of the structure plan is in keeping with the ideas and design approach Nina Jensen (2013, personal communication, 8 January) presented during our conversation. During the interview, Jensen explained that the thorough reading of the existing landscape features and especially the terrain became the key to minimise infrastructure and paved surfaces (and reduce construction and maintenance expenses) and to adapt building structures to the most appropriate and attractive locations. In this context, Jensen did not refer to any computer-generated analyses or GIS-based calculations; She simply referred to ‘reading’ the landscape, which I shall return to later in this chapter. Naturally, the local rainwater drainage system (LAR) had to be the result of the area’s existing natural flows and wet hollows; also, old aerial photographs had shown former swampy areas and wetlands (currently drained) and slowly the idea of constructing a new lake (north-east) had taken form. Eventually, the new lake became one of the most important structuralising and identity-forming elements of the new residential area, Jensen explained.

Even if Schønherr’s structure plan for Bellinge Fælled seems to be generated from existing landscape features, and water flows and wetlands have come to replace housing structures as primary structuralising elements in the design process as prescribed by landscape urbanism theory (as defined in chapter 2), Jensen was quite indifferent to the whole idea of landscape urbanism.

If it is relevant, yes, but it is not a ‘must’ [...] If it is applicable then you can do it, but not all places are obvious [...] Some argue for bewildered grass fields anywhere. I don’t think it is an aesthetic expression that necessarily is right everywhere (Jensen, 2013).^[89]

Although Jensen may have interpreted landscape urbanism as primarily an ‘aesthetic

89 Translated from Danish by author.

expression', which I consider as a slight misconception seen in relation to the prevailing idea of landscape urbanism, her considerations on landscape's role in urban design encircled, as I see it, at least two thematics that landscape urbanism still remains to address more thoroughly, i.e., aesthetic and livability. Despite the specific focus on environmental sustainability and landscape's utility values (water management, localisation of homes, soil transportation, etc.) in developing Bellinge Fælled, Jensen maintained that the balance between aesthetic and practical considerations was of outmost importance.

The sustainable solutions have to exist as aesthetic and well-functioning urban spaces – also when not a 100-year rainfall [...] Even if we are thinking in terms of sustainability, it also has to be a great place to stay (Jensen, 2013, personal communication)^[90].

Whereas sustainability was the primary motivation for many of the specific design decisions, the learning-value of the various solutions was equally prioritised; For instance, besides being recreative and visually interesting structures, as Jensen defined them, the rainwater drainage system and especially the new lakes were supposed to display their functions to the residents^[91]. According to Jensen, the drainage system was to be laid open, and the lakes were to look as natural as possible, notwithstanding that *“the entire water management system could just as well have been more urban in its expression without jeopardising its functionality”*, Jensen (2013) concludes. When superimposing these considerations onto other examples of landscape-induced urban projects (hypothetical or actual) such as Waldheim and Santos-Munné's (2001) visions for *Decamping Detroit*, Field Operations' (2002) proposal for *Fresh Kills*

90 Translated from Danish by author.

91 By displaying the rainwater system's mechanisms and enhancing the green structures, Odense Kommune hoped to make people more aware of Bellinge Fælled's profile as 'more sustainable' than similar residential areas (Rasmussen, 2013, personal communication).



Figure 15: (COWI copyright, printed with permission) Aerial photo. Overview of the Bellinge Fælled area. The most southern lake has been dug out. Retrieved from www.krak.dk 07/07/2016.

Lifescape, and Stoss landscape Urbanism's (n.d.) competition entry, *Minneapolis Riverfront Streamlines*, it strikes me that Jensen's idea of using the nature's aesthetic for exhibiting ecosystem services, perhaps, is one of landscape urbanism's most recognisable visual characteristics. For example, extensive grass fields, nature-like ecosystem services, and 'well-groomed' wilderness^[92]. What I find even more interesting, seen in relation to landscape urbanism's representations, is that this nature-like expression not always reflects an actual utilisation of nature's abilities. Take for instance the giant cover-up of Fresh Kills Lifescape^[93]. If this assertion is tenable, Jensen's idea of landscape urbanism's aesthetic expression as something 'bewildered' seems quite accurate; Its projects are highly urban but appear as if natural? In spite of Jensen's opposition to the idea of landscape urbanism and the above-mentioned discrepancies, I still recognise many of landscape urbanism's methodical features in the design for Bellinge Fælled. While listening to Jensen and her review of the Bellinge Fælled plan, it was clear to me that the design for Bellinge Fælled was conceived as if a large landscape. Whether landscape urbanism or 'landscape architecture' urbanism, it is arguable that the overall design for Bellinge Fælled represented the manifestation of an envisaged synthesis between urban design, landscape architecture, and sustainability.

92 In many ways, it may seem a bit contradictory to pair 'well-groomed' with 'wilderness'; None the less, when overviewing the presentation materials for the mentioned landscape urbanism projects, it appears to me that their depictions of plantations and wildlife are somewhat staged and are to unfold within clearly defined settings and well-designed frameworks.

93 In my view, Field Operations' design for Fresh Kills Lifescape (see, chapter 2) provide a nature-like cover for a series of high-tech solution to local ecological problematics. When overviewing the project design, I keep wondering if the design reflects the truth about Fresh Kills. Yes, Field Operation's design is a response to a park-design competition (2001), but the fact that Field Operations' design for Fresh Kills Landfill is based upon a gigantic cover-up of enormous waste mounds is widely toned down in the presentation materials. When I first saw Field Operations' illustrations and diagrams for the landfill project, I naively thought that all the green was used for some sort of phytoremediation processes and that the large park would appear as a large accessible landscape for NY residents. Not until later, I realised that large parts of the landfill area were actually to be encapsulated (landfill cap) and later covered with plants for visual pleasure only; These areas are actually toxic (45% of the Fresh Kills area has been used for landfill operations) and will not be accessible for humans for decades to come. If ever. Further, the work with the landfill cap actually requires transportation of nearly 3 million tons of soil to the site (Tully Constructions, n.d.), a fact that increases my scepticism to the original impression that Field Operations' glossy and nature-like illustrations have made.

Even though, Jensen referred to large-scale urban projects as a relatively new metier for Schønherr, she was still sure of their expertise: “*We cannot make local plans. In that sense, we are obviously not urban planners, but we are most certainly capable of designing large-scale projects*”. Jensen enhanced the landscape architect’s ability to work across scale and scope and to form a synthesis between aesthetic, functionality, and livability; “*the landscape architect’s strength is to consider the landscape values and the spatial totality*”^[94], she said. Seen in relation to discussing landscape urbanism in Denmark, the obvious similarities between landscape architecture urbanism, as suggested by Jensen, and landscape urbanism, as defined in its literature, cannot be overlooked. In my view, it raises the question, whether landscape urbanism is something new – or if the problems of contemporary urbanism have been at the centre of landscape thought and practice for so long that Danish landscape architecture already includes urbanism? In that case, landscape architecture may possess, not only, the key to define landscape urbanism’s practice more clearly in relation to aesthetic and its human use, it also opens up for defining more locally founded practices; A Danish version of landscape urbanism that considers local conditions and the uncertainties of contemporary urbanism already in the conceptualisation of urban projects. These considerations will be discussed more thoroughly later in the discussion chapter.

Plan-implementation and practical obstacles

From the very first day, Odense Kommune adapted and active role in the development of Bellinge Fælled by purchasing 45 hectares of land north from Bellinge village in order to develop Odense’s first sustainable residential area. As formal land-owner of the area, the municipality could determine the parcelling and sale and control the development process beyond the local plan regulations. According to Mie Søgaard Rasmussen (2013, personal communication, 7 January), the municipality had previously tried to stipulate various demands regarding environment and sustainability in local plans (primarily in relation to the building’s construction materials), which had

94 Translated from Danish by author.

proven problematic due to EU legislation^[95]. Taught by bitter experience, Odense Kommune found that the best way to work with sustainability in relation to residential development was via the structuring of the area, which can be regulated by the local plan^[96].

We cannot stipulate specific demands on sustainability in the local plan, but if we organise our plan as sustainable as possible, perhaps we can make a difference. Then we can only hope that we can motivate people to build more sustainable in Bellinge. We do not have the tools to make demands. We can motivate and inform (Rasmussen, 2013).^[97]

In 2012, the first framework local plan^[98] (LP 6-698)^[99] was adopted. LP 6-698 established the formal guidelines for the future development of Bellinge Fælled, and it was regarded as the first step towards realisation of the structure plan. The primary purpose of the framework local plan was to define the layout of the green/blue structures while ensuring that the area-resources did not exceed a traditional parcelling (Odense Kommune, 2012). LP 6-698 stipulates that the building plots in Bellinge Fælled will be 500-800 m² in average, which is smaller than a typical single-family house plot in

95 I have not been able to obtain information on the specific EU legislation.

96 I find it quite interesting that Rasmussen insisted that Odense Kommune did not have the tools to make demands for, for example, environmentally sound construction materials. If Odense Kommune was the formal land owner of the concrete area, it would have been – as far as I am concerned – possible to make demands already in the sales material. Perhaps, Odense Kommune found it too controversial to place heavy demands when offering individual single-family house plots for sale – or perhaps OK did not own the area? Unfortunately, Rasmussen (2013) did not go into further details on the project sales strategy during the interview.

97 Translated from Danish by author.

98 A framework local plan (rammelokalplan) establishes the overall regulations for an area's use and built structures; it singles out whether regulations on, for instance, parcelling, location of the built structures, details on design, etc. should be determined in later local plans (Post, 2009, p. 152)

99 LP 6-698. Bellinge Fælled: Boliger, 1. etape (Odense Kommune, 2012)

Denmark (approx. 800m²)^[100]. By concentrating the built areas, leaving more area for the green/blue structures, Odense Kommune hopes to minimise thermal loss^[101] and boost the area's biodiversity and recreational potential. Lp 6-698 also provides more detailed guidelines for the construction of the first sub-area (to the south), extension of an existing rainwater basin, and associated green areas. At the time of writing, this area (including the dug-out rainwater basin) has been fully developed (row houses and single family houses).



Figure 16: (Odense Kommune, 2015) Illustration plan. Bellinge Fælled: Boliger, 2. etape. In LP 6-763, p. 30.

100 I have not been able to obtain statistical information on the average area for single-family house plots in Denmark. In *Fra nutidens til fremtidens parcelhuse*, Jensen (2006, p. 11) refers to 800m² as “a normal single-family house plot” (translated from Danish by author).

101 Without knowing the figures or calculations (if any has been made), I find it doubtful that a reduction of the building plot sizes (single-family houses) from approx. 800 m² to 600 m² on the average (25%) should make a considerable difference in terms of thermal loss.

The local plan for the second phase of the development (LP 6-763)^[102] was adopted in 2015. LP 6-763 regulates the south-eastern part of Bellinge Fælled, and it provides the opportunity for the construction of additionally 35 single family houses and 70 row houses (Odense Kommune, 2015). Further, LP 6-763 stipulates guidelines for the further development of the rainwater management system, a wet area, sound barrier, and minor parts of the large common area (Fælled). At the time of writing, the LP 6-763 site is in the process of being prepared and a number of parcels are on the market. The planning administration expects that additionally two or three local plans will have to be prepared before the entire area is local plan implemented.

When overviewing the two local plans, it is clear that the spatially defining green/blue structures are highly prioritised; By a series of planning regulations and additional recommendations, Odense Kommune ensures that the future extensive coherent green area is kept clear from buildings and the new lakes will be established according to the structure plan^[103]. Whereas the local plans, so far, seem to be capable of regulating and maintaining the intentions of the original structure plan, Rasmussen (2013) and Jensen (2013) presented me to some interesting aspects of the Bellinge Fælled development process. During the interview with Rasmussen, it appeared that the original intention was to partly establish the green/blue structures before the site preparation and construction took place! Even if the future landscape of Bellinge Fælled is completely ‘man-made’, the idea that Bellinge Fælled could actually emerge via the landscape as a ‘reversed’ development process would have been an extraordinary manoeuvre – and a most relevant laboratory for testing landscape urbanism as an actual implementable strategy in residential (sub)urban development. Unfortunately, the idea of establishing the landscape attractions (village green and lakes) prior to the building structures proved to be impossible due to practical and financial obstacles.

102 LP 6-763. Bellinge Fælled: Boliger, 2. etape (Odense Kommune, 2015).

103 It is the intention that the structuralising extensive open-space area will consist of various landscape types (lakeside, village green, and park) and diverse plantations when fully developed.



Figure 17-18: (Photos kindly deposited by HANS JØRGENSEN & SØN Entreprenører A/S) The drainage system leading towards the lake (top); Southern part of Bellinge Fælled. Row houses and the new lake (extended rain water basin) (bottom). Available at www.hjsas.dk [Accessed 2016].

We really wanted to do it [...]. The idea was – when we first did the workshops – to plant the trees first and then build the houses. Unfortunately, we [Odense Kommune] have specified site preparation [budgets], which are difficult to get around [...]. The way the site-preparation [budgets] are arranged, the money is released for each phase. Actually, we had a hope that we could have launched the project by digging the large lake. It would have been an attraction! But, we could not afford it [...] (Rasmussen, 2013)^[104].

Besides the obstacles regarding the intended reversal of the realisation process, which Rasmussen and Jensen were clearly disappointed with, I got the general impression that the development of the Bellinge Fælled project had proceeded relatively unproblematic regarding both the communication of intentions between designer and project-owner and the plan-implementation process. From the interdisciplinary workshops via the structure plan to the local plans, the project was obviously surrounded by primarily positive responses, and Rasmussen and Jensen were generally satisfied with the outcome of the endeavours. Having this in mind, it is striking how ‘little’ it takes to change the entire prospect of the project. Because of Odense Kommune’s financial organisation, Bellinge Fælled has ended up being parcelled out and site prepared, in the same way as a traditional suburban residential area (establishment of necessary infrastructures such as roads, sewerage, water lines, power supply, etc.). Perhaps, a minor detail in some aspects, but seen in relation to landscape urbanism it is a significant difference. The production of urban space in Denmark is a complicated affair. What may seem like a good idea in one particular discussion forum (cf., chapter 3) is definitely not possible in another. Even the slightest opposition within a decision-making forum can make drastic changes, alterations – or even cancel a given project. In the case of Bellinge Fælled, the original intention of letting the green/blue structures guide the development has become more conceptual than actual. The

104 Translated from Danish by author.

overall plan is designed via the landscape, but the plan-implementation and beginning realisation^[105] reflects that the landscape, again, is secondary to the built. Bellinge Fælled has ended up been parcelled out and site prepared in the same way as a traditional suburban residential area. Perhaps, it is a minor detail in some aspects, but seen in relation to landscape urbanism it is a significant difference. Notably, the same also goes for Ullerødbyen and Tankefuld, which both have run into opposition when attempting to reverse the implementation process. I shall return to these dilemmas later (see, chapter 5).

Parameters for environmental sustainability

The original setup for Bellinge Fælled was to develop a sustainable residential area. As previously described, the interdisciplinary Bellinge Fælled team ended up focusing on five sustainability parameters; the five parameters, which mainly concerned the environment, were utilised in designing the structure plan. In this coherence, it seemed as a reasonable assumption that Odense Kommune and the landscape architects from Schønherr in one way or another have considered landscape and environmental sustainability as two inter-connected themes; nevertheless, during the interview with Mie Søgaard Rasmussen (2013), she recalled that the landscape-orientated approach to the structuring of the areas was not part of the original vision. According to Rasmussen (2013), the intense focus on the landscape primarily came from the landscape architects; but, as the project progressed, she said, it would have been irrational to work against the terrain and the existing structures. Why Odense Kommune specifically chose Schønherr, a well-reputed landscape architecture office, as primary consultant for working out the structure plan for Bellinge Fælled remains unanswered. According to Nina Jensen (2013), they simply received a call from the

105 At the time of the interviews with Rasmussen (2013) and Jensen (2013), the site preparation and the construction of the Bellinge Fælled homes have not yet begun. At the time of writing, the first part of the area has been constructed (according to LP 6-698). Overviewing the area, which I unfortunately have not visited myself, it is clear that the only green/blue element that has been established, is the most southern lake as it represents the first part of the local water management system. As such, the blue structure represents a functional necessity in opposition to 'Fælleden' (the large common), which have not yet been established (see, Figure 26).

municipality, *“they asked if we could draw a sustainable city? I thought so. That’s how we got the assignment”*. Whereas one could easily interpret Odense Kommune’s choice of a landscape professional instead of an urban professional as part of a general re-orientation towards landscape, ecology, and environmental issues in spatial design (cf., chapter 1 and 2), Jensen (2013)’s approach was far more pragmatic than I imagined. When asking about Jensen (2013)’s professional opinion about the hybrid practice between landscape architecture and urban planning, Jensen (2013) primarily focused on the assignment supply. *“We try to extend our field [...], it is also a way to survive the financial crisis”*, Jensen (2013) explained. None the less, Jensen (2013) was quite clear when it came to couple the landscape architectural approach with sustainability; *“We consider the site, what does it tell us?”* By considering the integral whole, Jensen (2013) explained, *“the idea of sustainability is integrated already from the beginning”*.

Despite the unsuccessful implementation process and the fact that the average plot ratio in Bellinge Fælled, when fully developed, will end up being comparable to similar more conventional residential developments, Jensen (2013) and Rasmussen (2013) were both positive about the setup. During the respective interviews, they both reasoned that the extensive amount of un-built space in Bellinge Fælled would contribute to the area’s amenity value and increase the general biodiversity. Jensen (2013) and Rasmussen (2013) also enhanced that the large open space areas were compensated by smaller building plots. Also, in working with environmental sustainability and its manifestations, I find the idea of keeping the work in-house rather potential; Instead of outsourcing the work completely to an external consultant firm, each workshop participant from the municipality has had a saying in the definition of Odense Kommune’s way of understanding and working with sustainability; this both in relation to the design and planning of a sustainable urban development and in relation to the municipal implementation procedures. As I see it, the preceding workshops and the concurrent efforts in defining the five sustainability parameters can be seen as an important training in accumulating Odense Kommune’s internal knowledge and expertise in handling sustainability in practice. During the respective

interviews, it was clear that Jensen (2013) and Rasmussen (2013) were content with the project but also aware of its flaws. Leaving out the economic and social aspects of sustainability, Jensen (2013) and Rasmussen (2013) enhanced that even if the un-built and built structures are well-considered, well-planned, and optimised in every possible way, it is an impossible challenge to achieve sustainability in every respect. In the end, the marked forces determine whether the building plots will be sold or not, and Bellinge Fælled's possible future residents are the ones to inhabit and develop the area beyond the local plans' regulations and guidelines. However, if the municipality succeeds to establish the local rainwater drainage system and the soil management can be kept on site, at least the CO₂ emission and the expenses to soil transportation and sewerage work will be reduced considerably, Jensen (2013) and Rasmussen (2013) each concluded. I shall revert to the discussion on sustainability in chapter 5.

4.2 Ullerødbyen (Hillerød Kommune/SLA)

The second project to be investigated in this empirical investigation is Hillerød Kommune's project for a new residential development by Ullerød in Hillerød. Although this case study focuses on the existing plan-implemented and partly realised project, which is designed by SLA, it is worth noting that Ullerødbyen is not an entirely new vision. Already in 1977, Hillerød Kommune arranged a competition inviting urban professionals to propose a comprehensive plan for a residential neighbourhood in relation to Ullerød (located north-west from Hillerød). The competition was won by the then relatively young Danish office *Vandkunsten*^[106], whose design articulated Ullerødbyen as a series of interconnected green open spaces that ascended in scale from the individual parcel's private outdoor space up to a large, central park space with path systems all the way to Frederiksborg Slot (Arnfred, 2010); Unfortunately,

106 Vandkunsten was established in 1970 by Svend Algren (b. 1937), Jens Th. Arnfred (b. 1947), Michael Sten Johnsen (b. 1938), and Steffen Kragh (b. 1947). Vandkunsten made its breakthrough with the pioneering work on Tinggården in Herfølge (1978), which, today, is considered as the role model for Danish high-density/low-rise housing (denstoredanske.dk, 2016).

due to problems of co-operation between Vandkunsten and Hillerød Kommune^[107], Vandkunsten's plan was never implemented. Despite its status as unrealised, Vandkunsten's structure plan for Ullerødbyen is still noteworthy, not only for the specific design, but also for the thorough reflections on the green open spaces, which I shall return to in chapter 5.

As time went by, the urban growth continued and Hillerød Kommune experienced an increased demand for new housing. In 2002, Hillerød's Town Council decided to arrange a new competition for a residential development in relation to Ullerød, and ten interdisciplinary teams were invited to compete by a prequalification^[108]. The teams primarily consisted of building architects and urban planners; only few of the teams included landscape architects^[109]. The competition ran from October 2002 until January 2003. The Ullerødbyen area is approximately 150 ha., and it is expected to

107 Besides a competition feature in *Arkitekten* (no. 6, 1978), I have not been able to obtain detailed information on the first Ullerødbyen competition (1977). According to Jens Ulrik Romose (2013, personal communication), Vandkunsten felled out with the municipality after the competition, and Vandkunsten's original structure plan was later finished by Hillerød Kommune's planning administration; Ultimately, the entire project was outvoted in the town council. Despite the project's failed realisation, the significance of the first Ullerød competition is underlined by Dansk Byplanlaboratorium's notes on Danish urban planning consultants in the 1960s and 1970s. Here, the first Ullerødbyen competition is referred to several times in the project records attached to the mentioned consultants (Dalgas and Kristensen, eds., 2010, p. 71; Dalgas, et al. eds., 2011, p. 93, 194). Also, in Svend Algren and Michael Sten Johnsen's list (Dalgas, et al. eds., 2011, p. 194) of Vandkunsten's significant projects and competition entries in the 1970s, Ullerødbyen is highlighted among other important urban development projects, such as Veksø (1972), Dybbøl (1974), Hanstholm (1975), and Fuglsangspark in Farum (1981-83).

108 Unfortunately, as Ullerødbyen is well on in years, first-hand knowledge on the selection process is limited. DAL (Danish Association of Architects) was competition secretariat. The prize winning and purchased entries are described in *Ullerødbyen: En helhedsplan for et nyt boligområde i Hillerød* (DAL, ed., 2003).

109 The selected teams were: Arkitekttegnestuen Virumgård A/S with Peter Juel Jeppesen, Henrik Fog-Møller, and Erik K. Jørgensen A/S; BBP Arkitekter A/S with Ib Asger Olsen, Rambøll Nyvig A/S, and Rambøll A/S; Arkitektfirmaet Vilhelm Lauritsen A/S with Tegnestuen Møllestræde A/S, Svend Kierkegaard A/S and Rud og Borg ApS; Arkitektfirmaet Hou & Partnere A/S with Jens Kvorning, and Jeppe Aagaard Andersen; Vandkunsten ApS with Aksel V. Jensen; CUBO Arkitekter A/S with Møller & Grønborg; Dithmer Arkitekter; Arkitektfirmaet Svend Allan Jensens A/S with W. Rossels Tegnesteue; Transform; Stig L. Andersson Landskabsarkitekter with Dorthé Mandrup Arkitekter.

house 1500 to 1700 residential units of various types (single-family detached housing, high-density/low-rise housing, and apartment housing), childcare institutions, shops, and senior housing when the area is fully developed. The implementation of Ullerødbyen was to take place over a number of years; First part of the development (approx. 300 homes) should be site prepared and ready for construction in 2006. The main purpose of the competition was to design an overall plan that could serve as structuralising framework for the consecutive development of Ullerødbyen. According to the competition brief^[110], the primary vision was to re-think the suburban typology by focusing on sustainability, community spirit, amenity values, and long-term thinking in relation to alternative housing forms. In order to ‘achieve a sustainable result’, the competition brief suggested three primary ‘agents’ to consider in relation to the structure plan, i.e., minimise the use of resources (especially the non-renewable), recirculate resources locally (preferably within the local plan area), and optimise living conditions for humans and animals.

In January 2003, Stig L. Andersson Landskabsarkitekter (current SLA) with Dorte Mandrup Arkitekter^[111] was officially announced as the winning team.

The [winning] entry has, in a convincing way, used the landscape [...] as starting point for an appealing overall plan, which can become a valuable contribution to Ullerødbyen's final planning. The [winning entry] frames a large coherent landscape in an organic shape and places the building structures in close connection to the nature, as a lung that forms a natural demarcation of the [housing structures]

110 Ullerødbyen: Idékonkurrence om en helhedsplan (Hillerød Kommune, 2002).

111 During my interview with Stig L. Andersson and Jens Ulrik Romose, neither of them referred to Dorte Mandrup Arkitekter's role in the Ullerødbyen project. Further, the following work with the overall plan and the quality programme was done by Hillerød Kommune in collaboration with the contractors, i.e., NCC and SKANSKA, and SLA without Dorte Mandrup Arkitekter. From this, I have decided to leave out Dorte Mandrup Arkitekter in this empirical inquiry.

on to the meadows and fields. In the same time, the [entry] creates a fine coupling to the existing housing structures, which also will benefit greatly from the well-arranged open space areas (from the jury report, DAL, ed., 2003, p. 6)^[112].

In the following, SLA's structure plan^[113] for Ullerødbyen will be analysed according to the described analytical model (see, chapter 3.3). Subsequently, the development process, preliminary findings, and key passages from the respective interviews with head of design-team Stig L. Andersson (2013, personal communication, 11 June) and municipal key person from Hillerød Kommune, Jens Ulrik Romose (2013, personal communication, 12 June) will be outlined and discussed in relation to landscape urbanism theory and Ullerødbyen's development and plan-implementation.

Interviewees: Jens Ulrik Romose, Project manager, urban planner (M.Sc.) (Byplan, Hillerød Kommune), and Stig L. Andersson, Founder and creative director of SLA,

112 Translated from Danish by author.

113 Besides the competition brief (Hillerød Kommune, 2002) and the jury's presentation of the competition entries in the jury's report (DAL's Competition Secretariat, ed., 2003), I have not been able to obtain printed project materials on SLA's competition entry for Ullerødbyen (e.g., competition posters). During the interview with Stig L. Andersson, he referred to the plan drawings and illustrations in the quality programme (Hillerød Kommune and SLA, 2006) and the illustrations used in the jury's report. Jens Ulrik Romose primarily used the drawings from the first local plan (LP 335) as basis for discussing the project's structural implications (Hillerød Kommune, 2006). Notably, the first local plan for Ullerødbyen refers to the quality programme's structure plan as a 'diagram' for the overall plan's principles. The actual plan material in LP 335 (appended maps) is produced by the municipality in collaboration with SLA and the developers (i.e., NCC and SKANSKA) of the first phase of Ullerødbyen's development (Romose, 2013, personal communication).

professor (KU), landscape architect (MAA, MDL)^[114]. Both Jens Ulrik Romose and Stig L. Andersson have been more or less directly involved in the development process of Ullerødbyen. It is worth noting that SLA has not been directly involved in the planning process – nor the realisation process of Ullerødbyen. Besides the production of a management plan^[115] for Ullerødbyen Syd’s central landscape (2009), SLA has not been part of neither the plan-implementation process (local plans) nor the development of the housing areas. Further, it is important to remember that it is very unlikely that SLA has been represented only by Stig L. Andersson himself during SLA’s work on Ullerødbyen. I am quite sure that SLA has been represented by

114 During the various interviews, I found that I had to consider the discrepancy between material reality – or facts and imagination, between ‘the truth’ and the interviewee’s interpretation of it (see, chapter 3.4: *Delimitations and limitations*). Here, the interviewee’s professional background and experience appeared to be important factors for his/her understanding of the project’s making from initial vision to the design, and implementation process; In the case of Ullerødbyen, Jens Ulrik Romose appeared quite rational-constructive (he holds a M.Sc. from DTU and has many years’ experience in municipal planning). Stig L. Andersson represented a more artistic-academic attitude (landscape architect, professor at KU, and respected debater in the public and professional discussions on landscape and urbanism). Further, it looked as if the interviewee’s personal enthusiasm and engagement towards the discussed project influenced the discussions during the interview. For instance, in comparison to Bellinge Fælled, which the interviewees still had fresh in their memory at the time of the interviews (less than 3 years), Ullerødbyen was well on in years. The Ullerødbyen competition was completed long ago (more than 10 years). While Ullerødbyen was still very present in Jens Ulrik Romose’s working day due to the realisation process, it seemed to be a filed project for Stig L. Andersson.

115 Except from SLA’s management plan for the landscape in Ullerødbyen South (SLA, 2009), which I accidentally found on Ullerødbyen’s homeowners’ association’s webpage, I have not been able to obtain any further information on SLA’s work with the inner landscape nor have I succeeded to find the concrete landscape plan document in Hillerød Kommune’s plan database. As I was not aware of the landscape plan during the interviews with Stig L. Andersson and Jens Ulrik Romose, I did not ask questions about this. Whereas Andersson did not refer to the landscape plan during the interview, and Romose only sporadically mentioned that the municipality and SLA had worked out a detailed plan for the landscape in order to fix a price for the cost of construction. During my interview with Romose, he did describe some of the inner landscape’s ecosystems service, which will be described later in this chapter, I also got the general impression that these functions (e.g., local rainwater management and solar panels) were the result of the supply companies’ work with the area and not some original intended solutions. From this, I assume that NCC and SKANSKA, who also financed the inner landscape, initiated and controlled the establishment of the landscape without intervention from the municipality. Following, I have contacted Hillerød Kommune about the landscape plan, but they do not have any filed information hereof; albeit they let me know that SLA had designed the nature playground in the area (Hansen, 2016, email correspondence). For sure, it would have been interesting and relevant to include considerations on the landscape plan to this empirical enquiry; Unfortunately, the landscape plan remains undisclosed.

several project architects. If Andersson has been directly involved in the work with Ullerødbyen, I am quite content that it has been in a more responsible position. This was also the impression he gave during the interview.

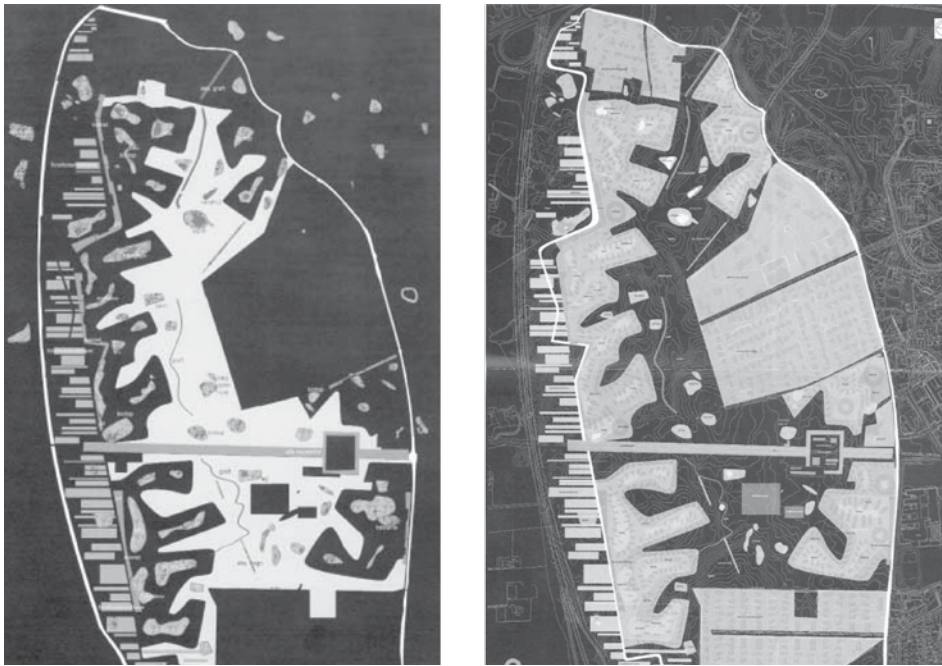


Figure 19: (SLA, 2003). Ullerødbyen. Landscapes (left). Structure plan (right). In *DAL's Competition Secretariat*, eds., 2003, pp. 6-7.

The structure plan

SLA's winning entry for Ullerødbyen organises the future housing structures around an inner open landscape. To the west, the area turns its back to the Hillerød Motorway and a zone of forest botany and sound-absorbing barriers segregates Ullerødbyen from the busy motorway. Structurally, the plan drawing looks like the sagittal section of a kidney; the built and unbuilt interweaves like intertwined fingers. The result is an extended exchange surface between housing structures and open landscape. Al-

though the built-up area frames the large landscape, it appears as the landscape dictates the form of the urban frame rather than the other way around. As I see it, SLA's structure plan challenges the traditional hierarchy between built and unbuilt, between urban and landscape. The landscape and terrain replace buildings and housing structures as organizing principles, and the open space areas and built areas communicate into a negotiated form by adapting the building structures to the terrain; as such, the terrain comes to dictate the topography of the entire area.

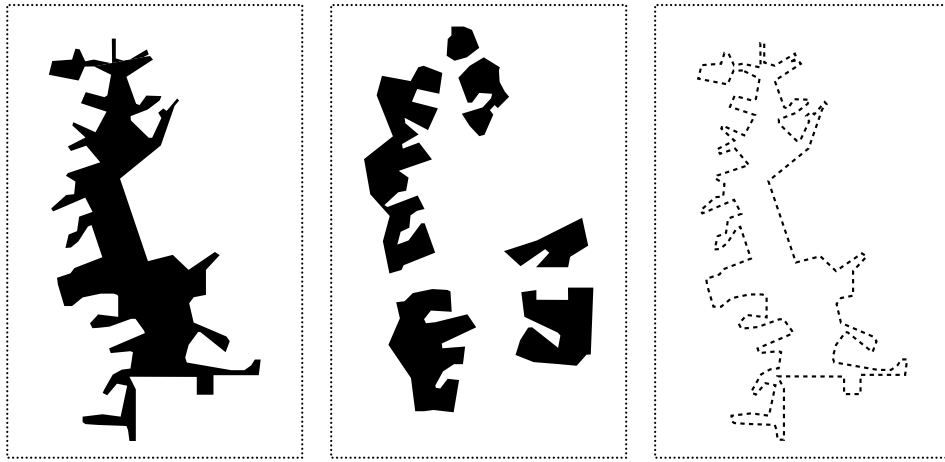


Figure 20: (Author, 2013) Ullerødbyen diagrams. Unbuilt (left). Built (middle). Exchange surface (right). Organisationally, the built and the unbuilt are equalised; the built and the unbuilt weave untroubled together and appear as equal design elements.

Seen in relation to Bach and Clemmensen's (2005a) analytical model (as described in chapter 3.3), I find that SLA's proposal for Ullerødbyen shares many references with landscape urbanism's theoretical-practical aspects. As the inner landscape in Ullerødbyen appears as an 'empty' open space – or void in landscape urbanism's terminology, it seems that SLA operates with a clear distinction between traditional urban and landscape programmes; Whereas the proposal primarily defines the inner landscape as 'nature', the built structures contain the Ullerødbyen's primary

programme, i.e., housing. Organisationally, the inner landscape comes to define the overall structure of the area; Here, the black/white illustrations of the landscape and structure plan underline, as I interpret it, an intentional play between foreground and background in the organisation of the area's structural components. When it comes to Bach and Clemmensen's idea of the 'processual level', SLA's design clearly lacks some initiatives. Even if SLA's design has a clear focus on the landscape and terrain, the landscape seems to be perceived as a structure or space for specific programmes – not as a concept or process as landscape urbanism argues for. As such, the idea of utilising the processes of nature or applying a phased development, inspired by agrarian cultivation principles, as described by Bach and Clemmensen is non-existing in this project design. Finally, Bach and Clemmensen's 'visual level', which describes how considerations on landscape are reflected in the staging of the physical environment, e.g., contrasts between urban and landscape programmes. Here, SLA's proposal for Ullerødbyen obviously seeks to utilise the clear distinction between urban programmes and landscape in order to create a unique feeling of living close to 'real' nature. By intentionally contrasting the built with unbuilt (also seen in the black/white illustrations), the inner landscape is enhanced as something truly special and different from the housing structures. In my view, whether landscape urbanism or not, 'contrasting' seems to be the key to understand the dynamics of SLA's original design for Ullerødbyen; the magic seems to happen in the meeting between two opposites. In this coherence, I found that especially the programmatic distinction between urban/nature and the structural collision between built/unbuilt are associable with landscape urbanism's methodical agents. Notably, as I studied the following project materials (quality programme, local plans, and also the first constructed part of Ullerødbyen), it was clear that these important contrasts between urban/nature and built/unbuilt, as seen in the competition entry, was rather unidentifiable in the adapted and plan-implemented project; More of which in later in the discussion chapter.

Processes urbanism

When I interviewed Stig L. Andersson (2013, personal communication, 11 June) in the presence of SLA's head of communications Kristoffer Holm Pedersen, it was

clear that Ullerødbyen, at least for SLA, was a filed project. The competition ended in 2003, and in January 2006, SLA handed over their final contribution to Ullerødbyen's development in form of a 'quality programme', which will be outline later in this chapter. All the same, Andersson recalled that SLA's design for Ullerødbyen, at the time, represented a pioneering approach by highlighting the landscape instead of the built. According to Andersson, it was primarily building architects and urban planners who sketched out frameworks for urban developments in the early 00s; Today, he argued, landscape professionals are gaining more and more influence in designing urban projects. Whereas the landscape architect previously was considered as sub-contractor to the building architects, landscape architects are increasingly involved already in the initial phases, Andersson continued.

[T]here has been a deep-rooted delusion, in Denmark at least, that only building architects can solve urban problems, and urban problems primarily are related to the built [...] Landscape architects, they do the plantings... We plant nothing! It is just the material we use [...] while others use bricks and window frames [...] But to understand the city as a sort of organism, a complex system with all parts interconnected, that is most [building] architects rather poor at [...] I think, municipalities and developers could achieve much more, if those who are trained in thinking in complex systems, biologists, landscape architects [...] and perhaps physicists, were engaged instead (Andersson, 2013).^[116]

When listening to Andersson's reflections and elaboration on the more systems-orientated approach to the shaping of the city, I found that Andersson shared many of landscape urbanism's theoretical deliberations, albeit in his own home-made terminology; None the less, Andersson did not idealise landscape urbanism and especially

116 Translated from Danish by author.

not its practical aspirations. According to Andersson:

Focus has been on the so-called landscape urbanism, and many architect offices have embraced it. What is interesting about landscape urbanism is its lack of interest in design. It is a method for solving some technical problems. It identifies that the city has various problems, for instance, pollution and that nature possesses a way to handle these problems. This is the reason why extremely [many] landscape urbanism [projects] are about how to get plant matter into the city (Andersson, 2013).^[117]

Andersson understood that landscape urbanism's idea is to regenerate the city in a more positive and better way, but since landscape urbanism's primary focus is the utility value of landscape, the aesthetic and amenity values become more or less accidental, he said. Instead, Andersson had formulated his own yet more design-orientated approach that combines the utility value of natural processes with considerations on livability and amenity value.

Modernist and postmodernist urban planning with predetermined and centrally determined functional division and aesthetics have proved to fail in a world in constant change. SLA meets this challenge with a landscape inspired planning method called process urbanism. Process urbanism is a method that uses the same logic as nature's principles of organisation. Nature and the city are not opposites or delimited units. They are diversified systems which combined should be balanced. Knowledge about wind, water, light, energy, circulation, politics, health, urban life, density, sustainability etc. is collected into one urban ecosystem, filled with poetry and surprises (SLA, 2010a).

117 Translated from Danish by author.

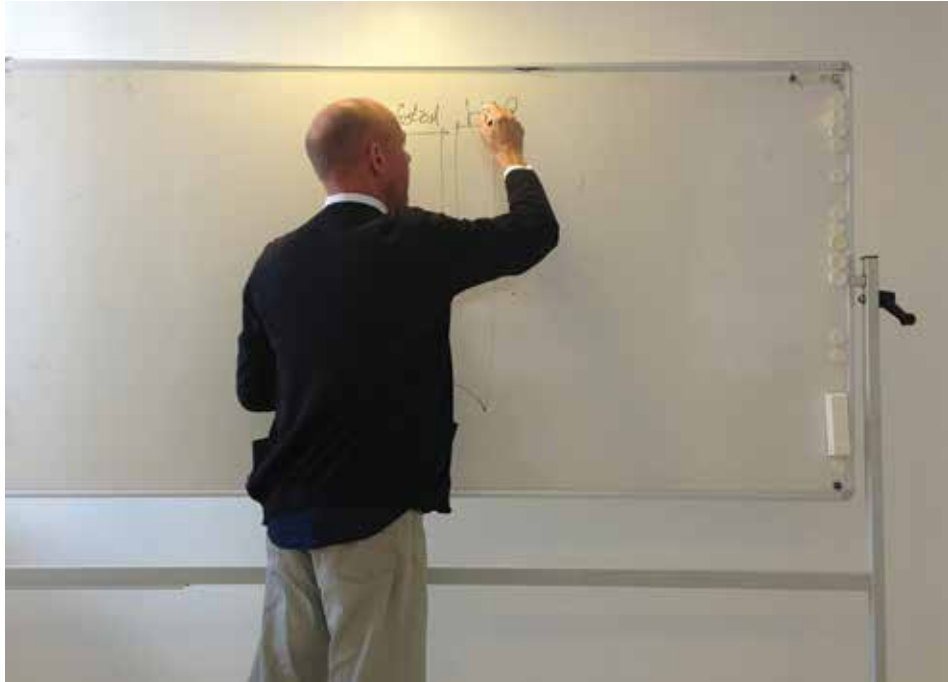


Figure 21: (Photo by author, 11 June 2013) Stig Lennart Andersson explaining his principles on the white-board during the interview.

Even if SLA's formulation of process urbanism came almost a decade later^[118] than SLA's entry for the Ullerødbyen competition, I found that Andersson was quite eager to inscribe Ullerødbyen (and most of SLA's recent projects) into process urbanism's methodology and thinking. *"Methodically, [process urbanism] works in creating a cup design as well as a city. It works all the way. It's like the 'cradle-to-cradle' think-*

118 The ideas behind process urbanism were originally developed as part of the touring exhibitions *Man Made Environment* and *New Nordic Landscapes*. The project *Process Urbanism: The City as Artificial Ecosystem* was shown from 2010 until 2013 in Shanghai, Oslo, Copenhagen, Reykjavik, Stockholm, and Helsinki (SLA, 2010a; 2010b, [video]).

ing [...] It works all the way down to the smallest scale”^[119]. Interestingly enough, when I asked Andersson to develop further on process urbanism’s methods and procedures, he explained that it is left to the individual project manager, how to interpret process urbanism in practice. Instead, Andersson framed process urbanism as a mind-set, a way of thinking that leads to a dialogue, which eventually ends in a design; Yet the design identity is SLA’s.

If one hires us for an assignment, then one will get the design identity we work with. If one hires someone else, one will get another expression. [...] My function in this office is the professional responsibility. I have the responsibility for how things look like (Andersson, 2013).^[120]

In spite of my numerous attempts at keeping the interview on track, it was clear that Andersson was way beyond Ullerødbyen. He seemed more determined to pass on his ideas on process urbanism and to legitimise the landscape architect’s current position in urban development projects. It is worth noting that during the time of the interview (June, 2013), SLA’s website had a direct link to process urbanism’s own almost manifesto-like homepage www.processurbanism.com. Today, at the time of writing (October 2016), the link to www.processurbanism.com on SLA’s website is no longer available. Instead, SLA’s website introduces yet another artful neologism called *SLADNA*^[121] as their way of thinking and approaching a design process. I will not go into further details on SLA’s new DNA, but as I read it, the new juxtaposition is in accordance with process urbanism’s previous reflections, albeit in a new interesting and catchy formulation. Besides Andersson’s eager to inscribe SLA’s practice into a somewhat home-made academic-theoretical discourse, I find that the interview with Stig L. Andersson encircled many of the same elaborations that emerged during

119 Translated from Danish by author.

120 Translated from Danish by author.

121 <http://www.sla.dk/en/sladna/>

my interview with Nina Jensen (2013, personal communication, 8 January). Here, especially the seeming absence of aesthetic considerations and the neglect of the human dimension in shaping the urban surroundings were important topics in both Nina Jensen (2013) and Stig L. Andersson's dislike of landscape urbanism. Obviously, in comparison to Jensen (2013), Andersson has gone a step further with his formulation of process urbanism, which in my view, shares many references with landscape urbanism's theoretical foundation but with a specific design incentive. Although Jensen's idea of approaching urban design via the landscape appeared less reflective and more practice-based than Andersson's, their individual considerations appeared to be in agreement with one another. In my view, Jensen and Andersson both argued for utilising landscape's abilities and possibilities in terms of ecosystem services and amenity values when designing the city; Most importantly, they both underlined pleasant and well-functioning urban spaces as primary objective for the design process (Jensen, 2012; Andersson, 2013). It is hard to over-look the obvious similarities between landscape architecture urbanism, as defined by Jensen, process urbanism, as defined by Stig L. Andersson, and landscape urbanism, as defined in its key literature. The interview with Andersson has contributed to amplify my thesis that the problems of contemporary urbanism have been at the centre of landscape thought and practice for so long that Danish landscape architecture already includes urbanism. I shall return to this in the discussion chapter.

From competition entry to partnership agreement

According to Jens Ulrik Romose (2013, personal communication, 12 June), Hillerød Kommune selected SLA's proposal as winning entry because of its strong landscape elements; also, the extended exchange surface between housing structures and open landscape, which would increase the number of homes in the attractive front row overlooking the landscape, was an important factor. SLA's proposal with its curved road structure, scalloped housing areas, and open central landscape formed an interesting alternative to the existing Ullerød's grid-like development from the 1970s; further, the idea of establishing a zone of forest botany between the Hillerød motorway and the new area was intriguing, Romose explained. After the competition,

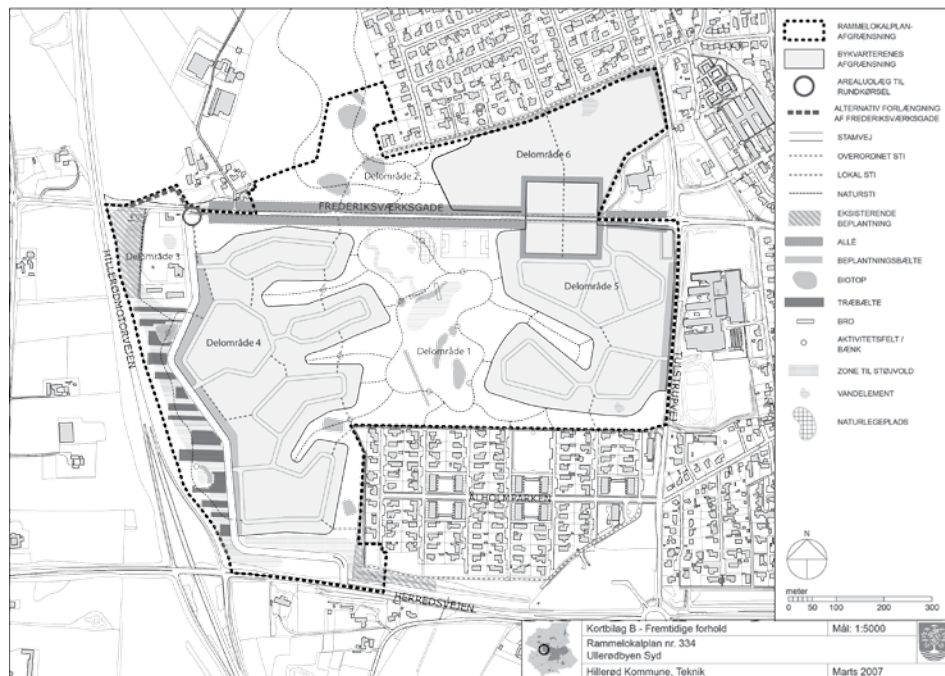


Figure 22: (Hillerød Kommune, 2006) The adapted structure plan is not published independently. It appears in the local plans for Ullerødbyen Syd (Hillerød Kommune, 2006a; 2006b; 2006c; 2007).

Hillerød Kommune's planning department wanted to continue the corporation with SLA; Unfortunately, the Town Council's subsequent budget negotiations did not set aside money for the initiation of Ullerødbyen's development; According to Romose, the lack of finances resulted in a timewise break from the competition to the initiation of the development process. After thorough considerations, the municipality reached the conclusion that the realisation of Ullerødbyen was to start in the southern part of the area (south from Frederiksværksgade), but whereas the municipality owned only one quarter of the southern area, it was clear that Hillerød Kommune could not pay the expenses to the landscape, roads, and site preparation without generating profit from sale, Romose explained. According to Romose, the municipality went over sev-

eral possible solutions in dialogue with the landowners. The housing market was skyrocketing in 2004-2005, and the Town Council decided to form a partnership with the landowners in order to initiate the development of Ullerødbyen as soon as possible. The landowners accepted to find suitable consultants, who could manage the process from preparation of the site, to building construction, and sale. Driven by the high prices on land, the private landowners chose to sell their respective areas to two professional land development companies, i.e., NCC and SKANSKA, and in 2005, Hillerød Kommune, NCC, SKANSKA, and SLA formed a formal partnership with the purpose of developing first phase of Ullerødbyen. Romose explained that whereas NCC and SKANSKA were the primary landowners of the area, an important aspect of the partnership agreement was that each landowner in the area, including the municipality, would receive the same share of housing construction per square metre. In order to balance the income for the landowners, it was necessary to adjust SLA's original structure plan into a more concrete and accurate structure plan. Following, each owner was responsible for site preparation, roads, and supply within their respective areas, Romose continued.



Figure 23: (SLA, 2006) The large inner landscape with various facilities for permanent and temporary activities. in Kvalitetsprogram Ullerødbyen Syd. In Hillerød Kommune and SLA, 2006, pp. 8-9.

First phase of Ullerødbyen's development included the construction of approximately 600 homes and the establishment of the southern part of the large, central landscape; The expenses to the construction of the common areas, i.e., local distributor road, sound absorbing barrier, and the inner landscape were to be shared between the landowners by the share of housing, "*If one owns 50% of the housing, he should pay 50% of the common expenses*", Romose outlined. SLA sketched out a landscape plan, and it was estimated that the inner landscape with plantations, sound absorbing barrier, nature playground, football fields, trash bins, and so on would cost around 30 mill. Dkr.

This [sharing] was quite unusual [...] We share out some expenses and profits [...] We establish some mechanisms that can realise the project. It is easy enough to get a good idea and to plan-implement it; the difficult part is to realise the plan as intended. [In Ullerødbyen] we had a legal contract about doing things as planned. It [Ullerødbyen] appears as intended; A part of the partnership agreement was that they [NCC and SKANSKA] have had influence (Romose, 2013).^[122]

As the co-operation plan was finalised, Hillerød Kommune, NCC, SKANSKA, and SLA began the adjustment work on the overall structure plan. The idea was to create a coherent plan that could form the basis for the following local plans. During the interview, Romose explained that SLA's winning entry was based on 400 square metre building plots instead of the traditional 900 square metre. "*We could never have sold those plots [...] We simply don't have buyers to such small plots*"^[123], Romose argued. Hence, SLA's original structure plan needed some serious work in order to balance the share of housing between the partners while maintaining the original structuralising concept. Romose told me that the planning administration had weekly

122 Translated from Danish by author.

123 Translated from Danish by author.

meetings with NCC and SKANSKA's architects and SLA in that period, and SLA's original black/white structure plan was slowly transformed into a more concrete plan that provided a larger footprint for housing without forgoing too much of inner landscape. Romose recalled that the developers fought for profit and SLA fought for the landscape.

Generally, SLA undertook the role to protect the landscape and to preserve as much area for landscape as possible in order to maintain its qualities [...] The developers' architects had the overall agenda to get as much area as possible to private gardens and housing. The more [they could] put into [private gardens] the more [they could] earn on sales (Romose, 2013).^[124]

According to Romose, Hillerød Kommune's ambition was to develop a fantastic neighbourhood, and as project manager (himself and colleagues), it was the planning administration's job to balance the various interests. Interestingly, Romose made no secret of telling that he considered the developers as the representatives for the end-users.

We have had a dialogue with the citizens, but they cannot participate in the work meetings [...]. NCC and SKANSKA's employees earn their living by selling housing every single day; they have the knowledge. SLA has an enormously know-how about how to create and maintain the qualities in the spatial manifestations: [...] the landscape and the architecture. [SLA] can provide [Ullerødbyen] with something special, but it is a balance (Romose, 2013).^[125]

Later, Romose implied, the developers realised that the slightly smaller plots would

124 Translated from Danish by author.

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increase their number to sell. During the 00s, the house prices and land prices were fast-growing, and the developers wanted profit. Romose was quite sure that this was the reason why, the developers agreed on the smaller plot sizes^[126].

The quality programme

As something quite new, the adapted structure plan was followed by the formulation of a *quality programme*^[127]. According to Romose, the purpose of the quality programme was to define the common goals and intentions for Ullerødbyen's development and for the life the neighbourhood was intended to frame. Interestingly, instead of describing how things should look like, the quality programme focused on which qualitative values and functions to be fulfilled. At first, the municipality wanted the quality programme to be registered (tinglyst) in order to use it as a regulative tool in the development of Ullerødbyen; The registration never took place, Romose explained, *"it would have been too complicated; the quality programme should have been very detailed and accurate in order to be formally registered. A registered document has to describe precisely what to do, and what is not allowed"*^[128]. Instead, the quality programme became a forerunner to the local plans, he continued, *"in [the quality programme], we described the qualities that we would like to have in the area"*^[129]. As such, the quality programme became a summary of the discussions and agreements that occurred during the work with the structure plan, Romose said. From 2005 until 2006, SLA worked out the material for the quality programme in collaboration with the partnership. Subsequently, in addition to the adapted structure plan, the quality programme was to supplement the local plans for Ullerødbyen Syd; Whereas the local plans should regulate the built structures, i.e., size, area, measure-

126 The adapted structure plan is not published independently. It appears in the local plans for Ullerødbyen Syd (Hillerød Kommune, 2006; 2006b; 2006c; 2007).

127 *Kvalitetsprogram: Ullerødbyen Syd* (Hillerød Kommune and SLA, 2006)

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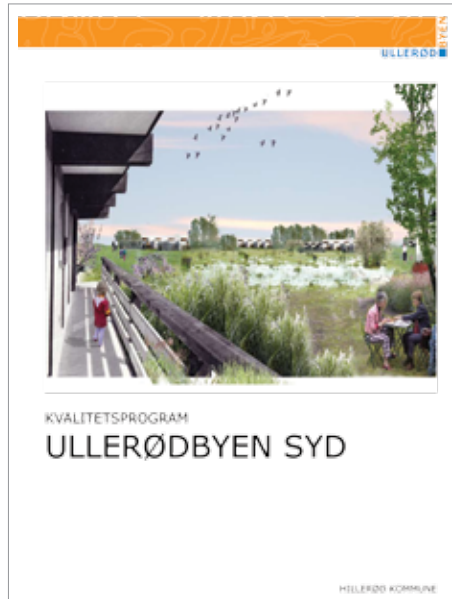


Figure 24: (SLA, 2006) *Kvalitetsprogram: Ullerødbyen Syd*. In *Hillerød Kommune and SLA, 2006*.

ments, materials, etc., the quality programme was meant to supplement the structure plan and the local plans by describing the desired qualities for Ullerødbyen in words, pictures, and illustrations (Hillerød Kommune and SLA, 2006). It is noteworthy that since handing over the quality programme to the municipality, SLA has not been involved in the development process of Ullerødbyen.

Before returning to Romose's thorough summary of Ullerødbyen's development, I will briefly return to the interview with Andersson (2013, personal communication, 11 June) and his description of the quality programme. Interestingly, whereas Romose referred to the quality programme as a minor part of Ullerødbyen's development, Andersson, did not mention the following work with the structure plan, the local plans, or constructed reality (Ullerødbyen Syd was almost fully developed at the time of the interview). Instead, Andersson kept referring to the quality programme as the most innovative part of Ullerødbyen's development. According to Andersson, the quality programme is not to be confused with a design manual; the quality pro-

gramme focuses on Ullerødbyen's qualities; Whereas a design manual would describe how to achieve a specific design expression, the quality programme describes how to control the initiatives to be taken in order to optimise the desired qualities. In this coherence, Andersson explained, "[...] *we are not interested in how it is going to look like. We are interested in the values one creates when doing certain things [...] Then, it must look as it may*". Andersson insisted that Ullerødbyen was about the quality programme and the design considerations were integrated in here. Although I find Andersson's statement thought-provoking seen in relation to SLA's generally strong and recognisable design identity and their (later) formulation of process urbanism, it is also an interesting comment when considering Andersson's obvious critique of landscape urbanism's alleged lack of interest in design and aesthetic. Obviously, Andersson's idea of focusing on the resultant values and qualities in Ullerødbyen concerns aesthetic and design considerations, but the idea of deliberately rejecting the very design of form and space as an important generator in urban projects seems somewhat antagonistic. Although I found Andersson's presentation conflicted in terms of optimisation of qualities versus deliberate design considerations, he did not give any methodical directions on how to consciously work with the integration between landscape features, biotic and abiotic processes, and design. None the less, it should be mentioned that SLA's intentional juxtaposition of, what I consider as, landscape urbanist thinking with deliberate reflections on aesthetic and livability adds an important extra dimension to landscape urbanism's more unreflective understanding of design identity and form language. I shall return to this later in chapter 5.

The public-private collaboration

In the summer 2006, the first three local plans for Ullerødbyen Syd, i.e., Framework LP 334, LP 335, and LP 336^[130] was adopted by the Town Council. The local plans were based upon an adapted structure plan for Ullerødbyen Syd. SLA's original struc-

130 Rammelokalplan 334: Ullerødbyen Syd (Hillerød Kommune, 2006); Lokalplan 335: Ullerødbyen Syd – Bykvarter Øst (Hillerød Kommune, 2006b); LP 336: For Ullerødbyen Syd – Bykvarter Vest (Hillerød Kommune, 2006c). Lokalplan 343: For Ullerødbyen Syd – Bykvarter Midt was adopted in 2007.

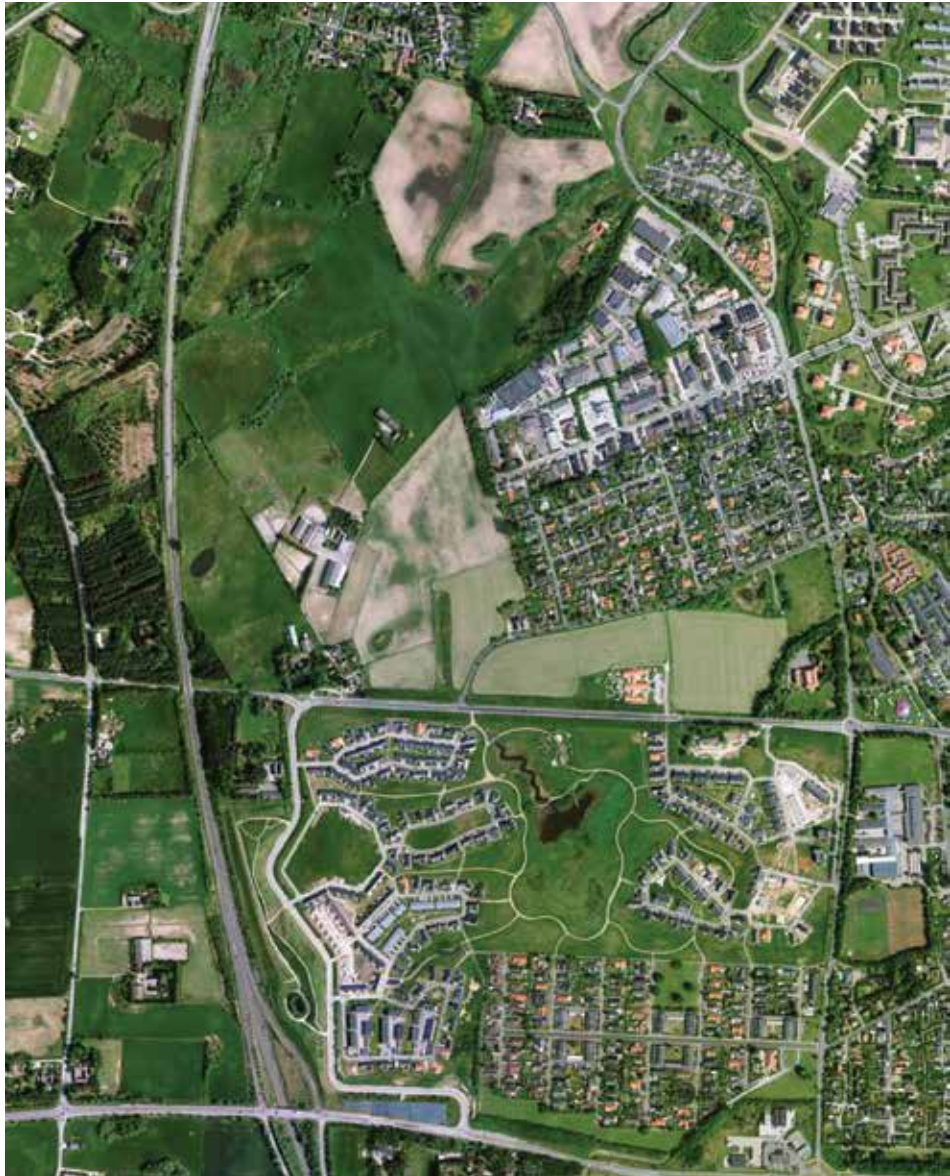


Figure 25: (COWI copyright, printed with permission) Aerial photo. Ullerødbyen. Retrieved 28/3/2017 from www.krak.dk

ture plan had been processed via a series of workshops that included the developers, Hillerød Kommune, and SLA. According to Romose, the primary challenge was that NCC and SKANSKA both intended to use standard-house companies as spearheads in selling the building plots; As a result, the local plans' regulations concerning the architecture became quite general and non-restrictive; *"There was a large degree of freedom for the architectural [expression]; This means that Ullerødbyen has quite a lot of standard houses"*^[131]. Already in the fall 2006, NCC and SKANSKA began the construction work, and already in 2007, the first homes in Ullerødbyen Syd were ready for occupation. Two years later, in 2009, the entire Ullerødbyen Syd was plan implemented, 80% of the municipal building right and land were sold, and approx. 250 housing units were constructed or under construction (cf., Møller & Grønberg, et al., 2009d).

Seen in relation to my two other case studies (Bellinge Fælled and Tankefuld), which both are developed on land purchased by the respective municipalities, the realisation of the large-scale plan for Ullerødbyen Syd as a public-private collaboration is an interesting practice. NCC and SKANSKA have profited from the sales and Hillerød Kommune has become a new neighbourhood richer without paying the total expenses. Obviously, the public/private collaborative model has been beneficial for all parties; further, Romose told me during the interview that Ullerødbyen remains rather popular, and the sales have been less subject to the influence of the financial crisis than the rest of Hillerød. According to Romose, some of the housing plots close to the lake were sold for up to 4 mill. Dkr. – without a house, and the plots remain relatively pricey, approx. 1,5 mill. Dkr. for a well-situated plot (2013 prices). When asking Romose about the pros and cons, it was quite clear that he was pleased about the process as it satisfied the council's ambitions, but it was also clear that he would have welcomed some more interesting architecture in the area. Despite SLA's somewhat novel approach to the structuring of the built/unbuilt with emphasis on the central

131 Translated from Danish by author.



Figure 26: (Photos by author, 2012) Ullerødbyen (southern development area).

landscape, the realised project is characterised by standardised houses and generic architecture. According to Romose, Ullerødbyen obviously differs structurally from, for instance, a 1950s or 1970s residential development, but in Ullerødbyen it is the landscape that come to constitute the main quality of the area.

What is interesting now is: can Ullerødbyen work? Can it be a special place? Now and in 5 years, 10 years, 15 years? [...] The landscape is unique, but the architecture is plain. It is really ordinary. It is the standard house companies, who have built both the row houses and most of the single-family houses [...] In spite of the large degree of freedom, people have found back to the standard house [...] So, this is the result [...] Can we wrap "it" up in plantations [...], road trees, the unique road structures, when the built structures are [plain]. And the landscape, will it appear as unique? If so, it will be the nature and the landscape that sustain the area – not the architecture (Romose, 2013).^[132]

Interestingly, Romose told me that the development of Ullerødbyen Nord would be totally different. Hillerød Kommune has expropriated the entire northern area as the municipality was quite aware that the development of Ullerødbyen Syd was one of a kind. According to Romose, the housing market is no longer geared for private developers to purchase and develop extensive areas; In Ullerødbyen Syd, the earning potential was undoubtedly the developers' primary incentive for entering the partnership; *"The housing plots were sold for fortunes! That is also the reason why, the developers agreed to spend 30 mill. Dkr. on the landscape. It was peanuts"*. After the financial crisis, no developer would make such an investment as NCC and SKANSKA did in Ullerødbyen Syd, Romose continued. From this, the northern part of Ullerødbyen is to be developed by Hillerød Kommune and for less means.

132 Translated from Danish by author.



Figure 27: (Photos by author, 2012) Ullerødbyen (southern development area).

Today, the southern part of Ullerødbyen is more or less built up, and the planning of Ullerødbyen Nord has begun. First step was a concretised master plan^[133], which was worked out by Hillerød Kommune in collaboration with NIRAS. The master plan for Ullerødbyen Nord is based on SLA's structure plan as presented in the quality programme (Hillerød Kommune and SLA, 2006). According to the master plan (Hillerød Kommune and NIRAS, 2014), the northern part of Ullerødbyen will be developed according to the same principles as Ullerødbyen Syd, and the central open landscape framed by housing structures will make up the overall structuralising principle. The master plan has formed the basis for the first local plan for Ullerødbyen Nord (LP 400), which was adopted by Hillerød Town Council in 2016. The area will later be put out to tender.

Reflections on the built result

In the summer 2012, I visited Ullerødbyen Syd with my camera and bike. In the following, I intend to share some of my own thoughts and observations on the built as well as some of the reflections that Jens Ulrik Romose presented during the interview. As I first entered the area from Frederiksværksgade/Allekredden, I was disturbed by the desertedness of the area. I met absolutely nobody during my tour de Ullerød. Not even a car. At first, I was puzzled over the size of the roads. The dimensions were somewhat oversized and without doubled-sided sidewalks. "*A car-based development...!*", was my first thought. Never the less, in spite of its vast dimensions, I must admit that I found the sweeping road structure quite intriguing. At least, it represented an interesting contrast to the existing 1970s grid-like structure in the old Ullerød. The first housing enclave, I entered, was characterised by detached single-family houses overlooking the large landscape in front row and less attractively placed row houses in relation to the smaller central green. Not much to say about the architecture. Though, I must admit, I had not expected to see so many standardized houses. It was like standardized house paradise. Even the row houses were plain and generic. Ad-

133 *Konkretisering af helhedsplanen for Ullerød Nord* (Hillerød Kommune and Niras, 2014).



Figure 28: (Hillerød Kommune and Niras, 2014) Ullerødbyen Nord. Disposition.

ditionally, the central greens, which basically form the organisational centres of each housing enclave, were conceived as empty lawn areas, sparsely furnished with alien and somewhat useless wooden decks^[134]. All in all, my first impression of the housing areas was a bit disappointing. After looking around in the first housing enclave, I biked due west through the large landscape that forms the primary organising trait of Ullerødbyen. I found that the inner landscape, grass-grown with grit paths, was quite interesting and appealing. The small, central lake^[135] formed a nice landmark in the vast landscape, and the various new (at the time) plantations and wild grasses gave an impression of being close to nature, albeit in a managed and intentional way. After biking through the central landscape, I reached the most western part of the development. Again, the sub-areas were dominated by standardized single-family houses in the best locations. Finally, I reached the north-south supply road between Fredriksværksgade and Herredsvejen, i.e., Månepletvej. Månepletvej follows the sound absorbing barrier that flanks the Hillerød Motorway, and it was obviously intended for cars only. No sidewalks. No bicycle paths. I tried to locate the forest botany between the Hillerød Motorway and the housing areas, but the sound absorbing barrier was dominated by grasses and sparse tree plantations^[136].

As I left Ullerødbyen Syd and biked towards Hillerød, I had a strong feeling that I had just visited one of the physical manifestations of the early 2000s building climax. Ullerødbyen Syd has been designed, plan-implemented, and almost entirely constructed in only ten years. It has been financially beneficial for the original land-owners, the developers, Hillerød Kommune, and the residents. All the same, I could not help wondering if the speed of the development and the public-private investment model

134 The central greens may have been developed and furnished differently since I first visited the area.

135 Interestingly, as I later discussed the inner landscape with Romose, he told me that the lake was established as part of a local rainwater drainage system. Hillerød's water management company had estimated that a locally established system (utilising the large landscape and an existing stream) would be a profitable solution for Ullerødbyen Syd in the long run.

136 I have not visited the area recently. Perhaps, the forest botany has been established subsequently.

have resulted in some unfortunate architectural and spatial consequences. When I walked around in Ullerødbyen Syd that day in August 2012, the intentions from the competition brief and SLA's ambitions for the structure plan were somewhat difficult to recover in reality. For instance, the competition entry's clear distinction between housing area and landscape was quite indifferent in reality. Due to the localisation of single-family detached houses in the front row overlooking the landscape, the demarcation was in certain areas only marked by the contrast between cut lawn and wild-growing grass^[137]. Also, without going into details, the careful considerations on the built structures that SLA presented in both the competition entry (see, DAL's Competition Secretariat, ed., 2003, pp. 6-9) and later in the quality programme (Hillerød Kommune and SLA, 2006) seem somewhat neglected in built reality. The quality programme described the desired spatial and recreational qualities, but the quality programme was never registered and as such not binding for the developers; Also, even if the quality programme was regarded by the partners as a positive and useful addition to clarify the intentions behind the local plans, Hillerød Kommune did not insist on a more interesting architectural expression in order to please the developers. The local plans framed the overall structural traits, but the architectural expression and style were left to the developers and the buyers of the building plots. I must admit, I quite agree with Romose's opinion about the nature and landscape as the primary upholders of the area (fully cited in previous section). The architecture is strikingly common. As I see it, even if the landscape to a wide extent appears rather simple with its sparse plantations, grasses, and few constructed facilities (playground and football field), the landscape forms the primary identity-creating construct of the entire Ullerødbyen Syd area^[138].

As a final remark, it should be mentioned that whereas Ullerødbyen Syd was de-

137 As these observations were made some four years ago, it is possible that the demarcation between the housing areas and the open landscape has been enhanced by hedges as the quality programme called for.

138 Today, the large landscape is owned and maintained by Ullerødbyen Syd's homeowners' associations. As such, the landscape's development and appearance depends on the homeowner association's means and ambitions.

veloped as a public-private partnership, the northern part of the Ullerødbyen area is entirely owned by Hillerød Kommune (by expropriation in 2008). In Ullerødbyen Syd, Hillerød Kommune was, according to Romose, the guarantor of the project's quality, but NCC and Skanska were given rather free hands in developing the area, which perhaps also is the reason why, the area, seen from an architect's point of view, appears rather tedious in terms of urban spaces and building architecture. Seen in the light of Ullerødbyen Syd's public-private development strategy, it is noteworthy that in *Lokalplan 400 for Ullerødbyen Nord*, Hillerød Kommune (2016, p.8) underlines that in order to ensure that Ullerødbyen Nord can be developed with a special character within the individual sub-areas, the later invitation to tender will include, "*a series of requirements with various foci [...], e.g., sustainability, specific architecture, resident target groups, overall plan for the landscape, etc.*"^[139]. One may suspect that Hillerød Kommune, by making demands to the future tender process already in the local plan, seeks to ensure that the northern part of Ullerødbyen becomes more appealing than Ullerødbyen Syd both in terms of well-considered ecosystem services (e.g., local rainwater management and overflow basins as suggested by the master plan for Ullerødbyen Nord) and not least the building architecture. Unfortunately, my interview with Jens Ulrik Romose (2013) took place well before Ullerødbyen Nord was plan-implemented. Hence, I was not given the chance to get his perspectives on Hillerød Kommune's future plans for Ullerødbyen.

4.3 Tankefuld (Svendborg Kommune/Nord Arkitekter)

The third and final project to be investigated in this empirical inquiry is Svendborg Kommune's project for a new residential area in relation to Svendborg. In the following, the background and planning context for the Tankefuld project will be outlined. Subsequently, the winning entry from the Tankefuld competition, which was designed by an inter-disciplinary team^[140] lead by Nord Arkitekter, will be analysed

139 Translated from Danish by author.

140 Nord Arkitekter, Holscher Arkitekter, Arup group, and RTKL.

and commented according the analytical model described in chapter 3.3.

Finally, the development process, preliminary findings, and key passages from the interview with Svendborg Kommune's key person, Poul Hjere Mathiesen (2014, personal communication, 9 April) will be outlined and discussed in relation to landscape urbanism theory and Tankefuld's development and plan-implementation. Unfortunately, I have not had the opportunity to interview the designer behind the overall spatial layout for the Tankefuld project. Despite several persistent approaches to Nord Arkitekter, I have not succeeded to arrange an interview regarding their work with Tankefuld. During one of my attempts to arrange an interview with Nord Arkitekter, I was told that the competition team leader of the Tankefuld project was no longer an employee at Nord Arkitekter. It should also be noted that Nord Arkitekter has not been involved in the project since 2009. I shall return to this later. Retrospectively, one might have expected that at least one of the case study informants would be inaccessible in one way or another – or declined to participate in a formal research interview. I am aware that this imbalance in the total empirical material may result in a biased discussion. I considered the opportunities for replacing the Tankefuld project with another similar Danish development project, which I found impossible due to the previously defined selection criteria (see, chapter 3.3). Ultimately, I decided that the Tankefuld project, seen in relation to discuss practiced landscape urbanism in Denmark, was simply too significant to be excluded from this PhD research. Also, when I finally understood that Nord Arkitekter was definitely not an option, I had already interviewed Poul Hjere Mathiesen from Svendborg Kommune and collected the remaining written project materials. In spite of the insufficient data on the designer's perspectives, I have thus chosen to include the Tankefuld project. Thankfully, the interview with Mathiesen had been very thorough and informative. Further, team Nord Arkitekter's competition material (presentation posters) includes many written considerations. Also, the following Tankefuld master plan^[141], which

141 *Forslag til Tankefuld Masterplan 2009* (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2008).

has been worked out by Nord Arkitekter/Holscher Arkitekter, is very descriptive, albeit it cannot be regarded entirely as the designer's own words as it obviously represents a commissioned assignment. Finally, I intend to overview a series of academic writings about the Tankefuld competition and team Nord Arkitekter's entry. For instance, Stefan Darlan Boris (2010) includes considerations on team Nord Arkitekter's entry in his PhD thesis, Prof. Ole B. Jensen (2010) discusses Cittaslow as urban planning concept in relation to Tankefuld, and Bo Vagnby (2010) argues for the problematic of value-based urban planning in relation to Tankefuld's focus on sustainability. Nevertheless, the primary source regarding the designer's ideas and incentives remains team Nord Arkitekter's illustrations and associated writings on the presentation posters.

Interviewee: Poul Hjere Mathiesen, Project manager, urban planner, architect MAA (Svendborg Kommune's urban planning administration). Poul Hjere Mathiesen is a trained urban planner with many years of experience in spatial planning and municipal planning administration. During the interview, he presented not only a clear understanding of the Danish planning system in general but also a unique insight and understanding of how the shifting political trends within Svendborg Kommune's Town Council had influenced the Tankefuld project during its long-time of implementation. Unfortunately, Mathiesen had not been part of the initial phases of the Tankefuld project. As such, he was not part of the formulation of the competition brief nor the selection of competition teams or winning entry. Mathiesen made it clear that he became project manager of the Tankefuld project in 2008 – after the competition was settled.

The landscape town and the Cittaslow principles

In *Kommuneplan 2005-2017*, Svendborg town was designated as Svendborg Kommune's primary growth centre. Because of the closeness to the coming new motorway (Svendborgmotorvejen between Odense and Svendborg which opened in 2009) and the area's location within cycling distance of Svendborg town centre and the Svendborg Vest train station, it was decided that Svendborg should develop westwards along Svendborg Sund towards Rantzausminde and the Tankefuld forest. The idea



Figure 29: The six entries from the Tankefuld competition's 1. phase.

In the jury's report (Bølling, ed., 2008, pp. 4-5)

was to develop the area as a series of individual neighbourhoods, each with its own identity in relation to the area's distinctive landscape traits, i.e., Egense Ås (ridge), Ådalen (river valley), Tankefuld (a woodland between Kogtved and Rantzausminde), and Sofielundsskoven (forest). These characteristic landscape features should be integrated in the planning of the area as nature attractions and as recreational facilities for the area's future residents and to Svendborg town in general. The area is approx. 825 hectares, and in Kommuneplan 2005-2017, it was decided that the new town district should appear as well-defined neighbourhoods containing 50-150 dwellings each (Svendborg Kommune, 2006, pp. 3.1.1-3.1.4).

Throughout the 2000s, the housing market flourished, and Svendborg experienced an increasing demand for new housing. As a result, Svendborg Kommune decided to arrange a competition for the future development of the area west of Svendborg. It was during the arrangement of the competition the area was given its poetic name: *Tankefuld*^[142]. In collaboration with *Akademisk Arkitektforening*, Svendborg Kommune decided to announce the idea competition internationally and invite urban and landscape professionals to tender for participation^[143]. From the submitted bids, six teams^[144] were invited to participate in the following idea competition, and in August 2007, aided by the *European Regional Development Fund*, the competition^[145] was launched as a two-phased competition. It was the intention that Tankefuld should develop over a 25-30 years' period; When fully developed, the area is expected to contain at least 2-3000 housing units^[146] and include workplaces, public institutions, and a variety of recreative facilities. With an expected total of 5-7.000 residents, Tankefuld will house 10-12% of Svendborg Kommune's current number of inhabit-

142 According to the competition brief (Svendborg Kommune and Akademisk Arkitektforening, 2007), the name 'Tankefuld' is to be associated with the peaceful romantic gardens of the nineteenth century as well as a reference that points to the rapidly changing modern-day society's need for reflection and thoughtfulness.

143 I have not been able to gain access to the international invitation to tender. According to the jury report (Bølling, ed., 2008), the competition was announced on April the 4th. 2007 in *The European Union Times* (EUT). Nor have I not been able to obtain any documented information on Svendborg Kommune's selection process of the six competition teams. According to Poul Hjere Mathiesen (personal communication, 2014), 35 to 40 teams responded to the international invitation; The six teams were chosen from among them. Mathiesen did not reveal the identity of the first-round teams nor who selected the six competition teams or the selection criteria.

144 Elkier + Ebbeskov arkitekter, Lisbeth Westergaard Planning, 2+1 Idébureau, and Claus Carstensen (81120/1); Nord Arkitekter, Holscher Arkitekter, Arup group, and RTKL (12347/5); Karres en Brands landskapsarkitekten, POLYFORM, Witteveen+Bos, Cenergia Energy Consultants, Henrik Dahl, and Uffe Paludan (12345/6); COWI, AplusB, Kjør & Richter, Aalborg Universitet, Alfio Bonanno, and Hans Krull (15489/2); Arkitekt Kristine Jensens Tegnestue, Gehl Architects, Praksis Arkitekter, and Esbensen Rådgivende Ingeniører (25738/3); NIRAS Konsulenterne A/S and NIRAS A/S (35874/4).

145 The competition was aided by the *European Regional Development Fund*.

146 The distribution of housing types is described in the competition brief as 60% single-family houses, 30% dense, low-rise housing, and 10% high-rise housing (Svendborg Kommune and Akademisk Arkitektforening, p. 42).

ants. In the foreword to the competition brief, the Mayor of Svendborg at that time, Lars Erik Hornemann (V), underlined the Town Council's visions and expectations to the future development of the Tankefuld area:

We imagine Thoughtful as a landscape town: a town built on the premises offered by the landscape, in which buildings and landscape, infrastructure and nature are interwoven in such a way that they add value to each other in terms of experience qualities and usefulness. We believe that an overall development plan based on the green structures will be able to create fertile ground for organic urban development for the benefit of the entire Svendborg area instead of just being a new urban layer added to the already existing town (Svendborg Kommune and Akademisk Arkitektforening, 2007, p. 33).

In the spring 2007, previous to the competition, Svendborg Town Council had decided to submit an application to become the first *Cittaslow*^[147] town in Denmark. This meant that the town committed itself to follow the Cittaslow key principles and strive to improve the inhabitants of Svendborg's quality of life by slowing down the town's overall pace (Svendborg Kommune, 2016). Accordingly, the objective of the Tankefuld competition was to propose an overall structure for a 'landscape town'

147 The *Cittaslow* organisation was founded in 1999 in Italy. The former Mayor of Greve in Chianti, Tuscany, Paolo Saturini, came upon the idea to use the local characteristics and special products as basis for the town's development and growth strategy. Soon, his ideals were endorsed by the mayors of three other minor Italian towns, i.e., Bra, Orvieto, and Positano, and in close collaboration with the founder of the *Slow Food* movement, Carlo Petrini, Cittaslow's goals and principles were formulated. The idea was to replace modern-society values such as efficiency, quantity, and homogeneity with thoughtfulness and focus on quality, sustainability, and local production. Cittaslow's main key words are: local products and values, 'festina lente' (make haste slowly), seizing the moment, and pursue the best solution rather than the fastest (Cittaslow International, 2016; Svendborg Kommune, 2016). Today (updated October 2016), the Cittaslow International Network includes 228 towns in 30 countries around the world (www.cittaslow.org, 2016).

that articulates the ideals of a modern Cittaslow town^[148]; Tankefuld must reflect the local values and qualities of Svendborg, and its development must be based on social, economic, and environmental sustainability. In this context, it should be noted that environmental sustainability has been the primary incentive (and later impediment) for the development of Tankefuld, more of which later.

In the first phase of the Tankefuld competition, each of the six teams were asked to present their interpretation of the concept 'landscape town' and to propose a landscape-structuring approach that could serve as an overall framework for the development of Tankefuld. Each team should present a varied palette of housing types and recreational facilities that balanced the qualities of the Cittaslow concept while in the same time providing Tankefuld with a clear identity that underlines Tankefuld as an attractive housing and business area (Svendborg Kommune and Akademisk Arkitektforening, 2007, p. 45). After the first phase, a jury selected three teams^[149] to compete in a second phase. The jury prepared a written statement setting out their reasons for the selection of the respective projects including an indication of weaknesses, unclear aspects, or shortcomings. In January 2008, each of the three teams was given the opportunity to present their respective project proposal to the jury; each team received individual feedback and suggestions for improvement of the presented material. Following, the three teams had time to develop their projects, and in February 2008, the adapted project proposals were presented to the jury again at individual workshops that included urban planners from Svendborg Kommune's planning administration. After the workshops and the jury's final voting, the entry by team Nord Arkitekter^[150] came out the overall winner (Bølling, ed., 2008).

148 In March 2008, Svendborg Kommune became member of the Cittaslow International Network and Svendborg became the first Danish Cittaslow town.

149 Elkier + Ebbeskov arkitekter, Lisbeth Westergaard Planning, 2+1 Idébureau, and Claus Carstensen; Nord Arkitekter, Holscher Arkitekter, Arup group, and RTKL; Karres en Brands landschapsarchitecten, POLY-FORM, Witteveen+Bos, Cenergia Energy Consultants, Henrik Dahl, and Uffe Paludan.

150 Proposal no. 12347/5

Figure 30: (Nord Arkitekter, et al.) Tankefuld structure plan.
In presentation posters (p. 3)..



The structure plan

In the following, team Nord Arkitekter's winning structure plan will be analysed and discussed according to Bach and Clemmensen's (2005a; 2005b) analytical model (as described in chapter 3.3). Subsequently, the plan-implementation process, and key passages from the interview with the municipal key person, Poul Hjere Mathiesen (2014, personal communication, 9 April) will be outlined and discussed in relation to landscape urbanism theory and Tankefuld's development in general. As mentioned previously, the designer's perspectives will be included via team Nord Arkitekter's competition presentation material and the following master plan^[151], which was prepared by Nord Arkitekter and Holscher Arkitekter^[152] in 2008.

When overviewing team Nord Arkitekter's structure plan and presentation posters, it strikes me that the primary colour of the plan drawings and illustrations is green. Green in many shades and nuances. The landscape, which the designers obviously consider as green, dominates the plan. The future housing and built areas are reduced to green-greyish surfaces with scattered white sugar cubes. Structurally, team Nord Arkitekter uses Egense Ås^[153] as a fulcrum for establishing a large structural element: a 'landscape ring'. The landscape ring connects to Egense Ås, frames the landscape town, and establishes an accessible and coherent recreative band for the future users and residents. The landscape ring is outlined to the south by a coherent forest belt, which is created via afforestation between the existing forests. To the north and west, the landscape ring appears more transparent consisting of open landscape and fields. In relation to the landscape ring, the proposal places eight urban development areas; each area has its own local landscape-identity that reflects its localisation in the over-

151 *Forslag til Tankefuld Masterplan 2009* (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2008).

152 During the interview with Mathiesen (2014), I got the general impression that Holscher Arkitekter primarily was sub-consultant to Nord Arkitekter during the formulation of the Tankefuld master plan.

153 Egense Ås (ridge/kame) is a 15.000 years old landscape structure.

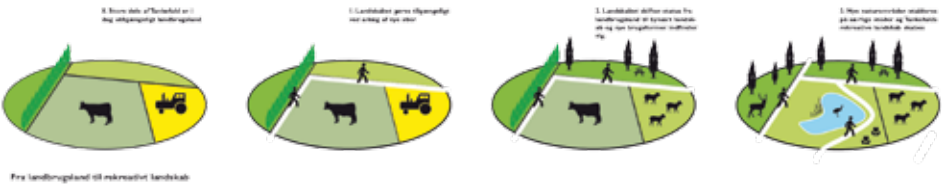
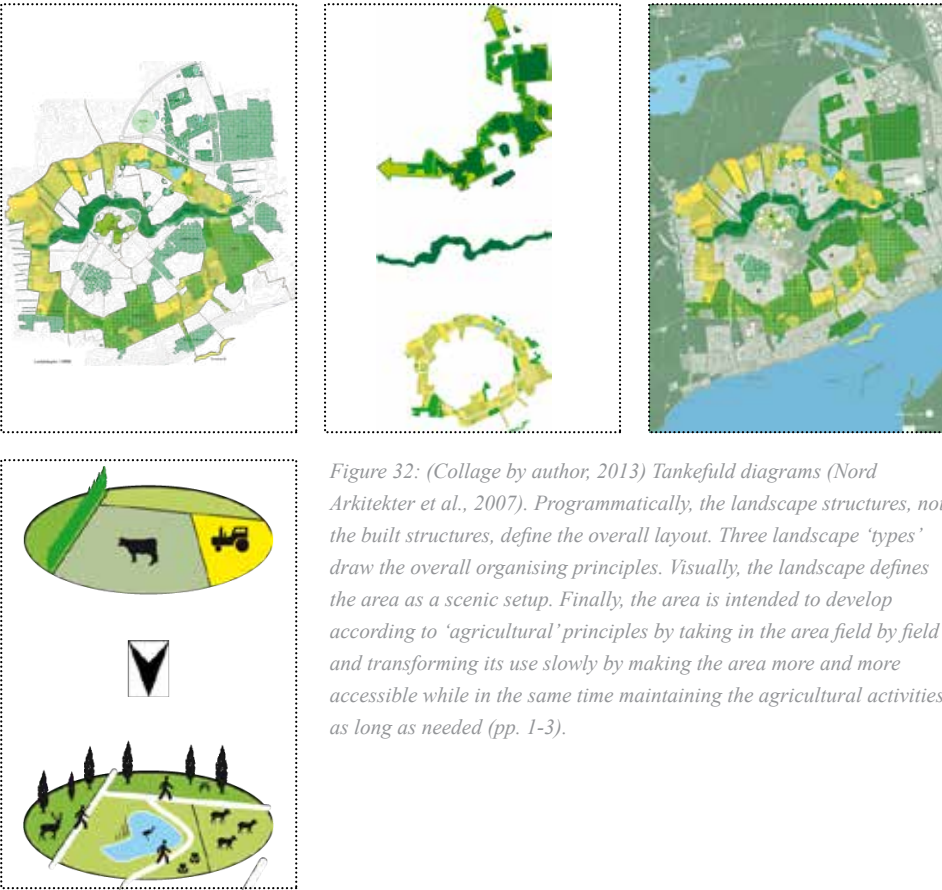


Figure 31: (Nord Arkitekter; et al., 2007) Tankefuld diagrams. From agricultural land to recreative landscape (p. 2).



all setting of the Tankefuld area. Centrally placed with Egense Ås in the back, team Nord Arkitekter's proposal establishes a 'landscape-urban' town centre that unites the area infrastructurally and functionally (Nord Arkitekter et al., 2007; Bølling, ed., 2008, pp. 10-11; 22-24).



Figure 33: (Nord Arkitekter, et al., 2007) Landscape structures. In presentation posters (p. 1).

With its layout of a programmable circle-shaped landscape band, I find that team NORD's proposal for Tankefuld can be associated with Koolhaas/OMA's ideas for Melun-Sénart (see, chapter 2). By placing eight urban development areas – or 'landscape villages' in relation to valuable and preservation-worthy landscape structures, the proposal shares clear references with landscape urbanism's idea of using the unbuilt (void) as primary organising element. When overviewing team NORD's structure plan for Tankefuld in relation to the analytical model outlined by Bach and Clemmensen (2005a; 2005b), many of landscape urbanism's methodical aspects can be found. As outlined in chapter 3, Bach and Clemmensen operate with four basic levels for decoding the role of landscape (described as landscape-strategic aspects), i.e., programmatic, organisational, processual, and visual (2005a) and five methodical agents (described as landscape-strategic principles), i.e., reverse optic (landscape as the organizing element), void (intentionally 'empty' spaces), external order (introduction of foreign organisational layer), programmatic equalization (traditional urban and landscape elements are equally valued), and orchestrated collision (new hybrid programmes or mix between urban and landscape programmes). In my view, many of Bach and Clemmensen's considerations can be found in team NORD's proposal for Tankefuld. As I see it, the proposal in exemplary fashion uses the landscape as generator for organising the Tankefuld area at several levels. Firstly, the extensive

afforestation programme interconnects the existing forests in the area and creates a spatial transition between the old Svendborg and the new Tankefuld; Secondly, Egense Ås, which the proposal considers as a coherent landscape structure, is utilised as a recreative landscape element that cuts through Tankefuld. Egense Ås is kept clear of buildings and by removing the existing plantation (see, Nord Arkitekter et al., 2007, p. 1), the Ås is staged as a special recreative attraction. Finally, the primary structural element and identity-giving concept, i.e., the landscape ring, conjoins the various landscape structures into a coherent whole. Decoding the structure plan by Bach and Clemmensen's analytical model, it appears that the introduction of the landscape ring (see., Bach and Clemmensen's (2005b) 'external order') together with Egense Ås forms the primary organising trait of the proposal. Further, as I see it, the idea of accentuating the landscape structures in organising the area is also underlined by a clear programmatic distinction between traditional urban programmes (primarily housing) and landscape programmes (recreation and leisure activities). By concentrating the built and unbuilt in separate zones and by letting the voids define the overall structure of the area (reverse optic), team Nord Arkitekter's entry succeed to reflect the concept of a landscape town; Tankefuld is structured by the landscape and the landscape becomes the basis for a phased development of Tankefuld. During my decoding of the Tankefuld project, it struck me that team Nord Arkitekter's entry, in contrast to Bellinge Fælle and Ullerødbyen, also focuses on how to use a landscape-strategy to develop the Tankefuld area and make it accessible to the future users and inhabitants over time. The entry includes a series of diagrams that illustrate how the agricultural landscape in time will be transformed into more recreative uses. As I see it, team Nord Arkitekter's considerations are relatable to Bach and Clemmensen's 'the processual level', which describes how landscape is part of the timewise development of a project. Unfortunately, as also discussed in relation to the analytical model in chapter 3.3, a more explicit use and utilisation of the landscape in designing an urban project, e.g., how to utilise ecological systems and natural processes in shaping the physical environments, remains unclear.

The master plan

After the competition, working groups from the municipality scrutinised the competition entry and made recommendations for improvements. Nord Arkitekter and Holscher Arkitekter were hired to summarise the proposed modifications and transform the competition entry into a comprehensive master plan in collaboration with the municipal planning administration. The primary purpose of the master plan is to ensure that the Tankefuld vision can be realised. The master plan outlines the overall spatial structure for Tankefuld and proposes a framework for the area's development. The master plan is seen as a 'strategic tool' that *"can ensure an ambitious and realistic urban development in Tankefuld and facilitate a phased development, which can meet the future's unknown needs and possibilities"*^[154] (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, p. 7). The master plan describes the area's existing values, which to maintain, and which to use as a basis for the future development. The master plan outlines the overall organizing landscape traits, infrastructure, local Cittaslow elements, sustainability initiatives, housing and types of dwellings, and business strategies. Also, the master plan clarifies the guidelines for a phased development of Tankefuld, and it suggests various models for organisations and partnership agreements, which could contribute to the financial background for the realization of the plan. In the master plan, the landscape is enhanced as generator for the spatial development of Tankefuld as a landscape town. The master plan underlines that the landscape and built structures are not to be considered as separate elements; instead, the urban and the landscape should be interweaved in order to create new spatial and recreational qualities. Despite minor adjustments of the landscape structures and built areas, the spatial development strategy for Tankefuld remains the same as in the competition entry. The landscape should guide the development, and the proposed seven built areas are to be developed according to the landscape structures. The master plan suggests a three-phase development. In the first phase, the forest band closest to Svendborg town should be established along with the most

154 Translated from Danish by author.

eastern part of the landscape ring. In the second phase, Egeense Ås is included into the landscape structure, and finally, in the third phase, the most western part of the landscape ring, which is based upon the existing forest reserves (fredskov) are to interconnect the landscape structures and encircle the entire Tankefuld area. In the master plan, the spatial development strategy is followed by the designers' ideas for possible building typologies and building structures based upon the topography and local landscape structure of each sub-area. Each sub-area (A to G) is represented by a diagrammatized circular section (which I, by the way, find rather odd as both topography and landscape structures tend to reach beyond such geometrical demarcations). The circular sections make the sub-areas easily comparable in terms of landscape characteristics, infrastructure, and possible building structures. Following, the master plan introduces three more detailed examples of how the sub-areas could manifest spatially (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009). In April 2009, *Forslag til Tankefuld Masterplan 2009* (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009) was adopted by Svendborg Town Council.

Kommuneplan 2009-2021 and the first local plan

Unfortunately, despite the many ambitions and good intentions presented in the master plan, Svendborg Kommune soon realised that the Tankefuld vision would prove problematic to implement. Already during the plan-implementation of Tankefuld in *Kommuneplan 2009-2021* (Svendborg Kommune, 2010), the project met much resistance; building a landscape town in the Danish open country side in relation to existing and protected landscape structures is in direct opposition to the Danish planning system's zoning principles and collides with The Nature Protection Act (see, chapter 3.2). After much legal wrangling with The National Forest and Nature Agency, an altered structure plan and modified version of the Tankefuld development strategy was finally implemented in 2010. Especially the structural alterations are striking; the Tankefuld structure plan as presented in the master plan is simply no longer existing. The landscape ring has been substituted by two large landscape bands, and the original intentions of developing the built areas according to the landscape structures has been abandoned. According to *Kommuneplan 2009-2021* (Svendborg Kommune, 2010, p.



to take place in the northern part of the Tankefuld area in relation to Sofielundskoven. Second phase should take place from the south in relation to Rantzausminde (south) towards Egense Ås (north-east). When fully developed, the two development areas will be interconnected via the new road from the north. The rest of the Tankefuld area is designated as perspective areas^[156] (urban development after 2021). These areas should follow the same inside-out principle as the first phases in order to maintain a clear distinction between town and landscape at all times.

If the urban development for some reason should come to a standstill (because of, for example, economic fluctuations, the housing market, new political decisions or legislations, or developments in society) the phased plan will, at any given time, ensure that a clear distinction between Svendborg town [...] and the open landscape is maintained (Svendborg Kommune, 2010, pp. 519-520).^[157]

Whereas the master plan underlines the potential dynamic of interweaving the landscape and the built areas (Svendborg Kommune, Nord Arkitekter, Holscher Arkitekter, 2009, p. 44), Kommuneplan 2009-2021 (Svendborg Kommune, 2010) underlines that a clear distinction between built and unbuilt will be maintained according to Danish planning tradition (Ibid., pp. 519-520). Even more interestingly, Kommuneplan 2009-2021 does not offer many directions on how the landscape bands are to be conceived - nor how they should be developed^[158].

When overviewing Kommuneplan 2009-2021 in relation to the master plan, it strikes

156 Areas designated for urban growth beyond the plan period (Post, 2009, p. 147).

157 Translated from Danish by author.

158 Kommuneplan 2009-2021 frames 290 hectares of land for 'future landscape development'. According to Kommuneplan 2009-2021 (Svendborg Kommune, 2010, p. 524), these areas should be kept clear for new constructions and 165 hectares of existing farm land (to the south) should be converted into forest; "The new more recreative use of the landscape bands will take place by establishing tracks, places from which there is a view, and recreative spots open to the public".



Figure 36: Left: Structure plan from competition entry (Nord Arkitekter, et al., 2007, p. 3); Middle: Structure plan in Forslag til Tankefuld Masterplan (Svendborg Kommune, Nord Arkitekter, Holscher Arkitekter, 2009, p. 12); Right: The Tankefuld structure in Kommuneplan 2009-2021 (Svendborg Kommune, 2010, p. 525); Half of the landscape ring has been removed, Egense Ås has doubled in size, and the built areas has been adapted.

me that Tankefuld appears as a sad reminiscence of a grandiose vision. The interconnected landscape structures and the iconic landscape ring from the competition entry and the master plan are long gone and so is the landscape-based development strategy. In 2011, Svendborg Town Council adopted the first local plan, *LP 540 Sofieroskov, Tankefuld Nord* (Svendborg Kommune, 2011), in order to initiate the development of Tankefuld. LP 540 frames a residential area of 600-900 dwellings of various types in relation to Sofieroskov (north-west from Svendborg). The local plan also opens up the possibility for establishing business as well as public and private services. Despite the altered structural and strategic framework presented in Kommuneplan 2009-2021, Svendborg Kommune maintains the idea of Tankefuld as a landscape town in LP 540, albeit in a more value-based way. Whereas team Nord Arkitekter's competition entry and the master plan describe the landscape structures as generator for designing the overall spatial layout and the development strategy for Tankefuld, LP 540 primarily refers to the landscape as a value. In this context, LP 540 outlines six values for the new area, i.e., *The manifold landscape* (increase biodiversity, recreation, alternative farming practices close to housing); *The good life* (thoughtfulness and Cittaslow principles); *Art in the neighbourhood* (visual, aesthetic, and artistic elements should underline the landscape town); *Sustainability* (carbon-neutral, environmentally friendly technologies and power supply, low-energy housing, higher

density, and sustainable means of transportation); *Healthy living* (exercise and fitness activities, local production of food); *Learning* (Tankefuld as a pioneering Cittaslow town, innovation, experiments, dialogue, knowledge sharing, and new technologies). When scrutinizing LP 540 and the appended maps, one realizes that also the master plan's proposed structure for this sub-area has been abandoned in favour of a more traditional structure. Whereas the master plan suggests a series of demarcated enclaves centred by a common green and surrounded by (undefined) green, LP 504 presents a more pragmatic structure with fewer internal local roads and less road area intended for future expansion; The majority of the building plots are reserved for single family houses with a private garden, the houses face the local roads, and the common greens suggested in the master plan are replaced by private gardens. In my view, Kommuneplan 2009-2021 and LP 540 articulate the shift in Svendborg Kommune's discourse for how to conceive Tankefuld. Whereas the competition entry and the master plan primarily focus on the landscape's ability to structure Tankefuld and how the landscape can facilitate a sustainable development with regard to the Cittaslow principles, Kommuneplan 2009-2021 and LP 540 focus more on the set of values, which includes the Cittaslow principles, that are to define Tankefuld. Even if the overall vision remains to create a landscape town – or an urban structure based on the landscape's premises, Kommuneplan 2009-2021 and LP 540 represent, as I see it, a value-based urban development strategy rather than a spatial development strategy based on landscape structures as first intended. Further, LP 540 focuses more on the future buildings and the initiatives to be taken in order to achieve more sustainable and environmentally friendly constructions (e.g., green, multifunctional roofs, local rainwater drainage, recyclable materials, permeable pavements, low-energy housing, etc.) than how to organize the overall structure of the local plan area.

Planning obstacles, political disagreements, and Citta(too)slow

This section is based upon my semi-structured interview with Poul Hjere Mathiesen (2014, personal communication, April 9). During the interview, Mathiesen outlined and commented on Tankefuld's development from competition entry to the plan-implemented result and initial realisation. During the interview, it became clear to me

that the Tankefuld project had taken a lot of resources politically as well as administratively. As an outsider, I found it quite difficult to clarify Tankefuld's development; It was clear that the implementation process had been extremely complicated and affected by shifting political interests in Svendborg Town Council, national planning implications, and a stagnated housing market. It is important to underline that the following represents my recording and understanding of Poul Hjere Mathiesen's version of events. Mathiesen became the planning administration's project manager of the Tankefuld project in March 2008. Mathiesen told me that he had not been part of the initial phases of the Tankefuld project, but during the interview he appeared to be rather well-informed about the earliest phases of the Tankefuld project, and he had taken up an unambiguous position when it came to navigate the Tankefuld project into real life. During my interview with Poul Hjere Mathiesen, I got the general impression that Tankefuld has been quite a thing for Svendborg Kommune. From the initial vision to beginning realisation, Tankefuld has challenged not only Svendborg Kommune and the municipal planning administration, it has also caused quite a stir in the established Danish planning practice. In the following, I have sought to combine Mathiesen's statements and considerations with related written documentation on Tankefuld in order to frame Tankefuld's development as clearly as possible.

According to Mathiesen, the idea of developing Tankefuld with special regard to the local landscape had been existing already from the beginning. The key words were sustainability, health, and learning. Mathiesen told me that he was quite sure that the idea of using the landscape as the primary planning element and identity-giving feature had occurred already during the formulation of the competition brief.

The landscape is actually the largest structure. It is the landscape that positions the town [...] The manifold landscape – or the value of living close to [the landscape] suddenly becomes part of it [...]. This is also the reason why so many found [the project] exciting! There is a forest, Egense Ås, a stream, and terrain [...]. Suddenly it takes part in the structuring of the town. The new town. Also, what about those who

are in the area now? What about animals and nature? What about the farming interests? Do we have to drive that out? We are lucky here too. There aren't many livestock in the area. Just imagine, a lot of piggies and cows and all – and slurry! [...]. Fortunately, it is primarily plant production [...]. There are heifers and such. Perfect for landscape close to residential areas; One can simply close down one field after another without damaging any structure and simply develop it [...] (Mathiesen, 2014).^[159]

During the interview, Mathiesen underlined the landscape's ability to support a phased development and a gradual transformation of the Tankefuld area. According to Mathiesen, the Tankefuld area was solely agricultural land before 2005; Then, in 2006, the first foreign object, i.e., Øhavsstien^[160] (the archipelago trail) appeared in the landscape and made it accessible for people other than the farmers; Following, some of the larger fields were divided into smaller fields, and the municipality began to muscle in on the competition area with the purpose of developing housing and recreational areas. Mathiesen explained that Svendborg Kommune began to consider the forests as recreative facilities and not simply as forestry and hunting grounds; *"We took a different view on the landscape elements [...] We altered [the understanding]. Eventually, one has something completely different"*^[161]. According to Mathiesen, Team Nord Arkitekter's winning entry in the Tankefuld competition proposed a structure that encircled Svendborg Kommune's ambitions in the best possible way; especially, team Nord Arkitekter's idea of developing the area as a series of landscape villages each with its own landscape identity (see, previous section), had been appealing, Mathiesen said.

159 Translated for Danish by author.

160 Øhavsstien is a 220km hiking trail that encircles the South Funen Archipelago. The last part of the trail opened in 2008.

161 Translated from Danish by author.

The overall concept became a green structure – a green circle, a landscape circle. [...] Unfortunately, the overall concept could not be realised, but I shall revert to that later. So, the overall concept was a green ring and a number of landscape villages [...]. That was the structure to work on (Mathiesen, 2014).^[162]

Despite the fact that the competition brief (Svendborg Kommune and Akademisk Arkitektforening, 2007) uses the wording ‘town’ and ‘new town’ several times and asks the competition entrants to focus on attractive housing as well as public and private services and business development, Mathiesen underlined that Tankefuld was never intended to be an independent town next to Svendborg; Tankefuld was conceived as a residential neighbourhood – as a supplement to Svendborg’s existing housing supply. During the interview, I got the general impression that there was a sort of discrepancy between the Town Council’s original visions (as presented in the competition brief, at least) and the planning administration’s reality and latitude. In addition to the ‘new town’ versus ‘residential neighbourhood’ problematic, the introduction of the Cittaslow principles in relation to Tankefuld had also caused some confusion to the planning administration. According to Mathiesen, the Cittaslow concept was easily transferable to Tankefuld; “[Cittaslow’s] ideas of sustainable, long-term solutions were easy to superimpose onto [Tankefuld]; It was something that accidentally fit together”^[163]. Mathiesen referred to Cittaslow as a branding strategy – and not an urban development method; “We also had a problem with that snail!”^[164] *We are planning growth; what are we supposed to do with a snail with a house on its back?*^[165]. Mathiesen explained that it was hard to make the Cittaslow concept popular to the public; In the same time, “one can almost feel that Svendborg is a

162 Translated for Danish by author.

163 Translated for Danish by author.

164 Cittaslow’s logo is an orange snail with a snail shell on its back.

165 Translated for Danish by author.

Cittaslow [town]”^[166]. According to Mathiesen, several of Cittaslow’s values, e.g., sustainability, good and healthy life, quality, and slow pace development, were in keeping with the municipality’s visions for Tankefuld – but it did not influence the concrete plan directly.

When it came to the plan-implementation process, Mathiesen explained that the work on Kommuneplan 2009-2021 had been particularly challenging; The Danish Nature Agency (Skov- og Naturstyrelsen) and The Department for Food Industry (Direktoratet for Fødevareerhverv) had raised objections to both the landscape ring and the scattered landscape villages; According to Mathiesen, “*they vetoed the entire setup [...] The idea of building in the rural zone...! The rural zone is for farming!*”^[167]. Mathiesen explained that the plan-implementation process took almost a year of long and tough negotiations between Svendborg Kommune and The Danish Nature Agency; “*It was quite dramatic*”, he recalled. Mathiesen explained that it was during these negotiations that the original development strategy, i.e., to establish the landscape structures first – or in parallel to the built structures (see, Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, pp. 44-45) and the proposed landscape structural framework, i.e., the landscape ring and the coherent forests, were cancelled in favour of a more traditional development strategy and a spatial structure based upon a forest band and a widening of the Egense Ås structure. According to Mathiesen, it was not only Tankefuld’s overall structural framework that had challenged the planning administration; also, the idea of using forest reserve (fredskov) for recreational purposes and settlement in relation to protected landscape structures proved to be problematic.

[T]here are administrative implications all the time! [...] To be a ‘landscape-converter’ is in conflict with most nature protection initiatives. In this case, it was The Forestry Act while in other cases,

166 Translated for Danish by author.

167 Translated from Danish by author.

[it was] something about streams [...] So, to convert and add [to the landscape], it challenges common practice; It can be difficult. Can we simply annul the duty to preserve the forest? We don't have an argument for that [...] Then some of the residents want to establish a kitchen garden... Can we put in a water pipe and construct some garden sheds? Here, The Forestry Act applies again [...] Then we have Natura 2000, §3 areas, and so on [...] It is a completely different set of rules that apply! (Mathiesen, 2014).^[168]

As described in the master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, pp. 56-57), it was Svendborg Kommune's intention to establish a public-private development company to develop Tankefuld^[169]; Unfortunately, due to the financial crisis, the establishment of the development company was postponed. In 2008, Svendborg Town Council decided to purchase 50 hectares of farm land and 40 hectares of forest from Hvidkilde Slot with the purpose of boosting the development of Tankefuld (Møller & Grønborg, et al., 2009c, p. 16).

Despite Svendborg Kommune's investments, the development of Tankefuld has been slower than expected.

We bought for 80 mill. Dkr. of land [...] The municipality bought a large piece of land at the worst possible time; The municipality borrowed money and now the land is rented out. The whole town is talking of it – how the municipality has overbought itself (Mathiesen, 2014).^[170]

168 Translated from Danish by author.

169 The private land owners are important players in the development phase. The private land owners can site prepare and sell the land independently (in accordance with municipal and local plans) - or choose to sell the land to private investors or the municipality. The municipality hopes that the building activities can help finance the landscape development in the adjacent areas. The farmers have to contribute financially to the future infrastructure; in return, it will add value to their land (Møller & Grønborg, et al., 2009c, p. 16).

170 Translated from Danish by author.

The demand for new housing is simply too low, Mathiesen explained. Young people do not have the money to invest in this type of housing, he said; They want to work less and pick up the kids early; *“They actually want ‘real’ slow-living; They want a house for less than a million [...] We call them the neo-hippies (Mathiesen, 2014)”*^[171]. Mathiesen explained that the prices for the building plots (600.000 Dkr. to 700.000 Dkr. in 2014) are too high for the potential buyers; Further, the stipulated requirements in LP 540 regarding the construction of single-family houses (see, previous section) also involves an additional expense seen in relation to a mass-produced standard house; *“So, those who actually want to build sustainably cannot afford to pay [...] On top of that, most people find that the building plots are too small [600 to 700 square metres]”*^[172]. In order to meet the public criticism and hopefully boost the sales, Mathiesen was quite sure that the municipality would have to alter LP 540 and downgrade the value-based and sustainable urban planning principles; Still, he was not sure how many and how far-reaching alterations were to be made; *“Is it too far advanced – or is it just right? What if the market is awakening? [...]”*^[173]. Mathiesen explained that the project also took form according to the Town Council’s composition. LP 540 (Svendborg Kommune, 2011) was prepared during a social-democratic dominated Town Council^[174]; *“They were preoccupied with the green adventure [...] They chose the ‘difficult’ solutions – something with an edge; They wanted Svendborg to show something different. Today, at the sales stage, we pay the price”*^[175], Mathiesen finished.

171 Translated from Danish by author.

172 Translated from Danish by author.

173 Translated from Danish by author.

174 The formulation of the Tankefuld vision and the initiation of the architectural competition took place under Mayor Lars Erik Hornemann (V) (2005-2009). From 2010 till 2014, Curt Sørensen (S) was Mayor of Svendborg. In 2014, Lars Erik Hornemann took over as mayor again.

175 Translated from Danish by author.

Tankefuld – realistic or utopian?

Overviewing team Nord Arkitekter's winning entry for the Tankefuld competition, the following master plan, the plan documents^[176], and the built result it is clear that Tankefuld has undergone considerable changes during its implementation process. Due to The National Forest and Nature Agency's influences during the work on the municipal plan, both the original structure proposed by team Nord Arkitekter's winning entry and the development strategy described in the master plan have been altered; The landscape ring and the coherent forest bands have been substituted by two large landscape bands, and the development strategy based upon the idea that the landscape structures were to guide the development of the area has been abandoned. As mentioned in the beginning of the chapter, I did not have the opportunity to interview the architects behind the original design for Tankefuld. For that reason, I do not know much about the designers' incentives for using the landscape as primary structuralising element nor do I have knowledge of their working methods. Nevertheless, the analysis of the original Tankefuld structure plan revealed many of the same observations that I made when scrutinizing the Bellinge Fælled and Ullerød cases; which I will discuss more thoroughly in the next chapter. In this context, it is to be kept in mind that whereas the structure plans for Bellinge Fælled and Ullerødbyen both are designed by landscape architects, i.e., Schønherr and SLA, the original structure plan for Tankefuld was designed by a team lead by Nord Arkitekter – an office primarily associated with urban design and buildings. It would for sure have been interesting to ask them about their incentives, working methods, and not least their attitude to landscape urbanism theory. Although the designers' own reflections, much to my annoyance, will remain untold in the Tankefuld case study, I have sought to get an

176 Kommuneplan 2009-2021 (Svendborg Kommune, 2010), LP 540 Sofielund, Tankefuld Nord (Svendborg Kommune, 2011), and LP 615 for et blandet bolig- og erhvervsområde ved Sofielund Skovvej i Tankefuld Nord (Svendborg Kommune, 2016). The LP 615 was made in order to establish a local housing and care facility for children and young people. The LP 615 area lies within the LP 540 area. The structural principles of LP 615 follow LP 540's guidelines.



Figure 37: (Svendborg Kommune, 2013) View of Tankefuld's sub-area A.

overview from reading the texts on the competition presentation posters; Obviously, the posters represent a sort of 'sales material' (in order to charm the jury), but, for lack of any better, I have accepted the presentation posters' texts as representative for how the designers may have conceived Tankefuld. When reading team Nord Arkitekter's texts, it appears that the design team's focus has been on the landscape and its ability to structure the Tankefuld area; The Cittaslow principles are also mentioned, but whereas the later local plan (LP 540) presents the Cittaslow mind-set as the primary aspect of the Tankefuld development, team Nord Arkitekter's overall idea, according to the text, remains to define an adequate framework for the unfolding of the Cittaslow principles (Nord Arkitekter, et al., 2007, p. 1). As I see it, team Nord Arkitekter's entry proposes a spatial structure based upon existing and new landscape features that supports and encourages the slow living principles – without backing down on the overall structural framework and the future spatial qualities. Retrospec-

tively, it still remains unclear to me when the focus changed. Perhaps, it happened during the plan-implementation process and the negotiations with The Danish Nature and Forestry Agency? During my interview with Poul Hjere Mathiesen, I got the impression that he somehow still imagined Tankefuld as it was, completely with landscape ring and innovative housing units placed in a large landscape structure. In my view, this dual understanding of Tankefuld still dominates the discussion. When I think of Tankefuld, I picture the iconic landscape ring, glossy images, and praising words from the competition; I am quite sure that many others do as well. As I see it, this twofold reality has been a great hindrance to the realization of Tankefuld. I will even go so far to say that the overall structure for Tankefuld's development is so degraded that it has nothing to do with the original structure. Perhaps, due to the lack of the original structural framework, the values that are to define the life to be lived in Tankefuld have been given more attention? Today, the Cittaslow principles along with the almost intense focus on sustainability (see, LP 540) has come to play a larger role than the original project and the master plan suggested. In my view, Tankefuld has gone from being an exemplary vision based upon a distinctive landscape structure and thorough spatial considerations, albeit with specific values regarding its physical manifestations and social life, to a value-based project with little attention to the overall spatial structures. In *Tankefuld – en by, der vil det hele!* Bo Hellisen Vagnby (2010) discusses the problems and potentials of applying a value-based development strategy in relation Tankefuld. Interestingly, Vagnby's article is apparently written prior to the publication of Kommuneplan 2009-2021 (adopted in 2010). In the article, Vagnby praises the master plan's spatial-structural principles and especially the landscape ring. Vagnby describes Tankefuld's spatial layout as "*a clear and functional unit in beautiful harmony with the surroundings areas*"^[177], and he draws parallels to Copenhagen's Fingerplanen, the post-war Green Belts around London, and Danish planning icons such as the plan for Hanstholm (1966) (designed by Gaardmand, Dybbro, and Haastrup) and Værløse Vest (1970) (designed by Dybbro

177 Translated from Danish by author.

and Haastrup). None the less, despite Tankefuld's (at that time) strong spatial layout, Vagnby expresses a profound concern that Svendborg Kommune's high ambitions and somewhat idealistic goals for Tankefuld will prove difficult to realise. According to Vagnby, the Cittaslow principles, which are formulated in a different urban planning culture than the Nordic-rational, together with the municipality's demand for sustainable solutions form a potential weak point in the development of Tankefuld.

With so ambitious and, in many respects, idealistic goals for the urban development, the municipality demonstrates a will to many things. As such, one cannot pinpoint anything on the expressed values [...]. One can only have sympathy for the well-meaning purpose [...]. However, it is not the first time in neither Danish nor international urban planning history that one uses a very broad declaration of intent, which in a following implementation phase has failed to be carried out. Either because of altered development and marked conditions – or because urban development projects with a long time-horizon have a tendency to be let down by the intended marked segment as well as the decision-makers. In other words, one loses the control of the implementation environment (Vagnby, 2010, p. 2).^[178]







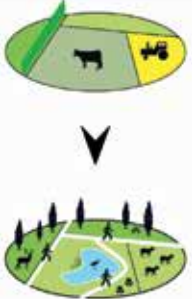



When scrutinising Vagnby's arguments, it appears that many of his concerns have become crucial reality for Svendborg Kommune. The original landscape-structural intentions, which according to Vagnby formed the very fundament of the project, are long gone, and the value-based development strategy, as stipulated in Kommuneplan 2009-2021 and LP 540, has collided with a stagnated housing market and the local state of demand. Even though the first part of Tankefuld has been locally planned and site prepared, it has suffered from poor sales and lack of buyer interest. Today, the first Tankefuld sub-area appears rather rudimentary with its odd unfinished structure,

178 Translated from Danish by author.

lonely central building (a rental housing association), scattered single-family houses, and apparent useless roads. Unfortunately, the grandiose structural visions and almost idealistic goals for the life to be lived in Tankefuld have not succeeded to make it into real life. Hence, it remains to be seen whether Tankefuld will ever be fully realised.

CHAPTER 5:

Findings and discussion

	Bellinge	Ullerødbyen	Tankefuld
Programmatic			
Organising			
Processual			
Visual			

5.1 The articulation of landscape urbanism in the three cases

Based on the findings from the tree project analyses, I argue that the original project designs for Bellinge Fælled, Ullerødbyen, and Tankefuld, each in its own way, unfold and articulate landscape urbanism's reversal of traditional order by applying a landscape-strategic approach to the design and spatial organisation of the respective areas. Superimposing the (in chapter 2.1) described methodical aspects of landscape urbanism onto the original designs for Bellinge Fælled, Ullerødbyen, and Tankefuld, it appears that the ambitions of Corner's 'surface strategies', Waldheim and Santos-Munné's 'decommissioning' principles, and especially Smets' idea of 'clearing' generally resemble with the three projects' ambitions and agents. Despite the considerable difference in area^[179] and the scale of the applied strategy, the landscape in the three respective cases performs as key design element. The landscape forms and guides the coming built-up areas. Based on these overall reflections, the simple conclusion would be that Bellinge Fælled, Ullerødbyen, and Tankefuld are Danish representatives of genuine landscape urbanism. However, as the discussions and preliminary conclusions throughout this thesis reflect, there is much more to it than that.

Connectivity

In Bellinge Fælled, the overall spatially organising principles relate to the green/blue structures and the curvatures of the existing moraine terrain. In the proposed structure by Schønherr, the unbuilt areas appear as constituting for the coming development. The inner open landscape structure (fælleden) seemingly subjugates the built; it organises the coming housing areas as well-defined clusters distinct from the central landscape, and the housing structures are arranged according to the logic of the suggested local rainwater drainage system. Notably, Bellinge Fælled is the only project in this empirical study that actively uses the landscape's ecosystems potential as an

179 Bellinge Fælled: 45ha and about 500 housing units in total. Ullerødbyen: 150ha and about 1500-1700 housing units in total. Tankefuld: 825ha and about 2000-3000 housing units in total (arranged in 50-150 units enclaves).



Figure 39: (Vandkunsten, 1977) Ullerødbyen 'skovby' (forest town) (In *Arkitekten*, 1978, pp. 136). According to Vandkunsten's co-founder, Jens Thomas Arnfred (2010, p. 71), their proposal for Ullerødbyen caused controversy: "In [Vandkunsten] we did not always do as we were told. In Ullerødbyen we did almost all the things, we were not allowed to do. We planted forest, built forest towns in the rural zone, and developed Ullerød as a series of green spaces that connected the individual parcels' private outdoor spaces to the family units' common areas, to the neighbourhood's green, to Ullerødbyen's central green park with path systems all the way to Frederiksborg Castle. [...] We won the first prize, but the project was never carried out. It was rumoured that there was a forest guard in the municipal council..." (Translated from Danish by author).

actual spatial design parameter^[180].

In Ullerødbyen, the built areas are organised around an inner open landscape. The unbuilt and built interweave (not blending) into a negotiated form, which highlights the meeting/collision between landscape and housing; between nature and urban. Similar to Bellinge Fælled, the spatially defining landscape structure in Ullerødbyen is situated centrally within the areas. As in Bellinge Fælled, the central landscape primarily functions as recreative green open space to the residents of the area^[181]. Interestingly, when overviewing the original structure plans for Bellinge Fælled (Schönherr's plan) and Ullerødbyen (SLA's competition entry), it appears that both Bellinge Fælled and Ullerødbyen are intended to 'connect' to their neighbouring areas via their landscapes. In the case of Bellinge Fælled, such ideas have proven problematic in reality. As discussed in chapter 4.1, Odense Kommune failed to establish the large landscape structure as a coherent structure. As such, the landscape's capacity to reach beyond the demarcated site only exists as an intention in the local plans (Odense Kommune, 2012; 2015)^[182]. Area-wise, to the north and east, Bellinge Fælled reaches

180 In Ullerødbyen and in Tankefuld, ecosystems services are not part of the original spatial designs. According to Jens Ulrik Romose from Hillerød Kommune (2013), the first part of Ullerødbyen features local rainwater drainage (see, chapter 4.2). It was established as part of the realisation process by Hillerød Kommune's water management company. The local water management was not part of SL's original project design. Further, the rainwater system in Ullerødbyen is in sewers. It is not immediately visible. In the case of Tankefuld, *Lokalplan nr. 540 For Sofielund* (Svendborg Kommune, 2011) requires run-off water and rainwater to be handled locally. Water management is not a spatially integrated part of the original design for Tankefuld. See, competition entry (Nord Arkitekter, et al., 2007) and Tankefuld master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009).

181 Mie Søgaard Rasmussen (2013) from Odense Kommune and Jens Ulrik Romose (2013) from Hillerød Kommune argued for the respective landscapes' attractiveness to the municipalities' other residents. I find this argument rather optimistic, not to say unrealistic, as both Bellinge Fælled and Ullerødbyen are localised several kilometres from the respective town centres. From central Odense to Bellinge Fælled: approx. 10km. From central Hillerød to Ullerødbyen: approx. 5km. Obviously, the immediate neighbours can benefit from the areas. As I see it, the catchment areas of Bellinge Fælled and Ullerødbyen are relatively moderate.

182 At the time of writing, 'fælleden' (the common) remains to be established. In the local plans (Odense Kommune, 2012; 2015) the constituting open space area simply appears as background for the built. This return of landscape to background is further emphasised by the local plan's illustrations. Here, the central landscape merges into a generic green background.

into current farm land. To the south and west, Bellinge Fælled meets Bellinge village. Notably, Nina Jensen (2013) from Schønherr indicated during the interview that she found it troubling that the ‘site-reading’ had to take place within the administratively defined boundaries (Odense Kommune’s purchased area). Jensen explained that it would have been more relevant to work beyond such non-physical demarcations. For example, Jensen argued that the infrastructure and the attractiveness of the future Bellinge Fælled area could have been improved considerably by including the entire terrain formation (a ridge that continues into the neighbouring area east of Odense Kommune’s area). In this consideration, the landscape of Bellinge Fælled is not en-



tirely anchored into the local context; it does not connect to any surrounding areas or landscape structures. As such, the landscape's ability to connect new with existing as well as connect the future built areas internally, appears somewhat contextually amputated.

Seen in relation to Bellinge Fælled, it occurred to me that Peter Bredsdorff and Sven-Invar Andersson's winning entry for the Gullestrup (see, figure 39) competition (1965) represents many of the same considerations on landscape as guiding for the development. Without going into details, it appears that whereas Odense Kommune's 'reverse' approach to the development of Belling Fælled failed in practice, it somewhat succeeded in the case Gullestrup. The purpose of the Gullestrup competition was to bring forth ideas for infrastructure and suburban settlement patterns for a 400ha area north from Herning. The winning design suggested that the new area visually and physically was subdivided by a series of forest belts. The forest belts should cut through the site and perform as the primary structuralising elements. All future development in the area was to be located in relation to the forest fringe. The suggested subdivision made it possible to initiate a staged development of the area, which later proved useful as only a small part of the planned development was later realised. As all of the forest belts were not established prior to the first construction work, each belt should function as an individual forest as well as part of a possible larger structure (Gaardmand, 1993; Boris, 2010). Even though Gullestrup has not been fully established, the built sub-areas appear and function as small 'independent' urban developments in the forest clearing. Albeit years apart, a project like Gullestrup reflects that the idea of basing urban development on landscape is not an entirely new practice in Denmark. It also points to the problematics related to establishing landscape structures prior – or parallel to construction.

Whereas the subdivision into forest/built units has made a phased development possible in Gullestrup, Odense Kommune has neglected the potential of a thought-through phased establishment of the large common. In my view, in Bellinge Fælled, each fragment of landscape (subdivided according to the local plans) does not work as an

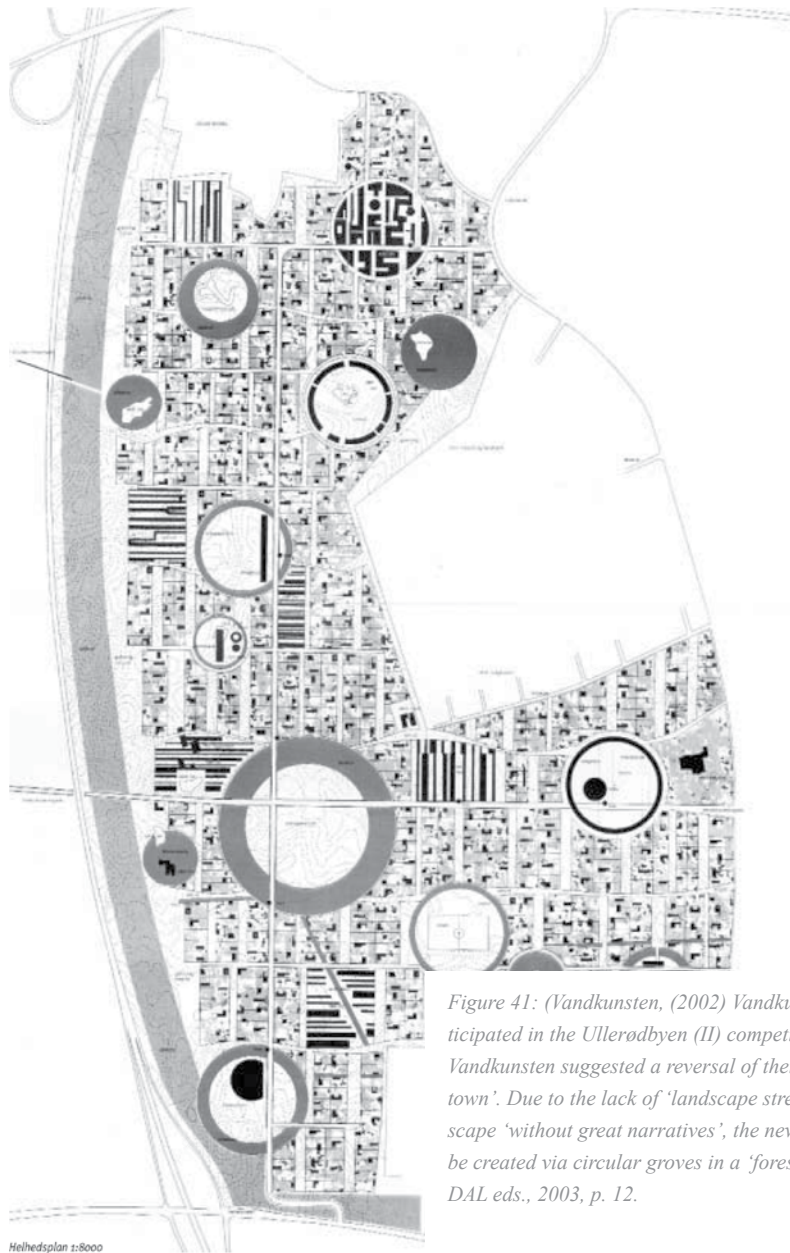


Figure 41: (Vandkunsten, (2002) Vandkunsten also participated in the Ullerødbyen (II) competition. Ironically, Vandkunsten suggested a reversal of their 1977 'forest town'. Due to the lack of 'landscape strength', a landscape 'without great narratives', the new identity should be created via circular groves in a 'forest of houses'. In DAL eds., 2003, p. 12.

independent unit, but merely as undefined fragments of a larger coherence, which may/may not be established.

In Ullerødbyen, the large inner landscape (if established in its total) will be cut into two by an existing through-going (east-west) road. However, the graphic representation of SLA's original structure plan indicates that the landscape is to be conceived as a totality. Disregarding that the two landscape halves will be physically disconnected, which could prove problematic in terms of fauna and wildlife corridors, I venture to assert that it would be possible to maintain a somewhat coherent landscape identity between the two halves; For example, in terms of plantation types, biotopes, and the degree of maintenance. Regarding the landscape's connectivity to surrounding areas, SLA had only little opportunity to consider landscape coherences on a larger scale. To the west and north, the Ullerødbyen area is flanked by Hillerød motorvej and Isterødvej; To the south and east, the area meets the existing Ullerød (1970s single-family standard house developments). These physical boundaries, I argue, make it hard to inscribe Ullerødbyen's landscape into any larger coherences of landscape structures^[183].

In team Nord Arkitekter's original project (Nord Arkitekter, et al., 2007) for Tankefuld, the landscape is actively used to spatially connect the new area to Svendborg on a relatively large scale^[184] (the landscape ring). Unfortunately, whereas the landscape ring connects the future development and Svendborg into a coherent whole, it does seemingly not orientate outwards reaching structures beyond the demarcated (competition) area. Further, due to the extent and scale of the proposed landscape structure, which I shall revert to later in the discussion, I find it hard to determine how the

183 As mentioned in chapter 4.2 on Ullerødbyen, Vandkunsten suggested a structure plan for Ullerødbyen already in 1977. Interestingly, Vandkunsten's proposal shares many similarities to SLA's later proposal (see, figure 40).

184 Cf., previous definition of scales in chapter 3.3 on *The Danish cases*.

landscape within the seven sub-areas will manifest and connect locally. From this, it seems as if Tankefuld suffers from some of the same contextual incoherence as seen in Bellinge Fælled and Ullerødbyen, albeit on a considerably larger scale.

Even though the three cases use landscape as primary vector for design in the spatial structuring of the respective area, it seems that the administrative demarcations have played a crucial part in defining the levels on which the landscapes have been considered and conceptualised. As a result, the projects are simply not inscribed into any larger coherences or landscape-ecological networks. Hence, the landscapes in the three cases come to appear detached and rudimentary. Viewed in this light, I find that the perspectives of applying a landscape-strategic approach in the three cases are somewhat lost. The three landscape strategies simply fail to unfold their full landscape urbanist potential in terms of connectivity and systems-based thinking. As I see it, in Bellinge Fælled, Ullerødbyen as well as Tankefuld, the landscape strategies are not sufficiently anchored in the local context, and they simply connect to nowhere. This ‘disconnection’, I argue, have later resulted in an unavoidable devaluation of the constituting landscape’s role and importance in the following implementation process; more of which later.

Scale and scope

Another aspect of ‘connectivity’ is the scale and scope of the applied landscape strategy; the level on which the landscape is, so to speak, utilised. Whereas the landscapes in both Bellinge Fælled and Ullerødbyen primarily are operationalised locally, within the administratively demarcated sites, and used as the immediate forming element in the spatial organisation of the respective neighbourhoods, the landscape in team Nord Arkitekter’s original proposal for Tankefuld is arguably utilised as a design generating feature on several levels. In Tankefuld, the landscape is first and foremost used as overall structuralising element and identity-giving concept on the scale of Svendborg town. In this context, the original Tankefuld project deploys a more

planning-orientated^[185] use of the landscape. The large landscape ring (whose outer diameter roughly corresponds to 2/3 of Svendborg town's total extension) conjoins the Tankefuld area's various landscape types and structures (e.g., meadows, forests, a through-going ridge/kame) into a coherent whole by an extensive afforestation. By concentrating the built and unbuilt in separate zones and by letting the forests and open space areas define the overall organisation of the future Tankefuld development, the competition entry succeeds to reflect a phased development of a 'landscaped town' as requested by the competition brief (Svendborg Kommune and Akademisk Arkitektforening, 2007). Unfortunately, when overviewing the following master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009), it appears as though the landscape strategy slightly loses its strength when looking into the spatial visions and ideas for the concrete spatial design of the Tankefuld neighbourhoods. The Tankefuld competition brief (Svendborg Kommune and Akademisk Arkitektforening, 2007) called for an overall spatial strategy, which team Nord Arkitekter's entry most certainly fulfill. Unfortunately, as I see it, the following master plan (cf., Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, pp. 46-53)^[186] somehow implies that the overall landscape strategy can be more or less directly carried on to the spatial organisation and design of the residential sub-areas^[187]. When it comes to use the landscape actively in designing Tankefuld's sub-areas (the master plan suggests that a 'reading' of the landscape in each of the seven sub-areas can be

185 Here, I refer to Ewing's (2012) distinction between planning and urban design (see also, chapter 1.2).

186 The Tankefuld master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009) is a joint effort between Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter.

187 Unfortunately, I was not given the opportunity to ask questions of the original Tankefuld project's designers (see, chapter 4.3). This means that my assertions regarding the seeming lack of considerations to the coherence between landscape as 'planning strategy' versus landscape as local 'design strategy' remains unanswered. During my interview with Svendborg Kommune's Poul Hjere Mathiesen (2014), I got the general impression that the design of the first Tankefuld sub-area (Sofienlund) is the result of more value-based considerations, mainly the Cittaslow principles and technicalities concerning sustainable construction solutions (see also, Vagnby, 2010). Accordingly, I assume that Sofienlund's structural layout (in LP 540) is designed by Svendborg Kommune's plan administration. As described in chapter 4.3, Nord Arkitekter and Holscher Arkitekter have not been involved in the Tankefuld project since the master plan.

‘translated’ into concrete housing structures). However, I find it rather suspicious that the suggested landscape readings with corresponding translations, as presented by the master plan, come across as generic green LEGO-like backdrops (presented in Petri-dish-like sections without neighbouring contexts) that display scale-less tiny white sugar-cubes and greyish shapes as imagined residential developments. In this coherence, I venture to assert that such relatively superficial reading^[188] of local conditions combined with the unreflective transmission of an overall large-scale landscape strategy (town scale) into concrete housing patterns (neighbourhood and local scale) is untenable. Seen in relation to the above-mentioned problematics of applying a somewhat ‘disconnected’ landscape strategy, this seemingly overgeneralisation of the proposed landscape strategy’s scale and scope points to yet another implication to consider when applying a landscape urbanist approach to Danish suburban development. However, it is not the first time in history that a large-scale landscape strategy has been suggested on the town or regional scale, which has following proven diffi-

188 In the master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, p. 46), it is argued that the structure of each sub-area is based on the local landscape and that landscape is the structuring element. Each of the seven areas are represented by a ‘characterisation’ of the local landscape (within the petri-dish), a suggested infrastructure, and an example of a possible building structure. The suggested layouts for the different sub-areas introduces various ‘translations’ of the local landscape. In one example, an ‘external order’ (cf., Smets, 2002) is introduced; Another example argues for a clear distinction between landscape (undefined) and housing structure; A third example argues for ‘establishing a new landscape network’ as backdrop for the housing layout (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009, p. 46-50). Also, the master plan’s (p. 49) more detailed example for sub-area A (see, figure 34), which introduces no less than ten nuances of green, reflects an obvious confusion between what is there and what is new; what is generic and what does the many nuances of green represent?

cult to handle locally. Take for example, Copenhagen's *Fingerplanen* (1947)^[189] and the Dutch Randstad's *Groene Hart* (c. 1945)^[190]. In these plans, the overall strategies are conceptually strong (clear distinction between built and unbuilt) and visually recognisable (a hand, a ring), but they offer only few guidelines, tools, or remedies for how to handle the suggested clear distinction between built and unbuilt locally. As a result (which indisputably is the combination of extremely many other factors, which I will not go into details with in this thesis), the greater Copenhagen's 'fingers' have grown web in several locations and Randstad's green heart has suffered from urban thrombosis. Despite my own obvious overgeneralisation of Fingerplanen and Randstad's green heart, my point is that a large-scale strategy based upon landscape and a clear distinction between built and unbuilt cannot simply be transmitted into spatial design on the smaller scale.

Seen in the light of the above discussions on connectivity, scale and scope, my argument is that in order to unfold landscape urbanism's full potential as a combined 'planning' and 'design' strategy, the urban professional needs to pay attention to the

189 Fingerplanen (Egnsplankontoret, 1993 [1947]) was the result of the post-war year's regained belief in the future. The ideals of a social, democratic, and rational society materialised in this overall vision. The idea was to establish new and well-organized towns from scratch, unaffected by earlier settlements. Copenhagen was supposed to grow by the five fingers. Railways and motorways should connect the new smaller towns and communities in the fingers. The spaces between the fingers should appear as open landscapes, providing recreative areas for leisure activities. As a result of modernism's rationales, Fingerplanen reflected a scientifically argued plan with a humanistic touch, providing efficient local housing areas and access to green areas for the inhabitants (cf., Jensen and Partoft, eds., 2010). Throughout the years, Fingerplanen has been much discussed. It is not my intention to go into this discussion, but in discussing landscape urbanism as a strategy on the town and regional scale, Fingerplanen's iconic status cannot be overseen. Despite the fact that Fingerplanen was never implemented into an actual plan, it has been more or less integrated into later regional plans for the greater Copenhagen area. In this context, Fingerplanen appears as the perhaps most famous Danish planning strategy, and its iconographic cover is worldwide famous for its principle of integration between urban development, transportation infrastructure, and protection of green spaces within the system of the 'finger town' (Jørgensen, 2013).

190 The 'Groene Hart' (green heart) is a relatively thinly populated area in the middle of the Dutch Randstad (NL). Randstad is composed by the cities of Rotterdam, The Hague, Leiden, Haarlem, Amsterdam, and Utrecht. The cities are connected by dense infrastructure. With its open pastures and farm land, the green heart represents an important recreative area to the citizens of Randstad (7,1 mill. inhabitants in 2000). Since the 1960s, it has been of national interest to preserve the green heart and keep it clear from urban sprawl. Due to population growth in the minor towns in the area, this ambition has only partly succeeded (Biilmann, n.d.).

transmission of the large-scale intentions and deploy a somewhat ‘cross-scalar’ practice, addressing the large scale as well as the small scale in conceptualising urban projects^[191] (see also, the discussion on *Tree City*’s practical failures in chapter 2.3). Similar observations have been made by Sjöstedt (2013), whose investigations coupled considerations on landscape urbanism in relation to environmental sustainability in Chinese new town developments^[192]. Here, Sjöstedt’s reflections pointed to the same problematic of the large-scale landscape strategy as discussed above. According to Sjöstedt (2013, p. 118), her practice-based investigations showed that a cross-scalar practice was of outmost importance in order to fulfil landscape urbanism’s full potential in Chinese urban developments. Albeit Sjöstedt operates within the perspective of environmental sustainability, I find her reflections generally applicable to my own considerations on practiced landscape urbanism.

A small site’s design to incorporate [landscape urbanism] cannot be fulfilled if the design begins from the small scale without the integrated perspective of the larger scales. The planners focus on the large-scale landscape systems and seem to view the small scale, at the neighbourhood level, as irrelevant for an urbanism based on landscape systems. The architects focus mainly on the buildings and do not consider landscape systems to be part of their task. [Landscape urbanism], however, operates across scales. To fulfil its full potential, the practitioners – architects, planners, engineers etc. – would need to operate with cross-scalar practice, addressing the small scale as well as the large

191 Here, I refer to a design-professional working process not a ‘formula’ for how to handle the administrative and organisational planning processes.

192 Sjöstedt adheres to Yu’s (2009; 2011) ‘Chinese version of landscape urbanism’, which focus is identification and planning of ecological infrastructure (EI) on the regional scale. In Yu’s definition, the scope of landscape urbanism is obviously way beyond the almost ridiculously small format of Bellinge Fælled, Ullerødbyen, and Tankefuld. In this definition, the projects for Bellinge Fælled, Ullerødbyen, and Tankefuld are not even close to encircle the principles of Yu’s version of landscape urbanism.

scale (Sjöstedt, 2013, p. 118)

In my view, the problem in both the Chinese examples and my own cases is that the urban professionals are hired to operate with a cut-out piece of land at a given project level, precluded from considering the top-down/bottom-up spatial or ecological coherences. In Bellinge Fælled and Ullerødbyen, Schønherr and SLA were simply not given the opportunity by the project-owners (Odense Kommune and Hillerød Kommune) to look beyond the administratively demarcated areas. In the case of Tankefuld, the design team was first and foremost assigned by Svendborg Kommune (via the competition brief) to present work on the large scale (1:20.000 and 1:5000) while in the same time being encouraged to introduce images and 3D visualisations of the spatial consequences on the local scale (cf., Svendborg Kommune and Akademisk Arkitektforening, 2007). Inevitably, the result is a somewhat amputation of any system-based thinking as argued for by landscape urbanism (see, chapter 2.3/2.4). In the three cases, due to the administrative delimitation (cut-out) of sites and the possibly (as seen in Tankefuld) overgeneralisation^[193] of the assignment specifications, which urban professionals inevitably are bound to follow, the urban practitioners are forced to operate on different levels and apply different lenses to each scale^[194].

193 Seen in relation to the discussions above, this disregard of what is spatially going on between 1:20.000/1:5000 and 1:1 seems almost outrageous. Unfortunately, in the case of Tankefuld, the following master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009), which in my opinion held the potential to fill in the gap, failed to establish the connectivity between overall strategy and local spaces. As seen in the competition entry (Nord Arkitekter et al., 2007), the master plan's presentation of the local neighbourhoods appears generic and detached from any contextual reality.

194 I have not come across the very term in landscape urbanism's key literature, albeit one may argue that Shane (2006) and Corner (2006; 2003) touch upon some of the same discussions. Here, Shane (2006, p. 63) criticises landscape urbanism's "*amnesia and blindness to pre-existing structures, urban ecologies, and morphological patterns*". According to him, "*a common ground is useless without people to activate it, to make it their commons*". Also, Corner's (2006, p. 32; 2003, p. 63) elaborations on the 'imaginary', which, as I see it, combines overall strategic considerations with actual materiality and meaningful environments, could point to such cross-scalar considerations.

An interesting perspective on the cross-scalar consideration is proposed by Miljøministeriet and Plan09's collection of experience data, including Tankefuld and Ullerødbyen (Møller & Grønborg, et al, 2009, p. 10). Instead of discussing the lack of a cross-scalar practice, Møller & Grønborg, et al. points to the necessity of not simply "*considering the landscape as one large green surface that runs like water between the buildings*". They suggest a clear differentiation between 'the landscape's scales' (from small private gardens to the larger landscape features)^[195]. This differentiation is made by a more hierarchical landscape approach. Here, Møller & Grønborg, et al. suggest three basic levels: A. The large landscape features, which the development attaches itself to (e.g., forests, river valleys, fjords, the coastline). These are town and regional landscapes, which are there regardless of any new development. B. The development's own landscape (e.g., farm land, meadows, plantations, streams, hills). These landscapes surround and interweave into the built areas. These are neighbourhood landscapes, semi-public domains, perhaps with undefined delimitations. C. The 'close by' landscape, which divides the individual built enclaves and helps subdivide the town. Such landscapes are common (e.g., homeowners' association) and intensively cultivated (park-like). In many ways, Møller & Grønborg, et al.'s differentiation offers a convenient framework for understanding the scales/levels of the Danish situation. However, I argue, in making such clear hierarchical differentiations one must be very aware not to end up considering each scale/level out of its overall landscape context. In framing a large (unbuilt) landscape in relation to urban development, it seems essential to consider, not only, the extent of the total landscape area, but also, its hierarchical subdivisions, spatial interconnections, and the content and use of each landscape level.

Site capacity

The discussion on how to transmit a large-scale landscape strategy into concrete

195 Møller & Grønborg, et al.'s landscape scales correspond to this thesis' regional/town scale, neighbourhood scale, and local scale (cf., chapter 3.3).

design of urban spaces is obviously a study in itself and beyond the intentions of this PhD study^[196]. However, based upon the experiences obtained from scrutinising the three Danish cases, it appears that the way the areas have been demarcated (administratively) in combination with the specific project assignments (commission/competition brief) have been determinant factors exceeding any landscape urbanist intentions. As much as the previous discussions concern the connectivity, scale and scope of landscape urbanist interventions, I find that it also raises the question: *Whether landscape urbanism is applicable to all types of sites?* Whereas landscape urbanism's practical aspirations, as described in chapter 2.1, primarily have developed in relation to North American brownfield transformations, the Danish representations investigated in this PhD thesis represent the absolute reverse. As mentioned previously in chapter 2.3 (section on Tree City), Shane (2006) and Corner (2001) both argue that whereas landscape is capable of dealing simultaneously with decreasing densities and sites of indeterminate futures, it is equally capable of addressing the suburban green-field formations seen in the fringe of most western world cities. Here, Shane (2006, p. 59) particularly points to the idea of *"dense clusters of activity and the reconstitution of the natural ecology, starting a more ecologically balanced, inner-city urban form in the void"*. Unfortunately, neither Shane or Corner addresses the ambiguity of how such spaces should develop and what identity they should be given. Despite such relatively intangible consider-

196 In my view, one of landscape urbanism's qualities is its ability to generate ideas and to suggest overall spatial frameworks for future developments. Such overall frameworks tend to be long-term and do not fixate specific architectural or stylistic interpretations for the coming local spaces and urban millieus. In many ways, this openness is the crux of the matter. Whereas it is one of landscape urbanism's forces, it also seems that, as also seen in the case of Tankefuld, it is in the interpretation between overall spatial strategy and the actual spatial outcome (1:1) that the problems occur.

ations from Corner and Shane, Australian landscape architect Richard Weller^[197] (2008) resumes the suburban thread in *Landscape (Sub)Urbanism in Theory and Practice*. In this article, Weller outlines a possible suburban practice of landscape urbanism^[198]. Instead of producing a master plan as a suburban development project's first conceptual plan, Weller argues for introducing a 'landscape structure plan' (LSP). To guide the creation of the LSP, Weller sketches out six principles for such activity:

1. Protect, interlink, and enhance existing vegetation deemed of cultural and ecological value; 2. Create a holistic matrix of public open space (POS) that transcends individual property ownership and is robust, simple, and multi-functional; 3. Integrate with the POS matrix a comprehensive storm water management system as a legible infrastructural component of the project; 4. Assert the POS matrix as the primary guidelines for subsequent development; 5. Align streets and housing orthogonally (north- south and east- west) to maximise pas-

197 In my view, Richard Weller is a central figure in making landscape urbanism theory more practical relevant. Whereas key person such as Charles Waldheim and James Corner primarily theorise on landscape urbanism and a possible practice (see, chapter 2 in this thesis), Richard Weller has presented an extensive amount of writings that seek to couple landscape urbanism theory to an actual urban practice (see for example, Weller 2001; 2004; 2006; 2007; 2008). Bonus-info: Richard Weller is currently the Martin and Margy Meyerson Professor of Urbanism and chair of the department of landscape architecture at the University of Pennsylvania. Weller assumed the chairmanship from Professor James Corner in 2013.

198 Weller's landscape (sub)urbanism is based on a practice-based research project that questions "*the possibility of adapting landscape urbanist theory to the rigours of quotidian suburban master planning*". In the concrete case, Weller's research team applicate landscape urbanist theory to the *Wungong Urban Water* project, a coming 1500ha. development outside Perth, AUS. Interestingly, at the time of writing, the WUW project is being realised according to the proposed landscape (sub)urbanist setup. The Government of Western Australia, Metropolitan Redevelopment Authority advertises: "*Wungong Urban is set to become one of Australia's smartest, most innovative and most sustainable urban developments [...] Our redevelopment will protect the natural landscapes and waterways while bringing a vibrant new community to what has been a largely dormant corridor of the metropolitan area [...] Wungong Urban has become recognised as a national model in environmentally sustainable design. We have achieved this through very careful management of the area's natural resources and water-sensitive practices*" (MRA, n.d.).

sive solar access; 6. Create an iconic site identity not through suburban pastiche but through the use of substantial plantings of endemic vegetation (Weller, 2008, p. 264).

Whereas Weller's idea of landscape (sub)urbanism essentially presents an actual method and working procedure, which landscape urbanism's key literature generally omits (see, chapter 2.3), it also points to the importance of the very site's capacity^[199] to (in)form the spatial organisation of the future development. According to Weller (2008), the existing valuable landscape features^[200] and vegetation come to constitute the primary basis for the spatial organisation of the future development; Following, a well-considered system of new interconnected landscapes of public and functional (ecosystem services) interest is superimposed in order to connect existing with new and to optimise the future development in terms of local climate (sun and wind), water (natural drainage), and public open spaces (site identity and recreation). Whereas such interventions, so to speak, anchor the coming development in the existing site, it also implies that the existing landscape should provide some sort of spatial resistance in order manifest and assert itself in relation to the imposed layers (i.e., new landscapes, buildings, infrastructures, etc.). In my view, such considerations also point back to the very agency of mapping and the idea of 'reformulating what already exist into a qualified design response' (cf., chapter 2.3). I do not know much of Weller's local Australian context^[201], but seen in relation to my own three cases, I keep thinking that the robustness of a landscape urbanist project is utterly dependent on the existing site's capacity to insist that it is kept in force. This, I argue, does not simply imply that a landscape urbanist approach cannot be applied to less insisting landscapes,

199 'Site capacity' is also discussed in relation to Tree City's implementation process (see, chapter 2.3).

200 Strangely enough, Weller (2008) does not include many considerations on topography, which in my opinion is crucial for considering the latter five principles.

201 According to Weller (2008, p. 264), the Wungong site consists "*of damp, degraded, agricultural land on the outskirts of Perth*". Located at the headwaters of Perth's riparian system, "*the site bears topographic scar tissue, weed-infested fragments of vegetation, impeded hydrological systems, and unbalanced soils*".



Figure 42: (Photo by author; 2012) Ullerødbyen Syd. Central lake and meadow.

e.g., degraded farm land as seen in the Danish cases. However, when it comes to the following plan-implementation^[202] and realisation of such projects, I venture to assert that the constituting landscape (existing) and/or the new landscape (added layers) are ought to represent some sort of functional necessity (e.g., ecosystem service, wind screens, local climate protection, etc.) or distinct spatial or ecological value (e.g., protected landscape structures and vegetation) to the specific site and project in order to be maintained. This will be the topic of the following section.

Practicability in relation to the Danish spatial planning system

The constituting landscapes of this thesis' three cases, Bellinge Fælled and Ullerødbyen in particular, originally appear as degraded farm land, offering relatively little resistance in terms preservation-worthy ecological or cultural structures. In the case of Bellinge Fælled, the large open landscape and the wished for new lake have not been established as a coherent whole. Although Odense Kommune was the sole proprietor of the Bellinge Fælled area, which actually allowed for the green/blue structures to be established prior to the site preparation^[203]. Unfortunately, as described in chapter 4.1, Odense Kommune's internal administration of funds precluded the 'reversal' of Odense's customary procedure. In the first two local plans for Bellinge Fælled (Odense Kommune, 2012; 2015), Odense Kommune stipulates that the recreational areas and 'sufficient' rainwater drainage (within the respective local plan

202 Even though Weller's specifications for the LSP seem relevant and immediate usable to landscape-urban practitioners, Weller's neglecting of the master plan seems somewhat problematic seen in relation to a coming realisation process. The problematics related to favouring the strategy plan (considered as open-ended, flexible) over the master plan (considered as fixated, inflexible) are outlined and discussed in Kvorning (2016, pp. 50-60). Here, Kvorning argues that the flexibility and open-endedness of a strategy plan ideally should be seen 'end to end' with a master plan. According to Kvorning (2016, p. 51), "*There has to be operated with strategic plans for larger areas and when the circumstances and time-dimensions are uncertain. When it comes to realising smaller areas, which may be part of the strategic plan, one has to work with master plans or overall plans (helledsplan) in order to stipulate and coordinate all necessary elements in a construction and building process*" (translated from Danish by author).

203 The area was not parcelled out to individual land-owners till after the project had been worked out and plan-implemented (Rasmussen, 2013).

areas) must be established prior to use. Notably, Bellinge Fælled will be divided into six or seven individual local plan areas (cf., Odense Kommune, 2012). Accordingly, the common is split up. The municipality has following sold the two first sub-areas to private developers^[204]. As a result, the green/blue coherences will be established bit by bit according to the future sales. Even though Odense Kommune via local planning seeks to ensure that the lakes will be established and that the common will be kept clear from buildings, I argue that the future of the Bellinge Fælled's blue/green structures indisputably depends on local politician's goodwill. If the public feeling changes or the sales in Bellinge Fælled come to an end, before it is fully established, the overall landscape structure will be non-existent. Seen in relation to this chapter's discussions, it appears to me that the Bellinge Fælled structure reflects several of the previously described problematics. Firstly, the Bellinge Fælled landscape (blue/green) is spatially disconnected from any larger ecological infrastructures or coherences. In my view, this lack of connectivity represents a possible first obstacles to a successful plan-implementation and realisation. Second, except from the necessity of the terrain's formations in relation to local rainwater drainage, the very site capacity of Bellinge Fælled appears as relatively low (degraded farmland). This, seen in combination with the landscape's suggested generic content (recreation, sports, local gathering point), the landscape-strategy comes to appear rather conceptual^[205]. The common and the water system simply comes to represent a local value/utility without any necessity to – or co-dependency of – its immediate surroundings. However, disregarding the fact that the common is split up, the Bellinge Fælled project appear relatively unproblematic seen in relation to Danish planning practice and legislation.

204 As the interview with Mie Rasmussen (2013) took place well before the parcelling and tender process, I have not obtained information on the sales conditions or land prices.

205 In Bellinge Fælled, the large common and the water structures are upheld by the overall framework local plan (Odense Kommune, 2012). Nevertheless, the green/blues structures will be worked out bit by bit according to the following local plans for the respective sub-areas, which will be worked out proportional to the housing market and the state of demand (Rasmussen, 2013). In each sub-area, the green/blue structures and the housing structures will most likely come to represent an individual interpretation of the overall strategy. Each area could very well be developed years apart and uncoordinated with one another.

The common and the water system can very well be regulated within the demarcated area via local planning. In Bellinge Fælled, the local plans' (Odense Kommune, 2012; 2015) stipulations do not collide with any superior plans or existing policies. As long as the plots can be sold, and the local politicians uphold a positive attitude towards Bellinge Fælled beyond the four-year time frame that normally characterises political actions, the common and the water system can be maintained.



Figure 43: (SLA, 2002; Hillerød Kommune and SLA, 2006; Hillerød Kommune, 2006) Left: Competition entry. Middle: Quality programme. Right: LP 334.

In SLA's competition entry for Ullerødbyen, the landscape is presented as a contrast to the built (black/white illustrations). This contrasting is enhanced in the structure plan by what seems to be an intentional play between black and white; foreground and background^[206]. Overviewing the next documentation of Ullerødbyen's structure plan in the quality programme (Hillerød Kommune and SLA, 2006, p. 7), the contrasting illustration has been replaced by a more homogeneous representation. The dynamics of the interplay between built/unbuilt is apparently toned down, and the landscape appears as a light green background to the massiveness of the built. Interestingly, in this version of the overall scheme, it is the built that, so to say, is nuanced. Dark grey versus light grey. Apparently, it is a plan for the built. This grey/green illustration plan recurs in the following local plans (Hillerød Kommune, 2006a; 2006b; 2006b; 2007). The reason why I refer to this shift in representations, is that

206 Similar to the well-known illustrations for OMA's entry in the Melun-Sénart competition (1987).

the overall vision behind the original landscape strategy, which in my optic was the ‘contrasting’ between built/unbuilt, becomes more and more blurred as the project has been developed.

In the later adjusted plan structure for Ullerødbyen Syd, the meeting between built/unbuilt is simply represented by a thin black line against a white background. Notably, in constructed real life, the contrast between built/unbuilt is reduced to the meeting between cut/uncut grass!

Seen in relation to this chapter’s previous discussions on connectivity, site capacity, scale and scope, it appears to me that Ullerødbyen reflects several of the same problematics as proposed by Bellinge Fælled. The disconnection and the generic content, in particular. In Ullerødbyen, the existing landscape was flat as a pancake; it contained two minor §3 ponds, which have not played any significant role in the overall landscape layout. Nevertheless, whereas Bellinge Fælled’s large inner landscape has been subdivided according to the following local plans, the central landscape within Ullerødbyen Syd has been established as a whole. Here, the landscape was never intended to be established prior to the site preparation and construction. Instead, the developers (NCC, Skanska, Hillerød Kommune) agreed to establish at least some sort of coherent ‘wilderness’ as part of the site preparation and construction of homes (cf., Jens Ulrik Romose, 2013). This included the establishing of a new lake and a small creek (connects to an existing ditch); the extensive meadow; several tree plantations; and the forest botany^[207]. Despite the somewhat generic content of the central landscape (recreation, a playground, and a soccer field), it has later proven to be Ullerødbyen Syd’s largest asset seen in relation to the plain architecture of the buildings. In this way, disregarding the relatively low capacity of the existing/constituting landscape (flat farm land), the new plantations and wet areas have increased the central landscape’s preservation-worthiness and the attractiveness of Ullerødbyen

207 The forest botany primarily functions as sound absorbing barrier from Hillerød motorvejen and not as an integrated part of the landscape.

in general. From this, it seems that in order to maintain the intentions of an overall landscape strategy in relation to the formal planning process, a well-considered landscape architectural effort can help to uphold the landscape. Such an effort, I argue, includes a strong and detailed communication (in words and design) of the specific values and qualities of the suggested open space areas. Interestingly, these considerations also comply with Andersson's (2013) own reflections on the importance of amenity values and economic gain. Also, in the case of Ullerødbyen, I venture to assert that NCC and Skanska have profited from the landscape. Even though they paid for the landscape, I am quite certain that the expenses have been gained on the plot sales. The landscape has simply increased the attractiveness and amenity value of Ullerødbyen Syd.

Regarding the plan-implementation of Ullerødbyen, the process has clearly been influenced by the unconventional public-private realisation strategy (cf., chapter 4.2). As described previously, Romose (2013) explained that the processing of the original structure plan and the following planning process was a balancing act between the investors' and Hillerød Kommune's interests. However, according to the information presented by Romose (2013) during the interview, the planning process of Ullerødbyen have not been subject to any hindrances regarding Danish spatial planning legislation and practice.

At the time of writing, the northern part of Ullerødbyen's landscape remains to be established. The first local plan, LP 400 (Hillerød Kommune, 2016), generally refers to the master plan for Ullerødbyen Nord (Hillerød Kommune and Niras, 2014). Interestingly, the master plan presents a greater concern towards the landscape and its structuring abilities than, for instance, the quality programme does (Hillerød Kommune and SLA, 2006). As I see it, the northern part of Ullerødbyen's coherent landscape appears more complex and varied than the southern part. For example, the terrain is more dynamic (hills, hollows, and wetlands). The northern area also hosts several §3 areas and habitats for bats and amphibians (cf., Hillerød Kommune and Niras, 2014, p. 4). Whereas the Ullerødbyen Syd's landscape was established due to Hillerød Kommune's insistence (demand on the contractors), the northern landscape reflects a greater existing site capacity. Also, Ullerødbyen Nord is intended to fea-

ture locally managed rainwater drainage and open overflow basins, which require that the future built structures are organised interactively with the internal existing and coming water systems. In this perspective, it seems that the northern part of Ullerødbyen's central landscape features an existing capacity aside from local political patronage and future landscape architectural finishing.

In team Nord Arkitekter's original project for Tankefuld (Nord Arkitekter et al., 2007), the landscape strategy included several significant existing landscape features (i.e., forests, the ridge, meadows, marshland, etc.) By an extensive afforestation (added layer), the overall intention was to create a coherent landscape structure (of varied landscapes) to encircle and guide the future development of Tankefuld. Unfortunately, whereas the large landscape ring (cf., Nord Arkitekter et al., 2007) seems as a relevant landscape strategy on the town and regional scale, the following master plan (Svendborg Kommune, Nord Arkitekter, and Holscher Arkitekter, 2009) reveals that the landscape's capacity on the smaller scale remains relatively undisclosed and unutilised. In my view, the original Tankefuld project was simply too general in its conceptualisations. In Bellinge Fælled and Ullerødbyen, the landscape strategies were conceived on the scale of the administratively demarcated sites. Neither of these projects featured any significant or extensive preservation-worthy structures or ecologies. The following local planning processes have proceeded relatively uncomplicated^[208]. In contrast, the plan-implementation of the original Tankefuld project has been extremely complicated. Particularly, Miljøministeriet's (The National Forest and Nature Agency's)^[209] influences have resulted in significant alterations of the original structure plan's geometry as well as a reconsidering of the originally suggested phased development^[210]. According to Poul Hjere Mathiesen (2013) from

208 In the case of Bellinge Fælled and Ullerødbyen, minor supplements to the then municipal plans (Odense Kommune, 2012; Hillerød Kommune, 2005) were adopted.

209 Represented by the local environmental centre (Miljøcenter Odense).

210 According to Kommuneplan 2009-2021 (Svendborg Kommune, 2010, pp. 519-520), a clear distinction between town and open land will be maintained at all times. Also, the development will take place 'inside and out' in order to avoid disconnected development.

Svendborg Kommune, developing a neighbourhood in the Danish open country side is in direct opposition to the Danish planning system's zoning principles, and it collides with The Nature Protection Act (see also, chapter 3.2). As third party observer, I am not capable of describing or presenting the exact planning process or the obstacles related hereto. In my view, based upon the information revealed by Mathiesen (2013), it seems that the entire *misère* points to Svendborg Kommune's idea of developing a new urban area by including a large piece of open landscape (825ha of farm land, forests, and protected cultural landscapes) at one go. Whereas Bellinge Fælled and Ullerødbyen have been conceptualised as demarcated urban 'buddings' in direct connection to existing town areas^[211], the Tankefuld development covers an area that roughly correspond to 2/3 of Svendborg Towns total extent. Bellinge Fælled and Ullerødbyen somewhat correspond to an existing or short-term demand for new housing^[212] and can, so to speak, be argued for within a realistic time perspective. In Svendborg, however, instead of budding and continuation of the existing Svendborg town (as radial concentrations of growth from Svendborg an outwards), Svendborg Kommune deployed yet another approach. As described already in Kommuneplan 2005-2017, Svendborg Kommune wanted to concentrate Svendborg's future development into one coherent area west of Svendborg town. Strangely enough, the visions of Kommuneplan 2005-2017 have obviously not met any governmental objections. Nevertheless, when Svendborg Kommune by the competition in 2007 indicated that the entire physical extent of the future growth area would be included in one move,

211 During the plan-implementation the Bellinge Fælled and Ullerødbyen areas have changed status from rural to urban zones (by supplements to the municipal plans and via the local plans.

212 According to Mie Rasmussen's statements (2013), the initiation of the Bellinge Fælled project corresponded to a constant demand for new building plots (single-family houses) in Odense Kommune. In relation to Ullerødbyen, Jens Ulrik Romose (2013) explained that the initiation of Ullerødbyen (2001) benefitted from the 00's building boom. According to him, the investment-readiness was great. That be contractors as well as private house owners. Most of Ullerødbyen Syd's building plots were sold almost instantly. In Svendborg, Poul Hjere Mathiesen (2013) explained that the municipality was affected by the 00s optimism. Odense Kommune purchased land in 2008 (too expensively). Today, the demand for new housing plots is low. Tankefuld is on standby.

the extent of the municipality's development strategy became somewhat clarified to everybody.

Despite the uniqueness and clarity of the landscape ring as a planning strategy, the original project's weak point is, in my opinion at least, the lack of consideration to the local spatial impact. As such, the original Tankefuld project basically appears as an equalisation of landscape and town, built and unbuilt, and as an intentional and somewhat uncritical scattering of built enclaves here and there into the open landscape. In this optic, Svendborg Kommune's idea of 'converting'^[213] the nearby landscape (protected and cultural landscapes as well as farm land) into future development area basically collides with one of the very cornerstones of the Danish spatial planning system (see, chapter 3.2), that is, to maintain a clear distinction between town and open landscape.

5.2 Old wine in new bottles?

A central theme in the previous discussions is the unsolved relation between landscape as planning strategy versus landscape as concrete design element within the very same project. Seen in relation to landscape urbanism theory, I find that the same incoherence is generally represented by landscape urbanism's sparsely defined methodical-practical aspects (see, chapter 2.3). In *Embracing Openness: Making Landscape Urbanism Landscape Architectural*, Connolly (2004, pp.76-103) focuses on the 'default' conceptualisation of landscape urbanism, as defined in North American academic milieus and represented by writings of, e.g., Charles Waldheim (2002, 2006b; 2006c), James Corner (1999b, 2001, 2003, 2006), and Alex Wall (1999). Connolly (Ibid., p.214) claims "*landscape urbanism lends itself to methods simply being repeated, such as 'programming the urban surface', as that is what you do. To program, to organize, to make flow and to map seem almost reasons themselves*". In the 2012 essay *Grounding Landscape Urbanism*, Levy continues Connolly's discussions

213 Mathiesen (2013) mentioned that Svendborg Kommune's idea of being 'landscape-converters' as in direct conflict with most Danish nature protection initiatives. E.g., Naturbeskyttelsesloven (nature protection act), Skovloven (forestry act), Natura 2000,

in a search for concrete landscape urbanist methods.

Waldheim and Corner seem invested in a perception of their work as a break from past practices, as a unique praxis poised to address new urban situations. This emphasis on newness allows their work to be appreciated as emergent, in connection with the same ecological spontaneity landscape urbanists hope to nurture in practice. Stressing the newness of their approach, however, isolates it as an intellectually autonomous body of thought, rather than a flexible, historically integrated working method (Levy, 2012, p.2).

According to Levy (Ibid.), there is a need for the field to be developed as an ‘ism’ linked to a particular practice rather than an open set of principles that can guide the current urban practices. Over the past years, an emergent discourse of ‘ecological urbanism’ has been proposed to more precisely describe the combined landscape urban practice, c.f., *Ecological Urbanism* (Mostafavi and Doherty, eds., 2010); *Landscapeology* (Van Beek and Vermaas, 2011); and lately *Projective Ecologies* (Reed and Lister, 2014). These new writings continue to elaborate on a desired – or maybe even hypothetical practice. As I see it, the environmentally modified form of urbanism (be it landscape, ecological, infrastructural, and others) has emerged as a meaningful critique and as a relevant framework for addressing the complexity of contemporary urbanism, unfortunately, without proposing a concrete practice or working methods. As a result (see also, chapter 2.3 on ‘professional performance’), landscape urbanism somehow relies solely on its practitioners’ skills and expertise. However, whereas landscape urbanism’s practical aspirations arguably remain to be described more clearly, it also opens up for individual practical interpretations^[214].

214 Retrospectively, (as described in the introduction chapter) one may also argue that landscape and green structures have been central issues in urban planning since the beginning of the Twentieth-century. This again, makes it somewhat difficult to claim landscape urbanism a new and unique practice.

The (two) designers' perspectives

As described in chapter 3.3, I have, unfortunately, not had the opportunity to interview Nord Arkitekter. Obviously, this lack of data forms a considerable obstacle to this thesis' general discussions on the combined landscape-urban practice in Denmark. However, based on the interviews with Nina Jensen (2013); Mie S. Rasmussen (2013); Stig L. Andersson (2013); Jens Ulrik Romose (2013); and Poul Hjere Mathiesen (2013), who all have a professional/educational background in spatial planning and urban design, I take the liberty of outlining some identities between their respective statements and considerations. In the case of Bellinge Fælled and Ullerødbyen, the landscape is used actively as design element in the spatial organisation of the respective areas. According to Nina Jensen (2013), the Bellinge Fælled design is the result of a 'reading' of the existing terrain and thorough considerations on how to solve the local water management. In relation to Ullerødbyen's spatial layout, Stig Lennart Andersson (2013) argued for using 'nature's organisation principles' in designing the area. Although these considerations generally comply with landscape urbanism's theoretical elaborations on methods and a possible practice, Jensen and Anderson instead underlined aesthetic and livable urban spaces as their primary incentive during the design process. Whereas landscape urbanism notoriously rejects "*aesthetic intuitions regarding formal composition*" (Weller, 2007, p. 67), both Jensen and Andersson focused on the landscape architect's ability to work across scale and scope in forming a synthesis between aesthetic and functionality. Interestingly, whereas Jensen and Andersson during the interviews insisted on pleasant and well-functioning urban spaces, landscape urbanism's key literature (cf., chapter 2) seems to be more absorbed in describing the state of things via landscape than actually designing them^[215]. Yes, landscape urbanists are really, really good at describing things using new metaphors and conceptualisations; Unfortunately, in their

215 Despite numerous publications and debates concerning landscape urbanism, only few actual constructed works of landscape urbanism have been presented to the public. Even today, two decades after Waldheim's coining of the term in 1996, I still find it difficult to point out exemplary and constructed works of genuine landscape urbanism besides the usual handful of West 8 and Field Operations works as described in chapter 2.

intellectualisation of things, they seem to raise the discussions above, what I would regard as, classical design virtues (*utilitas*, *firmitas*, *venustas*)^[216] and the primary purpose of urban design, i.e., creating attractive and liveable spaces for humans^[217]; more of which later.

It is hard to over-look the obvious similarities between landscape urbanism's methodical-practical definitions (see, chapter 2.1) and the landscape-based principles applied in Bellinge Fælled and Ullerødbyen. However, neither Andersson nor Jensen considered themselves as landscape urbanists; They considered themselves as landscape architects working in urban design and planning (Andersson, 2013; Jensen, 2013). This seems somewhat paradoxical as both Andersson and Jensen enhance systemic thinking, open space areas, and ecological processes as essentials when designing and understanding the contemporary city and its development. Interestingly, out of frustrations over landscape urbanism's lack of considerations on aesthetic and design, Stig Lennart Andersson and his team formulated 'process urbanism' as an alternative approach that holds both the essence of landscape urbanism and a consciousness of aesthetic and amenity value (see, SLA, 2010). During the interview, Jensen suggested a similar approach, although she did not intentionally involve landscape urbanism as a theory. Here, Jensen enhanced 'the holistic approach' and 'good design practice', which she defined by thorough site research, focus on the integral whole and inter-connections, and not least aesthetics. After interviewing (only) two Danish landscape

216 This definition refers to Vitruvius' classical tripartite understanding of architecture, i.e., *utilitas* (function/commodity/utility), *firmitas* (solidity/materiality), and *venustas* (beauty/delight/desire). In order to create a lasting and valid architectural response to a specific problem, all three aspects must be considered and balanced. If one removes *firmitas*, the work no longer represents architecture but merely a scenography; If removing *utilitas*, one simply has a work of art; If *venustas* is removed, the design will appear as a meaningless construction (Byog Boligministeriet, 2000).

217 See, definition of urban design versus planning in chapter 1.2.

architects^[218], it is not possible to conclude that all Danish landscape architects reject landscape urbanism as a notion. Nevertheless, considering the general tendencies seen in Danish urban development projects, I venture to assert that the theoretical ideas behind landscape urbanism, one way or another, must have affected the current combined landscape-urban practice in Denmark. Also, the fact that Stig L. Andersson (with SLA) deliberately has formulated an alternative approach ('process urbanism'), to take on landscape urbanism, points to an awareness among Danish landscape architects, which cannot be overlooked.

Regarding the question, I formulated in this PhD thesis' introduction chapter: *To what extent has landscape urbanism, as a theoretically defined discourse, been accepted among Danish landscape-urban practitioners?* It must be recognised that the empirical material is simply too limited to make overall generalisations. Even though Nina Jensen apparently make use of landscape urbanist principles in practice, she did not consider landscape urbanism a part of her daily work. Stig L. Andersson, too, applied a landscape urbanist approach, albeit he made a virtue of rejecting its design abilities. Interestingly, when overviewing the data, I obtained from interviewing the municipal key persons^[219], I found that the three interviewees, to varying degrees, were informed of the ideas behind the landscape urbanist approach, but they were not familiar with the very term. Apparently, landscape urbanism is not a completely unknown phenomenon to Danish urban professionals. This observation points back to some of the very beginning assumptions of this thesis, i.e., the idea that the understanding of landscape's ability to structure and address the uncertainties of contemporary ur-

218 It would have been useful to interview the designers behind the Tankefuld proposal. As I see it, Nord Arkitekter, which is also a younger firm in comparison to Schønherr and SLA, represents a more urban orientated practice in contrast to the others' obvious focus on landscape. As such, Nord Arkitekter do not represent a landscape architecture office in its traditional sense. Perhaps, the theories surrounding landscape urbanism have been present in Nord's way of approaching the Tankefuld assignment? One can only guess. Unfortunately, this lacking interview forms a considerable impediment to this thesis' discussions and general conclusions on the Danish landscape-urban practice (see also, chapter 3.4).

219 Architect MAA Mie Søgaard Rasmussen (2013), Odense Kommune; Urban planner M.Sc. Jens Ulrik Romose (2013), Hillerød Kommune; Architect MAA Poul Hjere Mathiesen (2013), Svendborg Kommune.

banism has been at the centre of Danish landscape practice and tradition for so long that it already includes landscape urbanism. On this background, I venture to assert that landscape urbanism, as a theoretically defined discourse, primarily thrives and develops within the academic milieus. However, in the same time, it also indicates that the idea of utilising the very site's formations, vegetation, ecological and cultural features – or simply landscape – is part of what is considered among Danish urban professionals as 'good design practice' (see also, Sjöstedt's (2013) conclusions). Here, I argue, the search for connectivity and the agency of mapping are not unique to landscape urbanism; they simply are part of what Jensen (2013) referred to as an 'holistic approach'. In this coherence, the Danish combined landscape-urban practice appears in the projects as a profound knowledge and respect for local landscapes (e.g., terrain, existing biotopes, landscape types, etc.) as well as a desire to reveal contextual possibilities via design. In this optic, landscape urbanism's theorisations are simply over-intellectualisations of what Danish landscape-urban professionals apparently consider as practical common sense. Here, I argue, the thorough site research, which often is referred to as 'site reading', the cross-scalar practice, the focus on contextual relevance and connectivity, are all aspects Danish urban professionals already consider and have considered for decades^[220].

Sustainability, aesthetic, and landscape urbanism

Moreover, so-called “sustainable” proposal, wherein urbanism becomes dependent upon certain bioregional metabolisms, while assuming the place-form of some semi-ruralized environment, are surely

220 Diedrich's (2008, p.9) asserts that the problems of contemporary urbanism have been at the centre of landscape thought and practice for so long that Danish and European landscape architecture already includes urbanism. Here, Diedrich refers to landscape architects like Jean Claude Nicolas Forestier (France), Leberecht Migge (Germany), and groups of professionals like those surrounding C. Th. Sørensen and Steen Eiler Rasmussen (Denmark) as their works were moving away from the ideal of the pleasure garden towards green urban systems. According to Diedrich (Ibid.), “[t]he particulars of landscape influenced the creation of metropolitan systems, and these in return engendered new concepts and formalizations for the landscape and its particulars”.

naïve and counterproductive. Do the advocates of such plans really believe that natural systems alone can cope more effectively with the quite formidable problems of waste and pollution than do modern technological plants? And do they really believe that putting people in touch with this fictional image called “nature” will predispose everybody to a more reverent relationship with the earth and with one another (as if relocating millions from cities to the countryside will actually somehow improve biodiversity and water and air quality)? (Corner, 2006, p. 27)

In Bellinge Fælle, Ullerødbyen, and Tankefuld, a common theme has been sustainability. Even though sustainable development per definition is three-fold (environmental, social, economic), the three cases have primarily focused on the environmental aspects of such thinking. In Bellinge Fælle, sustainability was translated into five concrete design parameters (Odense Kommune and Schønherr, 2010), which were utilised in the design of the area. In Ullerødbyen, sustainability was primarily used in more general terms in relation to the competition. Here, the competition brief (Hillerød Kommune, 2002) suggested three primary ‘agents’ to consider in relation to the structure plan, i.e., minimise the use of resources (especially the non-renewable), recirculate resources locally (preferably within the local plan area), and optimise living conditions for humans and animals. In Tankefuld, sustainability has been a dominant theme as well. Whereas Ullerødbyen coupled considerations on sustainability with specific spatial interventions and Ullerødbyen viewed sustainability as primarily a matter of minimising the use of resource, the Tankefuld setup was coloured by a more value-based understanding related to the Cittaslow principles (see also, Vagnby 2010). At a time when environmentalists argue for condensing and transforming existing neighbourhoods instead of developing new urban areas (e.g., Kvorning, et al., 2012), I find it almost antagonist to claim this thesis’ three areas to be ‘more sustain-

able’^[221]. As discussed in relation to the three cases, the agenda on sustainable development – especially the environmental concerns – have been strong impediments for introducing alternative, more site-dependent (e.g., water management, local environmental impacts) and energy efficient (e.g., walkability, densification) planning and design methods. As such, I even find it hard to argue that this thesis’ three cases represent environmentally sounder alternatives (see also, chapter 1.2 on sustainability) to any other suburban development in Denmark. As I see it, all three projects represent low-density^[222] urban diffusion; they are utterly car-dependent; the primary housing typology is single-family homes (on large plots); the large landscapes are primarily recreative (not ecosystem services); etc. These considerations also correspond to, for example, CNU’s criticism of landscape urbanism’s ‘approval’ of sprawl (see, chapter 2.3). According to the CNU, an urbanism ‘with sprawl as its foundation’ cannot be considered environmental nor truly ecological (Hogan, 2010)^[223]. However, in *Bære-*

221 I already introduced the discussion in chapter 1.2, but seen in relation to this thesis’ three cases, the relevance of a correct usage of the term becomes very apparent. One cannot simply label something as ‘more sustainable’ (cf., Samuelsen, 2013).

222 The overall density for the Bellinge Fælled, Ullerødbyen, and Tankefuld areas are relatively low compared to traditional Danish residential developments of (primarily) single-family houses (Bellinge = c. 22; Ullerødbyen = c. 21 (without landscape); Tankefuld = c. 15 (without landscape and business areas). However, the density can be measured in different ways. According to Møller & Grønborg, et al. (2009, pp. 12-13) (their experience data covers Ullerødbyen and Tankefuld; I have not been able to obtain similar numbers for Bellinge Fælled), the density for each housing sub-area (delimited housing areas) – if not including the large landscapes – is approx. 16 dwellings (boliger) per hectares. Seen in comparison, the current national average for suburban developments is approx. 10 dwellings (boliger) per hectares.

223 According to Bhatta (2010, p. 29), one of the major effects of sprawl (in general) is that it increases traffic, saps local resources, and destroys open space. In short, Bhatta (pp. 29-36) points to nine primary problems of sprawl (exurban development), i.e., Inflated Infrastructure and Public Service Costs; Energy Inefficiency; Disparity in Wealth; Impacts on Wildlife and Ecosystem; Loss of Farmland; Increase in Temperature; Poor Air Quality; Impacts on Water Quality and Quantity; Impacts on Public and Social Health. Even though the general problematics of urban diffusion seem generally applicable to both North American and Danish suburban areas (albeit in different local scale and range), I venture to assert that the spatial situation in Denmark remains different from the North American. Without going into details with North American urban development practice and traditions, the Danish spatial planning system and the strict zoning have mostly prevented uncontrolled sprawl. As I see it, the Danish division into rural and urban zones has widely resulted in a maintained spatial distinction between ‘town’ and ‘landscape’. See also, the discussion on Tankefuld’s attempt to ‘blur’ this distinction.

dygtige Forstæder: Udredning og Anbefalinger fra Forstædernes tænketank [The suburbs' think-tank] (Kvorning, et al., 2012), the suburbs' landscapes are considered more positively. Although the think-tank's general recommendations on environmental sustainability focus on transformation/densification of the existing suburbs, the potentials of green open space areas are not considered as opposing to sustainable development. As underlined in this thesis' introduction chapter, the Danish suburbs' landscapes are the main quality and attraction to the suburbanites; the desire to live in close relation to 'nature' and green open space areas remains the primary incentive for living in the suburbs^[224].

As potential wildlife corridors and home to a, in many places, surprisingly rich animal and plant life, the open spaces areas and nature reserves have a direct coupling to environmental sustainability. Both the large coherent nature reserves and the smaller open space areas play an important role in the handling of rainwater and temperature regulation in the warm periods. Well-chosen plantation can help moderate wind and hereby reduce cooling in the winter as well as extend the outdoor season in transitional seasons. Forests bind CO₂, increase biodiversity, and increase recreational possibilities. As a place for meeting, peacefulness, relaxation, and aesthetic pleasure, the system of recreational areas play a major role both in relation to social sustainability and to health issues (Kvorning, et al., 2012, p. 113)^[225].

As the passage above indicates, landscape holds a potential to reach beyond immediate measureable functions and features (e.g., rainwater management, climate regulations, wildlife corridor). The landscape also holds the potential to create spatial coherences on various levels (see also, Braae, 2013) as well as contributing to aes-

224 See, Kvorning, et al., 2012, p. 111.

225 Translated from Danish by author.

thetic experiences and amenities. Seen in relation to the discussion on landscape's role in relation to sustainability, German architect and urban planner Thomas Sieverts adds yet another interesting perspective^[226]. According to Thomas Sieverts (2014), the most important thing a sustainable city has to have is beauty:

I was taught to make a place functional. In the future, we must learn simply to build a place, a place as open to different functions as possible, a place whose use can change while maintaining its architectural qualities. Experience shows us that the beautiful building is the longest lasting, not the most functional (Sieverts, 2009).

Sieverts claims that the sustainable city is not so much about the city's 'hardware', but the very behaviour of the city, and how people treat the city. In this optic, aesthetic becomes essential, Sieverts (2014) argues.

Because if something is not beautiful or not meaningful, people do not take care of it and do not develop responsibility and they forget about it. Things that do not stick to memory in a positive way or at least in a stimulating way will never be taking care of (Sieverts, 2014).

Seen in relation to this thesis' focus on the practical aspects of landscape urbanism in Denmark, such coupling between sustainability and landscape; between aesthetic and sustainability, continues to call attention to landscape urbanism's somewhat strained relationship with qualities beyond content and functionality. As indicated by Sieverts, one cannot simply focus on 'hardware' in designing relevant and durable

226 The discussion on aesthetic and sustainability is also unfolded by Bjarke Ingels, who has formulated the term '*hedonistic sustainability*'. Ingels (2011) argues that if the sustainable solution reflects a mediocre aesthetic based upon too many compromise (e.g., technical solutions and materials), the solution represents a 'downgrade' instead of an opportunity, "[i]t makes it essentially undesirable". Instead, Ingels suggests that sustainable behavior should be the result of pleasure, and the discussion on sustainability should open up to new aesthetic potentials and not be regarded as a sacrifice.

urban areas. Aesthetic has to be equalised to functionality and materiality in order to make a lasting response. Without going into details with modernism's remaining effects, it seems that landscape urbanism takes up the well-known legacy from those modernists, who thought that predicating design upon function would take care of the aesthetics^[227]. If you look after the landscape and ecologies, the aesthetics will take care of themselves^[228]. As with modernism, one might wonder if landscape urbanism is truly indifferent to aesthetics – or simply is replacing existing aesthetics with some new ones? As the landscape urbanist project develops from the existing site and conditions, the visual expression must ultimately reflect the local specifics. As such, a somewhat generic aesthetic identity cannot be defined, I argue. However, in its articulation of existing landscape features, ecosystem services, intentional, etc. in relation to spatial planning and urban design, landscape urbanism inevitably comes to represent an aesthetic that reflect an intentional play between nature and urban; unbuilt and built; wild and cultivated; landscape and urbanism. Here, it is the urban professionals' task to guide and stage such interplay. In this optic, I venture to assert that pleasurable and livable urban spaces does not occur somewhat spontaneously by simply 're-formulating' what already exists into a qualified design response (cf., Corner 2003; 2008). It has to be deliberately designed. Indeed, there is a powerful strain of anti-picturesque within landscape urbanism theory, but overviewing constructed examples of landscape urbanism, aesthetic appears to be one of landscape urbanism's greatest assets. In my view, projects such as Fresh Kills Lifescape, the

227 Even though the origin of the phrase 'form follows function' remains much discussed, the phrase is usually ascribed to American architect Louis H. Sullivan, who coined the phrase in the article *The tall office building artistically considered* in 1896. Originally, Sullivan attributed the core idea to Vitruvius's assertions in *De architectura*. Interestingly, when overviewing Sullivan's (1896) original article, it strikes me that whereas Vitruvius tripartite understanding seeks the balance between firmitas, utilitas, and venustas, Sullivan's somewhat two-part understanding implies that beauty itself lies within the symbiotic nature of form and function.

228 In Girot's (2012) review of Van Beek and Vermaas's (2011) *Landscapology*, he points to the same problematic of landscape urbanism's 'inherent' aesthetic.

High Line, Borneo-Spurenburg^[229], and others are not simply the results of mappings and analyses, each project represents a highly aesthetic outcome, which stems from multiple of intuitive aesthetic choices. I believe that such projects are widely recognised and praised also because of their peculiar and appealing aesthetic – not only due to their utility values or functionality. As such, I argue, Vitruvius’s ancient tripartite understanding remains relevant today; Whether *firmitas* or sustainability, *utilitas* or ecosystem services, *venustas* or aesthetic, all three aspects have to be considered and balanced in order to make relevant and durable designs.

5.3 Conclusions

This PhD thesis investigates the increasing interest in landscape and ecologies as vectors for design in contemporary Danish suburban development projects. The thesis’ investigations address the theoretically defined discourse, variously described as *landscape urbanism*, that argues for replacing architectural form with landscape as the primary medium of city-making. By superimposing landscape urbanism theory onto three apparently landscape urbanist projects for suburban residential development in Denmark (Bellinge Fælled, Ullerødbyen, and Tankefuld), this thesis discusses landscape urbanism’s efficiency and practicability in relation to the established Danish urban planning culture and tradition.

As reflected by the thesis’ three primary case studies, the understanding of landscape’s role in urban development in Denmark is clearly evolving. The way the urban practitioners conceive and work with the relationship between build and unbuilt is changing, and landscape architects work their way into the urban domain. From being background to foreground, landscape has in the three cases come to replace the

229 Landscape urbanists tend to refer to these projects as practical examples of landscape urbanism (e.g., Waldheim, 2002; 2006b; Tully, 2013). Personally, I do regard Fresh Kills as landscape urbanism, but I would refer to West 8’s Borneo-Sporenburg project as a master plan and Field Operations’s High Line as an urban landscape architectural project. Here, I venture to assert that these projects’ categorisations as ‘landscape urbanism’ stems from the fora in which the projects have evolved, i.e., Corner’s and Geuze’s respective offices, and not from the actual projects.

built as primary organising trait in the respective structure plans for Bellinge Fælled, Ullerødbyen, and Tankefuld. Landscape, so to speak, is deployed as both a 'lens' for understanding the complexity of contemporary urbanism as well as the primary design 'medium' through which it should be constructed (Waldheim, 2006a). As such, the three cases come to reflect landscape urbanism's merging of the traditional opposing alliance between landscape and urbanism. Taking a closer look at Bellinge Fælled, Ullerødbyen, and Tankefuld, I find that landscape urbanism's reversal of traditional order is unfolded and conceptualised in the respective plan proposals. The original projects for Bellinge Fælled, Ullerødbyen, and Tankefuld each reflect a type of spatial order that enhances the planning and design potentials of open space areas and natural systems.

In the three cases, landscape plays both a design and utility role; Landscape (in) forms the emerging built-up areas, and it provides ecosystem services in terms of local rainwater drainage (spatially integrated in Bellinge Fælled's design) and recreative facilities. As argue for throughout chapter 4, Bellinge Fælled, Ullerødbyen, and Tankefuld, each in its own way, reflect and unfold several of landscape urbanism's methodical aspects. However, as I examined the three cases more thoroughly, I found that the practical application of landscape-based design strategies was far more complex than one might be led to believe. The first complication, I found, is 'connectivity'. As indicated by landscape urbanism theory (cf., chapter 2), 'landscape replaces architectural form as primary medium of city-making'; Whereas a traditional urban design process is to generate form, the design process in landscape urbanism is considered more 'instrumental' (Weller, 2007). In this context, the urban professional has to position oneself as 'urbanistic system builder' (Reed, 2006) in order to facilitate urban development by the means of ecological features and unbuilt spaces. As I see it, moving from formalist models of ordering the city towards more open-ended and landscape-based strategic models, landscape urbanism accordingly exceeds local administrative demarcations and legislative planning regulations. In this perspective, I argue, the 'disconnectedness' of the three Danish cases represent an obvious contradiction to profound landscape urbanist thinking. From this, the landscapes in Bellinge Fælled, Ullerødbyen, and Tankefuld come to appear as fixed

form rather than a totality of reciprocally connected systems. Notably, one may also argue that claimed landscape urbanist icons such as Corner/Field Operations' the High Line, Geuze/West 8's Borneo-Sporenburg, and Corner/Field Operations' Fresh Kills Landfill project (no, it is not an individual island) suffer from the same sort of disconnectedness? The second complication, I came upon in relation to this thesis' case studies, was the 'scale and scope' problematic. Whereas the landscape-strategies for Bellinge Fælled and Ullerødbyen were conceived on the scales on which they are to implement, the Tankefuld strategy refers to a considerably larger scale. Unfortunately, as discussed previously, the large-scale strategy has more or less been directly translated into (generic) spatial form on the local scale. This problematic, I argue, relates, not only, to the fact that Danish urban professionals are ought to work with administratively demarcated sites and fixed assignments, but also to the organisational and professional frameworks that form the Danish urban production system (cf., chapter 3.2). As a result, the people involved in any urban project (be it architects, urban designers, landscape architects, planners, politicians, developers, etc.) operate on different levels, applying different lenses. In this context, I refer to the potentials of applying a 'cross-scalar practice' (see also, Sjöstedt, 2013) that considers the spatial consequences and coherences from the large to the small scale and reversely. In many ways, I find that landscape urbanism is a fruitful way of thinking during the design process; it has a special ability to include the natural environment and to consider the unpredictability of contemporary urbanism. Unfortunately, as seen particularly in the case of Tankefuld, landscape urbanism struggle to cope with the juridical and planning-administrative reality (see also, chapter 2.3). Even if landscape urbanism is a productive way of thinking in the initial phases, it has to be followed by a reconsidering of the way a project meets the Danish spatial planning reality. Unfortunately, the time-frame of this PhD thesis have not allowed me to go further into the articulation of such practice and its planning implementation. However, the questions concerning, not only, which practical methods and procedures of such cross-scalar approach should be applied, but also, who should secure such cross-scalar actions, open up for some interesting perspectives for an independent study.

Whereas the scale/scope of urban projects (in Denmark) traditionally is determined administratively - and not by the specific site's inherent features and contextual coherences (which could be an interesting practice), this PhD thesis' investigations have also shown that the specific site's 'capacity' plays an important role. As discussed earlier in this chapter, the landscape in Bellinge Fælded has not been provided sufficient relevance or quality to claim its right in the following plan-implementation and realisation process. In Ullerødbyen, the southern landscape has only been established as a coherent structure due to Hillerød Kommune's demand on the developers. Notably, this early political patronage of the open space area in Ullerødbyen Syd has upgraded the original landscape (degraded farm land without much inherent capacity) into a cohesive force to the entire southern development. In the case of Tankefuld, the overall combining of existing (forests, meadows, ridge) and new (afforestation) landscapes reflected a strong and recognisable, albeit conceptual, identity. Unfortunately, the comprehensiveness of the overall landscape-strategy could not be implemented as intended. In my view, this failed implementation was not due to lack of site capacity. The Tankefuld site, for sure, features strong existing landscapes and structures. However, as explained previously, the spatial impact of the large-scale structures on the local scale as well as the small-scale site capacity remain undisclosed in the original project

Earlier in this discussion, I hypothetically questioned: *Whether landscape urbanism is applicable to all types of sites?* Obviously, I somehow expected that I would come closer to an answer. Nevertheless, the answer still remains somehow ambiguous. Whereas Weller (2008) argues for a landscape (sub)urbanism rooted in existing and valuable landscapes, this thesis' three cases represent Danish rural landscapes with relatively low resistance. As I see it, this lack of site capacity indicates that in order to establish a preservation-worthy landscape in each of the three developments, the original (constituting) landscapes become utterly dependent on the added layers. Here, I argue, that in order to uphold large open space areas in the future, the designers' need to add importance and significance (e.g., utility values) beyond generic con-

tents such as ‘recreation’ and ‘leisure’. Hence, even if land-scape urbanism generally appears applicable to even the flattest Danish pancake land, it seems that its inherent instrumentality and overwhelming amounts of theorisations are somewhat overestimated in situations like Bellinge Fælled, Ullerødbyen, and Tankefuld. To me, it is a bit like ‘using a sledge-hammer to crack a nut’.

The final part of this conclusion concerns the practicability and effectiveness of landscape urbanism in Denmark. Here, one of my research questions asked: *Can landscape-induced planning and design strategies be successfully implemented in relation to Danish planning legislation and custom?* Again, I find the answer somewhat ambiguous. Seen in relation to my own three cases, the constituting landscapes (existing as well as new) in Bellinge Fælled and Ullerødbyen have been plan-implemented. However, as described previously, the landscapes in both cases are not physically anchored into the local sites. In the case of Bellinge Fælled, the large common is subdivided according to local plan demarcations. Perhaps, when (and if) the Bellinge Fælled area is fully developed, the common will merge into a coherent landscape (as proposed by Schønher), and the large lake will be established? In Ullerødbyen (due to Hillerød Kommune’s demands on the developers), the southern part of the inner central landscape (as proposed by SLA) has (despite the subdivision into three local plan areas) been established as a coherent whole. Based on these observations, the quick conclusion would be that in cases similar to Bellinge Fælled and Ullerødbyen (i.e., suburban (budding) developments, without too many governed and protected landscape features), small-scale landscape-based design strategies can be successfully implemented and politically cared for. Here, the million-dollar question would be: *Is it landscape urbanism then?* As the two cases have also shown, a local plan does not guarantee that the constituting landscape will be established. Someone has to pay! As such, one may suggest, in the case of Bellinge Fælled and Ullerødbyen, that the landscapes primarily have functioned as foreground and design-generating parameters during the design processes and not as crucial parameters in the following planning and construction-phases. In my view, the landscapes in these two cases, have been brought from the background to the foreground, back to the back-

ground, again. Although the two projects articulate several of landscape urbanism's principles, I venture to assert that the full potential of a landscape urbanist approach remains unfulfilled in Bellinge Fælled and Ullerødbyen.

Whereas the landscapes in Bellinge Fælled and Ullerødbyen have been plan-implemented without too many obstacles, the large-scale landscapes of the Tankefuld project have failed to be implemented. Seen in relation to landscape urbanism theory, I find that team Nord Arkitekter's original Tankefuld project represents the most potential landscape urbanist project in this thesis' empirical study. Despite the large-scale disconnectedness, the scale and scope of the project actually exceeds the conventional Danish exurban 'budding' practice, and the original Tankefuld project conceptualises an entirely new way of thinking urban development based on landscape in Denmark. Unfortunately, the Tankefuld project is apparently also the project that distances itself the most from an actual planning and financial reality. The designers and the municipality seemingly failed to establish a coherence between overall strategy, local spatial considerations, and the planning process. From being a unifying framework, the large-scale strategy somehow lost its significance when the scale and scope was altered and the reality kicked in. Tankefuld's main planning process has concerned the project's implementation into the then coming municipal plan (Svendborg Kommune, 2010). Here, the original project was simply vetoed by Miljøministeriet. The result is an altered geometry (large scale) and a return to the budding practice. Whereas the original Tankefuld project held the opportunity to develop on a locally customised, Danish version of a landscape urbanist, cross-scalar practice, it ended up as a political hot potato that challenged the very foundation of Danish spatial planning tradition. Ultimately, the Tankefuld project has demonstrated that, in the suggested form and format, landscape urbanism, as a full-blown, transboundary planning and design approach, is difficult to unfold within the framework of the Danish spatial planning system as it is today.

Perspectives

The many open spaces, which characterise today's urban territories, are often considered as surplus areas and part of urban fragmentation. However, in landscape urban-

ism's reverse optic, these open spaces become the very constituting trait of the city. By focusing on the landscapes (not the fragmented urban developments), new coherences can be found at various scales. Here, landscape comes to represent, not only, a physical material and place for intervention, but also a way of conceptualising the city. On the one hand, the inherent dynamic of landscape illustrates the unpredictability of urban development; on the other hand, landscape holds the potential to integrate nature's processes in urban contexts as 'ecosystems services'. In this understanding, landscape is acknowledged as being permanently changing and adapting, and the concept of ecosystems services represents the manifestation of humans' interaction with the environment. As I see it, this acknowledgment of mutual influence is central for developing landscape urbanism as a particular practice and extension of the open set of guiding principles presented by landscape urbanism theory. In my view, the understanding of local natural and cultural^[230] conditions as well as cultivation forms come to play an important role. Here, landscape architecture and local landscape tradition become central for establishing a locally anchored landscape urbanist practice.

This PhD thesis suggests that the incitements and ideas of landscape urbanism, essentially, are identical to the motives and design initiatives presented by Bellinge Fælled, Ullerødbyen, and Tankefuld. In the three cases, landscape as practice appears as a profound knowledge and respect for local landscapes (e.g., terrain, existing biotopes, landscape types, etc.) as well as a desire to reveal contextual possibilities via design. Accordingly, the three cases can be argued for as genuine examples of practiced (Danish) landscape urbanism. Nevertheless, neither Nina Jensen nor Stig L. Andersson consider themselves landscape urbanists. They consider themselves as landscape architects working in urban design and planning. This seems somewhat paradoxical as both Andersson and Jensen enhanced systemic thinking and nature's processes

230 Braae (2013, p. 4) argues for a new professional alliance between cultural heritage and the landscape architectural practice. According to Braae, cultural heritage tends towards being considered as a context-orientated resource rather than singular preservation objects. The landscape architectural profession works with the contextual and tries via design to test possible uses of the existing.

as essentials in the design process. In annoyance with landscape urbanism's lack of aesthetic and design considerations, Stig L. Andersson and his team have formulated 'process urbanism' as an alternative approach that holds both the essence of landscape urbanism and a consciousness of good design. Jensen suggested a similar approach, though she did not intentionally involve landscape urbanism as a theory. Instead, Jensen enhanced the holistic approach and good design practice, i.e., thorough site research, focus on the integral whole, and not least of all, aesthetics. Also, as seen in, for instance, Bredsdorff and Andersson's (1965) Gullestrup project and Vandkunsten's (1977) Ullerødbyen, and several others, the tradition of 'positioning' the urban in the landscape is nothing new to Danish landscape architects and urban practitioners. Another interesting aspect is Jensen and Andersson's understanding that utility value is not only about the ecological effects, which often are enhanced by landscape urbanism, but to a wide extent also about the recreational and social values for the end-users. After interviewing (only) two Danish landscape architects, it is not possible to conclude that all Danish landscape architects reject landscape urbanism as a notion, but considering the general tendencies seen in contemporary Danish urban development projects, I venture to assert that the ideas behind landscape urbanism (together with many other principles from the landscape architect's practice and experiences) must have affected the urban practices in some way. One possible explanation is that while academics search for new and more suitable representations and frameworks for understanding contemporary urbanism via theories, the contemporary urban practices use landscape and ecological thinking as a way to innovate at the level of design practice (see also, Shannon, 2006). From this, I find it reasonable to argue that the current discourse surrounding landscape urbanism indirectly affects the urban practices just as numerous other isms have done before. This reciprocal influence, I argue, is also part of defining and describing a locally founded Danish version of landscape urbanism. In my view, the landscape urbanism discourse may/may not have a direct link to what happens in Danish landscape/urban practices, but it certainly is part of the general professional reorientation towards landscape and natural processes seen in several Danish urban development projects (see also, Braae, 2013). The reason why Jensen and Andersson do not recognise themselves as landscape ur-

banists is, presumably, that landscape urbanism primarily (or at least in Denmark) is cultivated and discussed within the academic environments. Obviously, academia inspires practice and vice versa, but as this thesis' investigations have shown, landscape urbanism, as a notion, still remains relatively intangible regarding its practical incentives. Additionally, others would claim that landscape urbanism can be (mis)used as a way of profiling or validating urban projects by associating open/green development plans, which normally are considered as urban diffusion, with this specific way of thinking (e.g., New Urbanism's critique) Here, landscape urbanism becomes more of a 'brand', which again can be associated with many controversies. By avoiding the controversies surrounding landscape urbanism, Jensen and Andersson can concentrate on the practical aspects of a more landscape architectural approach to planning and urban design. It may well be that they see landscape architecture is implementing and developing new thoughts and methods (also coming from landscape urbanism) within the Danish tradition and field but without giving the credit to a specific 'ism' or defined theory. As such, Jensen and Andersson are free to unfold their 'landscape architectural' approach to urban design within the local Danish landscape tradition and develop it into a more locally founded practice. In this way, the loftier ambitions of thinking and processing the city as a landscape combined with the local Danish landscape traditions could come to constitute a Danish anchored version of landscape urbanism that considers local conditions and the uncertainties of contemporary urbanism already in the conceptualisation of urban projects.

5.4 References

Appendices

As part of the PhD defense, the interview materials (interview guides, sound-files, and transcribes) are made accessible on enclosed USB-stick to examiners and supervisor. A: Interview-guides (designers/municipal key persons) modified versions (in Danish) (pdf). B: Interview sound-files (designers/municipal key persons) (wav). C: Transcribed parts of interviews and associated personal notes (in Danish) (pdf).

Regarding appendix B and C, the interviews were carried out as personal conversations between the respective interviewees and I. The setup was informal. The interviewees participated subject to the condition that compromising material would go no further. I kindly ask you to respect this.

Bibliography

- AA KONKURRENCER (ed.) 2007. *Hornshøj Byplankonkurrence: Dommerbetænkning*: Akademisk Arkitektforening.
- AA KONKURRENCER (ed.) 2008. *Nordhavn: Dommerbetænkning åben international idékonkurrence*, København: Akademisk Arkitektforening.
- AALBORG, K. 2012. *Landområdet Svenstrup Syd* [Online]. Available: <http://www.aalborg.dk/Borger/Kultur-natur-og-fritid/Parker-og-groenne-omraader/Sider/Svenstrup-Syd.aspx> [10/07 2013].
- AARHUS, K. Competition entries: PowerPoint presentation [unpublished].
- AGGER, P. 2008. Ideer om natur- og miljøplanlægning i en bæredygtig øresundsregion. *Byplan*, 4, 44-45.
- ANDERSEN, H. S. & ANDERSEN, H. T. 2004. Introduktion. In: ANDERSEN, H. S. & ANDERSEN, H. T. (eds.) *Den mangfoldige by: Opløsning, oplevelse, opsplnitning*. Hørsholm: Statens Byggeforskningsinstitut.
- ANDERSSON, S. L. 2013. *Interview 11 June. Conducted and translated by author.* Type to RODEN, T. M.
- ARCHER, B. 1995. The Nature of Research. *Co-design, interdisciplinary journal of*

- design*, 6-13.
- ARKITEKTEN 1978. Konkurrence om strukturplan og bebyggelsesplan for en ny bydel i Hillerød Kommune - Ullerødbyen. *Arkitekten*, 6, 134-141.
- ARKITEKTEN 2003. Idékonkurrence. Byområde i Lisbjerg. *Arkitekten*, 5, 10-16.
- ARNFRED, J. T. 2010. Vandkunstens arbejder. In: DALGAS, V. & KRISTENSEN, H. (eds.) *Fra grænseløs optimisme til kritisk eftertanke: Byplankonsulenttegnestuerne i 1960'erne og 70'erne. Byplanhistorisk note nr. 66*. København K: Dansk Byplanlaboratorium.
- ASCHER, F. 2002. Urbanismen og den nye urbane revolution. *Distinktion: Scandinavian Journal of Social Theory*, 3, 29-36.
- ASCHER, F. 2004. Métapolis: A Third Modern Urban Revolution. Changes in Urban Scale and Shape in France. In: BÖLLING, L. & SIEVERTS, T. (eds.) *Mitten am Rand. Auf dem Weg von der Vorstadt über die Zwischenstadt zur regionalen Stadtilandschaft*. Wuppertal: Verlag Müller + Busmann.
- ASSARGÅRD, H. 2011. *Landscape Urbanism from a methodological perspective and a conceptual framework*. Master, Swedish University of Agricultural Sciences, Landscape Planning Department of Urban and Rural Development.
- BACH, R. C. 2008. "Surface Strategies" som landskabsurban metode. *Nordic Journal of Architectural Research*, 20, 51-61.
- BACH, R. C. & CLEMMENSEN, T. J. 2005a. Fem landskabsstrategiske principper: Landskab som optik. *Nordisk Arkitekturforskning*, 2005, 81-94.
- BACH, R. C. & CLEMMENSEN, T. J. 2005b. Landskabstilgangen. Aarhus: Arkitektskolen Aarhus/Center for Strategisk Byforskning.
- BACON, E. D. 1967. *Design of Cities*, New York, Viking Penguin.
- BEN-JOSEPH, E. 2005. *The Code of the City: standards and the hidden language of place making*, Cambridge, MIT Press.
- BIILMANN, O. n.d. *Randstad Holland i Den Store Danske*, Gyldendal [Online]. Available: <http://denstoredanske.dk/index.php?sideId=148612> [Accessed 15/03 2017].
- BISE. n.d. *Ecosystem services* [Online]. European Commission, DG Environment, European Environment Agency,. Available: <http://biodiversity.europa.eu/topics/ecosystem-services/#> [Accessed 29/03 2017].
- BÖLLING, A. M. (ed.) 2008. *Tankefuld: Byplankonkurrence, Svendborg. Dommerbetænkning*: Akademisk Arkitektforening.
- BORIS, S. D. 2010. *Urban skov og landskabsinfrastuktur*: Dissertation/Thesis, Institut for By og Landskab, Arkitektskolen Aarhus.
- BRAAE, E. 2013. Fremtidens Forstæder: Landskabets nye rolle. Erfaringer fra

- konkurrencen, Søndermarken, Vejle. Copenhagen: Realdania.
- BRINKMANN, S. & TANGGAARD, L. 2010. *Kvalitative metoder - en grundbog*, København, Hans Reitzels Forlag.
- BROWN & STOREY ARCHITECTS 2001. Emergent Landscapes. In: CZERNIAK, J. (ed.) *CASE: Downsview Park Toronto*. Munich: Prestel Verlag.
- BY- OG BOLIGMINISTERIET 2000. *Arkitektonisk helhedssyn*, København, By- og Boligministeriet.
- CHRISTENSEN, G. 2012. *ENGarkitekter. Telephone communication [2013]*.
- CITTASLOW INTERNATIONAL. *Association* [Online]. Available: <http://www.cittaslow.org/node/246> [Accessed 30/06/2015].
- CONNOLLY, P. 2004. Embracing Openness: Making Landscape Urbanism Landscape Architectural. In: RAXWORTHY, J. & BLOOD, J. (eds.) *The Mesh Book: Landscape/Infrastructure*. Melbourne: RMIT University Press.
- CORNER, J. (ed.) 1999a. *Recovering Landscape: Essays in Contemporary Landscape Architecture*, New York: Princeton Architectural Press.
- CORNER, J. 1999b. Preface. In: CORNER, J. (ed.) *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press.
- CORNER, J. 1999c. Eidetic Operations and New Landscapes. *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press.
- CORNER, J. 1999d. The Agency of Mapping: Speculation, Critique and Invention. In: COSGROVE, D. (ed.) *Mappings*. London: Reaktion books.
- CORNER, J. 2001. Landscaping. In: DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.). Barcelona: ACTAR.
- CORNER, J. 2003. Landscape Urbanism. In: MOSTAFAVI, M. & NAJLE, C. (eds.) *Landscape Urbanism: A Manual for the Machinic Landscape*. London: AA Publications.
- CORNER, J. 2006. Terra Fluxus. In: WALDHEIM, C. (ed.) *The Landscape urbanism Reader*. New York: Princeton Architectural Press.
- COSGROVE, D. E. 1984. *Social formation and symbolic landscape*, London, Croom Helm.
- CZERNIAK, J. 2001a. *CASE: Downsview Park Toronto*, Munich, Prestel Verlag.
- CZERNIAK, J. 2001b. Appearance, Performance: Landscape at Downsview. In: CZERNIAK, J. (ed.) *CASE: Downsview Park Toronto*. Munich: Prestel Verlag.

- CZERNIAK, J. 2007. Legibility and Resilience. *In*: CZERNIAK, J. & HARGREAVES, G. (eds.) *Large Parks*. New York: Princeton Architectural Press.
- CZERNIAK, J. & HARGREAVES, G. (eds.) 2007. *Large Parks*, New York, Princeton Architectural Press.
- DAI-BYAKUHO. 1995. *Concerning the Three Truths* [Online]. Available: <https://www.nst.org/articles/basics-of-study/concerning-the-three-truths/> [Accessed 11/03 2017].
- DAL'S KONKURRENCESEKRETARIAT 2003. *Dommerbetænkning. Ullerødbyen: En helhedsplan for et nyt boligområde i Hillerød*, København, Akademisk Arkitektforening.
- DAL'S KONKURRENCESEKRETARIAT 2003. *Et nyt byområde i Lishjerg : åben byplan-idékonkurrence : dommerkomitéens betænkning*, Kbh., DAL's konkurrencesekretariat.
- DALGAS, V., JENSEN, P. B., ILLERIS, J., KRISTENSEN, J. & KRISTENSEN, H. 2011. *Byplankonsulenttegnestuerne i 1960'erne og 70'erne: En interviewundersøgelse. Byplanhistorisk note nr. 65*, København K, Dansk Byplanlaboratorium.
- DALGAS, V. & KRISTENSEN, H. 2010. *Fra grænseløs optimisme til kritisk eftertanke: Byplankonsulenttegnestuerne i 1960'erne og 70'erne. Byplanhistorisk note nr. 66*, København K, Dansk Byplanlaboratorium.
- DANMARKS STATISTIK. 2015a. *BOL102* [Online]. Available: <http://www.statistikbanken.dk/10064> [Accessed 08/10/2016].
- DANMARKS STATISTIK. 2015b. *Boliger* [Online]. København: Danmarks Statistik. Available: <http://www.dst.dk/da/Statistik/emner/levevilkkaar/boligforhold> [Accessed 08/10/2016].
- DASKALAKIS, G. & PEREZ, O. 2001. Projecting Detroit. *In*: DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.). Barcelona: ACTAR.
- DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. 2001. Introduction: Committee Work. *In*: DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.) *Stalking Detroit*. Barcelona: ACTAR.
- DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.) 2001. *Stalking Detroit*, Barcelona: ACTAR.
- DELAITRE, M. 2010. *The Next Generation of Parks: Minneapolis Riverfront, Competition brief* [Online]. Available: www.minneapolisriverfrontdesigncompetition.com [Accessed 2015].
- DELEUZE, G. & GUATTARI, F. A. 1987. *Thousand Plateaus: Capitalism and*

- Schizophrenia*, Minneapolis, University of Minnesota Press.
- DIEDRICH, L. 2008. Territories: The landscape reveals the city. In: DIEDRICH, L. (ed.) *Territories: From Landscape to City*. Basel: Birkhäuser Verlag AG.
- DIEDRICH, L. 2013. *Translating harbourscapes : site-specific design approaches in contemporary European harbour transformation*, Frederiksberg, Department of Geosciences and Natural Resource Management, University of Copenhagen.
- EGNSPLANKONTORET 1993. *Skitseforslag til egnsplan for Storkøbenhavn : udarbejdet 1947*, Kbh., Dansk Byplanlaboratorium.
- EHLERS, P. (ed.) 2016. *Byrum: Kvalitet til hverdagslivet*: Dansk Byplanlaboratorium.
- EJRNÆS, R., WIBERG-LARSEN, P., HOLM, T. E., JOSEFSON, A., STRANDBERG, B., NYGAARD, B., ANDERSEN, L. W., WINDING, A., TERMANSEN, M., HANSEN, M. D. D., SØNDERGAARD, M., HANSEN, A. S., LUNDSTEEN, S., BAATTRUP-PEDERSEN, A., KRISTENSEN, E., KROGH, P. H., SIMONSEN, V., HASLER, B. & LEVIN, G. 2011. Danmarks biodiversitet 2010: Status, udvikling og trusler. Faglig rapport fra DMU nr. 815. Aarhus.
- ENCYCLOPÆDIA BRITANNICA ONLINE LIBRARY. n.d.a *Urban planning* [Online]. Encyclopædia Britannica Online Library Edition. Available: <http://library.eb.co.uk/eb/article-9074444> [Accessed Web Page 2012].
- ENCYCLOPÆDIA BRITANNICA ONLINE LIBRARY. n.d.b *Ecology* [Online]. Encyclopædia Britannica Online Library Edition. Available: <http://library.eb.co.uk/eb/article-9110583> [Accessed Web Page 2013].
- ENCYCLOPÆDIA BRITANNICA ONLINE LIBRARY. 2012. *Urban sprawl* [Online]. Available: <http://library.eb.co.uk/eb/article-9475347> [Accessed 08/06 2012].
- ERHVERVSSTYRELSEN. n.d.a. *Det danske plansystem* [Online]. Available: <https://erhvervsstyrelsen.dk/det-danske-plansystem> [Accessed 14/03 2017].
- ERHVERVSSTYRELSEN. n.d.b *Bystruktur og cyklisme* [Online]. Erhvervsstyrelsen. Available: <https://erhvervsstyrelsen.dk/bystruktur-og-cyklisme> [Accessed 14/03 2017].
- EWING, R. 2011. *Urban Design vs. Urban Planning: A Distinction with a Difference* [Online]. Available: <http://www.arch.utah.edu/cgi-bin/wordpress-metroresearch/wp-content/uploads/2012/publications/researchyoucanuse/ResearchJuly11.pdf> [Accessed 07/07 2016].
- FIELD OPERATIONS 2002. Lifescape. *PRAXIS*, 20-27.

- FLYVBJERG, B. 2001. The power of example. *Making Social Science Matter: Why social inquiry fails and how it can succeed again*. Cambridge: Cambridge University Press.
- FLYVBJERG, B. 2006. Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12, 219-245.
- FRAMPTON, K. 1983. Towards a Critical Regionalism: Six Points for an Architecture of Resistance. In: FOSTER, H. (ed.) *The Anti-Aesthetic: Essays on Postmodern Culture*. Seattle: Bay Press.
- GAARDMAND, A. 1993. *Dansk Byplanlægning 1938-1992*, Copenhagen, Arkitektens Forlag.
- GALLAND GARCIA DE QUEVEDO, D. & ENEMARK, S. 2012. The Danish national spatial planning framework. Cambridge: Lincoln Institute of Land Policy.
- GIROT, C. 2012. Landscapology: Learning to Landscape the City (Book Review). *Journal of Landscape Architecture*, 7, 84-87.
- GRAY, C. D. 2006. *From emergence to divergence: modes of landscape urbanism*. Master, Edinburgh College of Art.
- HANSEN, J. W. 2001. *Idekonkurrence om den nye forstad. Dommerbetænkning. Særtryk af Arkitekten Magasin nr. 15 2001*, København, Arkitektens Forlag.
- HANSEN, M. F. 2016. *RE: Email correspondance on Ullerødbyen South*. Type to RODEN, T. M.
- HEINBERG, R. & THE POST CARBON INSTITUTE. 2011. *Who Killed Economic Growth?* [Online]. Available: <https://www.youtube.com/watch?v=EQqDS9wGsXQ> [Accessed 2012].
- HILBERSEIMER, L. 1949. *The New Regional Pattern: Industries and gardens, workshops and farms*, Chicago, Paul Theobald.
- HILL, K. 2000. Visions of Sustainability. In: BENSON, F. J. & ROE, M. H. (eds.) *Landscape and Sustainability*. London and New York: Spoon Press.
- HILLERØD KOMMUNE 2002. Ullerødbyen: Idékonkurrence om en helhedsplan.
- HILLERØD KOMMUNE 2005. Forslag til kommuneplantillæg nr. 2 til Kommuneplan 2005.
- HILLERØD KOMMUNE 2006a. Rammelokalplan 334: Ullerødbyen Syd.
- HILLERØD KOMMUNE 2006b. Lokalplan nr. 335: For Ullerødbyen Syd - Bykvarter Øst.
- HILLERØD KOMMUNE 2006c. Lokalplan 336: For Ullerødbyen Syd - Bykvarter Vest.
- HILLERØD KOMMUNE 2007. Lokalplan 343: For Ullerødbyen Syd - Bykvarter

Midt.

HILLERØD KOMMUNE 2016. Lokalplan 400 for Ullerød Nord.

HILLERØD KOMMUNE & NIRAS 2014. Konkretisering af helhedsplanen for Ullerød Nord.

HILLERØD KOMMUNE & SLA 2006. Kvalitetsprogram: Ullerødbyen Syd.

HOEFER, W. 2015. *Perspectives on Ecology and Design* [Online]. Available: <https://www.toposmagazine.com/perspectives-on-ecology-and-design/> [Accessed 07/04 2017].

HOGAN, L. 2010. *Charles Waldheim, Landscape Urbanist, Confirmed for CNU 19* [Online]. Available: <http://cnu.civicaactions.net/cnu-salons/2010/12/charles-waldheim-landscape-urbanist-confirmed-cnu-19> [09/10 2015].

INGELS, B. 2011. *The architecture of hedonism: Putting the pleasure into green living* [Online]. Available: <http://grist.org/cities/2011-12-24-the-architecture-of-hedonism-putting-the-pleasure-into-green-liv/> [Accessed 04/04 2017].

JACKSON, J. B. & HOROWITZ, H. L. 1997. *Landscape in sight: looking at America*, New Haven, Yale University Press.

JACOBS, J. 1961. *The Death and Life of Great American Cities*, New York, Vintage books.

JENSEN, E. H. & PARTOFT, M. H. (eds.) 2010. *Byplanlægning - et produkt af tiden: dansk byplanlægning 1945-2010*, København, Dansk Byplanlaboratorium, Geografforlaget.

JENSEN, N. 2013. *RE: Interview 8 January. Conducted and translated by author.* Type to RODEN, T. M.

JESSOP, B. 2016. *Fordism* [Online]. Available: <https://global.britannica.com/topic/Fordism> [Accessed 17/5/2016].

JØRGENSEN, G. 2013. Planlægning for det gode liv i byen. *Den Grænseløse By*. København: Center for Strategisk Byforskning, Institut for Geovidenskab og Naturforvaltning Københavns Universitet,.

JUEL CLEMMENSEN, T. 2008. *Vejnettet og det urban-rurale landskab: Ph.d.-afhandling*. Arkitektskolen Aarhus.

KNUDSEN, S. L. C., BJERG, S. & HANSEN, J. R. 2008. *Viby An Interspace*. Master's Aalborg Universitet.

KOOLHAAS, R. 1978. *Delirious New York: A Retroactive Manifesto for New York*, New York, Oxford University Press.

KOOLHAAS, R. 1995 [1998]. What Ever Happened to Urbanism? In: O.M.A., KOOLHAAS, R., MAU, B. & SIGLER, J. (eds.) *S,M,L,XL*. New York: Monacelli Press.

- KRISTENSEN, H. J., FRANDSEN, J. N. & MØLLER, J. (eds.) 2010. *Cittaslow – byudvikling med udsyn og omtanke?*: Syddansk Universitetsforlag.
- KVALE, S. 1997. *InterView: en introduktion til det kvalitative forskningsinterview*, København, Hans Reitzels Forlag.
- KVISTHØJ, C. 2008. Life forms. Learning from Corner. *Nordisk Arkitekturforskning* 20(2), pp. 37-50.
- KVORNING, J. 2016. Plantyper og realiseringsprocesser. In: Realdania, Gladsaxe Kommune, Odense Kommune, Gladsaxe Alm Boligselskab, Fyns Alm Boligselskab & CIVICA (eds.) *Jagten på Forandringskraften: Viden og perspektiver fra modningsprojektet Boligliv i balance*. Realdania.
- KVORNING, J., CHRISTENSEN, S. M., MEILVANG, M. L. & RITZAU KJÆRULF, T. 2012. *Bæredygtige Forstæder: Udredning og anbefalinger*, Copenhagen, Naturstyrelsen; Realdania.
- KWINTER, S. 2002. Approaching Landscapes. *PRAXIS*, 4, 4-5.
- LAMPARD, E. E. 2007. *City* [Online]. Encyclopædia Britannica. Available: <https://global.britannica.com/topic/city> [Accessed 27/04 2017].
- LEERBERG, T. 2000. *En Visionær Pragmatisme* [Online]. Available: <http://www.arkitektturnet.dk/anmeldelser/0012tl.htm> [Accessed 12/12 2016].
- LEVIN, G. & NORMANDER, B. 2008. Arealanvendelse i Danmark siden slutningen af 1800-tallet. Faglig rapport fra DMU nr. 682. Aarhus: Danmarks Miljøundersøgelser, Aarhus Universitet.
- LEVY, S. F. 2012. Grounding Landscape Urbanism [Online]. Available: <http://scenariojournal.com/article/shanti-levy/> [Accessed 06/07 2015].
- LOOTSMA, B. 1999. Synthetic Regionalization: The Dutch Landscape Toward a Second Modernity. In: CORNER, J. (ed.) *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press.
- LOOTSMA, B. 2000. *Superdutch : new architecture in the Netherlands*, New York, Princeton Architectural Press.
- LUND, N. O. 2003. Byområde i Lisbjerg. Diagrammer er ikke nok. *Arkitekten*, 105, 10-17.
- LYNCH, K. 1981. *A Theory of Good City Form*, Cambridge, MIT Press.
- MAAS, W., RIJS, J. V. & KOEK, R. 2006. *FARMAX : excursions on density*, Rotterdam, 010 Publishers.
- MAROT, S. 2003. *Sub-Urbanism and the Art of Memory*, London, AA Publications.
- MATHIESEN, P. H. 2014. *Interview 9 April. Conducted and translated by author*: Type to RODEN, T. M.

- MCHARGH, I. L. 1969. *Design With Nature*, New York, Doubleday/Natural History Press.
- MERTINS, D. 2001. Downsview Park International Design Competition. In: CZERNIAK, J. (ed.) *Case: Downsview Park Toronto*. Munich: Prestel Verlag.
- METROPOLITAN REDEVELOPMENT AUTHORITY. n.d. *Wungong Urban* [Online]. Available: <http://www.mra.wa.gov.au/projects-and-places/wungong-urban> [Accessed 21/03 2017].
- MEYER, E. 2005. Site Citations: The Grounds of Modern Landscape Architecture. In: C. J. Burns and A. Kahn eds. *Site Matters: Design Concepts, Histories, and Strategies*. New York and London, Routledge. pp. 93-129.
- MILJØMINISTERIET 2007a. The Planning Act in Denmark (Planloven): Consolidated Act No. 813 of 21 June 2007. Translated from Danish by David Breuer. Denmark: Miljøministeriet.
- MILJØMINISTERIET 2007b. *Spatial Planning in Denmark*, Copenhagen, Ministry of the Environment.
- MILJØMINISTERIET. 2013. *Grøn omstilling - nye muligheder for hele Danmark: Landsplanredegørelse 2013* [Online]. Available: <https://erhvervsstyrelsen.dk/sites/default/files/landsplanredegoerelse2013.pdf> [Accessed 25/08 2015].
- MILLER, E. 2010. *RE: The Third Urban Revolution*.
- MILLER, M. 2013. *Landscape Urbanism Decoded* [Online]. Available: <http://www.theolinstudio.com/blog/landscape-urbanism-decoded/> [Accessed 03/06 2013].
- MINNEAPOLIS PARK & RECREATION BOARD. n.d. *Stoss Landscape Urbanism: Streamlines* [Online]. Available: <http://minneapolisriverfrontdesigncompetition.com/> [Accessed 06/03/2017].
- MØLLER & GRØNBORG, HILLERØD KOMMUNE, HOLSTEBRO KOMMUNE, SKANDERBORG KOMMUNE & SVENDBORG KOMMUNE 2009d. Store byudviklings-projekter: Plan- og proceserfaringer fra 4 danske kommuner, BILAG 4: Ullerødbyen. København: Miljøministeriet/Realania
- MØLLER & GRØNBORG, HILLERØD KOMMUNE, HOLSTEBRO KOMMUNE, SKANDERBORG KOMMUNE & SVENDBORG KOMMUNE 2009. Store byudviklings-projekter: Plan- og proceserfaringer fra 4 danske kommuner. København: Miljøministeriet/Realania
- MØLLER & GRØNBORG, HILLERØD KOMMUNE, HOLSTEBRO KOMMUNE, SKANDERBORG KOMMUNE & SVENDBORG KOMMUNE 2009c. Store byudviklings-projekter: Plan- og proceserfaringer

- fra 4 danske kommuner, BILAG 3: Tankefuld. København: Miljøministeriet/ Realdania
- MORTENSEN, M. T. 2012. *Forestillinger om Forstaden* [Online]. Arkitektforeningen. Available: <http://arkitektforeningen.dk/artikel/nyheder/forestillinger-forstaden> [Accessed Web Page 2013].
- MOSTAFAVI, M. 2010. Why Ecological Urbanism? Why Now? In: MOSTAFAVI, M. & DOHERTY, G. (eds.) *Ecological Urbanism*. Baden: Lars Müller Publishers.
- MOSTAFAVI, M. & DOHERTY, G. (eds.) 2010. *Ecological Urbanism*, Baden: Lars Müller Publishers.
- MOSTAFAVI, M. & NAJLE, C. (eds.) 2003. *Landscape Urbanism: A Manual for the Machinic Landscape*, London: AA Publications.
- NAJLE, C. 2003. Landscape Urbanism: A Manual for the Machinic Landscape. In: MOHSEN, M. & NAJLE, C. (eds.) *Landscape Urbanism: A Manual for the Machinic Landscape*. London: AA Publications.
- NEW YORK CITY & FIELD OPERATIONS. 2006. *Fresh Kills Park: Lifescape, Staten Island, New York, Draft Master Plan, March 2006* [Online]. Available: <https://www1.nyc.gov/html/dcp/pdf/fkl/dmp.pdf> [Accessed].
- NIELSEN, T. 2013. Re-imagining the Danish Suburb. *NSBB-Conference 2013: Suburbs - Transformation and Development*. Roskilde: Danish Building Research Institute, Aalborg University.
- NORD ARKITEKTER, HOLSCHER ARKITEKTER, ARUP GROUP & RTKL 2007. Tankefuld: competition entry, presentation posters.
- NORTH, A. 2012. Processing Downsview Park: transforming a theoretical diagram to master plan and construction reality. *Journal of Landscape Architecture*, 7, 8-19.
- ODENSE KOMMUNE. n.d. *Bellinge Fælled: En bæredygtig bydel (promotional/sales material)*.
- ODENSE KOMMUNE. 2008. Miljøpolitik..
- ODENSE KOMMUNE. 2008. *At lege er at leve: vision*.
- ODENSE KOMMUNE. 2009. Kommuneplan 2009-2021.
- ODENSE KOMMUNE. 2012. Bæredygtige sammen: Odense Kommunes Miljøpolitik 2012.
- ODENSE KOMMUNE. 2012. Tillæg nr. 19 til Kommuneplanen 2009-2021 for Odense Kommune, Bellinge Fælled, Ændring af kommuneplanområde 6, Bellinge – Dyrup - Højme.
- ODENSE KOMMUNE. 2012. Lokalplan (6-698) Bellinge Fælled.

- ODENSE KOMMUNE. 2015. LP 6-763 Bellinge Fælled 2. etape.
- ODENSE KOMMUNE & SCHØNHERR 2010. Bæredygtig bebyggelse i Bellinge.
- ODGAARD, M. 2014. *Biodiversitetens Byer: om naturbygning i dansk byplanlægning*. PhD, Arkitektskolen Aarhus.
- ODS. 1923. *Forstad* [Online]. København: Det Danske Sprog- og Litteraturselskab. Available: <http://ordnet.dk/ods/ordbog?query=forstad&tab=for> [05/07/2015].
- OMA. *Parc de la Villette* [Online]. Available: <http://oma.eu/projects/parc-de-la-villette> [06/07/2015].
- OVESEN, H. & HANSEN, J. W. 2001. Idekonkurrence om den nye forstad. Dommerbetænkning (Særnummer af Arkitekten, Vol. 15).
- POST, A. 2009. *Byplanhåndbogen*, Danmark, Dansk Byplanlaboratorium.
- PROJECT FOR PUBLIC, S. *What is Placemaking?* [Online]. Available: http://www.pps.org/reference/what_is_placemaking/ [Accessed Generic].
- RASMUSSEN, M. S. 2013. *Interview 7. January. Conducted and translated by author*. Type to RODEN, T. M.
- REED, C. 2006. Public Works Practice. In: WALDHEIM, C. (ed.) *The Landscape Urbanism Reader*. New York: Princeton Architectural Press.
- REED, C. & LISTER, N.-M. 2014. *Projective Ecologies*, S.I., Harvard University Graduate School of Design.
- REESER, A. & SCHAFER, A. 2002. *PRAXIS: Landscapes*, Cambridge, Praxis, Inc.
- RODEN, T. M. 2007. Greenmetropolis - en landskabelig strategi for Øresundsregionen. *Arkitekten*, 109, 46-47.
- ROMOSE, J. U. 2013. *Interview 12 June. Conducted and translated by author*. Type to RODEN, T. M.
- SAMUELSEN, H. H. 2013. *Fri os fra mere bæredygtighed* [Online]. Available: <https://www.information.dk/debat/2013/06/fri-mere-baeredygtighed> [Accessed 23/07 2013].
- SANDERS, L. 2013. Reflections on landscape urbanism. In: MILLER, M. (2013).
- SCHÄFER, R. 2010. Editorial. *Topos*, 71, 3.
- SCHUMACHER, P. & ROGNER, C. 2001. After Ford. In: DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.) *Stalking Detroit*. Barcelona: ACTAR.
- SHANE, G. 2006. The Emergence of Landscape Urbanism. In: WALDHEIM, C. (ed.) *The Landscape Urbanism reader*. New York: Princeton Architectural Press.
- SHANNON, K. 2006. From Theory to Resistance: Landscape Urbanism in Europe. In: WALDHEIM, C. (ed.) *The Landscape Urbanism Reader*. New York: Princeton Architectural Press.

- SIEVERTS, T. 2003. *Cities Without Cities: An interpretation of the Zwischenstadt*, London, Spon Press.
- SIEVERTS, T. 2009. Radio-interview with Thomas Sieverts. In: STEVE SCHER (RADIO KUOW) (ed.).
- SIEVERTS, T. 2011. Fra en umulig orden til en mulig uorden. In: CLEMMENSEN, T. J. (ed.) *Grænseløse Byer: Nye Perspektiver for By- og Landskabsarkitekturen*. Aarhus: Arkitektskolens Forlag.
- SIEVERTS, T. 2014. *The prerequisite of a sustainable city is beauty* [Online]. Danish Architecture Centre (DAC & CITIES). Available: <http://www.dac.dk/en/dac-cities/sustainable-cities-2/experts/thomas-sieverts-the-prerequisite-of-a-sustainable-city-is-beauty/> [Accessed 03/03 2015].
- SIGLER, J. (ed.) 1995/1998. *S.M.L.XL: O.M.A, Rem Koolhaas and Bruce Mau*, New York: The Monacelli Press.
- SJÖSTEDT, V. 2013. *Landscape-oriented New Town Development in China: prospects and implications for Western design firms*. Dissertation/Thesis, Unpublished, The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation, School of Architecture, Institute for Urban Planning.
- SLA. 2009. *Ullerødbyen Syd: Landskabsprojekt* [Online]. Available: http://ulleroedbyengf.dk/wp-content/uploads/documents/1462206301_Plejeplan.pdf#page=1&zoom=auto,-75,660 [Accessed Web Page].
- SLA. 2010. *Process Urbanism: The City as Artificial Ecosystem* [Online]. Available: www.processurbanism.com [Accessed 2013].
- SLA. n.d. *SLADNA* [Online]. Available: <http://sla.dk/dk/sladna/> [Accessed 2016].
- SMETS, M. 2002. Raster, Hülse, Lichtung und Montage / Grid, casco, clearing and montage. *Topos*, 38, 88-101.
- SMITH, R. L. & PIMM, S. L. 2007. *Ecology* [Online]. Encyclopædia Britannica. Available: <https://global.britannica.com/science/ecology> [Accessed 28/04 2017].
- SPIRN, A. W. 1996. Constructing Nature: The Legacy of Frederick Law Olmstedt In: CRONON, W. (ed.) *Uncommon Ground: Rethinking the Human Place in Nature*. New York: W. W. Norton & Company, Inc.,.
- STADSARKITEKTENS KONTOR MAGISTRATENS 2. AFDELING ÅRHUS KOMMUNE 2003. *Resultatet af Byplan-idekonkurrence om et nyt byområde i Lisbjerg 2002-2003*, Århus, Århus Kommune.
- STEFÁNSSON, F. 2009. Land og by. *Symbolleksikon Hentet 13. april 2017 fra* <http://denstoredanske.dk/index.php?sideId=426263>. Gyldendal.

- STEUTEVILLE, R. 2011. *Street fight: Landscape Urbanism versus New Urbanism* [Online]. Available: <http://bettercities.net/article/street-fight-landscape-urbanism-versus-new-urbanism-14855> [Accessed Generic].
- STOSS LANDSCAPE URBANISM. n.d. *Minneapolis Riverfront: Streamlines* [online]. Available at: www.stoss.net/projects/3/minneapolis-riverfront [Accessed 06/03/2017].
- SULLIVAN, L. H. 1896. *The tall office building artistically considered* [Online]. MIT. Available: https://ocw.mit.edu/courses/architecture/4-205-analysis-of-contemporary-architecture-fall-2009/readings/MIT4_205F09_Sullivan.pdf [Accessed 05/04 2017].
- SVENDBORG KOMMUNE. *Hvad er Cittaslow?* [Online]. Available: <http://www.cittaslow.svendborg.dk/hvad-er-cittaslow> [Accessed Web Page].
- SVENDBORG KOMMUNE 2006. Kommuneplan 2005-2017.
- SVENDBORG KOMMUNE 2010. Kommuneplan 2009-2021.
- SVENDBORG KOMMUNE 2011. Lokalplan nr. 540 For Sofielund, Tankefuld Nord.
- SVENDBORG KOMMUNE 2016. Lokalplan nr. 615 For et blandet bolig- og erhvervsområde ved Sofielund Skovvej i Tankefuld Nord.
- SVENDBORG KOMMUNE & AKADEMISK ARKITEKTFORENING 2007. Konkurrenceprogram: Tankefuld. Byplankonkurrence, Svendborg. Indbudt idékonkurrence.
- SVENDBORG KOMMUNE, NORD ARKITEKTER & HOLSCHER ARKITEKTER 2009. *Forslag til Tankefuld Masterplan*.
- SVERRILD, P. 1992. Forstaden – byens forlængelse – ny by – eller? *Fortid og Nutid*, 237-251.
- SVERRILD, P. 2008. *Hvem opfandt parcelhuskvarteret?* [Online]. Available: www.historie-online.dk/nyt/bogfeature/parcelhuskvarter.htm [Accessed Web Page 2013].
- SVERRILD, P. n.d.a. *AFLYST Vi gjorde forstaden til Danmarks største by - hvorfor elsker vi den ikke?* [Online]. Available: <http://dm.dk/Kurser-og-arrangementer/Find-kurser/2014034> [Accessed 2014].
- SVERRILD, P. n.d.b. *Forstaden er Danmarks største by - hvorfor elsker vi den ikke?* [Online]. Available: <http://www.dm.dk/FagligUdvikling/FagOgForskning/AdmOrgOgPol/Forstaden> [Accessed 2014].
- TALEN, E. 2010. *A tire in the park* [Online]. Available: <http://bettercities.net/news-opinion/blogs/emily-talen/13579/tire-park> [Accessed 2012].
- THE CONGRESS FOR THE NEW URBANISM. *The Charter of the New*

- Urbanism* [Online]. Available: <http://cnu.civicactions.net/history> [Accessed Generic].
- THOMPSON, I. H. 2012. Ten Tenets and Six Questions for Landscape Urbanism. *Landscape Research*, 37, 7-26.
- TULLY CONSTRUCTIONS. n.d. Final Cover and Related Work at Section 6/7, Fresh Kills Landfill Staten Island, NY [Online]. Available: <http://www.tullyconstruction.com/projects/details/?c=21> [2014].
- TULLY, P. 2013. On Landscape Urbanism. In: HOWARD, P., THOMPSON, I. & WATERTON, E. (eds.) *The Routledge Companion to Landscape Studies*. Oxon/New York: Routledge.
- UDBUDSPORTALEN.DK. 2016. *Tærskelværdier* [Online]. Available: <http://udbudsportalen.dk/udbudsguiden/ret-regler/taerskelvaerdier/> [Accessed Online Discussion Forum/Blogs].
- UNWCED. 1987. Report of the World Commission on Environment and Development: Our Common Future. <http://www.un-documents.net/index.htm>.
- VAGNBY, O. H. 2010. Tankefuld – en by, der vil det hele! In: FRANDSEN, J. N., MØLLER, J. & KRISTENSEN, H. J. (eds.) *Cittaslow – byudvikling med udsyn og omtanke?* : Syddansk Universitetsforlag.
- VAN BEEK, P. & VERMASS, C. 2011. *Landscapeology: Learning to Landscape the City*, Amsterdam, Architectura & Natura Press.
- VENTURI, R. 1966. *Complexity and Contradiction in Architecture*, New York, Museum of Modern Art.
- VESTERGAARD, H. *Projektbeskrivelse for "Attraktive enfamiliehuse i vækstcentrenes forstæder"* [Online]. Available: <http://boligforskning.dk/attraktive-enfamiliehuse> [Accessed 2013].
- VILSTRUP, K. 2001. *Ja, nej, ved ikke – om design, gennemførelse, rapportering og brug af repræsentative interviewundersøgelser*, Gylling, Narayana Press.
- WALDHEIM, C. 2001. Park=City? The Downsvew Park Design Competition. *Landscape Architecture Magazine, Journal of the American Society of Landscape Architects*, 91, 80-85-98-99.
- WALDHEIM, C. 2002. Landscape Urbanism: A Genealogy. In: REESER, A. & SCHAFER, A. (eds.) *PRAXIS: Landscapes*. Cambridge: Praxis, Inc.
- WALDHEIM, C. 2006a. *The Landscape Urbanism Reader*, New York, Princeton Architectural Press.
- WALDHEIM, C. 2006b. A Reference Manifesto. In: WALDHEIM, C. (ed.) *The Landscape Urbanism Reader*. New York: Princeton Architectural Press.

- WALDHEIM, C. 2006c. Landscape as Urbanism. *In*: WALDHEIM, C. (ed.) *The Landscape Urbanism Reader*. New York: Princeton Architectural Press.
- WALDHEIM, C. 2010a. On Landscape, Ecology and other Modifiers to Urbanism. *Topos*, 71, 20-24.
- WALDHEIM, C. 2010b. Weak Work: Andrea Branzi's "Weak Metropolis" and the Projective Potential of an "Ecological Urbanism". *In*: MOSTAFAVI, M. & DOHERTY, G. (eds.) *Ecological Urbanism*. Baden: Lars Müller Publishers.
- WALDHEIM, C. 2016. *Landscape as urbanism: a general theory*, Princeton, Princeton University Press.
- WALDHEIM, C. & SANTOS-MUNNÉ, M. 2001. Decamping Detroit. *In*: DASKALAKIS, G., WALDHEIM, C. & YOUNG, J. (eds.) *Stalking Detroit*. Barcelona: ACTAR.
- WALL, A. 1999. Programming the Urban Surface. *In*: CORNER, J. (ed.) *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press.
- WELLER, R. 2006. An Art of Instrumentality: Thinking Through Landscape Urbanism. *In*: WALDHEIM, C. (ed.) *The Landscape Urbanism Reader*. Princeton Architectural Press.
- WELLER, R. 2007. Global Theory, Local Practice. *Kerb, Landscape Urbanism*, 66-71.
- WELLER, R. 2008. Landscape (Sub)Urbanism in Theory and Practice. *Landscape Journal*, 27, 247-267.
- WELLER, R. & MUSIATOWICZ, M. A. 2004. Landscape Urbanism: Polemics Toward an Art of Instrumentality? *In*: BLOOD, J. & RAXWORTHY, J. (eds.) *THE MESH BOOK: landscape / infrastructure*. RMIT University Press.
- WHEELER, S. M. 2000. Planning Sustainable and Livable Cities. *In*: LEGATES, R. T. & STOUT, F. (eds.) *The City Reader*. London and New York: Routledge.
- WWW.RUDERAL.COM. *The Landscape Urbanism Bullshit Generator* [Online]. Available: <http://www.ruderal.com/bullshit/bullshit.htm> [Accessed Web Page].
- XAVEER DE GEYTER, A. 2002. *Research for the contemporary city: After-Sprawl*, Rotterdam, NAI Publishers.
- YIN, R. K. 1993. *Case study research: Design and methods*, Thousand Oaks, Sage Publication.
- YU, K. 2009. "Landscape Urbanism" and "Negative Approach Planning" [Online]. Available: <http://old.turenscape.com/english/news/view.php?id=187>

YU, K., WANG, S. & LI, D. 2011. The negative approach to urban growth planning of Beijing, China. *Journal of Environmental Planning and Management*, 54, 1209-1236.

English summary

This PhD thesis investigates the current orientation towards landscape as primary parameter for design seen in contemporary Danish suburban development projects. The PhD thesis' investigations address the theoretically defined discourse, variously described as *landscape urbanism*, that argues for replacing architectural form with landscape as the primary medium of city-making. By superimposing landscape urbanist theory onto practical urban design experiences obtained from scrutinising three projects for suburban residential development in Denmark, the PhD thesis discusses the practical articulation of landscape urbanism in Denmark.

Theoretically, landscape urbanism and its latest stage of development, *ecological urbanism*, draw on post-modern architectural movements in the 1980's. The discourse can be traced back to landscape architectural forefathers such as Frederik Law Olmsted in the 1880s to landscape ecologists like Ian McHarg in the 1960s and architects like Rem Koolhaas in the 1980s to James Corner in the 1990s. Architecturally, landscape urbanism's main focus is not on what is actually being built. Instead, it focuses on managing processes of change and suggesting flexible frameworks that set the stage for the uncertainty of contemporary urbanism. In landscape urbanism, natural systems are privileged over form in emphasising landscape as the most able organiser of post-industrial urbanity. By involving theories and practices, which have so far been either juxtaposed or isolated from one another, landscape urbanism breaks down professional boundaries and dismantles the traditional dualism between natural and synthetic, landscape and urbanism.

During the last couple of decades, the understanding of landscape and its role in urban development has clearly developed. In Denmark, the way the urban practitioners conceive and work with the relationship between build and unbuilt has seemingly changed and landscape architects have worked their way into the urban domain. From being background to being foreground, landscape has to a wide extent come to replace the built as the primary organising trait in many Danish suburban development projects. Through an architectural analysis of three selected Danish suburban resi-

dential development projects, i.e., Ullerødbyen, Bellinge Fælled, and Tankefuld, the PhD thesis discusses how landscape urbanism seemingly manifests in the projects' original designs. In addition, I present the respective designers' views and reflections via qualitative interviews that focus on landscape urbanism's practical significance to the Danish urban practitioner. Finally, in order to clarify what happens in the meeting between project proposal and Danish planning legislation and custom, the three cases are contextualised to the Danish spatial planning system. This contextualisation is furthermore supplemented by interviews with municipal key persons involved in the plan-implementation process of the respective projects with the aim of discussing the practicability of landscape-based urbanism in Denmark.

The investigations and discussions of this PhD thesis point to three main conclusions. First of all, I found that landscape urbanism's reversal of traditional order seemingly is unfolded and conceptualised in the three original projects. Each of the projects' plan design reflects a type of spatial order that enhances the planning and design potentials of open space areas and natural systems. Secondly, I found that even though the spatial motives and design incentives presented by the three projects were widely identical to those of landscape urbanism, neither of the interviewed designers considered themselves landscape urbanists. This paradox, I argue, points to some fundamental aspects of Danish landscape architecture tradition. Whereas landscape urbanism dissociates itself as a somewhat new and unique approach, the interviewed Danish landscape architects enhanced good design practice, i.e., thorough site research, focus on the integral whole, and not least of all aesthetics as '*comme il faut*' to landscape architects. The reason why the designers do not recognise themselves as landscape urbanists is, presumably, that landscape urbanism primarily - or at least in Denmark - is cultivated and discussed within the academic environments. In that respect, the landscape urbanism discourse may/may not have a direct link to what happens in Danish landscape/urban practices, but it is an integral part of the general Danish professional reorientation towards landscape and natural processes. Thirdly, in investigating landscape urbanism as a theoretically defined discourse in relation to the three Danish practical examples, I found that the meeting between architec-

tural visions and the Danish spatial planning reality was not entirely unproblematic. Whereas two of the investigated projects have been plan-implemented relatively unproblematic, the third project has during the planning process been altered to such an extent that the original landscape strategic visions are gone; Interestingly, this particular project held the opportunity to develop on a more locally customised, Danish version of a landscape urbanism. Nevertheless, due to severe planning obstacles, the project's original geometry and landscape-based development strategy has not been implemented. All things considered, this PhD thesis' empirical investigations have demonstrated that, in the suggested form and format, landscape urbanism, as a full-blown, transboundary planning and design approach, is difficult to unfold within the framework of the existing Danish spatial planning system and legislation.

Dansk resumé

Denne ph.d.-afhandling undersøger den landskabelige orientering, der ses i nyere danske forstadsudviklingsprojekter. Ph.d.-afhandlingens undersøgelser fokuserer på den teoretisk definerede diskurs, *landscape urbanism*, der argumenterer for at erstatte arkitektonisk form med landskab som det primære medium i byudviklingen. Her diskuterer ph.d.-afhandlingen den praktiske artikulering af landskabsurbanisme i Danmark ved at overlejlre landskabsurbanisme-teori med praktiske erfaringer opnået ved at undersøge tre konkrete Danske forstadsudviklingsprojekter.

Teoretisk trækker landskabsurbanisme og dens seneste udviklingsstadium, *ecological urbanism*, på post-moderne arkitektoniske bevægelser i 1980'erne. Diskursen kan spores tilbage til landskabsarkitekt-forfædre som Frederik Law Olmsted i 1880'erne til landskabsøkologer som Ian McHarg i 1960'erne og arkitekter som Rem Koolhaas i 1980'erne til James Corner i 1990'erne. Arkitektonisk er landskabsurbanismes hovedfokus ikke på, hvad der faktisk bygges. I stedet fokuserer landskabsurbanisme på at forvalte forandringsprocesser og foreslå fleksible rammer, der kan sætte scenen for en uforudsigelig byudvikling. I landskabsurbanisme er natursystemer privilegeret over form og landskab fremhæves som værende bedst i stand til at organisere post-industriel urbanitet. Ved at inddrage teorier og praksisser, som hidtil er blevet sidestillet

eller isoleret fra hinanden, nedbryder landskabsurbanisme tidligere faglige grænser og opløser den traditionelle dualisme mellem natur og syntetisk, landskab og urbanisme.

I løbet af de sidste par årtier har forståelsen af landskabet og dets rolle i byudviklingen udviklet sig. I Danmark har måden, hvorpå byplanlæggere opfatter og arbejder med forholdet mellem bebygget og ubebygget, tilsyneladende også ændret sig. Samtidig er mange landskabsarkitekter begyndt at arbejde indenfor byplanlæggerens traditionelle domæne. Fra at være baggrunden til at være forgrund har landskabet i vid udstrækning erstattet det byggede som det primære organiserende træk i mange danske byudviklingsprojekter. Gennem en arkitektonisk analyse af tre udvalgte danske forstadsudviklingsprojekter, Ullerødbyen, Bellinge Fælled og Tankefuld, diskuterer ph.d.-afhandlingen, hvordan landskabsurbanisme tilsyneladende manifesterer sig i de respektive projekter. Desuden præsenterer jeg de respektive landskabsarkitekters synspunkter og refleksioner via kvalitative interviews, der fokuserer på landskabsurbanismens betydning for den danske landskabsinfluerede byplanpraksis. Endelig kontekstualiserer jeg de tre projekter i forhold til det danske planlægningssystem for at præcisere, hvad der sker i mødet mellem projektforslag og dansk planlægningsrealitet og praksis. Denne kontekstualisering suppleres endvidere med interviews med kommunale nøglepersoner, der har været involveret i planlægningsprocessen af de respektive projekter. Her er formålet at drøfte praktiserbarheden af landskabsbaseret urbanisme i Danmark generelt.

Undersøgelserne og drøftelserne i denne ph.d.-afhandling peger på tre hovedkonklusioner. For det første ser det ud til at landskabsurbanismens omvendte optik tilsyneladende udfoldes og konceptualiseres i de tre undersøgte projekter. Hvert af projekternes plandesign afspejler en form for rumlig orden, som fremhæver åbne grønne rum og naturlige systemers planlægnings- og designpotentialer. For det andet fandt jeg ud af, at selv om de rumlige motiver og designincitament, som ses i de tre originale projekter, var stort set identiske med landskabsurbanismens, betragtede ingen af de interviewede landskabsarkitekter sig selv som landskabsurbanister. Dette paradoks,

argumenterer jeg, peger på nogle grundlæggende aspekter af dansk landskabstradition. Mens landskabsurbanismen forsøger at dissociere sig som en ny og unik tilgang fremhævede de interviewede danske landskabsarkitekter den gode designpraksis, det vil sige grundig stedsanalyse, fokus på helheden og ikke mindst æstetik, som 'comme il faut' for landskabsarkitekter. Grunden til, at de interviewede landskabsarkitekter ikke opfatter sig selv som landskabsurbanister, er formodentlig, at landskabsurbanisme primært - eller i det mindste i Danmark - dyrkes og diskuteres indenfor de akademiske miljøer. I den henseende har den landskabsurbanistiske diskurs måske/måske ikke en direkte forbindelse til det, der sker i dansk byplanpraksis, men den er utvivlsomt en integreret del af den generelle danske faglige re-orientering hen mod landskab og naturlige processer. For det tredje viste det sig at mødet mellem landskabsurbanistiske visioner og det danske plansystem ikke var helt uproblematisk. Mens to af de undersøgte projekter er blevet implementeret relativt uproblematisk, er det tredje projekt under planlægningsprocessen blevet ændret i en sådan grad, at de oprindelige landskabsstrategiske visioner er væk. Interessant nok repræsenterede netop dette projekt en oplagt mulighed for at udvikle en lokalt tilpasset dansk version af landskabsurbanisme. På grund af en kompliceret og konfliktfyldt planlægningsproces er projektets oprindelige geometri og landskabsbaserede udviklingsstrategi imidlertid ikke blevet implementeret. Alt i alt har ph.d.-afhandlingens empiriske undersøgelser vist, at landskabsurbanisme, som en fuldt udfoldet grænseoverskridende planlægnings- og designmetode, har svært ved at udfolde sig inden for rammerne af eksisterende dansk planlægningspraksis og lovgivning.

