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REFLECTING HISTORIES
AND DIRECTING FUTURES

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The Nordic Association of Architectural Research (NAF/NAAR) is an independent association of architectural researchers from universities and schools of architecture in the Nordic countries. The association has existed since 1987.

The present book is the proceedings publication from the 2017 NAF/NAAR symposium by the name of Reflecting Histories and Directing Futures.

NAF/NAAR symposia are held once a year. They are important platforms for critical reflection on architecture and architectural research in the Nordic countries. To ensure their dynamic and democratic format, the events are conceptualized and organized in collaboration with various partners and are hosted by a different university or school of architecture. Each year, the symposium focuses its discussions on a topic or theoretical framework representing the current research interests of NAF/NAAR and its collaborators.

Forty-seven scholars from the Nordic countries attended the 2017 NAF/NAAR symposium. All eleven articles in this publication—except those by invited keynote speakers Michelle Provoost, Director of the International New Town Institute (INTI), and Karsten Jørgensen, Professor at the Norwegian University of Life Sciences (NMBU)—were submitted to a double-blind peer review process, following a peer review template developed by NAF/NAAR.

NAF/NAAR is indebted to a number of people, whose names we are pleased to mention in this foreword. On behalf of the association, we wish to thank Eva Falleth, Dean in the Faculty of Landscape and Society at NMBU, and Ole Gustavsen, Rector at The Oslo School of Architecture and Design (AHO), who enthusiastically embraced NAF/NAAR by hosting its 2017 symposium at their institutions; Associate Professor Lisbet Harboe, AHO, Professor Elin Börrud, NMBU, and Associate Professor, Even Smith Wergeland, AHO, who were the driving forces behind the successful event and its organization; and
distinguished scholars Director Michelle Provoost, Professor Mari Hvattum, and Professor Karsten Jørgensen, whose keynote lectures framed the discussions of the event. Equally, we would like to express our profound gratitude to all of the many devoted peer reviewers who have generously supported NAF/NAAR and its work by offering their time and professional expertise to reviewing articles. Their willingness to participate sustained the book from start to finish.

Finally, we would like to thank our financial benefactors. The publication of the book was made possible thanks to the generous financial support of the Norwegian Directorate for Cultural Heritage (Riksantikvaren), The Oslo School of Architecture and Design, and the Faculty of Landscape and Society at the Norwegian University of Life Sciences.

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NOTES

1 Mari Hvattum, professor at the Oslo School of Architecture and Design, did not develop her keynote lecture into an article for this publication.
INTRODUCTION
Anne Elisabeth Toft

The 2017 NAF/NAAR symposium Reflecting Histories and Directing Futures was hosted by AHO in Oslo and NMBU in Ås. It took place on 15–16 June 2017 and coincided with the 30th anniversary of NAF/NAAR. This occasion not only called for a critical assessment of NAF/NAAR and architectural research in the Nordic countries, its history and changing concepts. It also encouraged reflection on architecture and its representational power.

The NAF/NAAR symposia engage in a discussion of research and architectural knowledge production as evolving practices. This symposium specifically focused on how the concept of the future has been expressed and understood in and by architecture in recent history, and in what way this understanding has shaped architectural discourse. It was an event which reflected on the agency of architecture and the visions and histories of different design cultures and their hegemony in society. Presenting a retrospective yet future-oriented framework for the symposium discussions, NAF/NAAR and its collaborating partners also encouraged participants to explore how the discipline of architecture is being shaped by different political, cultural, social, economic, and jurisdictional circumstances. The symposium pointed out the intertextuality of architects’ work and how the recognizable echoes of different influences add layers of meaning. It more directly fostered discussions that took into account the following three questions: How can we learn from historical futures through creative critical reflection? How can professionals in architecture, landscape architecture, urbanism, and planning project new futures along with a critical discussion of these projections? How are new futures imagined, directed, and critically reflected in contemporary practice?

With the present proceedings publication, NAF/NAAR and its collaborating partners wish to shed light on architectural research by taking a closer look at the social and cultural construction of concepts and theories that have defined society’s vision of the future. The publication looks at what role the work by architects, planners and landscape architects have played in shaping this vision.
The authors of the book's eleven articles come from academia and practice, respectively, and the articles represent a range of methodological and discursive approaches to the topic of the book. They are rooted in disciplines like architecture, landscape architecture, architectural history, cultural heritage studies, planning, and urbanism. The articles touch upon topical issues in society, such as sustainability, migration, and climate change. Central to the book, however, is housing and life in the city, but also questions regarding architectural representation and cultural heritage.

In his article ‘Landscape Architecture Education: 100 Years in Norway’, Karsten Jørgensen describes how landscape architecture education was established as the first academic programme of its kind in Europe. This took place in 1919 at Norges Landbrukshøgskole (The Norwegian University of Agriculture, NLH). The occurrence was politically significant and partly driven by a wave of nationalism that swept across the country after the dissolution of Norway’s union with Sweden in 1905. More generally, it was part of the long-standing process of constructing a nation state after Norway gained independence from Denmark in 1814. According to Jørgensen, the establishment of the academic landscape architecture education in Ås marked a modernization of the Norwegian higher education system and a new view in society on garden art, the city, and the countryside, as well as the cultivation and preservation of nature.

Hoogvliet is a borough of Rotterdam in the Netherlands. It was designed in the late 1940s. It adopted the principles of the English New Towns, and it represented the ideals at the time for architecture and urban design. In her article ‘Happy Hoogvliet’, Michelle Provoost reflects on how and why Hoogvliet, like many other modern post-war cities, soon experienced difficulties—eventually leading it to become predominantly a refuge for immigrants and a ghetto for the poor. Provoost in her article proceeds to describe the renewal of Hoogvliet which began in 2000 under the motto ‘WiMBY!: Welcome in My Backyard’. The project was run by Crimson Architectural Historians with Felix Rottenberg, former chairman of the Dutch social democratic party.

Martin Søberg, in his article ‘Kay Fisker’s Classical Principles for Modern Housing’, looks back on the work by the famous Danish modernist architect Kay Fisker. In the 1920s, he designed a number of building complexes in Denmark, which allowed him to explore the possibilities of large-scale mass housing through variations on the typology of the traditional perimeter complex.
block, a very common architectural typology in Danish cities. Søberg argues that Fisker did so with the aim of providing a fundamental framework for a new kind of modern life. In the article, Søberg discusses Fisker’s vision for the future of modern housing, and he unveils his method of transposing classical architectural motifs and principles of composition to contemporary architecture. This, according to Søberg, was a method used by Fisker, ‘not as a means of imitating a historical style but as a way of learning from the past in order to investigate and construct a future metropolitan condition’ that allowed for better living standards in the city. Søberg’s rereading of the works by Fisker sheds new light on Danish modernism in the 1920s and its historical references.

Anja Standal, in her article ‘Informing Future Urban Housing through the Morphological Development of the Terraced House with Mews’, investigates the historical terraced house in the United Kingdom; a housing typology which is not only very popular in the UK, but also in many other countries. According to Standal, it is a housing typology that in its present form originates from the nineteenth century; a time when housing development responded to the pressures of industrialization and the rapid densification of cities. Since recent sustainability goals have reintroduced densification as a current agenda, Standal suggests a future for the terraced house in new developments. In her article, she discusses the durability of the traditional typology, its history and many variations throughout the centuries, and how a configurational transformation of terraced housing with mews can, in her opinion, inform future urban housing developments.

The theme of densification in cities is also central to the article by Minna Chudoba, ‘Looking Up: Imagining a Vertical Architecture’. Chudoba sheds light on the image of the so-called vertical city and its meaning in architectural discourse. Reflecting on the representation of architecture and the densification of contemporary cities, she turns to discussions of the past, when modernist protagonists such as Le Corbusier and Eliel Saarinen introduced the idea of modern high-rise buildings. The aim of Chudoba’s article is to critically address the current discussions on city planning and the use of skyscrapers in Finland by contributing to this discourse a more thorough understanding of the history of tall building types.

The article ‘The Changing Enfranchisement of Stakeholders in Brutalist Architecture’, written by Tom Davies, aims at examining the role of Brutalist
architecture in post-war housing. In addressing the overall theme of the 2017 NAF/NAAR symposium Reflecting Histories and Directing Futures—and referring to Le Corbusier’s premise that ‘tomorrow belongs to nobody’—it discusses the relationship of the present and the future in planning and urbanism. The article looks at Brutalist architecture through the lens of cultural heritage, and it raises a number of critical questions regarding the agency of architecture and the preservation of modern structures. Davies in his article discusses the so-called Brutalist ethic, which, according to him, ‘sought to enfranchise communities and connect new design to historical continuity and the morphology of sites’. This was done as a basis for developing long-term strategies for buildings and users today. As Davies points out, many Brutalist structures were intentionally not complete when implemented. Rather, it was the objective of the architects who designed them that they should progressively develop in response to user requirements over time. Davies sets out to discuss in his article the implications of this approach when it comes to the protection and conservation of Brutalist architecture.

From a global sustainability perspective, there is an urgent need to rethink the potentials of the existing building mass in the Western world—and perhaps especially the many social housing units of the 1960s and 1970s—since future predictions suggest that a vast majority of it will still be in operation in 2050. Most structures of the past, however, will have to undergo extensive energy renovation if the overall energy consumption in the building sector is to be reduced. For better or for worse, the planned transformation towards a more energy-efficient building mass is likely to influence the experience of the built environment significantly. However, there is a lack of research, which illustrates the general expectations of the many architectural transformations ahead. Likewise, there is a lack of research and discourse on methods and tools that can help illuminate the architectural effect of the envisioned transformations. The article ‘Renovation of Social Housing: A Tectonic Dialogue Between Past and Present?’, written by Stina Rask Jensen, Marie Frier Hvejsel, Poul Henning Kirkegaard, and Anders Strange, focuses on specific issues of energy renovation in Denmark. By rereading the task of energy renovation through the lens of tectonic architectural theory, they aim at developing a theoretical framework for addressing the spatial implications of technical renovation initiatives.

In the article ‘Living on the Threshold: The Missing Debate on Peri-Urban Asylum Reception Centres in Norway, 2015–16’, Anne Hege Simonsen and
Marianne Skjulhaug address some of the challenges in society caused by the European refugee crisis which began in 2015. The authors argue that in 2016, almost 40 per cent of Norwegian asylum reception centres were located in so-called peri-urban landscapes across the country. In their article, Simonsen and Skjulhaug take a closer look at the asylum reception centres in Norway, their architecture and peri-urban locations, and how the centres function as temporary dwellings for refugees. They point out that recent studies show that the physical conditions of the centres are crucial to the asylum seekers’ quality of life, and that several researchers have emphasized the negative impacts of mediocre or low housing standards on asylum seekers’ lives. So far, however, according to Simonsen and Skjulhaug, a far less researched phenomenon is the significance of the locations of the centres and what role the often peri-urban situation of the dwellings might play in the well-being of refugees. This lack of research calls for further studies, and a key objective of Simonsen and Skjulhaug’s article is thus to investigate how asylum seekers engage in their temporary neighbourhoods and how the locations of the asylum reception centres may affect the refugees’ well-being and ability to integrate in society.

Otto Paans, Ralf Pasel, and Boukje Ehlen, who authored the article ‘Architectural Representation, the Controlled Future, and Spatial Practice’, reflect on the practice of architecture and on how the modes of thinking inherent in architectural design, according to their understanding, play a crucial role in architectural research. Their article leads to questions of architectural representation and the epistemology of architecture. Drawing on their own architectural practice, the authors present a number of architectural research projects characterized by experimental design approaches and methods that, in their opinion, point to reflexivity and criticality in architecture and to Immanuel Kant’s doctrine of aesthetic judgement.

In her article ‘Negotiating the Past of War and the Future of the Attractive City’, Liv Bente Belsnes presents the delicate case of Ekeberg Park in Oslo. Developed as a public-private cooperation project between The C. Ludens Ringnes Foundation and the Oslo municipality, the park, which opened in 2013, involved re-establishing a ceremonial site connected to a World War II war cemetery, built by the occupational power. The project, which caused a heated debate on history, heritage, ethics, and cultural policy in Norwegian society, forms the background for Belsnes’s reflections on the relationship and power structures between art and politics. In discussing Ekeberg Park
and its history, she draws on the theory on aesthetic regimes of art by the French philosopher Jacques Rancière, as presented in his book *The Politics of Aesthetics: The Distribution of the Sensible*.

Gunnar Sandin’s article “The Making of ‘Scandinavia’ in the Visionary Design of a Theme Park” engages with the proposal of a large amusement park to be located outside of Malmö, Sweden. The park, which was envisioned by its creators as a potential force in the future development and branding of the region of southern Sweden, was to be conceptually based on Scandinavian history, culture, and heritage. The article critically discusses image-making, the mediation of cultures, and the theme park as a simulacrum, and it pursues the representation of the notion of ‘Scandinavia’ and the epistemological construction and staging of this notion in the design proposals of the architectural project.

Architecture is always both about the reproduction of society and about proposing an alternative future. It raises fundamental questions related to representation and ways of representing; about normativity and criticality. The compilation of articles in this book presents different reflections on the agency of architecture and architectural designs. It is centred around how architects think and work when designing, and in what way their work is future-oriented. In summary, it focuses on how the concept of the future has been expressed and understood in and by architecture in recent history, and in what way this understanding has shaped architectural discourse. The aim of the publication is also to contribute to the discussions on how past understandings of the future direct current perspectives within and beyond architectural and urban practices, and in what ways the discipline of architecture is being shaped by different political, cultural, social, economic, and jurisdictional circumstances. It is the hope of NAF/NAAR and its collaborating partners that the book will provide new insights into and an understanding of architecture, architectural practice, and architectural research, and foster further discussion on these subjects.
ABSTRACT
Landscape architecture education was established at university level in 1919 at Norges Landbrukshøgskole (The Norwegian University of Agriculture, NLH), as the first academic programme of its kind in Europe. This establishment in a relatively poor country on the outskirts of Europe, with few traditions in the field compared to Sweden, Denmark, and Germany, for example, seems counterintuitive. Based on documents from the university archive, an explanation for the early academic founding of the discipline seems to be the pronounced need to raise Norway’s cultural level in a Nordic and European context in the early years of the twentieth century. This motivation found support in leading voices within art history in Oslo. At the agricultural university, an independent department for horticultural subjects was well established long before the turn of the century, and this department regarded itself as a natural place to set up the study of garden architecture. In conclusion, the article suggests a new understanding of the development and recognition of the landscape architecture discipline and profession in Norway.

KEYWORDS
Higher education, garden architecture, landscape architecture, Agricultural University of Norway
FROM GARDEN ART TO LANDSCAPE ARCHITECTURE

Landscape architecture has developed from a millennia-long tradition of garden art. The combination of an artistic and a horticultural focus led to great gardens like Versailles and Stourhead. The transition from garden art to landscape architecture came with a shift of focus in the profession from being primarily concerned with garden-making for (wealthy) private clients to working predominantly with public spaces in the form of parks, cemeteries, sports fields, and recreation areas, et cetera. The shift from garden art to landscape architecture took place in the enlightenment spirit of the eighteenth century. The first scholarly mention of the design of landscape for public benefit is found in 1779—fifty years before the term ‘landscape architecture’ was invented—by Christian Cay Lorenz Hirschfeld, a professor of philosophy at the University of Kiel, who published his *Theorie der Gartenkunst* in five volumes (Figure 1). In a small chapter of the fifth volume, he described what he named the *Volkesgärten* or ‘public parks’. According to Hirschfeld, this type of garden or park is found in some of the major cities, often called public promenades. He mentions Paris, Frankfurt, and London. According to Hirschfeld, such public gardens are of great significance for civic life and should be regarded as a necessity for all cities. It is a place of great natural beauty; there are walkways, roads for carriages, and benches for people, where they can sit and admire the scenery. This was obviously a timely observation, for during the next few decades *Volksgärten* emerged in almost every major city in Europe, also in Oslo, where King Karl Johan had bought land at Bellevue for the future palace and garden, and at Bygdøy for the public park that was opened in 1937.

The emergence of public parks around 1800 signifies a turning point for the profession of landscape architecture: after this date, landscape architects gradually turned their attention more towards public landscapes than private gardens. A major issue in Hirschfeld’s description of, and ‘programme’ for, the *Volksgärten* was the ‘democratic ideals’ that were linked to this new type of urban landscape: the parks should have general access, nobody should be excluded. The different classes, ‘by approaching each other more closely’, were to develop understanding and tolerance towards each other. In addition, the parks were meant to promote public health and ‘increase national consciousness and cultural unity’ among citizens by having sculptures and monuments commemorating important national deeds.

Later advocates for public parks expressed corresponding ideas. John Claudius Loudon published the article ‘Hints for Breathing Places for the Metropo-
Christian Cay Lorenz Hirschfeld (1742–1792) was a professor of philosophy and art at the University of Kiel. In 1779–85, he published *Theorie der Gartenkunst* in five volumes, in German and in French. *Theorie* was a very influential work, and Hirschfeld an important promoter of the English Landscape Style. Source: Weidmann Verlag, Leipzig.

Marie Luise Gothein (1863–1931) was an art historian and honorary doctor at the University of Heidelberg. Her work *Geschichte der Gartenkunst*, in two volumes, was published in 1913. (The English translation was released in 1928.) The work became the standard textbook at gardeners’ schools and at schools of landscape architecture in Europe. Source: Diedrichs Verlag, Jena.

Loudon thought that public improvements should be undertaken in a democratic fashion by the authorities, not sporadically by the benevolence of the wealthy. Frederick Law Olmsted referred to Hirschfeld and made several visits to European parks, when he worked on Central Park and Prospect Park in New York and consecutive assignments, for instance in Buffalo and Boston.

More recently, a new step in this development materialized as the European Landscape Convention. The convention states that, as a reflection of European identity and diversity, the landscape is our living natural and cultural heritage, be it ordinary or outstanding, urban or rural, on land or in water.
A central point in this convention is that landscape policies should also take everyday landscapes into consideration. Landscape architects have a strong common platform in this common professional history, as well as the garden art tradition (Figure 2). From these ‘commons’ we also have a common understanding, common concepts, and a common ‘language’.

One of the central concepts in landscape architecture is ‘nature’. This is not only the nature that scientists talk about focusing on biological systems and processes, but also the ‘nature’ that surrounds us whether in urban or rural areas; nature as green structures. Nature as our existential common ground. Olmsted saw this when he began advocating for the preservation of the Niagara Falls surroundings in the 1860s, which led to the founding of the first state park in US, the Niagara Reservation in 1885. The motivation was largely parallel to the ones found in Hirschfeld’s *Theorie der Gartenkunst*: ‘A man’s eye cannot be as much occupied as they are in the large cities by artificial things . . . without a harmful effect, first on his mental and nervous system and ultimately on his entire constitutional organization.’

Current research supports this position.7 The convention has contributed to a renewed focus on the links between public parks and public health: ‘A renewed interest in the ideas that contributed to the development of public parks and green-belts may bring back the landscape focus in urban and regional development that is called for in the European Landscape Convention.’

This convention has confirmed and strengthened the basis for landscape architecture’s allegiance. An innovative element in the convention was the shift from landscape as scenery to an all-embracing arena, where the stakeholders’ view is the focus. Thus, our common ground is not only public parks, but landscape as a whole. Landscape is a common resource. Landscape architects’ social mission is to enhance the common sharing of this resource for the benefit of current and future generations. This is reflected in the development of the education for landscape architects.

TEACHING LANDSCAPE ARCHITECTURE BEFORE IT BECAME A UNIVERSITY DISCIPLINE

Traditionally, recruiting for the subject mainly took place via apprentice schemes, particularly under castle gardeners and others who were responsible for large ornamental gardens. During the nineteenth century, teaching was increasingly given in ‘the laying out of gardens’ and the like at certain horticultural and gardener schools. Some of those who established a practice
in garden architecture and landscape gardening in Norway attended such teaching at Den Høiere Landbruksskole (The Higher Agricultural School) in Ås, where a separate department for horticulture was set up in 1887, and where the senior teacher Abel Bergström taught such subjects as laying out gardens and the history of garden art. One of the students at this school, Hans Mikale Misvær, took over from Bergström when he retired in 1900 and led the horticultural teaching as well as the park development on the campus of Norges Landbrukshøgskole (NLH). In 1918, Olav Leif Moen graduated from the horticulture department. After graduation, he got a job as a teacher at the national gardening school in Kristiania (Oslo), where he taught landscape gardening, drawing, and silviculture. At the same time, he also designed a number of garden projects and won a competition for front gardens organized by Kristianias Byes Vel. As we shall see, he later became the first professor of landscape architecture in Norway.

Others studied abroad—Ingolf Eide, for example, the most influential garden architect in the Bergen area in the early twentieth century, who studied from 1892 to 1894 at Vilvorde Havebrugshøjskole in Denmark, established in 1875. Karen Reistad studied from 1923 to 1925 at the Höhere Gärtnerlehranstalt at Dahlem in Berlin, an institution founded as Die Königliche Gärtnerlehranstalt on 20 August 1823 by Peter Josef Lenné (1789–1866). Those who completed the programmes at such colleges called themselves ‘gardeners’ or ‘landscape gardeners’, and in some instances ‘garden architects’. What all of these schools shared was that they did not offer education at university level—they were not academic programmes, such as the one established at Ås in 1919.

ESTABLISHING LANDSCAPE ARCHITECTURE EDUCATION IN THE USA AND EUROPE

In 1919, a new study programme in garden architecture was established in Norway. This was the first of its kind in Europe (Figure 3). Previously, only horticultural schools and gardener schools had offered teaching in the planning and laying out of gardens. How could it come about that little Norway established such a programme before major nations of culture like Germany, Britain, and France? What significance did the early establishment of this programme have for the development of the discipline in Norway, compared to other countries? This article attempts to give answers to such questions by taking a closer look at the background for the establishment of the programme and at how the study programme and the profession developed during the first half of the twentieth century.
The concepts ‘garden architecture’ and ‘landscape architecture’ come from a German- and English-language tradition respectively, but they mean roughly the same thing. The Nordic countries followed the German tradition when the profession was established in Norway. When the International Federation of Landscape Architects (IFLA) was established in 1948, with garden architect Elise Sørsdal as the representative from Norway, the English title ‘landscape architecture’ was chosen. As we shall see, the shift from garden architecture to landscape architecture took place in Norway during the 1960s.

The landscape architecture profession came into existence in the United States of America in the latter half of the nineteenth century, with landscape architect Frederick Law Olmsted (1822–1903) as the key figure. Around the turn of the century, study programmes in landscape architecture were esta-
lished at the high school and university levels in various locations throughout the States. First out was Harvard, which started a master’s programme in landscape architecture in March 1900. The programme was initiated by Charles William Eliot, president of Harvard University, whose son had been an apprentice at Olmsted’s office and practiced as a landscape architect before he died from meningitis in 1897. Cornell University followed suit with a Bachelor of Science degree in 1901, and a master’s degree in 1904. The question of higher education for landscape architects was also raised early on in this century in several European countries, also the Nordic ones, but only a few programmes were realized before 1950. It is striking that Norway managed to establish the first European study programme in the subject ‘garden architecture’ as early as 1919, despite the fact that the country was relatively poor and had no great tradition for garden art. Our closest neighbours, Denmark and Sweden, established their study programmes in 1960 and 1961 respectively. The five countries that started prior to 1950 were: Norway (1919), Germany (1929), Great Britain (1932), Portugal (1942), and the Netherlands (1948).

**SCEPTICISM ABOUT THE AGRICULTURE-BASED EDUCATION OF GARDEN ARCHITECTS**

As we shall see, both gardening and art-historical circles participated in the discussion dealing with the establishment of a separate education for garden architects. There was, however, pronounced scepticism regarding a study programme for garden architects linked to an agricultural college among established landscape architects in the Nordic countries. This was perhaps particularly true in Denmark, which had the largest professional environment in these countries at the time (Figure 4). A leading figure here, Erik Erstad-Jørgensen, says, for example, in a comment on the establishment of the study programme in Norway:

> But how is the agricultural college, which is an institution for agriculture in all its forms: agriculture, silviculture and horticulture, with many excellent teachings in various basic sciences such as chemistry, physics, geology and botany, apart from the more specialist subjects such as plant physiology, plant pathology and pure gardening subjects like the cultivation of kitchen gardens and orchards, running a nursery, flower culture, etc.—how is a young gardener at such an institution to be educated in garden architecture? . . . How many subjects would an institution for garden architects have to teach in order to do this justice? Apart from the
practical skills such as free-hand drawing, perspective drawing, watercolour painting and modelling, the young people should by all means available be drawn into the world of art. . . . For such teaching the agricultural college is not the right place; at best, a prospective garden architect can only learn how gardens ought not to be laid out . . .  

This scepticism very likely had its origins among qualified architects, who enjoyed high status, and with whom the established landscape architects wanted to be identified. The most widespread attitude among architects was probably that garden architecture hardly required any education other than a usual architectural background, topped off by a certain level of specialization within a knowledge of plants. This attitude naturally clashed with the most widely held view among horticulturalists, who regarded garden architecture as an extension of their own profession. In Norway, it was this attitude which formed the basis for establishing the study programme.

THE FIRST UNIVERSITY PROGRAMME IN LANDSCAPE ARCHITECTURE IN EUROPE

Even though Norway acquired a class of architects around the turn of the century onward that was interested in urban planning and garden architecture, it was the horticultural interests and gradually the agricultural college that took the decisive step of establishing a separate study programme in the discipline. This process escalated quickly in Norway, and it would seem that it was carried forward by a desire to elevate the cultural level of the young nation.

Den Høiere Landbruksskole was established in Ås in 1859. In spite of the fact that horticulture played an extremely modest role in Norway at the time, the discipline was given plenty of room at the college right from the outset. And even though economic horticulture was very much at the fore, emphasis was also placed from the outset on the aesthetic aspects of the discipline. In a festschrift that was published in connection with the centenary jubilee of NLH in 1959, credit for this was ascribed to the first principal, F. A. Dahl, ‘who was strongly influenced by the rich traditions horticulture had in his home country, Sweden, and who had a discerning eye for its potential.’ When the college started in 1859, great emphasis was placed on the designing of the surroundings. Dahl fetched the German gardener C. F. Liepe from Göteborgs Trädgårdsforening to draw up a plan for the park, and the Swedish gardener Abel Bergström was made park manager in 1860 to implement this plan. It can probably be ascribed to Dahl’s interest in the discipline of horticulture
that such great emphasis was placed on establishing a representative campus at the new institution. Bergström also gave lectures and practical exercises in landscape gardening until 1900. This was especially true after 1887, when he managed to get a separate horticultural department established at the college, a decade before the other departments for silviculture, dairy farming, agriculture, and surveying were founded. Those following the horticultural tract were also taught garden art. When Den Høiere Landbruksskole in Ås became Norges Landbrukshøgskole in 1897, an academic college with responsibility for research, Bergström gradually withdrew from teaching before retiring in 1900, and one of his former students from the first batch of horticulturalists in 1889, Hans Mikal Misvær, took over his position. Although the teaching was fairly modest in scope, it was nevertheless sufficient for some of the graduates in horticulture to choose to specialize in landscape gardening and garden architecture during this period. Most of them took supplementary education and practice abroad before gaining positions as city gardeners, or running their own garden architecture practice. As we shall see later, it was of great importance for the establishment of a chair in landscape architecture at NLH in 1919 that there was a rising class of garden architects who took part in the social debate from early in the century.

**EDUCATION IN GARDEN ART TO STRENGTHEN NATIONAL FEELING IN NORWAY?**

It was important for Norway to affirm itself as an independent cultural nation after the dissolution of the union with Sweden in 1905. Architecture, urban planning, and garden art were important arenas, partly in what can be called 'nation-building', partly in the self-affirmation of the new bourgeoisie, and partly in cultivating Bildung (education) among the common people, that is, as an educative project. Furthermore, there are grounds for believing that garden architecture had a special task in Norway—to display values about which town and country could unite, particularly values linked to nature. It is also conceivable that Norway did not have as assertive a class of architects as many other countries, and that this contributed to making it simpler to establish garden architecture as a separate discipline here than in other countries where architects might possibly have an interest in preventing the establishment of higher education for a competitive group.

There are many examples of garden architecture being brought to the fore early on in the century in connection with national values such as those just mentioned. We can clearly see this in connection with the organizing of an
important symbolic marking of the national state, such as the Jubilee Exhibition in 1914—the centenary of the Norwegian constitution. The exhibition area at Frogner was designed by the architects Marius Røhne and Iosef Oscar Nickelsen. Both the exhibition and the exhibition area were given much coverage in the press. *Aftenposten*, for example, printed an article by Carl W. Schnitler, professor of art history at Oslo University, with the title ‘The Gardens at the Jubilee Exhibition’. It begins as follows:

All of us hope that the great display at the Jubilee Exhibition of how far—or little—our country has advanced after a hundred years as regards material and spiritual culture will prove to have had the effect of rousing and unifying us to new assignments, have inspired us to find new and better solutions. Such a wish particularly applies to horticulture. For the first time in our country we have been able to see truly modern garden complexes in a European style.\(^{20}\)

There then follows a detailed and laudatory review of the complex, as well as an explanation of how the art historian Schnitler viewed the new concepts ‘the modern garden’, ‘the architectural garden’, and ‘spatial art in the open air’, and he adds that:

Of these new ideas, the garden complex at the exhibition is the first significant work that has been implemented here in Norway. . . . A lack of architectural attitude is the worst defect in our entire artistic culture. The capacity shown here for subordination and collaboration between architect and gardener\(^{21}\) is one of the most gratifying things the Jubilee Exhibition has given us.\(^{22}\)

There are several reasons for noting Schnitler’s role in this connection. His major work *Norske Haver* (Norwegian Gardens) from 1916 is of great significance for an understanding of garden art as an independent art form. In an epilogue to this work he talks about his intention in writing it:

The time has now come to try to recapture something of the attitude and beauty of the past, also in the larger context—the artistic harmony of the house with its surroundings. This is architecture in a broader sense. The beautiful unity between the city’s rows of houses, streets and open squares—between the single country house and the terrain around it, the garden we must now regain. . . . In this book an attempt has been made
to present a typological sequence of development and, at the same time, as an outcome of European art, the most essential of what Norway has produced within a single one of these areas. If it could contribute to our learning to work independently on the basis of the best in our domestic traditions, a considerable step would have been taken in the work to achieve our artistic regeneration.23

These quotations show that Schnitler had great ambitions for garden art in Norway, and the last sentence can be interpreted as meaning that he believed there to be a need for an independent study programme in the discipline. His involvement in this cause was already evident in 1912, in two major articles about ‘The Genesis of Modern Garden Art’, but it is most clearly in evidence in connection with the discussion about the plans for Vigelandsparken in 1923.24 Schnitler was an influential person, but he was not the only one to promote garden architecture in the public debate.

In 1914, the periodical Kunst og Kultur (Art and Culture) issued a special ‘garden number’. In it, the editor (and director of national antiquities) Harry Fett has an article about American playgrounds in which, clearly addressed to Norwegian urban planners, he writes about the work of the landscape architect Frederick Law Olmsted to create good places for children to play and pass the time in such cities as Chicago.25

In the same number, the garden architect I. O. Nickelsen has the article ‘Cities with Parks, Trees, Playgrounds and Flowers’, with the subtitle ‘Modern Garden Art’. He describes how gardens and parks abroad ‘are laid out along more architectural ideas, so they could harmonize with their surroundings’. He also says:

It was not to be expected that the professional, the landscape gardener, would happily accept this revolution in the laying out of gardens, and it was even less to be expected that he would immediately be able to acquire an understanding of its artistic justification; for that he did not have the necessary education or prequalifications.26

He then goes on to describe how ‘foreign gardeners, or garden architects as they are now called’ gradually digested the new ideas introduced by artists and architects, and even eventually improved them:
with the more academic and artistic education they gradually received, they did not make do with merely copying the reform gardens of the artists and architects, but sought their own ways of getting away from the laxity that had prevailed for such a long time, in which the landscape style had degenerated and was mainly used as a template without any conscious artistic content.27

Towards the end of the article there is a clear call to establish a better education within garden art, with a clear ‘national’ undertone:

I have already mentioned that Kristiania’s public gardens have remained completely untouched by the triumphal progress of modern garden art; but there can hardly be any doubt that a change is imminent in this sorry state of affairs. . . . the rise in culture will compel this to take place, just as a growing understanding of the enormous development of garden art in recent years will doubtlessly make it crystal clear that consistently thought-through and artistically defensible gardens can only be created by someone who is able to unite the ability of the architect to design and construct with the artist’s sense of composition and the gardener’s intimate knowledge of the life-conditions of plants and their effect in the landscape—by the modern landscape gardener or garden architect. Let us hope for a new era also in Norwegian garden art. It will and must come if we want to affirm our position in cultural society in general. Particularly for a tourist country like ours, it is important that our public parks present themselves in the most attractive form possible. Our visitors also assess our level of culture by the state in which our city gardens find themselves.28

This statement is also interesting in the light of Nickelsen’s role in connection with the establishment of a chair in garden art at NLH a few years later. He became an external member of the assessment committee that evaluated the applicants for the announced professorship at NLH.

THE BILL THAT PAVED THE WAY FOR GARDEN ART AT NLH

In 1911, a bill was put forward for changes at Norges Landbrukshøgskole, which, among other things, proposed a raising of the level: intake requirements were to be higher (at least two years of education as a gardener and three years of nursery practice to be accepted for the horticultural tract), the study period was lengthened from two to three years, and greater specialization was introduced via a division into various tracts within the individual
departments. Because of the First World War, the bill was not passed until 1919, but in the intervening years NLH had the opportunity to prepare for the changes that were to come. The question of a separate tract for garden architects was raised at the college council (later the professorial committee) for the first time in 1915, in connection with a letter from the ministry about the newly proposed bill. In 1917, the college council approved the setting up of a committee to evaluate the future organization of the curricula of the horticultural department. In October of the same year, the committee stated its position. It proposed a division into three tracts: one for growing fruit, one for growing vegetables, and one for garden architecture. Among its reasons for setting up a special chair in garden architecture:

Garden architecture is a subject that involves large-scale assignments and in itself has great development potential. And it is an important field for all levels of society. In the teaching at the college it has exceeded its formerly modest framework and from now on can only be kept abreast of the times and present developments by having its own chair. . . . An understanding of the importance of this discipline is now beginning to be realized, which is why garden architecture, sooner or later, will inevitably gain a place at a college in Norway. The committee is convinced that the natural place for such a discipline is at NLH, and that it would irreparably damage horticulture and garden architecture itself if it were removed from the department of horticulture and placed in some other educational institution.29

The college committee unanimously decided to recommend the proposal, and it approved the announcement of a professorship in garden art. In the course of 1918 and 1919, the professorship in garden art was announced three times without any qualified applicants seeking the post.30 With the blessing of the ministry, the first students were nevertheless accepted for the tract in garden art in 1919. The students had roughly the same timetable as other students in the Department of Horticulture during the first two years. Specialization in garden architecture only took place in the third year. In 1919, a stipend in garden art was announced, in the hope that the person being awarded it would qualify for the post. Olav Leif Moen was awarded this stipend in 1920, and he applied for and gained the position of lecturer in garden art in 1921, after studies in Berlin-Dahlem. In 1922, the first students graduated in garden architecture. There were not many of them: in the 1921–29 period, only fourteen graduated, and in the four following years none at
all, although there was apparently a need for this competence in society. Several of them gained high positions in the public sector; others established flourishing garden architecture offices. In 1929, Norsk Hagearkitektlag, NHL, (The League of Norwegian Garden Architects) was founded. So it took just under ten years since the bill that opened up the possibility for furthering greater specialization at NLH, and just under five years since the need for a separate education for garden architects was mentioned in any official document, before the study of garden architecture was actually established as a separate programme in the Department of Horticulture.

FROM ADVERSITY AND COMPROMISES TO SUCCESSFUL CONSOLIDATION

Times were hard for the new programme during the first few decades, with only a handful of students graduating each year. On several occasions there were confrontations between Moen and NLH. In 1948, for example, the Department of Horticulture proposed abolishing the division into tracts, so that garden agriculture would be one of several main subject areas under horticulture. Moen protested, gaining increasing support from the profession in these conflicts, but conditions for studying were extremely bad. Norsk Hagearkitektlag drew up a report on the inadequate teaching conditions that was referred to NLH, in which one of the proposals discussed was to transfer the entire study programme to Norges Tekniske Høyskole in Trondheim. The report was rejected by the Department of Horticulture, which saw no reason to distinguish between garden architecture and horticulture. When Moen died in 1951, however, the association was asked for advice about the future of the educational programme. The proposal to abolish the programme was dropped and teaching was substantially strengthened. More part-time teachers were employed, and Olav Aspesæter was appointed as the new professor in garden art in 1953.

The number of students gradually increased from the mid-1950s onward, partly because the study programme improved, but also because of an external factor: the large development of hydroelectric power, which people felt was ruining the landscape in such areas as Telemark—the heart of Norway—led to an increase in interest in nature conservation. Landsforbundet for norsk Naturvern (The National Society for Norwegian Nature Conservation)—later Norges Naturvernforbund (The Norwegian Society for the Conservation of Nature)—experienced a growth in membership, with the Mardøla protests in 1970 marking a climax.
During the 1960s, the increase in the number of students choosing the study programme continued. Bjarne Aasen and Toralf Lønrusten established a joint company and gave it the name Aasen og Lønrusten Landskapsarkitekterne AS. This soon led to more and more members of The League of Norwegian Garden Architects (NHL) changing their title from ‘garden architect’ to ‘landscape architect’, and in 1969 the association changed its name to Norske Landskapsarkitekters Forening (NLA). In 1972, the department followed suit, changing its name from Department of Garden Art (Institutt for hagekunst) to Department of Landscape Architecture (Institutt for landskapsarkitektur). That same year, the curriculum was revised and a compulsory first study year was introduced with a focus on agriculture—and the number of students dropped once more. In 1985, the study programme was given its own first study year instead of a general study year with the emphasis on agricultural subjects. It was only from this year onward that landscape architecture in Norway was a fully equal five-year course of study.

Since then, the number of student places has increased, from approx. fifteen to fifty per year in the centenary year of 2019. New landscape architecture programmes have been established at Oslo School of Architecture and at the Arctic University in Tromsø. Today, Norway is among the countries in the world that has most landscape architects in relation to its population and the profession enjoys a relatively high standing. And the discipline is looking ahead to identify future challenges. In times of global cultural and political diversity, it is key for landscape architecture to seek common understanding with landscape architects from different parts of the world in order to promote sustainable development across borders, common platforms with other professions and disciplines, transdisciplinary understanding, and common ground between opposing world views, so as to move towards peace and justice for people all over the world. Landscape architects are in many ways engaged in securing and developing environments that ensure sustainability, well-being, and quality of life for people on all continents, for example through the Landscape Architects Without Borders working group of the International Federation of Landscape Architects (IFLA).

Landscape architects not only have a common history—we also share the same future. This was emphasized in the report of the United Nations’ World Commission on Environment and Development called “Our Common Future” in 1987. The report focuses on the interdependence of nations in the search for sustainable development for the planet. Global development
leads to environmental, societal, and territorial challenges—urbanization alters land use at alarming rates, migration and political change increasingly bring into question people’s rights to use landscapes, and at the same time climate change and natural disasters pose new risks to land development. These global challenges affect how people interact with and perceive their everyday surroundings. Shaping these surroundings is the goal of landscape architecture—planning, designing, and managing functional, beautiful, and holistically sustainable places that respond to diverse human and ecological needs. All of these aspects form the basis of future developments in landscape architecture curricula (Figure 5).

Figure 5. Ian McHarg (1920–2001) was a landscape architect and professor at the University of Pennsylvania. His work in landscape planning at a regional scale pointed out a new direction for landscape architecture with a focus on environmental issues. This work was the basis for his book Design with Nature published in 1969. The book has profoundly influenced the discipline, and the principles set forth paved the way for the later geographical information systems (GIS). Source: Natural History Press, New York.
CONCLUSION

Norway established Europe’s first educational programme at university level in 1919, despite the fact that conditions were apparently too poor to justify such a step. Norway was a poor country with humble traditions in garden art. There are various factors that contributed to this early date. The most important single factor would seem to be the pronounced need to raise Norway’s cultural level in a Nordic and European context in the early years of the twentieth century. Such a contribution to nation-building also gained legitimacy from leading cultural figures such as C. W. Schnitler, who pointed to the need for a high level within garden art if Norway was to be perceived as a cultural nation. A crucial factor was also that Norges Landbrukshøgskole with a separate department for horticultural subjects was well established long before the turn of the century, and that this department regarded itself as a natural place to set up the study of garden architecture. It is also clear that the small but active group of professional garden architects have contributed to establishing the study programme and have played an important role as a mainstay when the programme received too few resources or was threatened with being discontinued. Today, landscape architecture education enjoys recognition in academia as well as in society, and in addition to celebrating the centennial of the study programme in 1919, both the profession and the discipline are looking ahead to solve new challenges related to globalization and climate change.
NOTES

1 William Andrews Nesfield, who designed garden areas for Buckingham Palace in London and Castle Howard in Yorkshire, was the first person to use ‘landscape architect’ as a professional title in 1849. The first person to use the term for the art of designing public open space, which is its modern usage, was Frederick Law Olmsted in 1863.


7 See, for example, the seminal *The Experience of Nature: A Psychological Perspective* by Rachel and Stephen Kaplan, Cambridge University Press, 1989.


11 Ibid., p. 464. Olmsted was active both as a landscape architect and a writer. In *The Public Park and the Enlargement of Towns*, for example, he develops ideas about the role of city planning and parks. See also Lee Hall, *Olmsted’s America* (Boston: Bulfinch Press, 1995).

12 Newton, *Design on the Land*, p. 332.


14 (Birli 2016)

15 Erik Erstad-Jørgensen, ‘Havekunst’, *Havekunst* 2, no. 1 (Copenhagen: Dansk Anlægsgartner- & Havearkitektforning, 1921), pp. 1–9, esp. pp. 5–6. In the same article, Erstad-Jørgensen proposes a teaching model that was later chosen in Denmark: ‘Teaching ought to finally be shared with painters, sculptors and architects of the same age, for it is via social interaction with one’s colleagues that one perhaps learns most, since here it is not so much a question of positive acquisition of knowledge but more one of gaining a sympathetic understanding of the nature of art and a certain degree of aesthetic insight’ (Ibid., p. 6). After the Royal Academy of Fine Arts in Copenhagen had featured garden architecture for a number of years among its subjects taught, an offer of a two-year programme with a final ‘examination of garden architects’ was formalized under the leadership of C. Th. Sorensen in 1951. In 1960, an independent programme in landscape architecture was also established at NLH (Abel and Stahlschmidt, ‘Landskabsarkitektuddannelsen på KVL har 25 års jubilæum’).

This has been shown in many contexts within culture-historical research. See, for example, the article ‘By og land, 1870–1910’ (Town and Country) by Povl Schmidt and Jørgen Gleerup in the book Livsrum og oplevelsesformer (Living Space and Forms of Experience) published by Odense Universitetsforlag in 1984. Another example is Erik Fossåskaret, who in the article ‘Tidsskifte ved tusenårsløpet?’ (New Era at the Millennium?) writes: ‘Culture-political efforts emerged as an effective means in the great nation-building project of the 19th century. More here than elsewhere. If Norway was to become a state, the country also had to show that it was also a nation to be reckoned with. Artists were to bring out the proud and magnificent’ (in Arnestad and Mjør, eds., Norsk kulturårbok 98 [Oslo: Det Norske Samlaget, 1998]).

The titles ‘gardener’ ‘landscape gardener’, and ‘garden architect’ are used fairly synonymously during this period. In Schnitler’s article, Nickelsen and Røhne are sometimes described as ‘gardeners’, at other times as ‘landscape gardeners’, while Aftenposten (as editors in connection with the conclusion of the Jubilee Exhibition) uses ‘garden architect’, which was being increasingly used at the time: ‘The exhibition has been planned by the garden architect Røhne.’

The criticism against the Vigeland complex came from various quarters—also from garden architects.

It is not clear to which chair the committee is possibly referring, but it is presumably that at Norges tekniske høgskole (NTH), where the first study programme in architecture in the country was established in 1910.
minutes of the meeting held by the latter on 20 November of the same year, it is noted that the ministry was unwilling to submit him for the professorship. NLH asked the ministry to reconsider its decision, but to no effect.


32 The executive committee of The League of Norwegian Garden Architects (NHL) recommended that the study of the discipline should continue to be at NLH, but that it ought to be separated from the Department of Horticulture and that a new professorship ought to be established in the discipline. One member, Torborg Zimmer (Frølich), dissented from this recommendation, wishing it to be mainly studied at NTH. See Magne Bruun, 75 år for landskap og utemiljø Norske landskapsarkitekters forening 1929–2004 (Oslo: NLA, 2004), p. 88.

33 Ibid., p. 92.

34 Barbara Birli, ‘From Professional Training to Academic Discipline’ (PhD diss., Faculty of Architecture and Planning, Centre of Landscape Planning and Garden Design, Vienna University of Technology, 2016), p. 35.

ABSTRACT
This article presents the renewal of Hoogvliet, which is an autonomous district 12 kilometres from the centre of Rotterdam. Originally designed in the late 1940s according to the principles of the English New Towns, Hoogvliet reflected the ideals at the time for architecture and urban design. However, like many other post-war utopias, Hoogvliet soon experienced serious difficulties and failed to live up to its promises of modernity, social equality, and progress. A majority of the first generation of inhabitants left the tiny apartments of the housing estate. The inexpensive houses of Hoogvliet instead attracted new inhabitants; the area became a refuge for immigrants, many of them from the Dutch Antilles. This change developed conflicts between the white well-to-do southern parts of Hoogvliet and the northern parts, which were increasingly dominated by socially weaker groups. The renewal of Hoogvliet began in 2000 under the motto ‘WiMBY!: Welcome in My Backyard’. The project was run by Crimson Architectural Historians with Felix Rottenberg, former chairman of the Dutch social democratic party. The concept of the project concentrated on the existing substance of Hoogvliet and the development of its ‘potentials’, which is both the inhabitants and the existing urban fabric. This approach called for a thorough analysis of Hoogvliet, focusing not only on problems and difficulties, but also on its positive aspects and qualities in the area. The strategy also needed a new type of town-planning document, a set of instruments that could help to steer the processes, directing them into a coherent policy. This is how Logica, a town planning manual for Hoogvliet, came into practice. Based on the same principles of enhancing existing qualities and potentials, a series of other projects was developed and realized between 2000 and 2007, among them co-housing, exhibitions, school classes, public events, and festivals, as well as a public park called the Heerlijkheid.

KEYWORDS
Hoogvliet, New Town, revitalization, WiMBY, Rotterdam
HAPPY HOOGVLIET

Only 6 kilometres long, Rotterdam’s subway line was the shortest in the world when it opened in 1968. Not surprisingly, the city took great pride in having built the Netherlands’ first subway. It was yet another sign of the city’s agility in reinventing itself after the devastating air raid that had destroyed its historical core in 1940. It manifested the two pillars of Rotterdam’s carefully cultivated image: modernity and progress. A new urban core dominated by buildings that meant business and spacious new housing estates fostered the city’s self-esteem. The subway was welcomed as a gadget that strengthened the new image. Starting in the rebuilt centre, the line crosses the river disclosing the old working class estates on the southern bank. It continues to the post-war housing estates that repeated endless series of identical or very similar units (which had appropriately been labelled ‘stamps’). For the time being the line ended in Slinge station, in one of the world’s most famous housing estates: Pendrecht.

The first designs for Pendrecht had been made by a vanguard of modern architects from the CIAM: Van den Broek & Bakema and Lotte Stam-Beese. The purity of the design and the much famed spatial concept had turned it into a model that inspired similar experiments all over Europe. It was one of the highlights of Dutch urban planning. The line was soon extended beyond the city’s municipal borders. First it led to the stations in Rhoon and Poor-tugaal. Even though we have hardly left Rotterdam behind us, the city looks light years away. Small villages accentuate the dikes; there are small shops, churches, and quite a number of farms: a typical Dutch pastoral. Green pastures show up on both sides of the subway line, willows mark the course of narrow country roads, and sheep graze the banks. Then, all of a sudden, one of the new housing estates appears and we’re back in Rotterdam. Station Hoogvliet is lined with high-rise blocks and large apartment buildings. It is the city’s farthest outpost, 12 kilometres away from the centre. Hoogvliet is a veritable New Town, an autonomous urban unit designed in the late 1940s according to the principles of the English New Towns near London. The reason to build Hoogvliet this far from the existing city was the passionate desire to do more than only repair the destruction caused by the war: the port of Rotterdam was to become the largest in the world. To achieve this ambitious goal, in the Botlek and Europoort areas huge new harbour basins were created and complemented by new industrial complexes. The small medieval village of Hoogvliet, situated in the immediate vicinity of the Shell refinery, was singled out as a ‘nucleus of growth’, suitable for housing the labour force
Figure 1. Source: ‘Plan in Hoofdzaak, de definitieve stedenbouwkundige opzet voor Hoogvliet’, 1953.
needed by the expanding port. Gradually, the old village was to be replaced by a completely new Hoogvliet. The historical port was filled in, and historical farms and the characteristic small houses along the dikes were demolished. As a prelude to these grand ideas, the old core near the seventeenth-century church (that had escaped demolition) was destroyed to make place for the New Town's shopping centre. The scale of this shopping mall was quite large: the plan envisaged shops, high-rise apartment buildings, cultural buildings including a musical centre, and a sports stadium. Hoogvliet was to become a regional centre, a sparkling magnet attracting people from the neighbouring villages (Figure 1). Lotte Stam-Beese's drawings of Hoogvliet radiate a mundane, urbane atmosphere comparable to Harlow or Stevenage, and quite different from the famous housing estate Pendrecht. Hoogvliet was to be a proud and independent urban core next to Rotterdam.

SUCCESES AND FAILURES
In its urban layout, Hoogvliet clearly reflected the ideals of the neighbourhood unit. The social hierarchy of family, neighbours, the neighbourhood community, and the urban society was mirrored by the physical hierarchy of the individual house, the street, a group of streets with a small shopping center, the neighbourhood, and the city at large. All housing units were designed as parts of a balanced community comprising various types of houses. The architecture of the houses, schools, and shops was sober and homogenous. This functionalist feeling was greatly enhanced by the industrial building methods that were applied in Hoogvliet. Apart from that, it expressed one of the great ideals of the time: social equality. An abundance of open spaces and collective gardens compensated for the small houses; the transparency and openness of the public greenery represented a new, open urban society. Naturally, traffic was organized according to the latest ideas on efficiency. Cars, bicycles, and pedestrians were provided with their own special lanes. These lanes were combined to create wide traffic arteries provided with ample greenery: a modern version of the American parkways. All components of the urban structure were endowed with the qualities of modernism and efficiency, simultaneously manifesting an idealistic social model (Figure 2).

Like most post-war utopias, the ideal New Town of Hoogvliet soon experienced serious difficulties. Instead of fostering social cohesion, the neighbourhood units promoted a feeling of contingency. In nearby Vlaardingen, sociologists discovered that inhabitants identified with their street and its
Figure 2. Photo: Maarten Laupman.
immediate surroundings, but not with the social module of the neighbourhood. To add insult to injury, the size of the houses was seen as too small. Lacking an extra room that could be used as a study, the houses offered in Hoogvliet were bound to have a devastating effect on the development of the individual personality, at the same time hampering opportunities to have harmonious family life. This was all the more serious because the population of Hoogvliet was made up of a curious mix of dockworkers from Rotterdam and immigrants from the agrarian provinces of Drenthe and Zeeland. They had their own dialect, clung to their own lifestyles, and formed a source of continuous friction. Finally, the possibility to transform Hoogvliet into an autonomous New Town was questionable right from the start. Rotterdam was nearby, and after the construction of the subway line and new highways in the 1960s, the inhabitants of Hoogvliet were no longer dependent on the amenities offered in Hoogvliet. What had been conceived as one of the blessings of Hoogvliet, its situation at a stone's throw from the Shell refinery, turned out to be a major setback, as a series of accidents and the continuously polluted air demonstrated. On 20 January 1968, an explosion shattered most of the windows in Hoogvliet, dramatically changing its image from a friendly, efficient, and modern city into the stigma of a place that could better be avoided.

Even before Hoogvliet lost its utopian ring, town planners had understood that its location was far from ideal. In the beginning of the 1960s, when new housing estates where still being added and the population of the New Town grew rapidly, the planners decided that the original vision of a city inhabited by some 60,000 people had become problematic. They decided to extend the subway line, adding one more stop to create Spijkenisse, at a safe distance from the industrial complexes. Spijkenisse was to develop into a New Town of approximately 80,000 people. The housing estates originally intended to be part of Hoogvliet were transferred to Spijkenisse. With it, the image of an optimistic, desirable housing estate definitely left Hoogvliet. Hoogvliet never had more than 37,000 inhabitants. Of the ambitious plans for a shopping mall with numerous cultural and recreational facilities, only some shops remained. Decades later, rows of terraced houses were built on the area that was left open. Even today, the area near the church gives the impression of a suburban wasteland, used for parking only. Instead of the urban, even semi-metropolitan character originally meant to single out Hoogvliet’s housing estates, the last ones that were built show a typically suburban character, defined by small, meandering streets lined with
single-family houses. Lost within one of these estates, stuck between the remnants of old dikes, the subway station is a far cry from the direct access to a really urban centre that was originally planned. The entrée to the city is marked by a vast and desolate square used as a bus station, where ten surreal bus stops all await the same line: no. 78. Whoever enters Hoogvliet at this point cannot help but remember the feelings of the town planners in the late 1960s: Hoogvliet is a town planning accident. It has become a mutant: half New Town, half suburb (Figure 3).

GHETTO
It may be true that Hoogvliet failed to live up to its promises of a New Town, and it is hard to deny that the dream of the modernist city became discredited here even before half of the project had been realized. Even so, Hoogvliet does exist and is there to stay. In the mid-1990s, over 30,000 people lived here, some of them the middle-aged ‘pioneers’ of the 1950s and 1960s. They liked Hoogvliet because to them it was a quiet place at a comfortable distance from the increasingly problem-ridden metropolis of Rotterdam. Many of the former inhabitants of Hoogvliet—those who could afford to move—had left the tiny, noisy homes and settled in the bigger houses of the surrounding cities. The inexpensive houses of Hoogvliet attracted new inhabitants: Hoogvliet became a refuge for immigrants, many of them from the Dutch Antilles. They took up residence in the northern parts of Hoogvliet, where their different lifestyles soon caused trouble. It did not take long for a real schism to develop between the suburban, white, well-to-do southern parts, which were mainly inhabited by native Dutch people, and the northern parts that were increasingly dominated by socially weaker groups. Nieuw England, the ‘oil’ estate, epitomized this new trend. In 1951, so-called fan-shaped flats had been erected here, lining streets named after regions rich in oil: Caracas street, Texas street. The homes in this area were especially small, built in sombre brick and located at the least desirable part of Hoogvliet: close to the oil refinery alongside the highway. In the 1990s, these streets changed into what soon became known as a ghetto. Junkies, drug dealers, and vandalism made Nieuw England an ideal topic for a documentary on Dutch television that further strengthened the image of Hoogvliet as a sad and lost neighbourhood.

REVITALIZING HOOGVLIET
To stop the downward trend, Hoogvliet proclaimed itself a disaster area in the mid-1990s. First of all, the fan-shaped flats were raided by the combined forces of the police, the public health service, tax collectors, and bailiffs who combed out all the apartments in an attempt to stop all illegal activities. Drug dealers were imprisoned, defaulters indicted, illegal tenants chased away. Subsequently, the remaining inhabitants were offered better houses elsewhere in Hoogvliet. The flats were demolished. Thus, the most disgraceful part of Hoogvliet had been dealt with in a mettlesome manner, meant to set an example for the next projects. The local authorities and the two housing corporations that had recently been privatized and owned most of the housing stock in Hoogvliet cooperated in an attempt to improve housing condi-
tions (Figure 4). No less than 5,000 houses, 30 per cent of the housing stock, were to be demolished, mainly flats of 56 square metres or smaller that could no longer live up to the expectations of the population of the 1990s. Likewise, the maisonette flats and the homes for the elderly that in the 1960s had been built around small courtyards, all of them miniature houses with only one small living room and an even smaller bedroom, were singled out for demolition. Marketable homes were to take their place. By creating a more diverse palette of housing types, reducing the rate of subsidized tenement housing (which used to be 70 per cent), a more diverse and well-to-do population was expected to be willing to move to Hoogvliet.

The revitalization campaign for Hoogvliet was clearly an answer to concrete needs, but it also reflected fundamental changes in the Dutch Welfare State. The state withdrew from public life, a concept that led Public Housing to become almost completely privatized. The Housing Corporations shook off their traditional role as social organizations and started to be run as semi-commercial companies. Not only in Hoogvliet, but in almost all post-war housing estates that have become subject to the processes of revitalization, this leads to strategies that are determined more by administrative and

Figure 4. Source: FAT Architects, 2001.
commercial concerns than by social ideas. As Jaqueline Tellinga put it in a recent publication on ‘The Big Make-Over’: ‘Since their privatization in 1995, the corporations have turned into real estate companies in which decisions on investments are taken at the highest level. They evaluate their possessions as part of their complete holdings, irrespective of their specific setting.’ This is why they choose a generic approach for all reconstruction projects, no matter how different the original situation may be. Everywhere, high-rise buildings and flats are substituted for low-rise, mostly single family homes; private gardens replace collective greenery, small neighbourhood shopping centres disappear, instead, large central shopping malls are designed. Last but not least: low-cost tenement houses are suppressed, expensive owner-occupied houses strongly promoted.

The revitalization of Hoogvliet followed the similar lines. To correct the negative image, it was decided to replace most of the urban structure, the public spaces, and the housing stock by something with a more ‘contemporary’ outlook. The characteristic composition of elementary blocks floating in space, so typical for the modern city, was considered out of date. They were replaced by enclosed spaces and traditional urban motives: the inner city street, the return of the building line as the main organizational principle, the square, the boulevard. The original concept of an introvert pedestrian shopping mall was to be turned inside out by moving the shops to the boulevard. The free-flowing public space that washed through the Hoogvliet’s urban tissue was to be framed by new blocks of houses, streets, and cozy courtyards. Collective spaces, a fundamental principle in post-war town planning, had to make way for private gardens. Everything reminiscent of the original ‘collective’ ideals was banned. From now on, the individual and his personal lifestyle were to determine Hoogvliet.

In short: the most characteristic feature of the revitalization scheme was the urge to eradicate the modern model on which the original plan for Hoogvliet had been based. Everything associated with it was seen as negative. The town planners’ main aspiration was to reinvent Hoogvliet. Even though they returned to tested traditional models, their ambition to bulldozer most of the existing New Town out of the way is reminiscent of the tabula rasa mentality of their colleagues who built Hoogvliet in the 1950s. The new plan did not relate to the existing situation any better than the original concept had related to the historical village it wanted to replace.
WIMBY!

In 1999, the alderman for physical planning, at the time a representative of the Holland’s green party, proposed a motion that urged for an International Building Exhibition modelled on the German example of the Internationale Bau Ausstellung (IBA) in Berlin and the IBA Emscher Park. It was a brave attempt to counter the prevailing currents in urban politics and the town planning profession, which were entirely focused on spectacular and highly prestigious projects in Rotterdam’s inner city. Instead, it wanted to direct attention to the slum like conditions in many of the post-war housing estates. The motion proved to be the starting point for the WiMBY! manifestation: Welcome in My Backyard. Since 2000, the management team has been led by Felix Rottenberg, former chairman of the Dutch social democratic party. The contents of the manifestation are defined by two architectural historians of Crimson, Michelle Provoost, author of this article, and Wouter Vanstiphout.

Even though the famous German projects inspired the WiMBY! project, it soon became clear that neither Berlin nor Emscher Park provided a model for Hoogvliet. Not only was WiMBY! never more than a miniature version of these projects; the context was also very different. Whereas the Emscher Park project worked in a virtual vacuum—both the industries and the population tended to move away from the Ruhr region—Hoogvliet was bombarded with reconstruction proposals. There was more than enough money, for revitalization had already started. The local political board, the corporations, and commercial realtors were engaged in what they called the ‘Hoogvliet conspiracy.’ A conspiracy that promised to be very successful.

Then came WiMBY! What could WiMBY! possibly add to a planning machinery that was already in full swing? Its special assignment was to improve the quality of the revitalization scheme, to introduce innovative concepts on various levels: social, economic, architectural, urban, and—most importantly—to make their proposals really happen. Visits to the Emscher Park had helped to give the participants some clues as to what was to be expected: industrial ruins turned into cultural attractions, the promotion of high-tech industries that built striking modern offices, beautifully designed public spaces, and magnificent light projects that attracted carloads of tourists from all over Europe. However—was this really what Hoogvliet needed? What kind of projects were possible, feasible, and necessary here?
It soon became clear that it was no use to found yet another separate organization, a real WiMBY! institute, to join the already existing organizations—this would only have led to time-consuming, competitive strife. Instead, we decided to concentrate on the existing planning machinery’s blind spots. We decided to cause a coordinated series of incidents that should have a marked effect on Hoogvliet. First and foremost, the projects that we embarked upon were to have a direct bearing to Hoogvliet and set an example for similar projects elsewhere.

Apart from engaging in concrete projects, we also wanted to change people’s mentality. Our focal point was the existing substance of Hoogvliet, both physically (the buildings) and socially (the people). As in so many reconstructed housing estates, there had hardly been time to reflect upon the object of so much planning fervour: the New Town of Hoogvliet. Nor had the results of research by sociologists, traffic experts, and town planning historians been properly assessed. WiMBY! identified the need to correct this as a prerequisite for reinterpreting the worn-out New Town. It wanted to rediscover its now hidden qualities as an unknown, captivating new urban entity with its own peculiarities. Reinterpreting and reusing what was already there was to become the guiding principle in the reconstruction process. As a consequence, some projects—the Domain Hoogvliet, Hoogvliet inside out, the WiMBY! Week—were on the verge of becoming social community work. Sometimes initiatives that bore no direct relation to architecture were most effective in presenting alternative approaches for sometimes over ambitious, large-scale reconstruction projects. Temporary interventions, cultural reprogramming, or a one-time event could help to rediscover the New Town’s hidden but positive qualities. Above all, it brings to light unexpected urban potentialities that can inspire future strategies. This potential is located both in the inhabitants and in the existing urban fabric. It is an open question whether or not a program based upon suburban and costly houses can ever generate such vitality.

ANTI TABULA RASA

We were absolutely sure that if Hoogvliet was to become a new, vital, and attractive city in ten years, then nothing could be more counterproductive than to start from scratch. The tabula rasa mentality that wants to do away with everything it encounters, from buildings to the underground infrastructure, may have been useful in the post-war reconstruction era, but in this case it was totally useless. Using existing qualities helps to prevent the New
Town from becoming generic, something that could have developed everywhere, in a suburb near Leeuwarden as well as in Enschede or Amersfoort. While the planning machinery set in motion by the corporations went on preparing the demolition of thousands of homes, postulating the values of the new, quiet suburban middle-class Hoogvliet that was be created in its place, WiMBY! worked at a totally different concept of Hoogvliet. Hoogvliet was to resemble itself and should not try to emulate other cities. It should find ways to deal with its green, village-like character and the ethnic make-up of its inhabitants, and it should cherish what positive opportunities manifested themselves. This approach called for a thorough analysis of Hoogvliet, focusing not only on problems and difficulties, but on its positive aspects. By stressing the negative qualities, the large-scale reconstruction process that had been going on for some time ignored the positive characteristics. Nobody mentioned the profuse greenery; public gardens were only seen as wasteland waiting to be developed. Nobody drew attention to the potentialities of the large community of people from the Antilles, for the problems of recent years only left room for negative feelings. Thus, many qualities that could have inspired the revitalization process were just simply discarded—an approach that seems inherent in Rotterdam’s ‘progressive’ tradition.

Our deviant views on Hoogvliet were first published in a book in 2000: *WiMBY! Welcome into My Backyard!*. Its cover illustrated our intentions: Hoogvliet’s historical church is shown adjacent to a vast expanse of Stelcon slabs, a symbol of the failure of the New Town but at the same time manifesting its own peculiar beauty. This beauty is enhanced by Hoogvliet’s unfinished character and can be seen in many places: the dike that had to make place for the subway line, but simply continues on the other side of it, farms that look out of place between the flats, geese and sheep grazing in a setting of 1950s architecture. The WiMBY! strategy demonstrates precisely these qualities by exaggerating even the tiniest specimens of it and by idealizing what went wrong. This analysis had distinct therapeutic features because it showed the inhabitants how unique their New Town really is. Thus, their ingrained inferiority complex was to be healed. We expected to promote a change of mentality that might help to stop the purely negative way of dealing with the existing situation. One of the earliest urban projects of WiMBY! seems to confirm that this strategy may be successful.
LOGICA
Believing that Hoogvliet has many positive qualities, we needed a different type of town planning document than the all-encompassing master plan. What was needed was a set of instruments that could help to steer the processes already at work, directing and manipulating them into a coherent policy. What was needed most was to create some logic in the often conflicting projects initiated by the many institutions working in Hoogvliet. This is how Logica, a town planning manual for Hoogvliet came into being. It was designed by the Rotterdam-based architectural firm of Maxwan Architects and Planners. Time and again, Logica emphasized the need for a joint approach of the ‘Hoogvliet project’. Logica stated that as long as a coherent vision was lacking, the revitalization campaigns could only result in a chaotic, unremarkable generic city in which the most important characteristics of the New Town would be lost. Logica identified the qualities that should be seen as Hoogvliet’s main characteristics. Four urban devices were believed to result in a consistent structure: the green buffer surrounding the New Town, guaranteeing a rural setting on all sides, the isolated situation of the neighbourhoods, endowing each of them with its own particular values, the green joints between the neighbourhoods containing the New Town’s infrastructure, and finally the overall green qualities of Hoogvliet, a result of the fully grown-up trees in the open spaces and collective gardens (Figure 5).

Logica presented clear choices: each of the four structuring elements were put to the test. Were they to be respected, or could one do without them? These issues were addressed in the so-called Logica committee that was made up of representatives of all parties involved: the municipal planning board, the local political board, two corporations, and the development agency of Rotterdam. The same issues were put before the inhabitants on the WiMBY! website. Thus, Logica changed from a plan into a negotiation process. It resulted in a binding choice for one of the twenty-four models that could be composed by combining the variables offered in the process. Remarkably, the strategy that was preferred opted for conserving and enhancing all existing qualities. Hoogvliet’s green neighbourhoods were to retain their self-contained qualities, flanked by wide parkways and surrounded by a recreational zone alongside the river Oude Maas.

NEW COLLECTIVES
While Logica addressed Hoogvliet’s urban and physical qualities, other aspects of WiMBY! focused on its social qualities. Like the physical quali-
Figure 5. Source: "LOGICA, een stedenbouwkundige handleiding voor Hoogvliet", MAXWAN, 2002.
ties, these social aspects were being grossly neglected, no matter how many publicity campaigns and inquiry procedures the official planning machinery organized. WiMBY! wanted more. We wanted to show what the inhabitants themselves had to offer. We wanted to exploit their creativity and make them responsible for projects we developed with them. In doing so, we discovered that the concept of the collective was much more important than the official reconstruction campaign took it to be. Working with single mothers from the Antilles community, we found that they needed forms of houses that combined the individual home with collective amenities and collective public spaces. The reconstruction campaign’s implicit mantra—‘collective spaces have become impossible to maintain because the contemporary New Town lacks a collective mentality’—may be true for the average Dutch family commuting from one place to the other in an ever-expanding network city, but it does not apply to other groups. Judging from the growing number of communes, even among native Dutch, there appears to be a growing need for collective arrangements. These considerations fostered three projects we organized with the support of the corporations. They are intended to accommodate new collective housing arrangements.

In one of the maisonettes—the most endangered type of house from the 1960s—a group of single mothers from the Antilles is provided with their own individual homes and a collective room that can be used as a crèche, a study, or a café. Part of the surrounding public spaces will also be brought under collective control and designated as safe places for children to play and mothers to eat or party together. In another maisonette flat in the same part of Hoogvliet, homes for young people are planned that follow the so-called ‘Foyer’ model which offers living, education, and work. The third initiative attempts to attract categories of people that so far try to avoid Hoogvliet. Even though Hoogvliet is easily accessible and has a lot to offer, its negative image puts off the more wealthy and creative layers of Rotterdam’s population. How to make Hoogvliet more attractive for these categories that could add to the social diversity of Hoogvliet? The usual type of single family house with a garden can be found anywhere. As such, it cannot induce people to move to Hoogvliet. It is believed that a form of co-housing might do the trick. Co-housing is a form of housing that combines twenty individual homes and a collective amenity that is assigned to them and managed by the twenty households living there. The nature of this collective entity is decided collectively. It can either be a day-care center, an ecological garden, a car repair hall, or a sports facility. Thus, a new meaning is given to the term
‘collective housing’. The oppressive connotations associated with the collective arrangements of the 1950s are replaced by self-defined contemporary forms that combine individual homes with a wide variety of opportunities to use public space.

COLLECTIVE SUBSTANCE
Judging from the way Hoogvliet manifests itself in its town planning and architecture, one would be inclined to think that its population must be homogenous. It is not. Behind the anonymous facades from the 1950s and 1960s a rich palette of people live. They differ in income, ethnicity, and lifestyle and express these differences in the way they dress and the way they decorate their homes. The photo project ‘Hoogvliet inside out’ asked dozens of people to have their pictures taken in a circulating photo tent. The elderly with their rollators, mothers with a pram, hip-hop boys acting tough—all kinds of people showed up. These portraits were complemented by interior photographs taken by designers Gerard Hadders and Edith Gruson. Subsequently, the portraits and the interior photos were blown up to larger-than-life billboards that were placed near the highway and as traffic signs at street crossings. Apart from that, they were used as propaganda for the WiMBY! week that was organized in December 2002 in a now demolished row of homes for the elderly, where all WiMBY! projects were presented, while half of the U-shaped row of houses was still occupied. The facades of the empty houses were used as huge billboards for the interior photos. All empty houses were dedicated to one of the WiMBY! projects, while in others historical movies were shown. In one of the houses, people could get their portraits taken, while the elderly people living nearby provided them with coffee. In this way, WiMBY! week showed not only a diversity of WiMBY! projects, but also the wide variety of people living in Hoogvliet.

EDUCATION
What are the elements that make a city worth living in? The quality of the housing stock and the shops, the facilities you find there, the surroundings, the population—all these things matter. In a depressed area, educational facilities are particularly important. A lot needed to be done to bring Hoogvliet’s schools up to date. Most of them had been built in the 1960s, many according to the standard types then designed by the municipal authorities. They are inconspicuous buildings in which the classrooms are connected by long corridors. The special rooms needed in present-day education are usually lacking. It is difficult to find a suitable place for teaching pupils on an indi-
vidual basis, for libraries, music performances, et cetera. The shabby concrete classrooms designed as temporary solutions when the schools became too small are hardly suitable for these purposes. The need for special classrooms is further enhanced by the changing make-up of Hoogvliet’s population. More often than not, children from various groups arrive at school without having breakfast. Provisions have to be made to help the parents. After school or during holidays, pupils have to be taken care of. Improving the facilities for primary schools, WiMBY! developed the so-called ‘SchoolParasites’, which were designed in cooperation with the Parasite Foundation. For three schools, beautiful facilities were created where the pupils can cook, eat, and work by themselves or rehearse plays. The plans by Barend Koolhaas, Onix, and Christoph Seyferth can be industrially produced. Apart from educational purposes, they can also serve to accommodate neighbourhood festivities, meetings, and gatherings of parents (Figure 6.1, 6.2, 6.3).

For secondary schools, a special initiative was already on its way: the concentration of three schools on a campus. This enabled them to share, for instance, sports facilities and the auditorium. WiMBY! urged the participating parties

Figure 6.1. Source: Barend Koolhaas, 2004.
Figure 6.2. Photo: Maarten Laupman.

Figure 6.3 Photo: Maarten Laupman.
to build this campus near the subway station. This was seen as a remedy for the disadvantageous location of the subway station, adding thousands of potential passengers, contributing to make the station safer, and giving the campus a function for the entire region. The campus is believed to make Hoogvliet a more attractive place: nice houses can be found almost anywhere; a nice campus is something special. Urging the schools in Hoogvliet to cooperate far more intensely than they were used to, the campus project tried to improve Hoogvliet’s educational system by promoting pupils to move from one school to the other. This should reduce the terribly high rate of dropouts. The subway station is presently framed by flats that are going to be demolished. The campus is going to be integrated in the housing program that is going to replace them. This will result in an ensemble of nice, small-scale school buildings and collective facilities such as a library that can be used by both the pupils of the schools and the inhabitants of the neighbourhood.

IN CONCLUSION: THE ESTATE HOOGVLIET
What will happen to Hoogvliet once all our projects have been realized? Will the result differ fundamentally from the outcome of revitalization schemes in other New Towns? Or will our efforts prove to be but incidents that are bound to drown in the vast reconstruction work carried out by the official planning bureaucracies? Are they but romantic visions illustrating the merits of an old New Town? Is it at all possible for a small organization like ours to alter the course of these bureaucracies, as WiMBY! claimed it would? Probably, the Domain Hoogvliet will be the ultimate test case. All what WiMBY! has stood for the last four years culminates in this project. The Estate Hoogvliet is a Summer Park intended to provide recreation and entertainment. It is situated in the green buffer between Hoogvliet and the highway in the periphery of the ‘oil’ neighbourhood. It comprises several components that have been developed in close cooperation with various groups of people in Hoogvliet: a tree collection, a graveyard for pets, a natural playground, sports fields, and a villa. The local inhabitants not only initiated all these amenities; they will also be engaged in building, managing, and maintaining them. In the park itself there are spaces for all kinds of activities: there are picknick and barbeque tables, and there is a pond for paddling. In the centre of the estate, the villa acts as an eye-catcher. It has been designed by the London-based firm of FAT architects that also planned the park. Its character is purely narrative. The ornamental facades show elements that refer to the original village-like, green Hoogvliet, the chimney of the Shell refinery that triggered off the idea to build Hoogvliet and the geometrical facades of the 1950s architecture. It is a Venturian deco-
rated shed containing the symbols and signs of a popular and recognizable visual language that can be understood by anyone (Figure 7). Even for fleeting passers-by, the need for a facility like the estate is easily grasped, for in Hoogvliet nothing ever happens. The shopping mall boasts of a brasserie where one can drink a cup of coffee, but for younger people there is absolutely nothing to do, least of all during evenings and nights. The villa is going to change this. There will be musical performances, plays will be enacted, family celebrations can take place here. Like the park, the villa has something to offer for everybody.

By keeping ourselves submerged in the wonderful world of Hoogvliet and engaging ourselves in a never-ending pursuit of the creative forces inherent in it, we believe that WiMBY! can contribute to a renaissance of the old New Town. Hoogvliet's negative image of a city inhabited by a dull NiMBY! population will be transformed into the positive image of a city with a peculiar mix of young and elderly people, people from the Dutch Antilles, nature, industry. A place that makes its inhabitants proud and visitors curious.
NOTES

1 This article was originally published as ‘Happy Hoogvliet’, in Happy: Cities and Public Happiness in Post-War Europe, ed. Cor Wagenaar (Rotterdam: NAi, 2004) and in Shrinking Cities, Volume 1: International Research, ed. Philipp Oswalt (Ostfildern: Hatje Cantz, 2005). Stylistic conventions and minor revisions have been made to conform to the publication at hand.

ABSTRACT
Providing sufficient housing for an increasing urban population was a significant challenge to modern architects. In Copenhagen, the Danish architect Kay Fisker (1893–1965) designed a number of estates during the 1920s, which allowed him to explore the possibilities of large-scale mass housing through variations on the typology of the perimeter block. Hornbækhus (1920–23) is particularly significant, in terms of both scale and typology, since the project leaves the centre of the block completely open as a collective greenspace. Fisker developed this scheme further in Jagtgaard (1924), Gullfosshus (1924–27), and other housing estates. These projects can be seen as materialized considerations of rational and geometric principles applied with the aim of creating order and proportionality in relation to a surrounding cityscape. Although the functional programme is different, I argue that an attempt to use such formal principles as a guideline to achieve architectural order is also demonstrated in Fisker’s proposal for the Amager Racing Track (1919–22), comprising a variety of spaces from the compartmentalization of the horse stables to the vast collective spaces of restaurants, lobbies, and viewing platforms. Through a reading of contemporary written discourse by Kay Fisker, Paul Mebes, and A. E. Brinckmann, amongst others, this article points to a perception of such classical principles of composition in contemporary architecture, not as a means of imitating a historical style but as a way of learning from the past in order to investigate and construct a future metropolitan condition. Composition, proportion, and typological diversion were some of these formal measures derived from historical studies and applied to contemporary architecture, so as to address the question of mass housing in a time of changing socioeconomic, political, and technological conditions, that is, with the aim of providing a fundamental framework for a new kind of modern life.

KEYWORDS
Kay Fisker, mass housing, classicism, modernism, Copenhagen
INTRODUCTION
Providing sufficient housing for an increasing urban population was a major challenge to twentieth-century European architects. It became a significant topic in international architectural discourse during the interwar period, perhaps most famously at the second CIAM meeting in 1929, held in Frankfurt am Main, during which the “Minimal Dwelling” was examined and debated. But the decade prior to this event had also witnessed noteworthy changes in the architectural typologies of mass housing, for instance in the construction of the German Siedlungen (estates) in Frankfurt am Main, Berlin, et cetera. In a Danish context, the architect Kay Fisker (1893–1965) was one of the key protagonists in this endeavour of developing contemporary architectural solutions to the problems of urbanization, a task that was clearly influenced by changing technologies—particularly in terms of sanitation—and by changing socioeconomic and political conditions in general.¹

During the 1920s, Fisker designed a number of large-scale housing projects in Copenhagen in which the traditional perimeter block was expanded and uniformized. Order, rationalization, and standardization were pivotal criteria and lines of direction in these architectural schemes. This article is an attempt to situate Fisker’s housing projects from this period in a typological, compositional, and discursive context. What sort of architectural principles did Fisker adhere to in developing his designs? How did they relate to the efforts of fellow architects? And how were such principles discussed in contemporary written discourse? In the standard histories of architecture in Denmark, the dominant direction in Danish architecture during the 1920s is usually described from a stylistics point of view as neoclassicism (or classicist), and Fisker’s projects do indeed comprise classical elements such as rustication, tripartition, and symmetrical facade layouts. Yet as I will argue in this article, Fisker’s relationship with classicism was not directed towards an exact imitation of a particular historical style; his attitude was not archaeological. Moreover, it leaned towards certain classical architectural principles so as to resonate with modern conceptions of what a contemporary city could be. Rather than recreating the past, it was a question of learning from the past in order to direct and construct the future.

Methodologically, the article is based on formal analysis of Fisker’s projects, with particular attention to typological aspects, and especially on examination and discussion of written discourse, both from the period in question and more recent texts, the latter in order to trace the reception of Fisker’s
projects and their affiliated agenda. The aim of the article is thus both historical and historiographical. Theoretically, linking words and buildings in the analysis of modern architecture and its discursive context is supported by the work of Adrian Forty in his foundational book *Words and Buildings: A Vocabulary of Modern Architecture* (2000), in which Forty argues for the consideration of verbal and written discourse to be viewed as part of architectural practice, intimately linked to a practice of construction of actual

Figure 1 Kay Fisker, Hornbækhus, Copenhagen, 1920–23. The Danish National Art Library

Figure 2 Kay Fisker, Hornbækhus, Copenhagen, 1920–23. Photo: Sandra Gonon, 2015. Arkitektur-billeder.dk
edifices. Along similar lines, the question of architecture as a project—which concerns not simply the individual buildings but considers a built project as a dispositive relating to the city and society at large—has been studied by Pier Vittorio Aureli in his book *The Possibility of an Absolute Architecture* (2011) and informs my approach to the analysis of the interdependency of Fisker’s projects and discourse as well.

**HOUSING AS AN URBAN FRAMEWORK**

In 1936, Fisker published the results of research into Copenhagen housing typologies, based on studies conducted at the Royal Danish Academy. This research covered the period from 1914 to 1936. In his introduction, Fisker pointed to the impact of the German architect Alexander Klein, who had investigated various types of flats in Berlin and attempted to develop new types of modern housing, published in *Wasmuths Monatshefte* in 1927 and in the Danish journal *Architekten* in 1929. Also, the research conducted by the German architects Otto Völckers, Ernst Neufert, and Otto Haesler was mentioned by Fisker as important sources of inspiration. Proposals for new housing types were also shown at exhibitions in Copenhagen during the 1920s. The central period in Fisker’s research was between 1918 and 1928. Part of Fisker’s introduction was based on an article on housing by architect and writer Steen Eiler Rasmussen, published in 1926 in *Architekten*, ten years before the release of Fisker’s results. Fisker was also attentive to the political and economic conditions that influenced housing construction during this period as a framework for understanding the building plans and the layout of individual flats. The most obvious change during this period, according to Fisker, was the transition from traditional perimeter blocks—which had dominated the Copenhagen cityscape for centuries—to new types of distri-

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Figure 3 Kay Fisker and Christian Holst, Jagtgaard, Copenhagen, 1924. The Danish National Art Library
bution, mainly constructed during the 1930s, including half-closed schemes, parallel houses, projects consisting of composition of blocks, or houses positioned at a ninety-degree angle.

The studies of changing housing typologies can be related to Fisker’s own mass housing projects in Copenhagen during the 1920s and 1930s. Hornbækhus (1920–23) is particularly significant, both in terms of scale and typology. The project leaves the centre of the perimeter block completely open as a collective greenspace, complete with large flowerbeds, a scheme which Fisker would develop further in Jagtgaarden (1924) and Gullfosshus (1924–27). The perimeter is retained in these projects, and they all feature classical elements such as a symmetrical arrangement of the facades, cornices, and tripartitions. But rather than stylistic imitations, the architectural theory supporting these projects was founded on objectivity and rationalization. Architectural objectivity had been sought by many architects and theorists following Art Nouveau or Jugendstil, for instance by the German architect Hermann Muthesius in his writings on Das Englische Haus (The English House, 1904–05) and his engagement in the Deutscher Werkbund. A new restricted classicism in the first decade of the twentieth century, for instance by Peter Behrens in his houses in Hohenhagen (1908–09), demonstrated this attitude of subtleness and clarity with implications on a typological rather than a stylistic level.

Societal changes were of substantial influence to Danish architecture during the first decades of the twentieth century. Regulations of rent levels were intended to secure the situation of people renting flats, to further diminish the consequences of the housing crisis, and to promote the construction of more housing. A law was passed in 1917 for the financial support of housing construction. Between 1922 and 1927, this was further supported by Statsboligfonden (State Housing Foundation). In Copenhagen, many of the large housing schemes constructed during the 1920s were a direct consequence of these initiatives, further supported by the fact that the municipality of Copenhagen frequently functioned as a commissioner of housing projects. Since land prices were kept down by the municipality, which owned major plots of land, this would result in new typological possibilities for the design of mass housing. One of the first of these rather large projects was Povl Baumann’s perimeter block built for the municipality in the working-class district of Norrebro around Struensegade in 1919–20, yet even prior to that and before the war, in 1912, Charles J. Schou had designed housing schemes
Figure 4. Kay Fisker, Jagtgaard, Copenhagen, 1924. The Danish National Art Library

Figure 5. Kay Fisker, Gullfosshus, Copenhagen, 1924, constructed in 1927. The Danish National Art Library

Figure 6. Kay Fisker, Gullfosshus, Copenhagen, 1924, constructed in 1927. The Danish National Art Library
in the Nørrebro and Sønderbro districts in which buildings would frame a common courtyard, with little or no protrusion of the block into the yard as had been typical hitherto in the privately commissioned projects—often motivated by financial speculation—constructed around the turn of the century.

Kay Fisker considered modern architecture as a project, that is, a pursuit of an ultimate solution and form. As Demetri Porphyrios has argued: ‘Povl Baumann in his Hans Tavsengade housing scheme or Kay Fisker in his 1923 Hornbaekhus, displace the notion of the habitat from the scale of the Parisian flat to that of the city block “Unité”, arriving in that way in the typology of the periphery block almost contemporaneously with Berlage, Oud, de Klerk or Kramer.’ Yet such a pursuit would not require the architect to establish a sort of avant-garde attitude, the presentation of the hitherto unseen and utterly original. It was rather an attempt to consider and develop existing models within the typologies and registers of housing. In what has been termed Fisker’s architectural testament, the essay ‘Persondyrkelse eller anonymitet’ (Personal Idolization or Anonymity) published in 1964, he points to the architect’s obligation to subordinate himself and his artistic will to the needs of human beings rather than attempting to create the spectacular: ‘We must remember that those architects, who are able to put to order our cityscape and our landscape and who are able to create a human environment containing good dwellings as a framework for the good life, are more valuable to society than those who create the individual and sensational artwork.’ Though this essay was written decades after the design and construction of the estates of the 1920s, a similar poetics seem to have been at work then: architecture considered a built framework for the daily life of people, whilst concurrently forming part of a total cityscape.

RULE OR SENTIMENT?
The classicist era in Danish twentieth-century architecture, spanning the period of circa 1915–30, has often been considered a strangely retrospective and transitional period between the historicist architecture of the nineteenth century and functionalism as a hegemonic style and ideology, which dominated Nordic architecture after the Stockholm exhibition in 1930. Nils-Ole Lund has pointed to a certain affinity for the orderly in both classicism and functionalism: ‘Classicism and Functionalism were animated by the same wish for harmony and rationality, logic and good sense. Both schools aspired to an abstract order.’ He nevertheless maintains an evolutionistic viewpoint in which classicism is merely a stepping stone towards functionalism. Chris-
toffer Thorborg, on the other hand, has recently questioned the narrative of classicism as a transitional phase. Thorborg argues against the standard interpretation of Danish classicism by the cultural-leftist historians who have interpreted the architecture of the period of circa 1915–30 as proto-functional rather than as an independent contribution and answer to modernity along the lines of Étienne-Louis Boullée and Claude-Nicolas Ledoux, furthermore suggesting the projects of such architects as expressions of the aesthetic sublime.8

The narrative of continuity and development is particularly evident in the writings of Tobias Faber. Danish architecture history—well into the twentieth century—is presented by Faber through this homogenizing narrative: ‘But the special cachet, which, in spite of all this, is apparent in Danish architecture, and the general architectural quality which has been characteristic for important sections of Danish building activities are due to an unbroken and close association with a functional, craft-dominated building tradition and its simple architectural expressions.’9 As we have seen, contrary to what this quote might suggest, innovative investigations were in fact conducted during the 1920s, meaning that the housing typologies in Denmark would change dramatically during the interwar years. However, as Faber emphasizes continuity, even the transition from historicism to national romanticism, classicism, and functionalism would present itself as one line of natural development.

Faber, opposing historicism and its international tendencies, emphasizes the idealism of the neoclassical period in Danish architecture from the mid-1910s to the mid-1920s. Rather than praising the stylistic aspects of neoclassicism, he points to a certain rationalism and simplicity, along with standardization of housing types, which would inform Danish architecture in years to come. As he states: ‘First and foremost, the sense of quality within craftsmanship and the use of natural materials was reawakened’—and this, according to Faber, was to be seen as a continuation of Danish tradition, including a ‘healthy, natural attitude towards smaller jobs’.10 Interestingly, Faber links such attitudes to one of the first historicist Danish architects, M. G. Bindesbøll, who, however, has been viewed as a predecessor of modern rational ideas, and Faber points to a link from Bindesbøll to Ivar Bentsen, Fisker, and others who represented a continuity within a so-called functional tradition, a term launch and promoted by Fisker in the 1950s.11 This should nevertheless not lead us to neglect the innovations and experimental work which Fisker and his generation of Danish architects
conducted, all along with acknowledging Fisker’s attentive eye to contemporary international architectural projects and research.

Other historians have as well pointed to the rational rather than stylistic pursuits of Nordic architecture during the 1920s, for instance Demetri Porphyrios, who in his text ‘Reversible Faces’ introduced the concept of Doric sensibility: ‘A clear contract was silently being formed between vernacular straightforward construction and classicist stereometry.’ Likewise, Carsten Thau and Kjeld Vindum have argued that this Doricism was indeed crypto-functionalist, its stylistic expression having to do with an interest in the archaic rather than in the decorative: ‘the Doricism of the 1920s did not express its intention through a literal copying of great Classical architecture; it sought to find an expression for the archaic goal of creating shelter, a basic architectural function, joined with simplicity and timeless textural effects.’

This narrative of classicism being driven by an aim of rationalization rather than style was in fact articulated already during the period in question. Thus, the art historian Vilhelm Wanscher, in his review of Carl Petersen’s Faaborg Museum, often considered to be the first example of Danish twentieth-century classicism, states that contemporary classicism is a tendency influenced by logic: ‘however briefly it may be of interest as an expressive form is rather insignificant in relation to the fact that it supports the pursuit of creating pure architecture.’ According to Wancher, classicism was serene by nature:

It fully knows the meaning and effect of its forms; it works with equal skill in plan, in cube, in space; it applies light and shadow as architectural parameters; it adores the regular proportions and the just location. Hence its works are in the best instances not just classicist but classical, which means that through them we enter into a relationship with absolute beauty, the kind of which human beings only understand through mathematics.

Following this Neo-Platonist point of view, architecture could indeed develop following its functions and a rational line of thought: ‘Without doubt, it is the reserved right of the present—if it can handle the task—to found a truly rational theory of architecture, one in which all elements are accounted for by their individual or mutual functions.’ However, not everyone was as delighted by the rational principles of the classical as Wanscher. Vilhelm Lorenzen, art historian and editor of Architekten, claimed that contemporary
architecture had lost its interest in materiality and Nordic traditions, thereby positioning itself against the national romanticism of the turn of the century:

The younger ones clamped down the weakness of the previous period in architecture: The lack of monumentality, the emphasis on details at the cost of the totality—in short, a preference for the picturesque and coloristic rather than the plastic and ‘homogenous’. But they first and foremost blame the elder ones that architectural beauty to them was something coincidental, unpredictable, something which could only be felt, but not reconsidered. . . . They require rules, types and schemas and are more Vitruvian than Vitruvius.17

Lorenzen’s statement was not undisputed. Carl Petersen stated in Architekten, as a reply to Lorenzen, that: ‘Of course the young know that it is sentiment which is crucial, that by which they have to fill up the expressive form that they choose. But the restricted form does not obstruct the full expression of sentiment for the one who masters it.’18 Petersen would demonstrate the expressive power of restricted form in his and Ivar Bentsen’s competition

Figure 7. Carl Petersen and Ivar Bentsen, competition project for the former railway terrain, Copenhagen, 1919. The Danish National Art Library

Figure 8. Ivar Bentsen, project for a philharmonic and opera building at the former railway terrain, Copenhagen, 1919. The Danish National Art Library
project for the Copenhagen railway terrain the very same year. Even before the competition, in 1919, Bentsen had published a proposal for this area, an opera and philharmonic building including offices and a shop, with repetitive bays and windows sized according to the golden section. The project was highly controversial and sparked an intense and critical debate on the pages of Architekten. Urs Item has described it as ‘an image of equality of human beings in the new society’. The quest for new typologies and rational principles was supported by Fisker, then also editor of Architekten. In a review of the Danish translation of the Swedish art historian Gregor Paulsson’s book Den nya arkitekturen (1916) in the journal Forskønølisen, Fisker wrote: ‘Principally speaking, where he [i.e. Paulsson, MS] works for a suppression of individualism, for an objective art, a uniform architecture, turning into types and standardization of the forms, he stands strong and true and in touch with his time.’ The review was illustrated with the perspective and plan of Carl Petersen and Ivar Bentsen’s competition project for the Copenhagen railway terrain, by which Fisker indicated exactly what sort of architecture he would consider to be ‘in touch with his time’: objective and uniform architecture.

9. Kay Fisker, competition project for a nursing home, Frederiksberg, 1919. The Danish National Art Library
STEREOMETRIC COMPOSITION

The restricted, repetitive architectural language and large-scale typologies of Bentsen’s and Petersen’s railway terrain projects resonate with Fisker’s projects from the same period, the end of the 1910s, such as the 1918 first prize competition scheme for a housing block at Store Vibenhøi in Copenhagen. It featured a concave facade adjusting to the shape of a large circular piazza, tall windows with French balconies, rusticated corners, and a massive cornice crowned by a balustrade hiding the roof. The competition was arranged by the municipality, but the project never realized. Hans Erling Langkilde describes these early urban projects in his 1960 monograph on Fisker as follows: ‘There is something cleansed and utterly completed about his houses—an independent tone that makes the familiar qualities which usually belong to this period of time. After all, the Vibenhøi project is more dependent on the spirit of classicism than on its props.’ Another competition project was for a nursing home in Frederiksberg (1919). It consists of two almost square courtyard houses placed diagonally in relation to each other, thereby slightly overlapping on one corner. The same sense of a massive block-like structure returns in Fisker’s first prize project for a hotel in Bergen, Norway, in collaboration with Ole Gjerlov-Knudsen (1919).
Once again, the plan is almost square and surrounds a square courtyard housing a two-story hall—and, yet again, the project was never realized.

Concerning the Bergen project, Langkilde mentions a clear correspondence between the plan and the facade, the latter indicating the repetitive distribution of the hotel rooms. Though the functional programme is different, Fisker’s attempt to use geometry and rational principles as a guideline to achieve the order was developed to an even higher degree in his project for a racing track on the island of Amager, on the outskirts of Copenhagen in 1919–22. Due to the complexity of the project, its scale, and the consistency with which Fisker applies the means of geometrization and typological diversion, this project can be considered a creative laboratory for architectural ideas. It was developed into a final tender stage, but disagreements between Fisker and the commissioner concerning payments resulted in Fisker being dismissed. The Amager Racing Track would comprise a variety of spaces from the compartmentalization of the horse stables to the vast collective spaces of restaurants, lobbies, and viewing platforms. It was clearly conceived as a modern recreational facility, situated close to a tram station and to the proposed Copenhagen airport, which, however, would not open until years...
later. Various perspectival drawings show a rhythmic grouping of cubic volumes and the entire complex is surrounded by trees as a sort of framework. The buildings form a classical pavilion system, with several square parts in different heights and sizes, framing several courtyards. The compartmentalization and use of the grid as a regulating system would remind us of the theoretical project by Jean-Nicolas-Louis Durand from the early nineteenth century. In one proposal, the six identical square plan buildings are placed on a line, with the middle ones connecting to a taller rectangular building at the centre, the outer ones to two square courtyards in which two other square plan buildings are situated around courtyards. When preparing this project, Fisker referred to similar projects in Berlin, for instance the racing track in Ruhleben designed by Rudolph Krone in 1908–09, drawings for which are found in Fisker’s archive, yet the architectural language at Ruhleben featured national romantic and neo-baroque details contrary to the schematized geometry of Fisker’s project.

A drawing of the Amager project in a bird’s-eye perspective illustrates the new and very urban sense of scale that was also to be found in contemporary projects such as those of Bentsen and Petersen, in Fisker’s Hornbækhus, and
later in his Jagtgaarden and Gullfosshus projects, amongst others. The large open room activated by the movement during the races, framed by plants like a wall, buildings along one of the longer sides, consisting of a continuous pavilion system mostly one storey high surrounding six square courtyards of which some attached to an even bigger courtyard. Hence, the whole system is based on proportionality between the parts of the building, with the square as a privileged geometric shape. In Bentsen and Petersen’s project for the former railway terrain, the contrast between the massive building scheme and the emptiness of the bordering Sankt Jørgens Lake emphasized the sublime sense of scale, just like the horizontal place of the racing ground contrasts the more delicate buildings forming a backdrop for the races.

Examining some of the plans for this project, it becomes clear that the square is a generating entity, forming a grid as a basis for the layout of the entire building scheme. This simple shape spreads across the ground and constitutes the full complex, binding together horses and people. Concurrently, the building contains a certain hierarchy, partly due to the tripartition with restaurant and tribunes placed in the middle on two floors, while the stables seem to subordinate to this core entity. The stables themselves are of particular interest, since they mainly consist of square horse boxes, connected with hallways. That is, a system of individual cells connected to an infrastructure, itself being linked with the major public space: the restaurant. The entire complex thereby forms a sort of mini-version of an urban situation, a community in which the housing of the horses is literally put into boxes yet joined to a monumental centre, the open landscape, and the actual infrastructure of the tracing track. Apart from the many other differences, one also finds an ensemble of individual cells, that is, the flats, the surrounding infrastructure, and the open landscape in the courtyard of the Hornbækhus housing project. Hence, we might consider Fisker to be working with a total structure in various projects, and though the plan of Hornbækhus is much more varied, the Amager Racing Track, along with his early competition projects, is an investigation into the formation of contemporary and later projects as well as some of their urban principles. That being said, the plan layout of Hornbækhus is also an adjusted figure and thereby very different from the pure geometries of the racing track. Its rectangular form slightly adjusts to the curvature of the street at Borups Allé, while a similar curvature is absent along Ågade Street, where the longest of the four facades stretches as a full plane as if to emphasize the almost endless repetition of facade elements like windows, yet this horizontal recurrence is contracted by the rusticated corners. If the facade features repe-
tition, then the plan is in fact revealed to be more complex, for the building contains a significant number of different plan solutions, determined by their position within the perimeter. The corners in particular contribute to this differentiation. As Fisker would state in a lecture given in Helsinki in 1927: ‘the highest virtues of architecture are to be found in proportions, which demand meticulous deliberation at all times. Material has lost its value as a means to elegance or as historical justification: what counts is its relation to the environment, to colour and surface treatment, which in itself also means attaining proportionality.’

FROM AROUND 1800 TO THE PRESENT

Paying attention to the relation between building and urban environment, thereby contributing to the creation of a totality, to proportionality, was also the concern of contemporary theorists and historians. As the German architect and theorist Paul Mebes wrote in the second edition of his influential book Um 1800: Architektur und Handwerk im letzten Jahrhundert ihrer traditionellen Entwicklung (Around 1800: Architecture and Crafts in the Last Century of Their Traditional Development), published in 1918:

The straight street, which is completely perceived as a closed space, is created by an architecture kept flat by the smooth treatment of the facades. From this stems the calm and enclosure of the streetscape, the eye is not strained by the loud plasticity of projecting profiles and the view glides unrestricted, guided by the lines of flight, into the depths.

This principle is illustrated in Mebes’s book by pictures of streetscapes in Copenhagen, Berlin, and other northern European cities. He points to the ‘harmony of the total picture’—a coherence in which monumental buildings may nevertheless stand out. Interestingly, Mebes even links this historical analysis to contemporary urban design. He argues that the art of city building during classicism is a model for contemporary design. Architecture in its most prominent task, that of building the modern metropolis, says Mebes, must follow the same principles as articulated by classicist urban design, the principles of ‘a total artistic organism’.

Similar connections between the compositional principles of classicism around 1800 and contemporary architecture were to be found in the work of the German art historian A. E. Brinckmann, who was quite influential to the Danish perception of classicism. Brickmann lectured on basic architectural
forms and spaces at the Royal Danish Academy in the spring of 1921 and subsequently published an article in *Architekten* on the topic of urban design during classicism. Fisker was editor of the journal at that point in time. In his article, Brinckmann emphasizes architecture from this period as being particularly intellectually inclined: ‘a clear and very cool-headed sort of artistic thinking.’ He further on connected classicism to the French Enlightenment during the eighteenth century:

Intelligence seeks the inner ordering and logic of development, seeks to clarify problems, as they appear in the creation of the art of building in an unambiguous way and provides, for instance, a spatial composition not as an orgiastic appearance but as a mathematical shape. Thought expands the outlook of present times and seeks in its pursuit to show the way for the future following the analogies of the past. . . . In short, *the mind now calls for an overview of the basic problems of the art of building, of object and space*, which a previous time had driven to the highest performances through instinct and sentiments.  

The article is illustrated by drawn plans of urban schemes such Durand’s proposal for a redesign of Place XV in Paris (1805), clearly structured according to a grid module: ‘The simplest sort of ground plan, the square, is chosen.’ Kirmo Mikkola has discussed how well the Nordic classicists of the twentieth century knew the French Revolutionary architects, pointing out that the Danish architect Edvard Thomsen published some of Durand’s drawings in 1924, however, Danish architects would have been familiar with Durand’s work even earlier, for instance from Brinckmann’s 1921 article. Brinckmann demonstrates an interest in urban design, how to create a composition between individual buildings and the larger cityscape, including public spaces and monuments. Hence, considerations of urban design and its consequences for the perception of volumes and spaces were significant during the 1920s. As Steen Eiler Rasmussen, architect and teacher at the Royal Academy’s School of Architecture, like Fisker, would state concerning Hornbækhus:

The enormous size of the house is shown by means of the hundreds of windows of equal sizes, windows which their grey frames bind together in long horizontal lines. The architect has emphasized the main features: dimensions and space. . . . He finds an almost pedantic order, and uniformity essential in such buildings; and that is quite logical. The subject is a collection of equal elements.
But even if the dimensions would seem to contradict the existing scale of the city, we might as well consider it an attempt to adjust to a new vision of urbani-ty. This is a building which adheres to the modern city of mass population and unforeseen speed—the speed of cars, aeroplanes, or even racing horses. In this sense, it is proportionate to the requirements of a contemporary metropolis.

CONCLUSION
In his 1936 research on housing typologies, Fisker pointed to the ‘stereotypical formalism’ of the state funding houses of the 1920s, but that they due to these measurements—rather than later houses—‘have more of a posture within the cityscape’. He thereby acknowledged and underscored the principles and aims set forth in contemporary Danish and German architectural discourse, such as the writings of Paul Mebes and A. E. Brinckmann. Fisker’s mass housing projects from the 1920s—the main examples being Hornbækhus, Jagtgaard, and Gullfoss—demonstrate an interest not only in the design of the single building but also in the buildings’ position within the urban situation and texture, the cityscape. This article has been an attempt at considering such aspects, and in particular some of the formal and discursive articulations of Fisker’s housing projects, also from the point of view of later considerations from this period in Danish architectural history. Fisker’s housing projects of the 1920s were partly influenced by changes in economic, social, and legal conditions during the period of the State Housing Foundation. They also reflect a more personal poetics that considered architecture a framework for good urban life. The projects of the 1920s demonstrate an interest in the ‘total scheme’ comprising individual elements, infrastructure, public facilities, and cityscape, composed with the means of geometry and a sense of order. These measurements, typological and compositional ideas, were in part related to historical studies of classicism around 1800. They were, however, not applied with the intention of copying a particular style; rather, they were conceived as rational and logical—and consequently as appropriate or even proportionate with the challenges faced by architects when giving form to a contemporary metropolis.
NOTES


4 Kay Fisker, ‘Københavnske boligtyper fra 1914 til 1936’, Arkitekten 6–7 (1936), pp. 113–128, esp. p. 120.


12 Porphyrios, ‘Reversible Faces’, p. 35.


15 Ibid., p. 2.

16 Ibid.


26 Ibid., p. 192.


28 Ibid., pp. 281 and 283. Italics are original.

29 Ibid., p. 284.


32 Fisker, ‘Københavnske boligtyper fra 1914 til 1936’, p. 128 (author’s trans.).
INFORMING FUTURE URBAN HOUSING THROUGH THE MORPHOLOGICAL DEVELOPMENT OF THE TERRACED HOUSE WITH MEWS

Anja Standal

ABSTRACT
The English terraced house is symbolic of dense urban fabric and originates from a time when housing development responded to the pressures of industrialization. After decades of efforts to rationalize the urban form under modernism and the functional city, sustainability goals have reintroduced densification as the current agenda, resulting in a revival of the terraced-house typology.

This article responds to the thematic approach of “past in present” in the call for papers, assessing the historical dimensions of structure and configuration in terraced housing within the built environment, and it considers the future provided for them in new developments. The objectives of the article are twofold: firstly, to investigate the context and development as well as the underlying configurational and spatial logic of the traditional English terraced house type; and secondly, to undertake a case study and morphological characterization of two British examples of development projects in London and Bristol from two different centuries, Westbourne Terrace, Paddington, London, and the Paintworks, Bath Road, Bristol. These projects are housing hybrids in which the terraced house type forms part of a composite plan and layout, and they represent a reinvention of the typology. The case studies provide an empirical basis for reflection and examination, asking how a structural understanding of the typology can inform the ongoing reappraisal of the terraced house in the United Kingdom and potentially other countries.

KEYWORDS
the British terraced house, development and context, morphological characterization, nineteenth century, urban form, urban block
INTRODUCTION

The English terraced house is symbolic of dense urban fabric and originates from a time when housing development responded to the pressures of industrialization. Whilst dense blocks of flats for the lower classes formed the response to the Industrial Revolution during the rapid growth of towns on the continent, in England—even in the most urban industrial regions—working-class families lived in small houses.¹

Since the Industrial Revolution, the terraced house has been the dominant house type in a British urban context. ‘Standardisation of plan’ and ‘building process’ have been two of the main reasons for the durability of this type.² Many houses in London and other cities were, from the late seventeenth century, built speculatively in the assumption that they would sell for the best price when finished.

The need for urban density is another reason for their permanence, given the high densities achieved by a range of variations on the terraced-house theme. The speculative method produced an enormous number of dwellings within a short time frame and forged the building industry in Britain ahead of its European counterparts in terms of production, the continent where the standardization required to increase outputs sufficiently took place later.

In the early twentieth century, the Garden City ideal drawn from the ideas of planners such as Raymond Unwin emerged as the model for addressing the slum conditions of Britain’s industrial cities, producing low-density and satellite suburbs.³ Following World War I, this turned into the revisionist approach of modernism and the functional city, typified by the urban block in the Unite d’habitation pioneered by Le Corbusier and CIAM (International Congresses of Modern Architecture), providing a new housing type. This was facilitated by developments in construction allowing buildings of increasing scale.⁴ During the modernist period, planners and architects condemned much of the Victorian and Edwardian housing as slums, seeking to clear and replace them with dense blocks and high-rise flats.

From the 1970s onward, following a strong reaction to the issues resulting from post-war housing, the terraced and semi-detached house saw a gradual revival, resulting in housing developments in a range of dwelling types.⁵ This article responds to the thematic approach to “past in present” in the call for papers, addressing the following research question:
How can the configurational transformation of terraced housing with mews inform future urban housing developments?

The article aims to assess the historical dimensions and transformation of the structure and configuration of the terraced house with mews and to look at the future provided for them in new developments. The objectives of the article are twofold: firstly, to investigate the context and development as well as the underlying configurational and spatial logic of the traditional English terraced house type, approached through the morphological development and physical role of type within the urban environment; and secondly, to undertake a case study and morphological characterization of two British developments in London and Bristol from two different centuries, Westbourne Terrace, Paddington, London, and the Paintworks, Bath Road, Bristol. These projects are housing hybrids, in which the terraced house type forms part of a composite plan and layout, and they represent a reinvention of the typology. The case studies provide an empirical basis for reflection and examination, asking how a structural understanding of the typology can inform the ongoing renewal of the terraced house in the United Kingdom and potentially in other countries.

THEORETICAL PERSPECTIVE AND METHOD
This article employs background research, literature review, and historical mapping, investigation of historical development and contextual relationships, to establish a morphological framework for assessing the urban block of terraced houses with mews.

Urban Morphology: Fundamental Elements and Analytical Approaches
The field of urban morphology is an international interdisciplinary field of research, which studies the city as human habitat through the physical urban environment. Urban morphologists focus on the tangible results of social and economic forces; they study the outcomes of ideas and intentions as they take shape on the ground.

Three main principles in morphological analysis are form, scale, and time. Firstly, three fundamental elements determine form: buildings and their related open spaces, plot or lot, and streets. Secondly, form is readable at different levels of scale comprising four common levels: the building/lot, the street/block, the city, and the region. Finally, urban form can only be understood temporally in terms of time since the elements of which it is comprised undergo continuous transformation and replacement.6
The field of urban morphology originally comprised three distinct schools of thought, the Italian, the English, and the French schools, which emerged and developed through decades of research. These schools comprised scholars from different professional fields, broadly: geography (English), architecture (Italian), and urbanism (French). In addition, there were individual researchers from a variety of other countries contributing to the field. The International Seminar on Urban Form (ISUF), founded in 1994, aimed to bring together the different schools and to provide a basis for an interdisciplinary field and establish common theoretical foundations. Today, four broad strands define the different approaches to the field: typo-morphological, configurational, historico-geographical, and spatial analytical. Each focuses on slightly different aspects of urban form using different methods and tools for understanding and analysis.

Generic Structure Diagram: An Analytical Approach to the Principles of Form and Scale

The landscape architect and urban designer Karl Kropf undertakes a detailed critical analysis of the definitions of different principles of urban form in his article ‘Ambiguity in the Definition of Built Form’. He reports on a variety of research into the structural aspect of the compositional hierarchy as a basis for identifying a common foundation for analysis, comparison, and synthesis. He examines seminal works within the typo-morphological and historico-geographical research (i.e. Conzen, Caniggia, and Maffei), concluding that the concept of compositional hierarchy has been most fully developed in these two strands. Kropf focuses on the hierarchical relationship between buildings, plots, and streets and their overlapping aspects and elements. Comparing different sources, he highlights ambiguities in the compositional hierarchy of the generic structure of built form, one of which is the urban block, and suggests a systematic approach for discussing these.

His synthesis establishes a common foundation and introduces the generic structure diagram, which shows relations between micro-elements of materials and structures and macro-elements of streets and urban tissues. This diagram shows relationships that connect the parts with the whole in the vertical cross-section, from below by the domain of its potential parts and from above by the position of the element as a part in composition. This includes relations between the building and plot, between plot series and the block, and between the block and the urban tissue. Additionally, a horizontal cross-section shows relationships that connect part-to-part on the same
level of scale, including relations between solid and void, rooms and spaces, plot and neighbouring plots, and plot and street. The diagram helps present elements and forms as patterns of relationships in a range of different ways. Within the structure of the diagram, elements are defined in three ways: in terms of position within hierarchy, outline as an object, and internal structure as an arrangement of parts. The diagram provides a basis for integration and illustrates complementary relationships between different approaches to urban morphology and available methods for studying and analysing various elements. The structure diagram defines relevant structural components and spatial and configurational relationships in built form. It also demonstrates the interdependency of the various scales and provides analytical answers to the two first principles of morphological analysis, form and scale.

Analysis of the configurational transformation of terraced housing with mews requires assessment of the layer of voids, within Kropf’s diagram, that form the open spaces of the urban built environment. These voids have generally been examined through the configurational approach of morphological research using methods such as graph analysis, j-graphs, axial line analysis, and isovists. The layer comprises a horizontal cross-section through the voids, revealing a part-to-part relation, which highlights topics such as territorial depth, spatial interaction, and boundary analysis, for example that of the building-street interface. This cross-section forms part of micro-morphological investigations. A vertical cross-section through the diagram shows the part-to-whole relationship, demonstrating the typo-morphological approach, with the voids at the lower level incorporated into the “solids” above. The diagram unites the two approaches, which complement each other and provide a broader view than on their own.

Development and Context: Time as an Important Principle
Time is the third principle in morphological analysis, and it is vital in reflecting histories and informing future development. In this, cultural and economic factors as well as context and development processes tell us something about the urban form’s ability to undergo continuous transformation and replacement. The durability of the terraced house over several phases reveals it as an interesting physical form for investigation. The development and adaptation processes it has undergone result from the type of development, the needs of the inhabitants, and policy and regulation within the time frame of the building and block. While this article is only able to touch upon these aspects lightly, the discussion will link the principles together and reflect on potential future investigations relevant for directing interesting futures.
Generic Structure Diagram of the Urban Block of Terraces

In the generic structure diagram, Kropf shows the position of the route or street space and its relationship to plot series. He addresses the primary front access point of a building to establish the hierarchical components that form the street. Kropf emphasizes a range of ambiguities connected to the street block, relating to the generative process of the streets in which the block is a by-product of that process. Different blocks are discussed in terms of how they address and form the street, from the simplest block without ambiguities of access to more complex blocks including multiple accesses from more than one side. He considers the block as occupying the same level as plot series in the generic structure, but as a resultant form with contributing parts (plot series), contributing forms (mutually connected streets), and a source form (urban tissue). However, this conceptualization of the generic structure diagram cannot solely work as a means of understanding the configuration and spatial logic of the urban block of terraces.

A more specific structure diagram, depicting the resultant form of the block, can address the transformation of the character of the mews street and the building processes in this article. The relationships of the block, both internally and externally, are of vital importance for the discussion and are shown in Figure 1 (below) as an expanded diagram, inspired by Kropf, which provides a framework for understanding the configurational and spatial logic of the terraced house in relation to the urban block and tissue (Figure 1).

The bottom layer shows relations between different voids and rooms in the hierarchy. Between the spaces, there are boundaries that characterize and include different aspects of access, interface, and relations. Looking at the

![Figure 1 Structure diagram of the urban block of terraces (source: author, inspired by Kropf [2014])](image)
terraced house, the defined spaces of a yard/garden and an alley/backstreet are included in the developed diagram. These voids were vital to the functioning of the terraced house. The yard provided a service area and practical space, typically for washing facilities and toilet, and the alley provided access for night soil (human-waste) collection. Similarly, the mews street provided access to the back stable of the terrace and often lay behind gates and arches, allowing service use only. Rooms establish buildings that relate to two modes of access: the presentable front access for guests and inhabitants; and the narrow alley. The buildings and rooms are part of an individual plot within plot series, producing a composition or aggregate of plots. The plot and plot series, together with the inner street (alley/mews), define the urban block, bound by street lines. As stated, Kropf’s original diagram does not place the urban block as a separate level in the hierarchy, preventing a visual distinction between the block and plot series in terraced house developments. This is important because this distinction can produce very different outcomes when looking at building processes. In some cases, the plot series coincides with the urban block. This happens when a developer is in control of the entire block—making the project likely to be built as an a priori form. In other cases the plot series are separate from the urban block, for example when groups of developers buy sections of the urban block for development. In the latter case, the urban-block is more of a system of processes rather than an a priori form.

BACKGROUND RESEARCH: THE TERRACED HOUSE WITH MEWS

The basic definition, or architectural intention, of a terrace from the eighteenth century onwards is thus to bind together a row of houses as tightly as possible, to give an impression, an illusion, of unity. The terraced house originated in medieval times with surviving examples like the rows of Chester or the Vicars’ Close at Wells Cathedral. The terrace in its current form dates to the late seventeenth century. The massive number of buildings constructed in this urban type results from the enormous increase in urban population in England and Wales during the Industrial Revolution, which between 1801 and 1911 grew from 9 to 36 million, and in total houses from 1.6 to 7.6 million. Cheap land, plenty of capital, and the development of an independent and resourceful building industry provided for the growth of population, with speculative development meeting demands. The basic plan and configuration of the terraced house is the same for larger
and smaller houses; two rooms on each floor, one front and one back, with the entrance and staircase placed to one side. It includes a yard at the back and access to an alley for service use. Within this simple basic plan, there are variables in size and accommodation, light and sanitary provisions. Of these, the following are significant: depth, height, access arrangements, staircase position, basements, and back extensions.

The method of producing the terraced house was a strictly cumulative method of creating form, through a speculative building process where the standard sizes of the building, when put together, define the urban block. A range of standards and types were developed during this period which regulated dimensions and quality of the material of each portion of the building. In addition, ‘units of intervention’ connected developers with each other, enabling cooperation over issues such as project planning, financing, or site supervision for the house (by class), the row, the groups of rows, and the estate. The speculators were often the estate owners, or someone who had bought or leased out the land from one or more established families. Roads were laid out, sewers dug, and the plots were parcelled out for sale to individual builders. If there was no single large estate, then smaller landowners often collaborated on the layout of streets and the allocation of functions. The first speculative developments helped to define and shape the form of later developments.

THE URBAN BLOCK OF TERRACES: PLOTS INTERLINKED WITH STREETS

The urban block is not an architectural form, but a group of independent building plots. It has a proper meaning only when it is in a dialectical relationship with the road network.

Because the development of terraced housing forms a cumulative method in producing urban form, its streets, and urban tissue, the process of development has been vital in determining the physical outcome on the ground. In the book *Urban Form: The Death and Life of the Urban Block*, Philippe Panerai et al. focus on investigating the urban tissue as an approach to understanding complex relationships between plot and built form, between streets and buildings, and forms and design practice. They connect the production of the urban block closely to interdependent but distinctive plots. These provide the basis for a construction-process, with a fixed legal and real-estate framework,
which determines the evolution of buildings and the types of use by the inhabitants. They emphasize that the thinking of the block as a whole is missing the point, reducing it to a homogeneous built-up area surrounding an empty centre. They stress the risks of taking up such a reductive way of thinking as showing only the outward appearance of urbanity without the conditions which allow this to happen. The urban block is not an a priori form, but a developing system capable of organizing parts of the urban territory.

The dialectical relationship between street and built plots creates the tissue and it is in the continuation of this relationship — capable of modification, extension and the substitution of buildings — where reside the capacity of the city to adapt to the demographic, economic and cultural changes that mark its evolution.

The street blocks “are the areas within the town plan unoccupied by streets and bounded wholly or in part by street-lines.” The plots are interlinked by the streetscape, in which layout determines the relationship of site, centre, and capacity for extension. The width and depth of plots condition what type of buildings can be built, for example a narrow plot corresponds to terraced housing while a wider plot corresponds to villas and apartment buildings.

THE ENGLISH TERRACED HOUSE WITH MEWS
This housing form is predominantly a Central London typology, but other important examples occur in other cities such as Bath and Brighton. The mews originated in the late seventeenth century, becoming widespread as the upper-class norm for dwelling moved from the countryside’s manor houses to the urban context. The grand terraced house provided for affluent families and included public areas for entertaining, private areas for residents, in addition to accommodation and working space for servants and service.

The typology originally consisted of a grand terraced house with a stable and accommodation for coachmen called the mews house at the rear end of the yard. The terraces often had full basements with a layout that was broadly that of the rooms above, where the back included the kitchen and the front housed the servants’ hall/breakfast room. The basement always had a door at the back opening to the yard, and in addition to this, the London terrace often had a door at the front. The ground floor was usually at street level, while the basement was one floor under and completely underground. A space called the area with dimensions from 1.5 to 3 metres wide served to
make a separate front access to the basement with a proper window. This resulted in the front of the house being separated from the footpath by an open space that had to be bridged to reach the main, front entrance on the ground floor, with a door to the basement usually fitted under the bridge.\textsuperscript{27}

The mews house faced onto a small backstreet, usually shared with the row of houses and stables on the other side, which made up the urban block. Each mews house comprised a stable and coach house at ground floor with the coachmen’s living quarters above.\textsuperscript{28} The demographic density in these small houses was high, with rooms rented out for other service personal and merchants. Elevations were typically plain, two storeys high and with large carriage doors on the ground floor.

The grand terraced house has clearly defined physical boundaries between built and unbuilt, between inside and outside the urban block, and between different users of varied social status. The main front access of the house defined important streets and boulevards, while the rear back access (of the mews house) was hidden in the service street behind. Entrances to these areas, often placed behind gates and arches, had lower social status than the more affluent areas they belonged to. The inner street created a configuration which people could move through, but it was really only used by the service people working there. The terraced house with mews occupied one plot, comprising a building of rooms, kitchen, and bathroom facing the main street, an open service yard that was an object of transformation and further development, and the stable building (now mews house) which was connected to the yard by windows and a door. The plot and its physical morphology clearly define front and rear access points.

**The Split: Separation of Mews from the Main Building**

A defining characteristic of the mews building is that it constantly had to adapt and change to new demands and occupancy, including changes in inhabitants, use, and social status.\textsuperscript{29} From being downtrodden and impoverished servants’ quarters of stables and coach houses, they were first transformed into car workshops and studios for designers and artists, and more recently (from the late 1970s) into affluent homes for the more wealthy.

From the 1850s, there was a clear divide between the back mews and the front street, although the stables were still a part of the same plot, but without a direct link within the plot. The major change in the configuration and use
of the big urban terrace resulted from the advent of public transport, through trains and buses, and motor cars, and a drastic reduction in the average number of servants employed in the typical household. By the early twentieth century, few horses remained in the city and the car utilized only some of the space of the mews building as a garage. This extra space began to be utilized for residential conversion of the stable building, the first of which took place in 1908 at Mayfair. This conversion was made possible by the Small Holdings and Allotments Act passed earlier that year, which made it difficult for developers to buy the land for new development and convert mews for residential use. The demand for these attractive mews houses increased rapidly pre- and post- World War I, and they became popular dwellings among young chic people in the 1920s.\textsuperscript{30}

The mews house became independent from the main house, which typically occurred during the late 1910s and early 1920s, long after the horses had left and at a time when a shortage of housing and economic wealth helped to make the mews attractive as dwellings.\textsuperscript{31} The qualities were many:

- the privacy, the hidden character, the lack of traffic, the individuality, the (until recently) easy-to-afford smallness of the houses, the lower cost of rates and maintenance, the close proximity to work and shopping, the sense of community, the pride of ownership and the feeling of country village in city centre.\textsuperscript{32}

The popularity of mews houses as dwellings decreased in the years between the 1940s and the 1970s, where new ideals for garden cities and the developing state agenda for council housing set new trends. However, with the preservationism of late 1960s and 1970s, its popularity increased and the mews house established itself as an urban house of quality for the wealthy.\textsuperscript{33} The split between the main building and its service building (mews) was a simple concept, however the actual separation could be challenging. Rerouting of electrical, water, and gas services and separation of drains had to be undertaken. In addition, new separating walls without overlooking windows and interconnecting doors were constructed. The split created two plots with different characteristics and outdoor spaces. In addition, the big urban terrace converted into flats and the basement entrance became a front entrance for a separate flat. The former yard changed characteristics from being an important outdoor practical area (washing, outside toilet, etc.) to an individual garden for leisure and stay.
From providing a rear access to the big urban terraced house, the mews house now had a front access to a more intimate residential inner street. This transformation process established an outward-facing property with a new role in the urban environment. From being a service area for stables and horses, it became a residential street connected to the urban fabric. It established another layer in the networks of urban streets that make room for meandering through a range of different context within a small radius. The split has offered a new layer of public-private interfaces within the city, providing new collective inner streets for residents and guests. From being one plot and one property, the terrace transformed into two plots and a new typology with characteristics similar to the back-to-back typology, a prototype of spatial efficiency and suitable for dense structures.

CASE STUDIES: THE PAST IN THE PRESENT
The case studies carry out morphological characterization of two British housing developments from two different centuries: Westbourne Terrace, London, and the Paintworks, Bristol. The form and style of the projects are not addressed, with the focus rather being on their configuration, structure, and placement within the urban tissue. The case studies were selected on the grounds of representation as type, with the following selection criteria: front access points, part of urban block within an urban tissue, internal residential street, and street-related perimeter block developments. While a range of new housing examples has produced dense and innovative solutions to the terraced house form, only a few examples are found in current literature which address the transformation of the terraced house with mews into a new typology and define a hybrid street-related urban block within an urban tissue. An example worth mentioning is Brookland Avenue in Cambridge, showing an example of terraces with a double-access situation. In addition, a range of contemporary London housing projects experiment with the terraced form as a part of a compound and assemblage of both the terrace, apartment block, and/or the mews, such as Silchester Estate and Portobello Square.

Two Centuries Apart:
Synergies between the Development of Westbourne Terrace, London, and the Housing Development Paintworks, Bristol
Westbourne Terrace (1843) Westbourne Terrace is a grand avenue and part of the Bayswater area in London (the former Metropolitan Borough of Paddington, south of the railway). The area was laid out in the mid-1800s with grand squares, long avenues, and stuccoed terraces, with a layout that contrasted
with the interrelated squares and short streets of the neighbouring Tyburnia area. The whole avenue was finished in the years 1856–60. The built form predominantly comprises terraced houses for the wealthy, with density and height chosen as opposed to the open plots of villas, to mask the railway.  

The most spacious and dignified avenue is Westbourne Terrace, begun c. 1840 and ‘unrivalled in its class in London or even Great Britain’. The houses form long stuccoed terraces of four storeys and attic over a basement, with pillared porches, many of them designed by T. Marsh Nelson. (fn. 161) They face carriage drives and were separated on either side from the tree-shaded roadway by screen walls surmounted by railings.  

No. 21 Westbourne Terrace is an example of a terraced house with a mews building in the south-eastern block of the avenue. The urban block is defined by two main avenues and two urban streets: Westbourne Terrace (west), Sussex
Gardens (south), Spring Street (east), and Craven Road (north). There is an internal street, Conduit Mews, which used to be the service area for the terraced houses by the main avenues and streets. The mews is L-shaped, has forty-three residential properties, and is approached through two gates in adjoining buildings at either end. The terraced house was built by William King as a speculative structure of four connecting plots (plot series):

Surveyor’s affidavit confirming that 4 houses of the first rate erected and built at 21, 23, 26 and 27 on the east side of Westbourne Terrace, in the district of Paddington, by William King, meet the requirements of the Building Act (1843). 39

The generic structure diagram for the terraced house with mews gives us a tool to read the different scales of the urban form in relation to its urban context. Originally built on one plot and as part of one plot series of four plots, the original property is now split into two plots where the main terrace has been converted into a block of flats and the original mews house is a freehold, a building on its own plot. The two plots consist of a combination of solids and voids, buildings and outdoor rooms/gardens. There are two main buildings (solids) and three outdoor rooms (voids); the mews house faces Conduit Mews and the Victorian terraced house faces the Westbourne Terrace avenue. The outdoor spaces of the main terrace include an area at the front, a garden at the back, and a lightwell in the middle. These voids all have different purposes and forms, and they are vital for the functioning of the building. Finally, the spatial and configurational logic of this terraced house becomes clear when examining the spatial organization of rooms and access points. The split of the original terrace has created two main front entrances in addition to the basement access in the area. The garden is connected to the basement floor with rear access. Even though the original building complex was once interlinked and interdependent, these two plots and their configuration relate to two different urban contexts; from the highest to the lowest level in the street hierarchy, from the wide urban avenue to the narrow cobbled backstreet. The distinction of this duality of different built form provides a very interesting variety of urban housing. This urban block, with a variety of residential types, has the original house through time, with adaption and appropriation becoming a historical example of a housing hybrid attractive for accommodating a high density of residents.
Paintworks, Bristol (2017) Paintworks is an ongoing (2017) urban housing development in Bristol. It is a large development which will transform an old industrial area closely connected to the main train station (Bristol Temple Meads) and thoroughfare. The planning proposal for stage 3 in the development was accepted in 2012, and the buildings are now in the process of being constructed. For this article, I have investigated the first finished “block” of phase 3 of the new development, comparing the configurational and spatial links to the historical block of Westbourne Terrace. The urban block is defined by two main streets, the river, and a public space: No name (west), Central Road (south), Public space (east), and River Avon (north). There is an internal pedestrian street with buildings directly connected out to form a neighbourhood. The buildings facing onto the two main streets of the block are connected to the ground with entrances and windows; the buildings facing the inner street and the public space are built on top of a

Figure 3 Generic structure diagram of rooms, solid/voids, and plots (source: author, with information from Crest Nicholson 2013)
big parking garage under the whole complex. In contrast to the Westbourne Terrace development, this whole project is under the control of one architect and one developer. The different plots and units are a result of a divide as part of the building process, and not as a development of a range of plot series to create an urban block.

Although constructed as one entity forming a block of units, the properties are divided over many plots with a common parking garage under the majority of the buildings. The houses function as individual terraced houses back to back from each other. A segment between the raised residential street and the ground-level access street shows this configuration. The two plots of the segment comprise a combination of solids and voids, buildings and outdoor rooms/gardens. There are two main buildings (solids) and two outdoor rooms (voids); a terraced house facing the residential street and a live/work terraced house facing the ground-floor access street. Two gardens at the back of the house share the same purpose for recreation and stay, and they have become an attractive part of the urban housing of today.

The spatial and configurational logic includes two main front entrances with rear access to the gardens. The two plots and their configuration relate to two different urban contexts: the raised residential street for pedestrians
and the access street for cars and pedestrians, from an intimate neighbourhood unit to a potentially buzzing work/live area. This distinction of dual context with their built form gives rise to a variety of urban housing in a new urban development.

**DISCUSSION: MORPHOLOGICAL DEVELOPMENT INFORMING FUTURE HOUSING**

The research has shown that the urban form of the terraced house has been an adaptable and flexible solution for urban housing in times of growth. These simple standardized schemes of the basic house have been adapted and developed according to needs and deeds of inhabitants and governments. The terraced house with the mews house stands out as a very interesting example of a type that has managed to adapt and renew itself through different cultural and economic contexts, and we see many traces of these configurations and qualities in new developments like Paintworks in Bristol.

**Role in the Urban Environment**

The characteristics of the original terraced house with mews are present in both old and new developments (in the case studies). Even in hybrid complexes constructed as a single entity, the architects and developers are aiming to emulate these characteristics and the role the type has in the urban context.

Figure 5 Comparison: Paintworks development and Westbourne Terrace as part of the development of an urban block (source: author from online map resource Mayor of London and Crest Nicholson 2012)
Primary and secondary access points play a significant role in how the case studies contribute to defining the urban tissue. The primary/front access points of a building or plot serve as the vital contributor to the spatial interaction between inside and outside, public and private ownership, et cetera. The secondary/rear access points contribute to the organization and qualities of the building/property in its own right. The red dotted lines in Figure 4 mark the influence of the access points on the urban tissue. In the original terraced house with mews in Westbourne Terrace, the mews building had a rear entrance to the service street at the back and contributed to the organization of the bigger terrace to which it belongs. When the plot was divided, this was transformed into a new residential primary access, with a new role within the urban block and tissue. The Paintworks development has individual front access points for all the houses connected to the surrounding streets and the internal street raised one level over ground. The new development grants strong attention to these subtle connections between dwelling and street—the interfaces between public and private—and contributes to an urban context.

**Spatial and Configurational Logic**

The terraced house split has created an interesting configurational pattern for future development projects like Paintworks in Bristol. Interesting distinctions between the back and front create a unique urban environment defining two completely different urban contexts that invite various residents and a dwelling area of distinctions and diverse qualities. When we compare the generic structure diagram for the split mid-nineteenth century terraced house of Westbourne Terrace with the early twenty-first century segment of a new development, we see a range of similarities. Both diagrams show development on two different plots, buildings and outdoor rooms have become similar, and the main front access on all four plots defines their urban context. The Paintworks development provides a recent example of a housing hybrid where the terraced house type is included in a composite plan with a layout, which sees a reinvention of the typology.

**Context and Development Process**

An interesting aspect of the terraced house is the way the housing type has been developed and changed through time. Comparing Westbourne Terrace with the recent development in Paintworks, we can see important aspects of the original built form implemented, particularly through types of access and definition of the street segment to which they relate. The qualities of the mews are to a great extent achieved in the residential street of Paintworks;
the privacy, the hidden character, the lack of traffic, the close proximity to work and shopping, the sense of community, the pride of ownership, and the feeling of a country village in the city centre. However, there are some critical aspects of learning from the past in this new development, mainly connected to the type of development. While Westbourne Terrace and its urban block was created as a system of speculative buildings on a range of plot series, the recent Paintworks development is built as one form, one development, and one block on a big site of land. The specific structure diagrams for the two cases presented in Figure 4 and the development process in Figure 5 present grounds for distinguishing the building block as a separate level in Kropf’s hierarchy as presented in Figure 1. While the original terrace with mews added plot series to form the urban block, the new project Paintworks has been developed as a block subdivided into plots. In Westbourne Terrace, the level of the plot series in the structure diagram is separated from the urban block by including developments of contributing parts, plot series, within contributing form, streets, into a resultant urban block, a system of development. At Paintworks the developer controls the whole urban block, building it as an a priori form. Here the plot series coincides with the urban block in the structure diagram.

In the book about the urban block, Urban Forms, the authors systematically go through a range of historical steps which have moved the urban block away from the streets, incurring a loss of diversity of multiple forms, uses, and adaptations. They present recent developments of urban blocks as becoming more and more independent from the street, even though the form has similarities and connections to the historical forms we so much admire. The urban block has become an a priori form—defined by a developer—rather than a system of adaptations and development. We can see some of this critique in Paintworks, where spaces and places for appropriation and adaptations are limited to the gardens. Parking for the residents is in a big common garage underneath the whole complex, a space without much potential for adaptations. The character of the residential street might lose some of its individuality and adaptation, the qualities highly appreciated in the mews streets in emulation. In the summary for their book The Mews of London, the authors warn against an artificial construct of the qualities of the mews house, with houses so alike that the owners have trouble distinguishing their own front doors. To make such developments successful, the authors emphasize that the inhabitants should use their own imaginations to characterize them both inside and out to suit their individual tastes.
CONCLUDING REMARKS

This article has addressed the historical terraced house with mews, a more complex variant of the basic terraced house, to look at the future directed for them in new developments. In general, the typology has kept its original urban form through the times, however its configurational and spatial logic has been transformed due to cultural and economic factors, context, and development processes. It proves to be an interesting example of an urban form’s ability to undergo continuous transformation and replacement.

In the recent project of Paintworks, Bristol, we have seen a reinvention of the terraced housing type in a hybrid complex of dwellings and live/work units in relation to new public squares and parks. The project’s role in the urban environment, its spatial and configurational logic, shows similarity to urban development from the mid-nineteenth century as exemplified by Westbourne Terrace, London, and gives interesting and relevant guidance and direction for the future of the physical built environment. The case studies show two ways of defining the block as part of the urban tissue and push Kropf’s structural approach a step further when inserting this as a separate level in the hierarchy. It offers an approach and wider relevance in terms of handling the aspect of time and development processes. The investigation of the urban block has revealed a range of aspects and ambiguities, some of which I have included in the content, however it needs further attention and research to be able to get a fuller understanding of the connection to both micro-morphological aspects of form and macro-relations of the urban tissue.

An aspect of critique and challenge in these new developments relates to the third principle of morphological analysis: time. Whilst Westbourne Terrace has organically established a hybrid complex of work/live environment for adaptation and transformation over time, Paintworks is a ready-made hybrid housing project built within short time frame, and on top of a parking garage. The building plots in the two contexts are very different as is the respective development processes—from plot size, number of developers, and form to inherent potential for adaption and change. The risks of showing the outward appearance of urbanity without ensuring the conditions to allow this to happen organically are present, however only time will show how these new urban blocks of the now a priori forms are adaptable and capable of forming valid parts of the urban landscape in the future. The research in this article emphasizes a need to better understand the aspect of time and the development process, and it contributes new methods seen
in the developed diagram. Future work on the topic needs to progress this further to achieve a thorough understanding of the relevant development mechanisms of the production of urban form.
NOTES


2 Ibid.


4 Panerai et al., *Urban Forms*.


7 Ibid.


10 Ibid., fig. 11.


12 Ibid.


15 Kropf, *The Handbook of Urban Morphology*.

16 Kropf, ‘Ambiguity in the Definition of Built Form’.


18 Kropf, ‘Ambiguity in the Definition of Built Form’.


Muthesius, *The English Terraced House*.

Panerai et al., *Urban Forms*, pp. 10–11.

Ibid., p. 162.

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Muthesius, *The English Terraced House*.


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ABSTRACT
Densification is a much-used concept in urban planning in Finland today. Big cities are dealing with a growing population, and a reasonable solution to housing needs seems to be infill construction. Along with the demand for density comes a discussion about vertical building and the role of tall buildings in the city skyline and the townscape. Today’s discussion is updating a similar discussion from the early decades of the twentieth century, when the future seemed vertical in many urban planners’ visions, on both sides of the Atlantic. In this article, two such visions from the 1920s are revisited: Swiss-French architect Le Corbusier’s famous plan for the centre of Paris and Finnish-American architect Eliel Saarinen’s plan for the lakefront of Chicago. These plans reflected a contemporary belief in technological advancement and showed a master planner attitude with a focus on the whole urban environment. Both planners were also looking upward, although seeing the possibilities of a vertically constructed city somewhat differently. In spite of their forward-reaching visionary qualities, both plans remained on paper, depicting a possible future that is now looked at as an alternate past. These visions and discussions of the previous century could still offer a comprehensive view for the contemporary discussion on urban density and one of its results: the vertical city. Many of the questions that should be answered when increasing densities in today’s cities already had their beginnings in the visions that the twentieth-century architects offered for the future.

KEYWORDS
high-rise, skyscraper, tall building, townscape, Eliel Saarinen, Le Corbusier
INTRODUCTION: HIGH-RISE DISCUSSION THEN AND NOW

Current High-Rise Discussion in Finland

Building high has always been a conspicuous means of showing power. Height guarantees visibility and therefore contains strong image-making possibilities. A city silhouette of shiny skyscrapers implies financial activity, optimism, and courage. It also indicates an urban density, which has been one answer to today’s sustainable urban growth in Finnish cities. In their search for solutions to infill construction, planners have looked upward, aiming to find prominent places for tall buildings. Resulting plans have provoked discussion about the visual effect of such buildings, as well as studies on their proper placement in the urban landscape. Many Finnish cities have faced the question of where to build high. Helsinki got its report ‘Korkea rakentaminen Helsingissä’ (Building High in Helsinki) in 2011, and a year later a similar study was published in Tampere: ‘Korkean rakentamisen selvitys Tampereen keskustaluella’ (A Study on Building High in the Tampere Centre Area). Several other Finnish cities (Kuopio, Espoo, Oulu, Turku and Hämeenlinna) have got their corresponding studies as well.

In two of the largest cities in Finland, Helsinki and Tampere, tall buildings have, in recent years, most visibly been responsible for changing the urban skyline. Therefore, in this article, the high construction studies of these cities are used as main examples of the discussion on Finnish high-rise construction. The aim is to bring a more thorough understanding of the history of tall building types to the current discussion, which has so far lacked in-depth contemplation about the new role of high-rises in the townscape. The studies may have shown how the skyline or street view would be affected by already designed high-rises, but the discussion has only skinned the question about the aims of placing tall buildings in specific places, and what this means for the townscape in the scale of the city as a whole.

The skyscraper is no longer a new building type, but until the twenty-first century, its applications have been few and far between in Finland. One of the motivating factors for constructing tall buildings now seems to be the creation of a dynamic image for a growing, forward-looking city. This was clearly visible on the cover of the Tampere report, which showed proposed tall buildings highlighted in shining amber, as if beacons for future growth. This motif has existed as long as the term skyscraper: private enterprises’ need to promote company image and cities’ need for landmark buildings, both for orientation and image reasons. Another factor mentioned in the Helsinki and Tampere studies was sustainable development. The current
planning trend calls for a denser urban structure and more efficient land use around rail traffic stops. This is made economically possible by raising the construction volume. Even if building high is not in itself considered sustainable, the placement of tall buildings may be used to promote densification and use of public transportation, thus making it one of the strategies to help diminish the carbon footprint of cities.6

When studies about high-rise construction began to be commissioned for Finnish cities in the first decade of the twenty-first century, several tall building projects had already been given the required permissions. They were predicted to be examples, setting the path for subsequent construction. The studies sought to develop general guidelines to help in the strategic planning of the city. Accessibility, topography, and historical urban values were taken into account when suggestions were made about suitable areas for high-rise construction. The Tampere study from 2012 is representative of such studies. It especially mentioned the importance of context-specificity, and the need to look for more than general situational guidelines to determine suitability. While the traditional way of using high-rises as ends of monumental axes was no longer deemed appropriate in today’s context, the role of tall buildings as focal points to aid urban legibility was duly noted. The study also

Figure 1. Tampere city centre with planned high-rise construction. Source: Moisala and Ylä-Anttila, cover of 'Korkean rakentamisen selvitys Tampereen keskuussa-alueella'.
asked a question about the role of tall buildings in the city: are they clearly visible landmarks or parts of high-rise clusters, with heights accommodated to fit the existing landscape? This question is also relevant for this article, as it links back to the tall office building discussion of the 1920s.

A Brief Look at History: The Tall Office Building Discussion in the 1920s
The urban role of tall buildings has been discussed before. The late 1800s had seen a rapid development of tall buildings, first with masonry construction and then steel. However, architecture had not kept up with the construction innovations. American architect Louis Sullivan asked what the tall building should look like in his famous article “The Tall Office Building Artistically Considered,”8 and the stage was thus set for a discussion that continued into the early part of the twentieth century. By the 1920s, forests of skyscrapers had grown in major American cities, but the question of skyscraper design was still unresolved, in spite of Sullivan’s call for functionally articulated designs that would celebrate the building type’s verticality.9 Problems were not consigned to form and facade articulation alone. The building’s role in the city also demanded solutions. Tall buildings were often clustered in close proximity, making it easy to compare the heights of adjoining buildings. This, however, created difficulties with density and light. One of Sullivan’s articles on the topic had been illustrated with a street scene, where closely built tall buildings were constructed in a setback style with gradually diminishing blocks.10 Setbacks were thought necessary in this situation, but in such clusters the skyscrapers’ possibilities as focal points of civic design were naturally lost.

The tall building was not seen as a solely American building type. In Europe, the discussion had been especially active in Germany, starting in the second decade of the twentieth century. Generally, Europeans were worried about the uncontrolled vertical clusters of American cities.11 Skyscrapers’ suitability, construction guidance, and effect on traffic were questioned.12 The suitability issue had much to do with the building type’s effect on the urban environment. Skyscrapers were mainly seen as buildings that could accentuate specific points in the city, as cathedrals had done previously.13 However, the landmark versus cluster issue was dichotomous. The oppressive density and traffic congestion of the American city were seen as problems, but at the same time the upward movement of a vertical city intrigued architects.14 The clustered skyscraper city was also called shining and magical.15
Approaches to the Tall Building: Common Themes and Contradictions
The two seemingly contradictory approaches to constructing tall buildings in cities—as landmarks or in clusters—continue to appear in today’s discussions. They were also visible in the studies done for Tampere and Helsinki. Both studies noted the skyscraper discourse of the 1920s, giving historical perspective. Current skyscraper designs were thus linked to a continuing story. Many of the earlier arguments used in promoting skyscrapers were reused; the tall building was treated as a landmark, or a beacon of dynamic image. Problems created by the clustering of tall buildings were also noticed, as they were in the 1920s, although now the discussion focused on where the tall buildings should be built, as opposed to whether they should be built at all. Indeed, the main aim of the high construction studies drafted for Finnish cities around the first decade of the twenty-first century was to show suitable zones or even specific places for tall buildings. So far, the groups of tall buildings seem follow a more disciplined placement logic than the more or less uncontrolled clusters so strongly criticized in the early twentieth century.\(^\text{16}\)

Historical references notwithstanding, the recent skyscraper studies do not present a comprehensive view of the early twentieth-century depictions of the tall building and its possibilities in the city. Back then, master planners could show their overall attitudes about the new building type as a single—or multipliable—part in an urban composition. Even if the aims of today’s studies are different from the 1920s urban visions, in-depth knowledge about the earlier visions could offer a necessary background for the contemporary discussion on urban density and one of its results, the vertical city.

This article goes back to describe contributions to the 1920s skyscraper discussion by two architects, Swiss-French architect Le Corbusier and Finnish-American architect Eliel Saarinen. Le Corbusier’s well-known plan for the centre of Paris and Eliel Saarinen’s plan for the lakefront of Chicago reflect the skyscraper discussion of the early twentieth century. Although most of the early examples of the building type had been constructed in the United States, famously in Chicago and New York, skyscraper discussion had flowed on both sides of the Atlantic. Therefore, the interest was naturally global when the Chicago Tribune newspaper announced its 1922 competition for the most beautiful tall office building in the world. For Saarinen, being awarded second prize in the competition resulted in a move to the United States to begin a new career as a teacher of architecture and planning. At the same time, Le Corbusier was developing his skyscraper type in Europe. His
first visit to the United States became a reality more than a decade later. His travel impressions were condensed in a book, where the vertical cities of the New World received both criticism and admiration. In the next sections, this article concentrates on how the two architects used the tall building type in planning an urban environment: the skyscraper’s role in the city.

SKYSCRAPER VISIONS OF THE EARLY TWENTIETH CENTURY

The Chicago Lake Front Story

The Chicago Tribune Tower Competition

Although Eliel Saarinen had not actually designed a skyscraper prior to the Chicago Tribune Tower Competition of 1922, he had already expressed his opinion on the tall building question ten years earlier. In the 1912 competition for the new capital of Australia (Saarinen received second prize),

Figure 2. Eliel Saarinen’s Chicago Lake Front Plan, perspective drawing. Source: Arkkitehti 2 (1924), p. 22.
he wrote about restricting building heights to prevent the kind of vertical
growth seen in American cities. According to Saarinen, overall planning
issues should be the main incentive, if tall buildings were grouped together.17
Like many of his Finnish colleagues, he preferred the European version: tall
buildings as accents in the townscape.18 For Eliel Saarinen, the skyscraper
was an urban design element.

In the Chicago Tribune Tower competition, fitting the context had not been
one of the evaluation criteria. The competition brief had simply called for a
beautiful office building.19 However, the resulting attention for Eliel Saarinen's
second prize entry—a vertical setback design—lead to an urban vision
where context was a main issue: the Chicago Lake Front Plan of 1923. There,
Saarinen proposed a solution for a growing city's traffic problems, while
advertising his skills as an urban planner, not just the designer of skyscrap-
ers.20 He especially emphasized the plan as an opener of possibilities.21

The Chicago Lake Front Plan
With a newcomer's objective eyes, Saarinen anticipated organic decentraliza-
tion by radically suggesting that American cities could have many centres.22
Starting with traffic, he designed parking solutions and elevated pedestrian
paths. Rapid transit traffic was circulated away from the centre, to prevent
congestion. A huge self-service parking hall near the centre would receive
cars and allow people to do business and shopping on foot.

Saarinen trusted in people's willingness to walk,23 as have many car-free zone
planners after him. Saarinen wrote of the architectural whole and a monu-
mentality necessary in a big city, with descriptions of scenes from the street
level and from a bird's-eye view. Even if local ordinances did not then allow it,
he placed cultural buildings in parks, the recreational areas for the car-prone
city dwellers.24 The plan was admired for successfully combining two import-
ant themes of American city planning: civic beautification and the needs of
increasing traffic, although underground parking was thought unrealistic
due to the water level of the nearby lake.25

In Saarinen's plan, the skyscraper was a strategically placed landmark. His
prototype from the Chicago Tribune Tower Competition was reused here
as a hotel, marking the spot of an underground railway station. The form
of the building was separated into four parts, all visible in the facade to
further enhance the building's verticality. In perspective drawings, the
skyscraper was studied both as an ending of a monumental axis and as part of a group of buildings that enclosed a public space. From far away this skyscraper was visible as a landmark, and from the street one could follow its vertical lines all the way to the top, as skyscraper design should allow, according to Saarinen.26

Saarinen’s understanding of the urban environment as a whole influenced his attitude towards high-rise buildings. The skyscraper was an individual urban design element, and parts had a subordinate status to the whole. In his book *The City: Its Growth, Its Decay, Its Future*, Saarinen later criticized the skyscraper for being self-centred and indifferent to its surroundings.27 Fittingly, Manfredo Tafuri has called Saarinen’s skyscrapers ‘spectators of the urban scene’.28 In Saarinen’s plans, skyscrapers acted as compositional highlights. One could admire the composition from their heights, or one could see them as defining landmarks in the composition. They were looked at or looked from. Clustering these buildings would have ripped them of this compositional power. Eliel Saarinen did not appreciate skyscraper clusters, neither for urban design reasons nor for planning reasons. Like Frank Lloyd Wright, Saarinen promoted controlled and decentralized growth for expanding cities.29 In the race between the elevator and the automobile, both architects would have likely put their money on the latter.30

Saarinen did not treat the skyscraper as a building subject to economic laws. In fact, he was critical of the kind of urban landscape these laws had created in American cities. He called the streets of New York too restless,31 but he could also give positive comments about the urban atmosphere. In such comments, he appears to be aware of the building type’s constraints as an embodiment of commerciality.32 This commerciality was intertwined with the skyscraper’s status as an American building type, a symbol of capitalism and industrial efficiency. Already in the late 1800s, visiting architects had thought Chicago’s early skyscrapers awe-inspiring, despite possible problems they could create.33 Likewise, Eliel Saarinen could enthusiastically describe lofty views of Manhattan, while criticizing the everyday environment of clustered skyscrapers.34

Tradition met modern times in Saarinen’s Chicago Lake Front. The design was to solve a modern urban traffic problem, while using a traditional composition of symmetrically placed elements. The skyscraper served as a landmark in this monumental civic design. The urban vision shown in
the next section—Le Corbusier’s Plan Voisin—shows yet another way to use the skyscraper building type. This skyscraper was neither an individual landmark, nor part of a heterogeneous cluster.

**The Plan Voisin Story**

**The Contemporary City**

Le Corbusier’s famous Plan Voisin—plan for the centre of Paris in 1925—was preceded by his study of a Contemporary City (Une Ville Contemporaine, 1922) for three million people.  

There the city was placed on an ideal level site and divided into sections according to function. The centre was for business and residential buildings, while the industrial areas and working-class housing were outside the centre, all connected by a speedy transportation network. The ideal city was based on a symmetrical grid of streets. Two highways intersected at the centre point of the city, forming the backbone of a hierarchically structured transportation system. For Le Corbusier, speed was of the essence in a modern city: ‘a city made for speed is made for success.’

Robert Fishman has noted the lack of symbolic value in the centre of this ideal city. Le Corbusier’s city centre had no need for civic monuments or individual landmarks. Instead, the centre was a hub of transportation, which Fishman has called an appropriate symbol of a city in motion.

According to Le Corbusier, the full possibilities of the new building type were not applied when skyscrapers were used in a traditional way as design focal points. Neither was he satisfied with the skyscraper clusters of American cities. Although he did not visit the United States until the 1930s, he was well aware of the urban development overseas and vehemently sought to differentiate his skyscrapers from the American versions even before he had actually experienced them. Strong criticism was voiced again after his American visit in the book *When the Cathedrals Were White* (1937). The skyscrapers of New York he declared too small and their setbacks a compulsory result of misguided urban planning. He wanted to see tall buildings further apart, not grouped close together. The planning of a metropolis could not be separated from its traffic systems, and this had been, according to Le Corbusier, neglected in New York. Even the spirit of the skyscrapers was all wrong: their height was determined only by number.

Le Corbusier had, like so many Europeans, a mixed attitude towards the skyscrapers in the New World. He was also fascinated by the courage and the creative atmosphere of the American city, comparing it to a forest just
as Saarinen and others had done. His admiration towards the American vertical city is evident when he describes them as cities of hope or calls New York a city of incredible towers or ‘a limitless cluster of jewels.’ Nevertheless, the admiration he felt was overshadowed by the results of analytical comparison grounded in his own version of modern urban planning principles. In Le Corbusier’s opinion, the American skyscraper clusters could not compete with his rationally placed Cartesian skyscrapers.

**Plan Voisin**

Le Corbusier formulated his ideas on modern city planning in his book *Urbanisme* (1924). Nowhere is his geometrical urban order better illustrated than in his plans and perspective sketches of Plan Voisin, the boldly utopian-dystopian vision for the centre of Paris. His aim was a new urban vision of upward growth—the traditional city had to go. With skyscrapers, a necessary workplace density was achieved for a city’s core. Although the fantastic perspective drawings may lead one to think otherwise, Le Corbusier saw his proposal as contemporary and possible, not wanting to stress the future orientation. In Le Corbusier’s version of the modern city, tall buildings were placed in the centre according to a functional logic, equidistant from each other, ensuring light and fresh air for the inhabitants. Le Corbusier’s skyscraper vision was a field, where each individual tall building had its predesignated place, conforming to an orthogonally ordered grid. If Saarinen’s skyscraper vision had not really treated the building type’s economic premises, neither did Le Corbusier’s. Looking at his famous perspective sketches of Plan Voisin, one is struck by the futuristic quality of this brave new world, where technology has managed to solve most problems and man has recreated himself to fit the strict geometrical order.

Need for density was the underlying reason for vertical growth. With a dense urban core, less distance had to be travelled, and thus the connections could be faster. The demands of modern working life also required green areas for recreation. Since these areas had to be near the workplace, in Le Corbusier’s vision the city had nowhere to grow but up. The modern city needed tall buildings in the very centre, where businesses would inevitably gravitate. Therefore, according to Le Corbusier, the city had to make room for them and their workers’ transportation.

Le Corbusier’s modern city grew vertically, not horizontally, as in Eliel Saarinen’s version. For Le Corbusier, the main focus was on the centre.
Industrial areas and the garden cities designed for workers, both outside the city centre, were not described with equal enthusiasm. Later, in his *When the Cathedrals Were White*, he described the Cartesian skyscrapers of the new urban core. Le Corbusier insisted that modern technology had made even sixty-storey skyscrapers realizable. This type of building would allow light into all the rooms and its cruciform shape guaranteed stability against wind. A skyscraper like this was not only a function of the offices it housed, but also ‘of the area of free ground at its base’. The problem of congested streets was solved by a hierarchically constructed traffic system, the highways winding their way through the skyscraper field.

Le Corbusier’s version of tall buildings was seen as another European application of the skyscraper building type. In Finland, this version was promoted by architect P. E. Blomstedt, who called it a ‘free high construction system’ and noted that it had nothing to do with either the closely built skyscraper clusters rising in America or the skyscrapers placed according to aesthetic principles, like old-fashioned ‘exclamation marks’. Blomstedt emphasized the building type’s possibilities as something other than a focal point in an aesthetically designed urban townscape.

Although today’s discussion has so far concentrated on the landmark or cluster issue, the skyscraper field made its appearance in the planning of Tampere as late as 1988, in the unbuilt proposal for Tampella by architect Timo Penttilä. The skyscraper field in its Plan Voisin guise is perhaps speaking today’s language even less than the traditional landmark, but one may still see echoes of it in the current high-rise designs. There, similarly, the distances between buildings are measured, wind situation assessed, and light angles studied.

**Comparison: The Skyscraper and the City**
Saarinen and Le Corbusier were modern architects, influenced by the prevailing ideas of order and control in design. The controlled growth of Saarinen’s organic decentralization was later shown in regional scale in the city maps he included in his book *The City*. According to Saarinen, cities should grow in concentrated satellites around the main core. Control was extended to the planning of this core, where each individual part was complementing the whole. Organic cohesion was as important in the urban design details as it was in the regional urban planning scale. The skyscraper’s role was to act as a focal point.
Le Corbusier’s ordered urban landscape sought to open up the traditional dense urban structure with an entirely new order: a field of skyscrapers. In Le Corbusier’s grid, no individual member stood out. Neither were the skyscrapers huddled together to allow the spectator to compare heights or make assessments about the power and prestige of their owners. Instead, they stood apart, with greenery all around, to create the soft edges necessary to make a transition to the human scale. Their spacious placement allowed fast-flowing traffic circulation. The skyscraper was a means for an efficient urban centre.

Eliel Saarinen had wanted to open up the dense urban centre by decentralized growth outward, but Le Corbusier solved the density problem by allowing growth upward. Both architects were looking at the whole city, concentrating on solving the needs of circulation and subsequent urban growth. Saarinen proposed individual landmarks, Le Corbusier multipliable elements. However, in both cases the architects saw the view of the whole as an essential part of the urban planning process. The whole would dictate the role of
its subordinate parts. Even the landmark was but one element in the plan. The two architects both used monumental symmetry in their urban plans, which showed a complete finished city in the master planner tradition. A master planner would depict a complete vision of the urban landscape, since envisioning piecemeal growth of vertical units, each aiming to upstage its neighbour, would contradict the idea of an urban whole with subordinate parts. Such a cluster formation process could not be easily controlled. In these cases, the vision of the whole would be overshadowed by the subordinate parts taking over. Understandably, the architects would criticize the seemingly haphazard clustering of skyscrapers in American cities, for they did not represent order. Instead, they were constructed following their own rules of power and economy, which setback and light angle requirements sought to keep in check.

What could these two skyscraper city designs from the 1920s bring to today’s Finnish discussion about the role of tall buildings? Just that: the focus on their role in the urban landscape. In the two examples, the architects studied the tall buildings’ effects on the city. The issue was not just where these buildings should be placed, but why, and also what the decisions would mean to the whole urban landscape. Both architects also sought to include the pedestrian view in the discussion, by looking along the facade or by emphasizing the ground-level connection.

DIFFERENT VIEWS OF THE SKYSCRAPER
Controlling the Whole: Looking At and Looking From
Neither one of the 1920s visions presented here was ever implemented. Saarinen’s plan was successful, nevertheless, in promoting his skills as an urban planner. He settled in the United States, continuing to design architecture and draw city plans, while teaching urban design at the Cranbrook Academy of Art near Detroit. The visual imagery of Le Corbusier’s Plan Voisin became known worldwide as an example of modernist planning. Its design principles inspired planners for decades. Both plans revealed a belief in technological advancements, in construction as well transportation. The future-oriented optimism was typical of the first decades of the twentieth century, even if the optimism was short-lived; already in the early 1920s, the problems of vertical automobile-oriented cities were noted by the likes of Lewis Mumford.
The discussion about skyscrapers has always included a considerable amount of future-orientation. Whether or not skyscrapers are signs of their builder’s wise use of wealth and ability to see ahead, they are special places where people may grasp the urban reality from above. At the same time, these buildings are points of orientation in the urban fabric, important locations in the townscape maps we all have inside our heads when moving in the urban environment. The designing architect has to imagine the building in both guises: from above and in control, and from the street level, looking up. Both of these functions stress the solitary role of the building type as a landmark.

For Eliel Saarinen, the skyscraper was, indeed, a landmark. His drawings of Chicago’s Lake Front emphasize this—he was both looking at the skyscraper and from it. The former was a designing architect’s or a pedestrian’s view, taking in the details of the vertical building from the street level to the top. The latter was an urban planner’s view. The idea of controlling the urban scene is shown in Saarinen’s description of the view from the top floor of his hotel-skyscraper:

And I see a stranger arrive in Chicago. From Central Station he makes his easy way by elevator to the hotel above. From its garden terraces, a beautiful panorama greets his eye. To the West and North he sees the growing metropolis and above it farther to the North the green park girdle along the length of the shore. Below him Grant Plaza expands southward in majestic repose, surrounded by flowerbeds and public buildings in harmonic monumentality; farther away verdant Grant Park and in the distant South, Chicago Tower’s monumental pinnacle flashing high above the city’s smoke and dust. To the Eastward, Lake Michigan spreads its wide expanse in green and violet, fading toward the horizon.

In contrast, Le Corbusier’s skyscraper, the multipliable building block, was used to create a geometrically ordered city centre. In his vision, the vertical city is often shown from afar, with an element of all-seeing control present, although drawings from the pedestrian viewpoint also exist, and the ground area is mentioned in his texts. His description of a view from the heights of a skyscraper (in this case in Manhattan) rivals that of Saarinen:

The whole city was lighted up. If you have not seen it, you cannot know or imagine what it is like. You must have had it sweep over you. . . . The sky is decked out. It is the Milky Way come down to earth; you are in it.
Elated descriptions like the ones quoted above condense the image-creating possibilities of the skyscraper building type in captivating prose. Nowadays, the views from the top floor are used to market the flats. In virtual reality, prospective buyers are seeing how the horizon will stretch in front of their yet-unbuilt apartment’s window. Most people take delight in such views. Michel de Certeau has called this the ‘pleasure of “seeing the whole”’, using the no longer existing view from the top of New York’s World Trade Center Tower as an example. Certeau has contrasted this controlling view from above with the everyday lives of people hurrying along the city streets. If the view from above allows the beholder to see the urban environment in its totality, then the city dwellers on the street level, in comparison, are hardly even conscious of the whole they live in. From the street, tall buildings are only seen as landmarks.

The view from above and from below are equally necessary for an urban planner. The street view gives the designer an idea of the enclosed space and its rhythm, while the view from above lets a planner see the whole planning task area. Naturally, Saarinen and Le Corbusier used both views.

Tall Building Types in the Current Discussion
The tall building types of the early twentieth-century discussion (the landmark, the field, and the cluster) are still present in the Finnish high construction studies. However, none of the earlier attitudes towards the skyscraper are taken as an obvious guideline for current designs. The landmark type has been deemed old-fashioned, the high-rises of the modernist field type too dreary and monofunctional, and the skyscraper clusters too haphazard. Nevertheless, all three attitudes are shown either directly or indirectly in the texts and illustrations of the skyscraper studies of Helsinki (2011) and Tampere (2012). The studies show suitable areas for building high but do not claim to promote the building type as an element of civic design or a building block to be multiplied. Instead, its possibilities are studied through examples, where qualities of both may be seen. The focus is on the townscape and the effect the skyscrapers might have on the street views, and in the Helsinki case, especially on the
skyline view from the seaside. Many high-rise buildings proposed for the Finnish cities are grouped together, but they are not simply following the rules of power and economy. The preliminary guidelines of the studies, at least, aim at controlling the construction of such clusters.

The idea of control is present in the very reason for the studies: to determine suitable areas for the construction of tall buildings. In the Tampere study, the city centre is shown in a bird’s-eye view, with the recently built or newly proposed tall buildings singled out, as accents in the townscape. The individual buildings are shown most often with design renderings, where a building appears as an object. The context is only hinted at. However, some pictures show actual street scenes. In these scenes, the tall building’s landmark role becomes clear (for example, Tähtitorni in Rautaharkko, 2007, in the Tampere study). A few of the cases contain several tall buildings close together. One could call these controlled clusters; the buildings are following a similar form language and visualized from an angle that emphasizes their kinship.

The Finnish skyscraper discussion today also has international undertones—as it did in the early 1900s when interest in the new building type was growing. In the Tampere context, the global aspect is visible, for example, in the choice of the consultant for a project that includes an arena and tall buildings for offices and housing. The initial proposal by Daniel Libeskind from 2011 is similar to his skyscraper designs, to mention just two, in Singapore (2011) and Warsaw (2017). In the Tampere proposal, tall buildings with slanted rooflines are grouped together. The idea of a skyscraper field comes to mind: again, the proximity of the skyscrapers must be carefully measured on the architect’s drafting table. Enough light and sunshine must be ensured to the workers of these office spaces, in this case not rising from a green park, but from a deck built over an existing railway yard.

The high construction studies for Finnish cities are serving a useful purpose in their respective cities: acting as a general guide for the placement of tall buildings. As such, they are part of the current skyscraper discussion. So far, this discussion has not vocalized real critique or serious contemplation about the role of the skyscraper as an element in the urban whole—precisely the issue that the two example architects from the early 1900s focused on. The compositional order they proposed may not be the aim of cities today, but taking into account the whole urban environment is still necessary when contemplating the effects of high-rises.
**The Future: Unused Possibilities**

When the role of the tall building is discussed as if it were a new building type with emerging architectural (and urban) possibilities, the idea of the hybrid building inevitably crops up. The idea of calling the skyscraper ‘an influential Modernist heterotopia of deviance’, based on Michel Foucault’s original concept, has been used by David Grahame Shane, who linked it with the writings of Joseph Fenton and Rem Koolhaas. This characterization contains complexities that deal with more than just form. However, at the form level the concept refers to the building type’s capacity to be articulated vertically along its facades, which could suggest a mixed-use combination of functions. Although this approach has not often been used in skyscraper construction, hybrid buildings have appeared occasionally throughout the history of this building type. They can be seen in the high construction studies for Helsinki, and also Espoo. There the placement of different functions is shown either layered or side by side. The latter version could lead to the kind of vertical articulation Shane was suggesting as a possible development in skyscraper design. In an urban context, articulation of the facades along the vertical axis could give, in the future, tall buildings a more decisive role as landmarks that aid an urban inhabitant in orientation.

It is worth noting that both Le Corbusier and Saarinen divided the shape of their skyscraper examples into sections. Saarinen quartered his Chicago landmark into clearly visible parts, and Le Corbusier used a cruciform shape for his high-rises. Both examples could have been flexible enough to accommodate multiple uses along the vertical axes. This type of articulation was not apparent in the next generation of modernist skyscrapers, which tended towards the rectangular slab form.

Although the two architect-planners presented in this article used the skyscraper as a subordinate element in their urban compositions, the tall building was not only looked at from afar, but also up close. Saarinen’s wish especially was to see the skyscraper from the street, where verticality was visible along the facade. In many skyscraper visions of today, such an impression right next to the building from a pedestrian viewpoint is rarely shown. Instead, the landmark possibilities of the building type are studied with the help of renderings that visualize the skyline or show a single building at the end of an urban corridor. The studies concentrate on the skyscraper’s effect from a distance. The missing pedestrian visions may be explained by the fact that design details are not known when the tall buildings are still in
the planning stage, but their absence is unfortunate. The results can be seen in the existence of towers that lack connection to their immediate environment at the street level—in the words of Kevin Lynch (Image of the City): the towers are 'bottomless'. To prevent this, attention is needed in designing the street-level pedestrian environment. A solution suggested in one of the Finnish high construction studies is placemaking. At the very least, it could focus attention on the street-level scale where the everyday lives of citizens are playing out.

CONCLUSION

Planners rarely design whole cities today. The role of the planner has changed since the early twentieth century to that of a team player in a complex process of citizen participation, discussion, and negotiation. The tasks in any planning process are multidisciplinary. The kind of traffic planning exercised by Saarinen and Le Corbusier—which gave them an incentive for their plans and a reason for the large-scale view—is now part of a multidisciplinary planning task.

Nevertheless, even today it is necessary to look at the city in the large scale as well, so as to be able to consider the role of tall buildings in an urban landscape. In an increasingly complex urban reality, infill projects are often just individual buildings. Even if the context is carefully studied in these cases, understanding the larger whole is necessary to fully determine the impact of tall buildings. The kind of studies commissioned for Finnish cities, with Helsinki and Tampere as examples, have attempted to present a large-scale view of the whole city. Already planned and designed high-rise projects were placed in context and viewed from above as well as from the street level. New spots for possible future skyscrapers were then suggested.

In these studies, current building projects were linked to the already long history of designing and constructing high-rises. They were presented as a natural result of a process started in the late 1800s. History was used to support their relevance by making the continuation of the story seem inevitable. At the same time, references to future-orientation and urban progress seemed to distance the new applications of the tall building type from its origins. A thorough understanding of these origins, however, could add to the necessary critical dimension of the current discussion. As before, the idea of a vertical city is intriguing, but it also needs to be questioned. In most of the Finnish high-rise studies, the relevance of constructing tall buildings is not doubted outright.
In the current or planned high-rise projects, one sees a combination of the different views of the skyscraper: the cluster, the landmark, and even the urban building block. However, as shown in the studies for Helsinki and Tampere, the clusters proposed for Finnish cities in the twenty-first century are not simply governed by the rules of economic growth. A need for control is apparent and an attempt to design the urban landscape is visible. The tall buildings concentrated on or around major traffic interchanges in the studies—as they were situated in Le Corbusier’s modernist vision and in Saarinen’s more traditional one—could thus be called controlled clusters.

As in Saarinen’s earlier skyscraper vision, the landmark effect in the urban landscape is graphically visualized, now with photomontages or 3D models. Consequently, the landmark possibilities of tall buildings are visible in the current tall building studies, even if the buildings are not treated as focal points in a composition. In the future, applications of the hybrid building type could even bring new visual articulation to the landmark role of tall buildings. In the Finnish context, these examples are, as yet, predominantly unrealized conceptual studies.

The urban building block is a use of the tall building type that has received the most criticism since its modernist applications in suburbs around the world. The premises behind the original idea, nevertheless, are still applied in the shadow studies of today’s high-rises. The controlled clusters of today are taking into account the distances between buildings and noting the need for light inside the apartments.

When the different views of the skyscraper are combined, the skyscraper’s role in the city may be in danger of becoming blurred. If the role is not properly considered, then cities may end up with random clusters or misplaced landmarks. The question asked in the Tampere high-rise study was whether the tall buildings will remain clearly visible landmarks or concentrate into clusters, rising and falling in the landscape. This was an important question. It will eventually be answered as more new high-rises are built and their impact is ready to be assessed. One would hope that the discussion about the tall buildings’ role continues, truly considering the possibilities that this building type brought to cities more than hundred years ago. The two 1920s master planners, with their dichotomic attitudes, were able to see both the potentials and the problems the skyscraper could create. The architects did not just settle on the design of the tall building, but each strove to visualize
an urban landscape where the tall building was fully utilized to its advantage, as they saw it. This kind of a view of the whole, unfortunately, has often been missing from today’s high-rise projects. A master planner attitude is no longer relevant in the twenty-first century, but even today’s planner needs to understand projects’ relationships to context. This article has attempted to show that a thorough understanding of the history of the tall building type and the preceding century’s discussions of its role could help to define a more comprehensive attitude to the high-rise question, as well as remind designers and builders of the importance of looking from the ground up.

The Tampere study claimed that a landmark and a new version of the cluster were both possible attitudes towards the tall building. At least the latter alternative—as the controlled cluster—refers to a possibility of using the building type in a way that requires a large-scale regional view, even considering the topography. If such clusters start springing up in the future—still staying within the boundaries suggested in the commissioned studies—their planners, developers, and designers need to discuss the role of the tall building from the viewpoint of the whole city, as well as from the street level. Vertical architecture—with its dynamic image of power and wealth—is still rooted somewhere, and it is at these roots that everyday life at the human scale takes place.
NOTES

1 ‘Tall building’ in the Finnish context generally means high-rise buildings of twelve stories or more, with heights of over 35 meters; see Antti Moisala and Kimmo Ylä-Anttila, ’Korkean rakentamisen selvitys Tampereen keskusta-alueella’, Arkkitehtistudio M&Y Moisala & Ylä-Anttila, final report, 30 October 2012, http://www.tampere.fi/liitteet/k/6C92lib5A/korkeanrakentamisenselvitys.pdf (all URLs accessed in April 2019), p. 9. In this article, the terms ‘high-rise’, ‘tall building’, and ‘skyscraper’ are used to mean buildings that stand out in their surroundings by their height. These terms are used in a similar fashion in the current high-rise discussion in Finland.

2 In 2014, this was supplemented by a study for high construction in the suburban areas of Helsinki: ‘Korkea rakentaminen Helsingin esikaupunkialueilla’.

3 In 2015, this was supplemented by a study for high construction in the regional centres of Tampere: ’Korkean rakentamisen selvitys Tampereen aluekeskuksissa’. Studies have also been done in Finland for Kuopio (2009), Espoo (2012), Oulu (2014), Turku (2017) and Hämeenlinna (2018).


5 Moisala and Ylä-Anttila, ’Korkean rakentamisen selvitys Tampereen keskusta-alueella’, p. 5.

7 Ibid., pp. 34 and 64.


9 Ibid., p. 206.


22 Ibid., pp. 487–89.

23 Ibid., pp. 491–92.

24 Ibid., pp. 493–504.

26 ‘Europe wakes up to the need of U.S. skyscraper’, Chicago Daily Tribune, 23 January 1923. Saarinen was looking at skyscrapers from a pedestrian’s perspective, and repeating a view used in urban photography in the 1920s: skyscrapers were no longer pictured only from afar, but from below along their facades. In particular, Erich Mendelsohn’s book Amerika: Bilderbuch eines Architekten (1926) has been noted for this outlook (Cohen, Scenes of the World to Come, p. 90).

27 Saarinen, The City, p. 186.


29 ‘Favors a decentralized city’, New York Sun, 21 August 1928.

30 The following quote is attributed to Frank Lloyd Wright: ‘The outcome of the city will depend on the race between the automobile and the elevator, and anyone who bets on the elevator is crazy.’ See, for example, Mark Hutter, Experiencing Cities (New York and London: Routledge, 2016), p. 116.

31 ‘Favors a decentralized city’, New York Sun, 21 August 1928.


34 Saarinen, The City, pp. 188–95.

35 Le Corbusier, The City of Tomorrow, pp. 163–78.

36 Ibid., p. 179.


38 Le Corbusier, The City of Tomorrow, p. 173. Le Corbusier showed contrast by juxtaposing a view of his contemporary city with a picture taken above Manhattan.


40 Ibid., pp. 36–44, 51–59, and 91. European architects’ reactions to American cities were often contradictory. As early as the late 1800s a visitor could call the skyscraper city simultaneously ‘hideous and magnificent’. See van Leeuwen, The Skyward Trend of Thought, p. 117; Montgomery Schuyler, ‘The “Sky-scaper” Up to Date’, Architectural Record (January–March 1899), pp. 231–57, esp. p. 256. Note also that Le Corbusier’s attitude to American cities is similar to his


43 Ibid., p. 52.


45 Ibid., 163–78. Robert Fishman (*Urban Utopias in the Twentieth Century*, p. 230) has noted how this ideal modern city was adjusted: from a skyscraper business centre in the Contemporary City to eventually a collection of vertical residential towers in the Radiant City, the latter no longer segregated by class.


48 Ibid., pp. 116–18 and 171.


50 Le Corbusier, *The City of Tomorrow*, pp. 163 and 166.

51 Le Corbusier, *When the Cathedrals Were White*, pp. 52–53.

52 Pauli E. Blomstedt, ‘Sinebychoffin puiston puolestä’, *Arkitehti* 11 (1928), pp. 170–71. In Finnish his term was ‘vapaa korkearakennusjärjestelmä’.


54 Lindroos et al., ‘Korkea rakentaminen Helsingissä’, p. 46.


56 ‘Nothing can be undertaken properly without a view of the whole’, as Robert Fishman (*Urban Utopias in the Twentieth Century*, p. 206) quotes Le Corbusier. Also, Saarinen claims that solving civic design problems demands an understanding of the whole; see Saarinen, *The City*, pp. 173–74.

57 The use of a tall building as an urban design element in a geometrically ordered composition—with symmetry—already appeared in Bruno Taut’s *Stadtkrone* design from 1919; see Taut, ‘The City Crown’.


59 Mumford, *Sticks and Stones*, p. 81.


62 Le Corbusier, *When the Cathedrals Were White*, p. 90.


66 Moisala and Ylä- Anttila, ‘Korkean rakentamisen selvitys Tampereen keskusta-alueella’, p. 64.


68 Lindroos et al., ‘Korkea rakentaminen Helsingissä’, p. 22.


70 The role of tall buildings in the Helsinki skyline was discussed already in the 1920s. See Laine, ‘Pilvenpiirtäjäsymys’, pp. 250–58, 262, and 271–73.


75 Ibid., pp. 253–54.


79 Kohonen et al., *Korkea rakentaminen Helsingin esikaupunkialueilla*, p. 12; Placemaking.

80 In the Espoo study, however, one suggested scenario was not to build any more tall buildings. Kjisik et al., 'Espoon korkean rakentamisen periaatteet', p. 73.

81 Moisala and Ylä-Anttila, 'Korkean rakentamisen selvitys Tampereen keskusta-alueella', p. 36; see also Kjisik et al. 2012, pp. 35–36.

82 Fishman, Urban Utopias in the Twentieth Century, pp. 273–75.
THE CHANGING ENFRANCHISEMENT OF STAKEHOLDERS IN BRUTALIST ARCHITECTURE

Tom Davies

ABSTRACT
This article examines the role of Brutalist architecture in post-war housing, taking Le Corbusier’s premise that ‘tomorrow belongs to nobody’. It tests the notion from the call for papers that ‘contemporary needs are more important than remote futures’ and explores ‘the relationship of the present and the future in planning and urbanism’. Rather than considering ‘contemporary’ as referring to ‘today’, it takes a longer-term perspective, based upon the thinking of Brutalist architects, which interprets ‘contemporary needs’ as relating to the developing needs of communities and stakeholders over time, from their building’s inception up to today. Starting by placing Brutalism within the development of twentieth-century architecture and housing, the paper considers the ongoing reappraisal of the buildings of the period as heritage, the different agents involved, and the diverse challenges presented for the care of the buildings and communities who live and work in them. The notions of ‘contemporariness’ and ‘context’ demonstrated by the principle of ‘as found’ in Brutalism are investigated, focusing on how they reintroduced ‘community’ as a primary consideration. This approach is manifested in the Low Rise High Density (LRHD) projects of the late 1960s and in the longer term, many of the principles underpinning sustainability today. Review of current heritage practice takes a suggestion from architectural historian Alan Powers, proposing that we refocus on the ‘essence’ of buildings rather than on their materiality, which can also be seen in today’s practice, and considers how this ‘essence’ should be extended to include community. The article concludes by considering how an integrated approach, drawing together the different themes of heritage, planning, and housing policy, might improve current practice to the benefit of both buildings and communities.

KEYWORDS
Brutalism, valorization, stakeholders, use strategies and futures, social housing, modernism, home ownership
INTRODUCTION

Rather than considering ‘contemporary’ as referring to ‘today’, this article takes a broader perspective, interpreting the term as temporally relative to the developing needs of communities and stakeholders at any given point in time since their building’s inception. It presents the narrative of twentieth-century architecture, planning, and heritage as a means of exploring the Brutalist ‘ethic’, which sought to enfranchise communities and connect new design to historical continuity and the morphology of sites, as a basis for developing long-term strategies for buildings and users today.¹

The historical narrative supporting this claim begins with the Garden City ideology (Phase 1) and revisionism of interwar modernism (Phase 2), and then looks at how architects in the 1950s and 1960s sought to redress the perceived failures of interwar design. This user-focused agenda of Brutalism revised the existing model and in time resulted in Low Rise High Density (LRHD) housing models and reconciliation with pre-modernist architecture (Phase 3). These later residential projects combined the ‘memorability as an image’ of earlier Brutalism with the terraced forms and complex arrangements of private–
public space to produce hierarchies of design which support the social interaction for good community. Many of the Brutalist architects stated intentions that their projects were not complete and should develop in response to user requirements over time, presenting a notion of temporal contemporaneity by progressively responding to their ‘contemporary needs’ as time progresses.²

The architect and historian Alan Powers suggests that protection of modernist buildings should examine the ‘essence’ of the building rather than its ‘substance’ through dynamic relationships, spaces, and interplay of light.³ Whilst this realignment is a developing characteristic of heritage practice, community and stakeholders play only a minor role in the process, and Powers’s assertion that conservation alone cannot sufficiently represent community interests remains problematic.⁴

In the conclusion, it will be considered how this ‘essence’ might extend to stakeholders, community, and social heritage, and how a composite approach, combining the themes explored—architecture and planning, heritage and housing policy—might provide for ‘contemporary needs’ and in so doing secure a vitality of use which sustains the building, user, and community.

The sections of the article explore the following themes which might form the basis for a combined approach:

- Historic Monument – Historic Environment (Heritage)
- Tabula Rasa (Clean Slate) – Sustainable Development (Architecture and Planning)
- Welfare Provision – Empowerment of the Individual (Housing Policy)

**PHASE 1: THE EARLY TWENTIETH CENTURY**

According to Floor Wibaut, the Dutch welfare planner who promoted much of the suburban expansion of Amsterdam in the early twentieth century, ‘[t]he point of departure for raising the culture of the working classes . . . must lie in the improvement of housing conditions’. Wibaut, whose name is close to the Dutch wie bouwt, meaning ‘who builds’, oversaw the construction of some 30,000 dwellings, comprising social-housing apartments and private houses, in the years 1915–21. Wibaut’s interpretation establishes social housing as the vanguard for twentieth-century welfare and improvement, introducing it as a medium for study, which is indicative of the broader advancements and factors behind societal development.⁵
Amsterdam belongs to the broader development of housing projects which took place across Europe. In Britain, this took the form of the Garden City Movement, beginning with Hampstead Garden City (1906) and developing into ambitious projects such as the Becontree Estate in East London (1921–35, 26,000 homes). European projects include the residential blocks of Austria’s Red Vienna (1918–34), housing associations, and building societies such as the Dutch Eigenhaard, Eigen Woningen, and Ernst May’s work at Frankfurt (1926–28, realizing some 8,000 dwellings), as well as OBOS and Selvaag Bygg in Oslo. This public-housing agenda responded to the rapid densification of cities and resultant poor living conditions for city dwellers and is traceable back to late nineteenth-century legislation and early projects such as the Potato Rows (Kartoffelrækkerne) in Copenhagen (1873–89). The early phase was primarily concerned with providing for the immediate need, but addressing this enabled the foundation for the expansion of these models, based on the work of key individuals such as Ebenezer Howard and Raymond Unwin and early legislation such as the Hampstead Garden Suburb Act (1906). The resulting mandate enabled authorities, architects, and plan-
ners to prescribe standards for construction and design as exemplified by the Addison Act of 1919 in the UK, drawing on the Tudor-Walters Report of 1917 and Raymond Unwin’s publication *Nothing Gained by Overcrowding!*. Examples of prescribed standards include:

We regard it essential that each house should contain a minimum of three rooms on the ground floor (living room, parlour, scullery) and three bedrooms above, two of these capable of containing two beds. A larder and a bathroom are essential.\(^9\)

**Stakeholders in Phase 1 (Rise of State Provision)**
Phase 1 shows that the state, its architects and planners were gaining confidence in their mandate of provision for society, which was manifested in an entirely top-down approach. Whilst the state-funded building programmes and architecture of the 1930s were yet to arrive, there were clear signs in the Tudor-Walters Report and prescriptions of the period of the conditions which made such schemes possible.

**PHASE 2: CIAM AND INTERWAR MODERNISM**
The Continental and Scandinavian projects which influenced UK planners in the 1930s resulted from the work of the Congrès Internationaux d’Architecture Moderne (CIAM), the International Congresses of Modern Architecture (1928–59). CIAM was the international forum for early to mid-twentieth century architectural discourse, with members from across Europe, Scandinavia, and the United States, including Le Corbusier, Walter Gropius, Ernst May, and Alvar Aalto. By applying itself to planning, transport, and connectivity, CIAM reconceptualized city and society as a machine, providing models of modern provision for modern living. The possibly most dominant scheme envisaged a radial arrangement of housing in blocks to take advantage of daylight, et cetera.\(^{10}\) In this Functional City, perceived social problems were resolved through segregation of function and the distribution of the population into tall apartment blocks at widely spaced intervals.\(^{11}\)

CIAM’s 1929 exhibition *The Minimum Dwelling Unit* demonstrates this rational thinking using repetitive plans of existing dwellings to show that use of space could form the starting point for architectural design. This marks a clear departure from previous notions of perfect classical form and decoration, providing the revisionist approach which came to define CIAM’s work.\(^{12}\)
Other models also included Gropius’s Bauhaus or Ernst May’s more organic approach to the expansion of Frankfurt in the late 1920s through which he sought to preserve ‘urban unity’ in the diversity of the city, using a discontinuous approach to the new suburbs, including a variety of parks, market gardens, and public parks. Historicity formed an important focus in this respect, and the various Siedlungen, or settlements, created by May have individual contexts relating to their earlier history. One example in Frankfurt is the Siedlung Römerstadt which draws on the Roman fortifications of the old city. Both Gropius and May employed low linear block forms, including terraces, which often have a degree of interplay at ground level between internal and external space through private and communal gardens, providing a modernist antecedent for Brutalism.

CIAM’s development comprises three paradigm shifts (1928–33, 1933–47, and 1947–68) which progressed from the problems of minimum living standards to a second phase which advocated the zoning of city plans and a single type of housing comprising widely spaced apartment blocks. The third and concluding phase shifted to a kind of liberal idealism, seeking to achieve CIAM’s original objective of transcending the functional city through the ‘creation of

Figure 3. The ‘Housing for All’ trip to Rabenhof: Red Vienna’s first project, 1925–28. Photo: Tom Davies, 2012
a physical environment that will satisfy man's emotional and physical needs' and creating the conditions for Brutalism to emerge in the early 1950s.\textsuperscript{15}

In its third phase, CIAM began using grid forms made of coloured panels to represent different categories. The grid, which was based upon Patrick Geddes’s Valley Section (a conceptual sketch of living unit sizes from hamlet to city), can be demonstrated by the ASCORAL grid from Bergamo (CIAM VII, 1949). It uses the following system: 1) dwelling (green), 2) working (red), 3) cultivating the body and the mind (yellow), 4) circulation (blue).\textsuperscript{16} The intention was to develop the Athens Charter chapter on habitation, which addressed social concerns.\textsuperscript{17} This, however, rapidly degenerated into a debate over the relevant classifications.\textsuperscript{18} The issues addressed by the charter are:

1. An inadequacy of habitable space per person;
2. A mediocrity of openings to the outside;
3. An absence of sunlight (because of northern orientation or as the result of shadows cast across the street or into the courtyard);
4. Decay and a permanent breeding ground for deadly germs (tuberculosis);
5. An absence or inadequacy of sanitary facilities;
6. Promiscuity, arising from the interior layout of the dwelling, from the poor arrangement of the building, and from the presence of troublesome neighbourhoods.\textsuperscript{19}

**Isolation and the Street**

The approach to creating the segregated, functional city employed a repetition of units to produce residences and compartmentalized buildings with both residences and amenities internalized. Buildings were often elevated by pilotis, a row of piers, creating open space, which removed the whole structure from street level.\textsuperscript{20}

The intention to remove residences from the morass of industrial city life brought about evident problems in removing them from the street and in the city’s principal forum for social interaction. Despite efforts to resolve this in the 1930s through elevated walkways, its isolating nature emerged as a clear issue, as demonstrated at CIAM Conference VII at Bergamo, Italy, in 1949.\textsuperscript{21} The challenge that CIAM faced in its final phase is characterized by the following quote from the architect Giancarlo de Carlo:
On this point we should be very clear, and therefore it is indispensable first of all to clarify the basic differences between planning ‘for’ the users and planning ‘with’ the users.22

These difficulties in reconciling the human agenda with that of ‘machines for living’ were brought to a head by Team 10, which included early Brutalists Peter and Alison Smithson and Structuralists Georges Candilis and Shadrach Woods, at CIAM 10.23 They criticized the segregation of housing, work, leisure, and transport, presenting two alternative grids: the Gamma Grid by Candilis’s team, which addressed dwellings in an integral way by focusing on qualitative aspects, and the Smithsons’ Urban Re-Identification Grid which took a similarly qualitative approach through its analysis of everyday built environments. Alongside the new qualitative focus, the UR Grid redefined the role of the street, removing the internal corridor of Le Corbusier’s design and placing it externally on the building to create their ‘streets in the sky’ concept.24

Figure 4. Infilled pilotis at Denys Lasdun’s Hallfield Estate, 1951–58. Photo: Tom Davies, 2012
Stakeholders in Phase 2 (Rise of State Provision)
Phase 2 sees the development of the state’s mandate, continuing a top-down approach, and in particular sees architects and planners exploring their own roles and potential in the delivery of state provision. This is particularly present on the scale of ambition of the state-led programmes and architects’ visions, revising and remodelling cities, and creating new towns and suburbs, which were developed in the 1930s.

PHASE 3: THE NEW BRUTALISM AND POST-WAR DEVELOPMENT
The Ethic of Brutalism
Reyner Banham’s *The New Brutalism* (1955) reviews the collaborative efforts of the early Brutalist architects Alison and Peter Smithson, the photographer Nigel Henderson, and the artist Eduardo Paolozzi as part of London’s Independent Group (1952–55). It considers the projects Golden Lane (1952), Hunstanton School (1954), Sheffield University, and the exhibition *Parallel of Life and Art* (1953). Banham characterizes the New Brutalists as being at the forefront of what he describes variously as an ethic, a movement, and a slogan, setting out the following three-point criteria for considering Brutalism and the projects which followed.

Banham’s criteria in *The New Brutalism* defines the Brutalist ethic as
1. Memorability as an Image;
2. Clear exhibition of Structure; and
3. Valuation of Material ‘as found’.

Points 1) and 2) place strong emphasis on the Brutalism’s statement aesthetic and honesty of presentation, whereby the makeup of the building is clearly displayed, and the presentation of materials is without artifice. These points represent a revision of the aesthetic of interwar modernism, advancing honest presentation and truth to structure. Point 3) addresses the admission of the shortcomings of CIAM and at a superficial level belongs with Points 1) and 2), but when considered together with the Smithsons’ writing it reveals itself as a broader refocusing on the existing values of a site, drawing on material, morphology, and community.

Peter Smithson reflects on the notion of ‘as found’ as relating to both the urban environment and the evidence within that environment which tells us how it came to be. This draws on the Smithsons’ site work with Nigel and
Judith Henderson through social studies and photography of bombed out working-class East End neighbourhoods in London. There, they saw what they define ‘as found’ as the objects and debris at bomb sites and the fittings and patina of buildings. This was later described as

1. Integration into a wider system of being,
2. Social cohesion
3. Reconciliation of all opposites and the transcendence of unity over diversity
4. Elegance

Their focus on ‘as found’ therefore signifies that good architecture and design need to read and relate back to the existing environment, and that this had been largely absent in interwar development.

**Brutalism and the Street**

The Smithsons defined the street as the central place for community, where the resident meets the world, and sought to make it central to their scheme for Golden Lane (1952) through the inclusion of street decks later referred to as ‘streets in the sky’. The wide space for interaction and recreation established at each level along the front of the block by the ‘street deck’ sought to update the traditional role of ‘the street’, providing communication and a point of contact, which had been marginalized by much of CIAM’s work.

Their belief was that the idea of the street is more important than the reality of the street, which Peter Smithson describes as follows: ‘Where a street is purely residential, the individual house and garden will provide the same lively pattern as a true street or square—nothing is lost and elevation is gained . . . ’ and ‘Thoroughfares can house small shops, post-boxes, telephone kiosks, etc—the flat block disappears and vertical living becomes a reality. The refuse chute takes the place of the village pump.’

Recognizing the value of ‘the street’ in maintaining community and providing points of interaction, they sought to safeguard a notion of value in elevated living as inherited from interwar modernism. In this, they hoped to achieve what the elevated, axial walkways of Le Corbusier’s *Ville Contemporaine* (1922) and other earlier projects were unable to, and reconcile ‘the street’ with modernism.
The Rise of Low Rise High Density and Community
Beyond the immediate circle of the Independent Group, young architects in the 1950s, including Neave Brown and Patrick Hodgkinson, worked with ‘as found’ values through site and community. They took a down-to-earth approach which went to the root of materials and form to provide qualities and spaces for interaction and relationships. They achieved this by adopting the devices of pre-modernist architecture, such as squares, terraces, and direct access to street level, continuing the reconciliation with earlier architecture begun with the revival of the street in the Smithsons’ work. Central to this was the Low Rise High Density (LRHD) terraced block which effectively turned the tall modernist point block on its side, picking up on May’s work in Frankfurt and realizing its quality through terraces across the landscape.

The British architectural historian Mark Swenarton describes this development of ‘the street’ by LRHD projects in Camden as

projects [that] recognise the ‘street’ as the basis for urban housing, we are designing not only the form of buildings and spaces but also the physical setting for social relationships, relationships between public and private, between members of a household, particularly adults and children, between households, between groups of residents and between residents and those who live elsewhere. Finally they worked together to pioneer.

Miles Glendinning and Stefan Methusius describe the reaction against high blocks resulting in the rise of the LRHD. They record dissatisfaction with efforts to integrate all ages in high blocks which were too self-contained and eliminated the need for the external ‘service areas’ in which interaction took place, producing a strong focus on outdoor space starting in the mid-1950s. The early LRHD projects designed in this period resolved this by introducing ‘enclosed private gardens or yards adjacent to each dwelling’. Central to this were children’s play areas which should ‘not be too close to old peoples flats but not too far from children’s homes’, which produced a freer kind of playground and suggestions that the whole layout of LRHD estates be designed ‘as a [robust] play structure . . . [including] ramps, screens . . .’ This also forms the backdrop for the Parker Morris Report (1961), which set provisions for good design:
The human problem for the future in the design of flats and maisonettes is to provide for people who live in them an environment which is as workable, and as satisfactory, as for people who live in houses.38

Several architects working in London at the time cite Serge Chermayeff and Christopher Alexander’s *Community and Privacy: Toward a New Architecture of Humanism* as an influence:

Privacy is most urgently needed and most critical in the place where people live, be it house, apartment, or any other dwelling. . . . to develop both privacy and the true advantages of living in a community, an entirely new anatomy of urbanism is needed, built of many hierarchies of clearly articulated domains. Such an urban anatomy must provide special domains for all degrees of privacy and all degrees of community living, ranging from the most intimately private to the most intensely communal. . . . Only when the habitat of urbanizing man is given such an order shall we perhaps restore to urban life a fruitful balance between community and privacy.39

Early examples of the LRHD include a 1953 scheme for housing by Patrick Hodgkinson, designs by Neave Brown, and Atelier 5’s Siedlung Halen in Switzerland (1961). It is possible to regard these architects as taking their cue from late 1950s planning and guidance of Chermayeff and Alexander, and bringing the Smithsons’ notions of ‘as found’ and ‘the street’ as a social hub to a logical conclusion, which reconciled Brutalism with pre-modernist architecture. Notably, the Smithsons concluded their 1960s work with the Garden Building in Oxford, which exhibits similar pre-modernist reconciliation. In the longer term, these projects exhibit many of the principles of sustainability that underpin today’s planning.40

Whilst clearly distinct from earlier schemes like the Golden Lane (1952) and Park Hill (1961), these projects adhere to Banham’s criteria in their use of untreated materials such as concrete and brick for providing a ‘clear exhibition of structure’, and they employ form which often achieves ‘memorability as an image’, as found at Alexandra Road. Interpreting ‘as found’ as utilizing the site, its context, and community in a wider sense, it seems reasonable that these projects belong to the legacy of Brutalism and its thinking. The architect Peter Eisenman describes something equally significant in the 1950s thinking of the Smithsons, namely that
[the] buildings [at Golden Lane] are themselves fragments of a larger scheme; they are to be linked in some future state. Their form thus embodies a respect for the empirical process; i.e., one builds in increments, on as much of a site as one is given. The future city is no longer contingent upon being built at one time, but rather upon a process, accumulating development on scattered and random sites over time. The link-like forms of Golden Lane accept the reality of this process. They suggest both vertical and horizontal connection to the existing context.\textsuperscript{31}

The importance of context, belonging, and historicity is underlined by Chermayeff and Alexander:

Most people today find pleasure and satisfaction in an ancient city which possesses visible physical evidence of its origin, growth and purpose. It is a unique and personal expression of the activity and life within. An urban environment of this kind is deeply felt; the inhabitants subconsciously respond to specific visual experiences with a sense of belonging [historicity], identification and affection.\textsuperscript{42}

This ‘continuous and evolving building’ with its apparently random or scattered planning approach rejects the segregated CIAM concepts of housing, work, recreation, and traffic, underpinning their idea of ‘patterns of association’.\textsuperscript{43} This presents a notion of ‘temporal contemporaneity’ and indicates that the management of projects should be determined by the developing and (thereby contemporary) needs of community. This extended beyond the Smithsons’ idea to become a broader aim, reflected in Neave Brown’s view that the listing of Alexandra Road should raise the bar for future improvement rather than serve as a hindrance.\textsuperscript{44}

**Stakeholders in Phase 3 (Emergence Individual/Community: Increasing Focus on Community)**

By its conclusion in the late 1960s, the role of the stakeholder was dramatically different from that of the ones in the earlier phases. The work of the Smithsons and others in the 1950s identifies and begins to address the community and the individual, but it sets about this in a largely observational capacity, as can be seen not least in the ethnographic studies of Bethnal Green in East London. Critically though, the focus on context and continuity, introduced by ‘as found’, is a broadly positive development enfranchising stakeholders and community in preserving aspects of their existing environment. The 1960s
projects often crossed this divide, working with communities to determine their needs for a site. Two examples include Neave Brown’s design taking a dinner-party approach at Winscombe Street (1965) and the community-built approach pioneered by Walter Segal.\textsuperscript{45}

**HOUSING POLICY: QUALITY VERSUS PRODUCTION – HOUSING MODELS POST–WORLD WAR II**

From 1945 onward, new pressures for housing and provision emerged, which needed to address bomb damage and to implement a rapidly developing welfare agenda, which saw the interwar efforts to replace substandard housing taken up again with renewed vigour.\textsuperscript{46} Whilst each country has its own particular version of this story, sufficient commonalities are found throughout international discourse and sociopolitical climate to demonstrate general trends from models of public loans, ranging from state provision to private finance.\textsuperscript{47} The Slovakian engineer and academic Ivanicka Martin Polak

\begin{figure}[h]
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\caption{Community through the public–private interface at Alexandra Road, 1967–78. Photo: Tom Davies, 2012}
\end{figure}
divides the period into three phases. The first of these, ‘recovery’ (1945–60), aimed at repairing war damage and alleviating housing shortages through subsidized housing construction, resulting in mass housing. The second phase, ‘growing diversity’ (1960–75), developed the welfare agenda through a focus on housing quality and urban renewal. Polak suggests that during this second phase important divergences began to occur as some governments adjusted their housing policies to refine their housing models. Whilst still in the favourable economic conditions of the 1960s, Germany and Denmark began rent deregulation and the retargeting of housing assistance.

By contrast, the government in Great Britain made only small adjustments to housing policy in the 1970s, which were eclipsed by the (Labour) Callahan Government’s Housing (Homeless Persons) Act 1977. The 1977 Act readjusted priorities for housing, making councils responsible for providing accommodation for homeless people in their area and prioritizing those in greatest need, effectively laying down the conditions required to run estates down. Over time, this redefined agenda of social housing produced a serious decline in living standards on its council estates, which was compounded by the (Conservative) Thatcher government’s promotion of home ownership and sell-off of council housing stocks under ‘Right to Buy’ (introduced in 1980). It seems possible that public housing models of countries which acted early on to realign regulatory systems have proven to be more robust, whilst in other countries home ownership became the dominant item on the political agenda, as was the case in the UK.

Polak argues that the third phase of the ‘new realities for housing’ (1975–90), through the emerging neoliberal agenda and reduction in public housing expenditure, made provision ‘more market-oriented, competitive and opened up to economic pressures.’ Countries which realigned their housing models in the 1960s or constructed for private ownership were better prepared for this.

The early models of Vienna, Frankfurt, and Amsterdam share common aspects, such as expropriation or the exchange of land for public building and the implementation of controls to prevent value speculation, as well as the use of agency of municipal and private cooperatives and low-cost housing societies. This includes public loans to districts with large populations to support development, land policies to reduce costs, and the municipal production of buildings. The realignment of the 1960s addressed the needs of diverse populations which, despite private home ownership, are present
in the UK’s housing associations today, demonstrating a need for diverse models of housing provision. The Vienna model stands alone in that, following remodelling in the late twentieth century, it today provides for a diversity of tenants with working- and middle-class income living together in low-cost rental housing totalling some 60 per cent of the city’s population.53

The Demise of the Tall Tower and Post-War Welfare Provision
The demise of tall building construction in the UK in the late 1960s and the subsequent loss of support for the Low High Rise Density forms details a schism between councils and their architects, which together demonstrate the weakness and reasons for the downfall of public housing in the UK. In Cook’s Camden, Mark Swenarton describes the cooperative spirit of the early post-war period as follows:

Since 1945, across Britain, architects and local politicians had collaborated to deliver the fruits of the welfare state: housing, schools, libraries, swimming pools etc.54

The pressure this placed on planning and construction became increasingly evident in the 1960s as councils sought to achieve housing targets through prefabricated tall buildings. This eventually became untenable, following the collapse of Ronan Point in 1967 and the removal of housing subsidies for buildings over four storeys. In contrast to mass prefabrication building programmes, the architects working on the LRHD projects were working in council or in private teams, supported economically by the state in the spirit of post-war reconstruction. Swenarton details the spiralling costs of Camden projects in the 1970s, owing to excessive inflation and bureaucratic revisions of requirements. This changed the scope, adding and removing amenities, which culminated in the Alexandra Road Public Enquiry, following its completion in 1978, and sought to apportion blame for huge overspend. This forms part of the wider context of trying to cope with the increasing budget of realizing post-war building and the new conservative government, which was preparing for the sell-off of council housing through ‘Right to Buy’ and for reductions in public funding.55

These problems have exasperated the rising costs of speculative development today and are highlighted by the work of groups such as London’s Just Space, describing itself as ‘a community-led network of voluntary and action groups influencing plan-making and planning policy to ensure public debate on
crucial issues of social justice and economic and environmental sustainability.\textsuperscript{56} Its draft plan for London, \textit{Towards a Community-Led Plan for London: Policy Directions and Proposals}, provides a policy for long-term sustainability of communities.\textsuperscript{57} Using terms such as ‘life-time suburbs’, it outlines models for public participation and community involvement in planning, sustaining diverse economies, demographics, and housing models such as not-for-profit rented homes. The European Network for Housing Research (ENHR) and the European Federation for Living (EFL) are similar groups in Europe looking for alternative models to the current market-led approach.

**Stakeholders in Housing**

Stakeholders in housing unsurprisingly follow a similar path to that of architecture and planning. It is worth noting, however, that the adjustments to existing models, which occurred on the continent, and the shift to private home ownership represent a movement from the focus of society as a whole to responding to individual needs, in different ways.

**HERITAGE AND THE HUMAN AGENDA**

The 1931 \textit{Athens Charter for First International Congress of Architects and Technicians of Historic Monuments}, which formed the inaugural moment for ICOMOS (The International Council on Sites and Monuments), formulates a useful starting point for the progression from historic monument to historic environment. It established key tenets of conservation such as knowledge-based restoration, the need for protective legislation, and the custodial care of important sites.\textsuperscript{58} The evidence-based approach defined in 1931 describes the aim of restoration as follows:

\begin{quote}
In the case of ruins, scrupulous conservation is necessary and steps should be taken to reinstate any original fragments that may be recovered (anastylosis), whenever this is possible; the new materials used for this purpose should in all cases be recognisable.\textsuperscript{59}
\end{quote}

Current practice originated in the Venice Charter of 1964, which introduced notions about context and setting in the care of heritage, introducing the notion of historic environment, and is reflected by the development of legislation for conservation areas in the late 1960s.\textsuperscript{60}

Early heritage protection focused on individual monuments or buildings, reflected in the use of the singular term ‘monument’. Conservation areas
recognizing the value of groups of buildings and forming the historic environment were not legislated in the UK until the Civic Amenities Act of 1967. The development of holistic designation in Europe and Scandinavia is roughly contemporary. This progression from historic monument designation to historic environment parallels the progression of architecture and planning from a singular focus to an integrated approach and sustainable development, which emerged in the 1950s. The phrase ‘managed change of the historic environment’ is common currency in the UK, describing an approach to development which seeks to sustain heritage values.

Despite the shift to a notion of a ‘historic environment’ and a more holistic approach, issues remain that are related to reconciling ideas of being ‘fit for purpose,’ referring to the viability of a building and its management being economically sustainable. Listing has traditionally taken the view that economic factors or physical conditions should not affect a decision to designate and that listing should not expect buildings to respond to future constraints or pressures at build. This was easier to manage in the earlier individualist approach to designation, but when considering the challenges of finding funding to maintain a growing number of designated sites and buildings, self-sufficient viability through secure revenue becomes vital. It also presents problems in consideration of the Smithsons’ evolving building, in allowing it to develop over time.

As a result, a new approach emerged in the 1990s, the origins of which are discernible in an essay by Alan Powers, which compares the traditional approach to listing to Thomas Aquinas’s notion of ‘substance’ in its focus on physical structure. He suggests that the values of modernist buildings lie instead in their qualities, or ‘essence,’ to use the Aquinas analogy, through the interplay of light, gaps, and spaces forming the rooms for social discourse. He recommends refocusing on this as the means of preserving modernist heritage. This suggestion finds a predecessor in the Smithsons’ discussion of the ‘space between’ as a focus in their design as well as the wider focus on facilitating relationships.

Powers demonstrates his point with reference to the Bankside Power Station in London where architects Jacques Herzog and Pierre de Meuron were able to make radical alterations to the unlisted structure to create Tate Modern and the potential loss of amenity through the removal of public space at a school in the Pimlico neighbourhood of South London. In the former, the lack of protection allowed positive intervention, whilst at Pimlico, the physi-
cal focus on protection failed to protect amenity value. Powers concludes that whilst conservation can provide a vehicle for protecting community interests, it is often unable to, and he recommends instead a ‘more general culture which balances essence and substance’ to protect form and amenity through use. This might also be termed a composite approach.

What followed in the 2000s has achieved this to a degree through the highlighting of ‘communal value’ and notions of ‘managed change’. Whilst heritage planners often combine forces with those working in other disciplines to achieve a more effective approach, no formal combined or holistic approach has yet been defined. This demonstrates an over-reliance on best practice and cooperation, and it indicates that the community aspect remains weakest in this informal arrangement.

**Stakeholders in Heritage**
There is a clear dichotomy in heritage between the prescriptive conservation of the interwar period and the historic environment and human agenda, which emerged in the late 1960s. It seems reasonable to infer that Powers’s notion of ‘essence’ should extend to community in this, but we have meanwhile begun to recognize that ‘essence’ through the new approach to buildings’ appropriate means of safeguarding community in this remains lacking.

**Applying This to Estates**
The earliest modernist listing is Alexandra Road, which was Grade II* Listed in 1993. Park Hill in Sheffield followed in 1998 and the Brunswick Centre in Bloomsbury, London, in 2000. Withdrawal of public funding in the 1980s produced challenges for these buildings, erected to be serviceable in a welfare state economy, which was compounded by the rejection of the ideals of the 1950s and the 1960s, opting for a return to earlier dwelling forms and the preservation of older buildings. The human agenda is present today in heritage work through communal value, meaning the value for communities and individuals. It has been developed since the 1972 Stockholm conference and Burra Charter (1999) but does still not necessarily ensure the interests of stakeholders and users. There are examples of community and resident groups being involved in the designation process in the 1990s, such as the Alexandra Road, where the involvement of English Heritage was instigated by the efforts of tenants in improving living conditions. At Park Hill in Sheffield, the agenda has shifted from social housing to affordable and at-market-value housing, resulting in little consideration of residents’ needs.
for continuity of community. In best practice, heritage practitioners state an aim of shifting ‘from the aim of cure to the strategy of care’, refocusing on long-term strategies for sites and buildings, which might offer a vehicle for carrying forward stakeholder interests within that process.

Avanti Architects’ work at Wynford House in Islington, London, as described in the submission for the Housing Design Awards, was ‘chosen by the residents’ in an open competition. Their proposals involve a balanced mix of physical and management intervention. A change of ownership (to a housing association), diversification of tenure (with private penthouses), and bringing families down to the ground (in new maisonettes on the bottom two floors) were combined with sympathetic restoration of Berthold Romanovich Lubetkin’s original fabric and landscaping, internal upgrading, security measures, and new community facilities.

Resident-driven regeneration has also taken place at the Elgin Estate in Westminster, London, where residents were consulted at an early stage and throughout the project, through meetings, exhibitions, and surveys. This resulted in a focus on renewal and improvement of the existing rather than extensive alteration, which finds parallels at Alexandra Road and the physically far more extensive work undertaken by Druot, Lacaton & Vassal in the Ville Nouvelles (comprising post-war suburbs) in Paris.

Druot, Lacaton & Vassal’s resident-led approach at Ville Nouvelles sought to address the interests of residents in the large housing schemes, working with existing structures through alteration, improved circulation, the use of space (a key focus of CIAM), and an increasing capacity. Typical alterations included extending floor space by merging and adding rooms, replacing walls with sliding-glass doors, and developing workable communal spaces, winter gardens, and terraces. They enlarged key areas such as main entrances and the foot of stairwells to create transparency and a connection to the outside world. These changes sought to increase daylight and provide new views and spatial richness through different climatic and sensory zones based upon regular dialogue with residents through meetings and workshops. Druot, Lacaton & Vassal’s approach demonstrates a high capacity for improvement of large-scale housing complexes and big apartment blocks when interventions allow for significant impacts to the physical composition of the buildings. The group claims to have drawn inspiration from social housing projects from the 1920s, the 1930s, and the early 1960s, but paying little regard to maintain-
ing the external appearance of the buildings which they significantly altered. Through this expansion into external space, there were no internal alterations to the apartments. This unintentionally reverses the traditional focus of heritage protection, whereby protecting the exterior usually comes first.\textsuperscript{77}

In discussing Wynford House, John Allan of Avanti Architects concludes that such lower profile cases, below the threshold for listing/designation, were successfully regenerated through economic and logical solutions rather than the intervention of heritage authorities. He recommends exploring this avenue as a viable alternative to traditional designation as a means of securing a long-term future.\textsuperscript{78} In view of the above cases, it may be that this approach, when successful and limited to moderate alterations and repair, can satisfy both heritage and stakeholder. The substantial alteration of the external appearance of Villes Nouvelles would fall short of approval from heritage authorities in a similar manner to English Heritage's engagement at Alexandra Road at the point that residents had appointed Avanti to undertake works deemed unsympathetic in heritage terms.\textsuperscript{79}

DISCUSSION – STAKEHOLDERS: USER AND COMMUNITY

The central role of stakeholders in the design of Brutalist projects and the logical conclusion of Powers's notion of 'essence' indicate that we should not only conserve the spaces for interaction but support the communities that occupy those spaces. This provides a clear argument for strengthening the role of the stakeholders and the community, which is achievable through a combined approach. Good stakeholder engagement needs to be retrospective in understanding notions of value as held by different groups through their community history and prospective in managing those values to produce benefit in the future.

Stakeholders can be mandatory, voluntary, direct, or indirect in their capacity to influence and can range from authorities to residents.\textsuperscript{80} Their capacity to influence may be through their holding resources, influence, legislative power, or connections to those with power or influence. In discussing stakeholder resolution, Arthur Zimmerman and Claudia Maennling employ the concept that stakeholders should be 'coherent with the change-agenda'.\textsuperscript{81} They conclude that without appropriate efforts, stakeholders will often not understand the process or proposal before it is fully communicated but that once done, many will be able to see potential benefits or at least no longer perceive a threat.\textsuperscript{82}
Efforts to better enfranchise under-represented groups are an increasing focus in revising the earlier project of goal-oriented focus, but they often lack a joined-up approach in reconciling different groups through process. This results in a tendency to emphasize demographic, cultural, political, and societal affiliations which ignore the social glue, the bonds of group cohesion, identity, and difference that typically form the basis for their aims, which can provide a real understanding of the stakeholder relationship unique to that project. Andrew Crane and Trish Ruebottom propose a model which integrates economic and contractual relationships with case-specific, socially relevant identification, which can provide an early identification of issues. Appropriately managed, this can be mutually advantageous to both clients and residents in allowing hitherto unknown factors to generate potential for improvement.

Stakeholder enfranchisement has followed similar trajectories in architecture and planning, heritage and housing policy in the twentieth century, progressing from object of provision to emerging as individuals and communities from the 1960s onward. Whilst this recognition represents a significant development in terms of enfranchisement, efforts to develop appropriate tools for securing stakeholder interests have unfolded slowly and remain ongoing to this day.

There are clear parallel developments in the narratives of the different themes progressing from singularity to pluralism. Architecture and planning progress from the tabula rasa revision to working with ‘as found’, presenting the human agenda, which in turn becomes sustainable development. In heritage, progression moves from monument to historic environment, whilst in housing we see progression from state provision to empowerment of individuals through home ownership and revision of public models with varying results.

Efforts to address stakeholder concerns in the different themes remain disjointed through a lack of cooperative approach. Beyond the shortcomings of heritage in protecting amenity value and stakeholder interests, this also applies to other areas of planning. Housing policy, which establishes the economic conditions needed to sustain communities and the framework for planning, currently faces severe challenges in providing for the diverse needs of society, particularly in home ownership where inflated prices make home buying impossible for many. The examples of estate regeneration and conservation indicate greater ease in attaining the successful outcomes on non-listed estates, so long as their council is attending to duty of care. Whilst overly prescriptive listing can hamper efforts, there is a clear need to revisit our approach to protection given the
benefits it can afford buildings and communities under the threat of redevelopment. This should develop the ongoing shift from substance to essence, so as to support both buildings and community in a way that conserves key values in the buildings whilst sustaining the vitality of the community living in those buildings.

In housing policy, the ambitious building programmes of the 1920s reveal a variety of devices for delivering large low-cost schemes. Whilst some are problematic in today’s context, the cooperatives, low-cost housing societies, and measures against speculation form key aspects in current discourse on housing and can usefully support communities and amenity value. It is clear that different economic models are required to address the diverse requirements of society, and this part of the narrative provides a resource for understanding the outcomes of different models.

CONCLUSION

The weaknesses and strengths of the different themes could be resolved by taking a composite approach. This should go beyond cooperation between different areas in planning today in order to realize the benefits of a formalized approach in bridging these gaps. The rise to prevalence of the human agenda in all three themes shows a need to operationalize stakeholder enfranchisement and give it a practical role in the planning process, whereby it can meaningfully influence decisions and outcomes. Applying best practice notions such as ‘coherence with the change agenda’ and the attention to structure highlighted by Crane & Ruebottom are key in this and could potentially start with a more nuanced version of a planning tool for mapping stakeholder values, as developed previously.

Whilst there are various aspects in Brutalism which are present in today’s approach to sustainable development, its focus on community provides a strong argument for a temporal contemporaneity which addresses changing needs as they develop. These buildings were designed around ideas of community and evolving stakeholder requirements, providing both the incentive for change and improvement while giving us clear guidance on how to safeguard their ‘essence’ through conservation. Reflecting on Corbusier’s claim that ‘Tomorrow belongs to Nobody’, the temporal contemporaneity seen in community and the ‘continuous and evolving building’ rather indicate that ‘Tomorrow belongs to Nobody’ because we should be concerned with addressing our needs day by day.
NOTES


4 Ibid., pp. 201–08.


13 Panerai et al., Urban Forms, pp. 95–96.

14 Ibid., pp. 90–113.


18 Frampton, Modern Architecture.
19 CIAM, _The Athens Charter_ (1933).


24 Risselada and Van den Heuvel, _Team 10, 1953–81_, pp. 8–34; Avermaete, _Another Modern_; and Risselada, _Peter and Alison Smithson_.


27 Ibid., p. 19.

28 Ibid.


30 Dirk van den Heuvel, ‘Picking up, Turning over and Putting with …’, in Risselada, _Peter and Alison Smithson_, pp. 150–73.

31 Smithson, _The Dynamics of Urbanism_, p. 118.


34 Dirk van den Huevel, _Alison and Peter Smithson: From the House of the Future to a House of Today_ (Rotterdam: 010 Publishers, 2004), pp. 64, 8–34, and 61–68.


36 Swenarton, _Cook’s Camden_, p. 280.

37 Glendinning and Muthesius, _Tower Block_, p. 71.


39 Serge Chermayeff and Christopher Alexander, _Community and Privacy: Toward a New Archi-


42 Chermayeff and Alexander, Community and Privacy, p. 51.


44 Mark Crinson and Claire Zimmerman, Neo-avant-garde and Postmodern: Postwar Architecture in Britain and Beyond (New Haven, CT: Yale Center for British Art Paul Mellon Centre for Studies in British Art, 2010); Swenarton et al., ‘Neave Brown in Conversation with Mark Swenarton & Thomas Weaver’.


49 Scanlon et al., ‘Social Housing in Europe’; Förster, ‘100 Years of Social Housing in Vienna’.


52 Panerai et al., Urban Forms, pp. 59–60 and 93–94; Förster, ‘100 Years of Social Housing in Vienna’.

53 Förster, ‘100 Years of Social Housing in Vienna’.

54 Swenarton, Cook’s Camden, p. 275.5 Bullock, ‘Building the Socialist Dream or Housing the Socialist State?’, Glendinning and Muthesius, Tower Block, pp. 319–24; Swenarton, Cook’s Camden, p. 278.


59 Ibid., p. VI.


64 Powers, ‘Style or Substance’, pp. 3–11.


66 Powers, ‘Style or Substance’, p. 10.


74 John Allan, ‘Preserving Heritage or Revaluing Resources’, in Macdonald, Preserving Post-War Heritage, pp. 201–08.


78 Allan, ‘Preserving Heritage or Revaluing Resources’, pp. 201–08.

79 Freear, ‘Alexandra Road’.


82 Ibid.


85 Ibid.
ABSTRACT
The built environment can be seen as a spatial continuum in constant alteration. When a building is renovated, we inevitably enter into a dialogue with this continuum. The motivation to alter a building may be decay and change in use or, as has been the case in Denmark in recent years, environmental and legislative demands for energy optimization. The vast majority of the existing building mass will still be in operation in 2050; and as such, the issue of energy renovation forms an important part of strategies to reduce the overall energy consumption in the building sector. However, such energy renovations dramatically influence the experience of the built environment. This calls for new strategies to articulate and maximize the spatial potential within the technical transformation process in critical dialogue with the existing construction. This article investigates whether the development of a tectonic approach to energy renovation might offer such a strategy. Methodologically, this is done by rereading the task of energy renovation through the lens of tectonic architectural theory. Specifically, Eduard Sekler’s etymological distinction between structure, construction, and tectonics, together with Fred Scott’s gradation of alterations, forms the basis for developing a theoretical framework for addressing the spatial implications of technical renovation initiatives. The tentative framework is applied in a comparative analysis of two case studies in order to illustrate that similar technical concepts, such as improvements of the thermal performance of the building envelope, can affect the perceived spatial quality differently depending on the applied strategy of alteration. As a conclusion, the article outlines a potential for positioning the question of spatial quality in the early design phases of energy renovation projects by means of tectonic thinking.

KEYWORDS
tectonics, energy renovation, architectural alteration, social housing
INTRODUCTION
‘. . . designers work with that of others who have preceded them, when working to alter a building, and also in precedence of those who will come after them. The work of intervention and alteration is thus collective, across generations . . . ’ In this phrase, Fred Scott advocates an understanding of the built environment as a spatial continuum in constant alteration. When a building is renovated, we inevitably enter into a dialogue with this continuum.

The motivation for altering a building may be decay and change in use or, as has been the case in Denmark in recent years, environmental or legislative demands for energy optimization. The vast majority of the existing building mass will still be in operation in 2050, and as such the question of energy renovation is crucial when aiming to reduce the overall energy consumption in the building sector. This is especially relevant within the domain of social housing. In Denmark, there are approximately 600,000 social housing units. The majority of these units were built before the introduction of demands for energy performance in the national building regulations in the late 1970s. Thus, there is a significant potential for reducing the overall energy consumption in the building sector by addressing this particular typology.

It is well recognized that the planned transformation towards a more energy-efficient building mass is likely to influence the experience of the built environment dramatically. When a dwelling is renovated, we face a vastly different task than that which comes with building from ‘scratch’, as we inevitably enter into a dialogue with the existing and the coming. However, recent research has identified that limited attention is being paid to the vital aspect of experienced architectural quality in contemporary energy renovation practice. In 2015, Ulrik Stylsvig Madsen and Anne Beim carried out a comparative study of eight evaluation methodologies with relevance for the Danish building renovation industry. Based on the study, the authors highlighted an apparent emphasis on technical, quantifiable values and advocated a need to include qualitative sociocultural values in future evaluations in order to secure a holistic approach. This is supported by the Norwegian researchers Fernanda Acre and Annemie Wyckmans who state that ‘. . . the inattention to the potential of nontechnical dimensions such as spatial quality, by stakeholders involved in the energy renovation of dwellings, constitutes a lost opportunity to increase occupants’ receptiveness to energy renovation’. Furthermore, it could be argued that inattention to the potential of spatial quality represents a lost opportunity to secure a long-term sustainable solu-
tion in which we do not look at value as something static, but rather focus on how the building can stay valuable to society and its inhabitants over time. According to Fred Scott ‘... the purpose [of altering a building] is to work the existent and the ideal together through the process of intervention, to keep the existing occupied and significant’. In this line of thought, energy renovation can be seen as an opportunity to secure such significance and add value to the inhabitants through attention to the implications of energy-saving initiatives on the perceived spatial quality.

Yet how should this issue be approached? One suggestion is put forward in the popular science publication *Arkitektur Energi Renovering* (Architecture Energy Renovation). The authors propose a design guide for working holistically with aspects related to energy consumption, indoor climate, and ‘improved spatiality’ simultaneously. The design guide is divided into three typologies: single-family homes, multistorey dwellings, and offices. It provides simple tools, suggestions for strategies, and cases which exemplify added value. The format ensures a ‘hands on’ guide for practicing consultants, which to the authors of this article represents great strength in early phases of renovation projects where design freedom is still relatively high, but knowledge about the project in its entirety remains limited. However, when zooming in on softer themes, such as ‘improved spatiality’, limited elaboration of the terms are offered. As such, they still appear less explicitly articulated than their more quantifiable counterparts.

There still seems to be a gap in the way we articulate and address technical quantifiable, ‘hard’ aspects, such as reductions in kWh/m², to qualitative, ‘soft’ aspects related to spatial quality. In order to address this gap, the authors of the present article put forward the following research question:

*Can a tectonic approach to energy renovation help to provide a framework for articulating the potentials of technical energy-saving initiatives on the perceived spatial quality?*

The research presented in this article forms part of the national research project REVALUE (Value Creation by Energy Renovation and Transformation of the Built Environment – Modelling and Validating of Utility and Architectural Value), which is conducted by the Department of Engineering and the Department of Public Health at Aarhus University in collaboration with ten partners in the building industry. The research project is dedicated to iden-
Identifying potentials for added value in building renovation. This article is built on the assumption that attention to spatial quality represents an important source of potential added value for the inhabitants.

METHOD

The first part of the article is devoted to the development of a theoretical framework based on a rereading of Eduard Sekler’s tectonic architectural theories combined with writings by Fred Scott on alterations in architecture. In this matter, Sekler’s tectonic theory provides a vocabulary for articulating the relation between technical initiatives and the implication on perceived spatial quality. By combining this approach with Fred Scott’s writings on renovation theory, we aim to relate tectonic theory to the domain of renovation which is by definition centred on alterations to an existing building and an understanding of our initiatives not as something final, but as a downstroke in a continuum.

In the second part of the article, the developed framework is applied in a comparative analysis of two renovation cases, namely Park Hill in Sheffield, UK, and Rosenhøj in Aarhus, Denmark. They were selected as two complementary cases related to Scott’s alteration spectrum on how to approach (energy) renovation. One represents a listed project, focusing on a combination of preservation and reinterpretation, and the other represents an approach focused on renewal. Hereby, a comparative study of the two opens up a potential to study whether or not the introduction of a tectonic lens in the context of energy renovation can help to articulate the consequences and potentials of technical initiatives on the perceived spatial quality across Scott’s alteration spectrum. The housing estates were both built in the 1960s and have been renovated within the last decade. Despite differences in scale and layout for example, they represent comparable cases in terms of typology and age. This allows for the focus on the applied renovation initiatives and how they have affected the perceived spatial quality. The case studies are based on literary references and interviews with representatives of the renovation teams.

Lastly, the article discusses perspectives and potentials for developing and implementing the tectonic analysis framework as a critical means for positioning the question of spatial quality in the early stages of renovation projects.
A TECTONIC APPROACH TO ENERGY RENOVATION?

Throughout the history of architecture, the notion of tectonics has been applied as a critical means to discuss the task, role, and responsibility of the architect in bringing together technique and aesthetics. In this article, we reintroduce tectonic theory as a starting point for addressing energy renovations and establish a link between technically motivated alterations and the spatial experience of the building.

The term ‘tectonic’ derives from the Greek word *tekton* which signifies a carpenter or a builder. Throughout history the term has developed to signify what Kenneth Frampton refers to as ‘poetics of construction’, a linkage between a given construction of a space and the way people experience that space. The notion reappeared in German architectural theory around 1850 as a response to the eclectic formal development of architecture and its relation to a possible meaningful exploitation of emerging industrial technology. In the wake of postmodernism, the application of tectonics as a lens through which to discuss a meaningful development of architecture rooted in primordial aspects of dwelling, on the one hand, and in exploiting technological inventions, on the other, reappeared, for instance in the writings of Kenneth Frampton. In current research, this interest in tectonics seems to be increasing, lately being associated with the question of ecology as well. This article builds upon this foundation with the aforementioned attempt at applying tectonics as a critical means of articulating the spatial potential of technical energy-saving initiatives. The article leans in particular on Eduard Sekler’s etymological study of tectonics. The reasoning for doing so is that his studies represent a relatively clear theoretical framework for addressing the interrelation between technique and spatial quality. In his 1964 essay ‘Structure, Construction, Tectonics’, Sekler defines tectonics as ‘the noble gesture which makes visible a play of forces, of load and support in column and entablature, calling forth our own empathetic participation in the experience’. He thus establishes a link between what he refers to as the structural concept and the way it ultimately affects the experiencing subject through spatial ‘gestures’ once the structural principle is manifested, or realized, in concrete ‘construction’.

In the paper ‘Towards a Tectonic Approach: Energy Renovation in a Danish Context’, Marie Frier Hvejsel, Poul Henning Kirkegaard, and Sophie Bondgaard Mortensen propose that Sekler’s terms be used as a vocabulary to articulate not only the ‘visible play of forces’, but also the implications of technical interventions on the perceived spatial quality in a broader sense.
Building on this reading of Sekler’s theory, we propose that the notion of structure, construction, and gestures can be used to describe how the technical concepts are realized through certain alterations to the construction and to what degree these alterations contribute to added value for the occupants through improved spatial gestures.

The task of renovating a building differs greatly from that of building ‘from scratch’, as it involves an evaluation of the state or value of the existing construction and how to manage this in the renovation process. In order to relate the rereading of Sekler’s tectonic architectural theory to the field of (energy) renovation, we suggest the combination of the tectonic framework with perspectives from renovation theory. Historically, changing—and even conflicting—attitudes to managing the existing built environment have been advanced. For example, the nineteenth-century French architect and author Eugène Emmanuel Viollet-le-Duc advocated an approach to renovation based on restoring the grandeur of the original building, maybe even a grandeur that has never existed. By contrast, his contemporary, the author John Ruskin, considered such a restorative approach to be altogether deceiving and advocated an approach based on preservation and preventing interference. The purpose of including these examples is not to initiate a thorough account of the theoretical development of the renovation field. Rather, the intention is to exemplify that there exist different views on the matter.

In this article, we also lean on writings by the architect and design theoretician Fred Scott. Based on a critical review of existing theories (the theories formulated by Viollet-le-Duc and Ruskin, among others), Scott stresses that if buildings are to stay inhabitable, they must be understood as part of a spatial continuum in constant alteration. When faced with the task of renovation, we inevitably enter into a dialogue with this continuum.

Where Sekler’s tectonic theory offers a vocabulary for articulating the spatial implications of technical initiatives, Scott’s writings provide a theory for understanding the initiatives not as something static or final, but as one of many alterations that the building will undergo throughout its lifespan. His understanding of renovations as a downstroke in a constructed spatial continuum is crucial when we seek to add lasting value for the users.
Scott points out that the changes to a building alter our perception of it:

If electricity is introduced into a pre-electric building, it alters it. If central heating is put in to replace local heating via foci of heat, such as stoves and fireplaces, the building is altered spatially. Most markedly, if extensive electric lighting is introduced, the building is altered. The alteration is in the way the building is perceived: to see the spaces fully illuminated by an internal light source during the hours of darkness causes the building to be seen differently from at its inception.²⁵

This supports the tectonic understanding that (technically motivated) interventions ultimately affect how a building is perceived and therefore constitute a spatial challenge. There are of course multiple degrees of alteration. Scott refers to wiring as an example of an alteration which can be easily concealed, whereas comprehensive changes to the spatial arrangements may cause greater ’stir’. In the case of (energy) renovation of social housing from the 1960s, we are not introducing electricity or central heating. Rather, the focus is on the energy performance of the building. In the specific case of energy renovation, research shows that one of the biggest potentials for energy reduction lies in reinsulation of the building envelope.²⁶ Furthermore, this is a commonly applied strategy in a Danish context. In order to ensure relevance for contemporary practice, we therefore focus our attention on this particular part of the building, investigating the spatial implications of altering the building envelope to be more energy-efficient.

Scott states that ‘[w]ork to existing buildings is of two types: either restorative or interventional’²⁷ and that a building can be altered ‘in the style of the original or in contrast to it’.²⁸ As an interpretation of these statements, we introduce three concepts for articulating the degree of alteration to the building envelope: preservation, reinterpretation/accentuation, and addition/renewal. These concepts represent extremes and, as such, a building renovation could often represent an approach somewhere ‘in between’ or even include different approaches in relation to different building components. Nevertheless, Scott’s statement serves as a reminder that different views on this matter exist and that it is relevant to articulate the implications for spatial quality in one approach over another depending on the level of existing quality in the particular project. The three concepts serve as a starting point for this articulation. Scott further distinguishes between surface and spatial changes. The former relates to alterations like colour or illumination, whereas the latter denotes alterations
of the existing spatial organisation. In this article, we seek to combine these two aspects under the tectonic notion of ‘spatial gestures’, inspired by Sekler, in order to address the spatial consequence or potential of a technical alteration in its entirety, rather than separate elements. In other words, the term spatial gestures is used to denote the resulting spatial capabilities of the building envelope in the exterior and interior, spanning from how it is experienced from a distance, for example when viewing the building as part of the urban fabric, to the experience through tactile encounters on the smallest scale.

In summarizing the content of this section, it can be seen that the works of Sekler and Scott overlap in the sense that they both stress the implications of technical initiatives on the perceived spatial quality in buildings. Based on the above rereading, we introduce the following interpretation of the two theories as a point of departure for articulating the consequences and potentials of technical alterations on the perceived spatial quality in the particular context of contemporary energy renovation:

Eduard Sekler: Introducing a vocabulary to describe how technical concepts (such as reduction of energy losses through the building envelope) are realized through alterations to the existing construction and to what degree these alterations contribute to added value for the occupants through improved spatial gestures.

Fred Scott: Establishing (energy) renovation as a dialogue between the past, present, and future, in which we alter the existing construction to ensure the value of the building to the inhabitants over time, by preserving or reinterpreting/accentuating existing values or adding new values.

INTRODUCING A TECTONIC FRAMEWORK
The ideas presented above are summarized graphically in Figure 1, which will serve as a framework for analysis in the following section. The figure visualizes the process of identifying existing spatial qualities in the building as it appears prior to renovation and laying down a strategy for alteration of the construction, that is, how to realize a technical concept (such as improving the thermal performance of the envelope) through alterations to the existing construction. Depending on the chosen strategy, the alterations to the construction can serve to ‘preserve’ or ‘reinterpret’ / ‘accentuate’ existing spatial qualities, or to ‘add’ new qualities through the spatial gestures they induce.
COMPARATIVE ANALYSIS OF TWO CONTEMPORARY RENOVATION CASES

In the previous section, we proposed a tectonic framework for articulating spatial quality as part of energy renovation projects through an improved mutually technical and spatial dialogue between the past and the present.

In this section, we will carry out an analysis of two cases based on the proposed framework. The cases are the social housing complexes Park Hill in Sheffield, UK, and Rosenhøj in Aarhus, Denmark. Both projects have been the subject of extensive renovation as part of the urban regeneration of the areas in which they are located. Yet they represent different approaches. The renovation of Park Hill, on the one hand, was performed in line with English Heritage’s requirements for a Grade 2 listed building with emphasis on maintaining distinctive modernist and brutalist characteristics and reinterpreting others. In the renovation of Rosenhøj, on the other hand, which is not a listed area, the original intentions are more hidden. The cases have been included as examples of how similar technical concepts, like energy optimization of the building envelope, can be realized through different degrees of alteration to the existing construction, ultimately affecting the perceived spatial quality in distinctly different ways. The purpose of the analysis is to examine if the developed tectonic framework might help to articulate, at a deeper level, the implications of technical energy-saving initiatives on the
perceived spatial quality in each of these approaches. The analysis of each case includes introductory facts about the building. Thereafter, the article will focus on addressing the building envelope through a brief account of the main characteristics of the existing constructions, followed by the analysis of the completed renovation based on the proposed tectonic framework.

PARK HILL, SHEFFIELD, UK
The residential area Park Hill was completed in 1961 with the help of architects Ivor Smith and Jack Lynn. Park Hill consisted of an astonishing number of 985 flats for rent and accompanying shared services. The 10-metre-wide slab blocks were built in up to fourteen stories, distributed in one continuous structure across the sloping hillside. The apartments were accessed through an entrance gallery on every third floor, which was made possible by introducing a mix of one-level apartments and maisonettes with internal staircases. The typology of the Park Hill complex differed greatly from that of the existing city and sought to break with "the existing living-pattern of the area, which had become a notoriously blighted slum." At the time of its completion, Park Hill was considered an ambitious state-of-the-art project which met an urgent need for affordable housing. After approximately twenty years, the perception began to differ and the once positive attitude towards the housing complex started to fade. Characteristics, such as the large scale, the extensive use of exposed concrete, and the mono-tenure principle, have been mentioned as contributing factors to the negative development. Park Hill was facing demolition when English Heritage decided to list the building complex in 1998. In 2004, the developer Urban Splash, in collaboration with the architects Hawkins/Brown and Studio Egret West, won a competition to renovate the housing complex. The renovation was carried out in three phases from 2004 onward, and the master plan involved changing the residential form from rental to mixed-tenure housing and including office spaces and a kindergarten, among other things.

EXISTING CONSTRUCTION (BUILDING ENVELOPE)
The Park Hill complex is an example of British brutalist architecture. The structural concept is defining for the exterior expression, as is the repetitive composition of apartments. As such, the concrete frame is a dominant characteristic in the facade. However, the rhythm of the facade is a result of the relationship between the in-situ concrete frame and its infill of precast balustrades, brickwork, windows, and balconies, which contribute to an experience of tactility and depth. The main materials of the construction are
exposed concrete and brickwork in two colors, both materials typical for the brutalist era. The contrast of textures in these materials and the changing depths of the infill relative to the frame serve to emphasize the latter. Another characteristic of the facade is that of the galleries on every third floor. As opposed to central corridors, these entrance decks provide air, views, and a potential for social concentration. The decks further function as pedestrian bridges, so-called ‘streets in the sky’, which bind together the slab blocks and connect the streets to the ground level at one end of the sloping site. When the renovation project began, Park Hill was in a poor state, suffering from physical decay and social problems. As such, the aim of the renovation of the building envelope was to contribute to the revitalization of the complex and to update the construction to modern-day standards, while at the same time respecting English Heritage’s requirements for Grade 2 listed buildings.

ANALYSIS OF RENOVATION INITIATIVES (BUILDING ENVELOPE)

Figure 2 illustrates a section through the building complex prior to renovation. Two subsections through the building envelope are highlighted for further analysis in the following text. The objective is to analyse the tectonic interrelation between the technical concepts and resulting spatial gestures in these areas. In order to do so, we have applied the developed tectonic methodological framework as a lens through which to address the alterations to the construction.

Figure 2. Section through the Park Hill complex, illustrating the area of analysis (prior to renovation). Source: The authors
STREET IN THE SKY / COVERED ENTRANCE DECK (FIGURE 3A)

Technical concept: The main technical concept for the renovation of the entrance facade was to update the building envelope to a thermally efficient skin at the same time as protecting the existing concrete frame. At the eastern facade, there has also been a focus on improving the thermal and acoustical performance of the deck between the ‘streets in the sky’ and the bedrooms in the underlying flats.

Construction: The technical concepts have been realized through a hierarchical approach. Everything but the concrete slabs, walls, and columns was demolished when the process began. The original concrete elements of the grid were repaired (blue, Figures 3a and 3b). New concrete balustrades were mounted following the original scheme, however in a slightly lighter version (blue, Figures 3a and 3b). The facade between the ‘street in the sky’ and the dwellings was rebuilt with a new facade line, including a part of the old ‘street in the sky’ and with only few of the original concrete facade elements preserved. The new wall was erected as a thermally well-insulated envelope with new doors and windows (red, Figure 3a).

Spatial gestures: The outer facade level with balustrades was altered as a continuation of the style of the original, both in terms of surface and spatial configuration. However, the actual building envelope (red) underwent considerable alterations, including demolishing the old wall and replacing it with new elements. The alterations allowed for new spatial gestures as the new building envelope was alternately pushed forward or drawn back to create spaces in the interior, where it added an additional storage room, and in the exterior, where it added a shared semi-private entrance for four dwellings. The consequence of doing this was that the ‘street in the sky’ was narrowed from 3 to 2 metres. The original width was defined by the milk cart being able to pass, which today, obviously, is no longer a functional requirement. The new layout allowed for a transition zone between the public and private realm, which has been described by a number of theoreticians as a general shortcoming in modernist housing schemes. The surface cladding material chosen for the building envelope was wooden panels. Normally, these panels would not be able to withstand the wear and tear of the climate, but in this case the overhang allowed for protection. The finish of the joining of materials is open to interpretation, but the overall spatial gesture is that of warmth, which contrasts and accentuates the rough concrete. As part of the renovation process,
windows were added in the building envelope, which allows for a little extra daylight in the interior space, but most importantly induces a sense of security for the entrance situation.
In this section, the alterations to the facade above the entrance floor, where the living rooms are located (Figure 3b), will be analysed.

*Technical concept:* As with the facade on the entrance level, the main ambition from a technical perspective was to update the building envelope to a thermally efficient skin at the same time as protecting the existing concrete frame.49

*Construction:* In the realization, this led to a hierarchical approach to handling construction elements. Everything but the concrete slabs, walls, and columns was demolished. Starting from the stripped grid, the original concrete elements of the grid were repaired (blue, Figures 3a and 3b). New energy-efficient aluminum windows and sliding doors were added, filling two thirds of the infill area as opposed to one third in the original scheme. Squares of anodized aluminum were introduced next to the windows instead of the original brick elements (green, Figure 3b).50

*Gesture:* The treatment of the original grid can be described as a preservation and continuation of the style of the original to an almost surgical degree. In this connection, it can be mentioned that the issue of thermal bridges in the concrete structure was de-emphasized in order to preserve the original expression of the grid.51 By contrast, the team of consultants altered the facade elements within the grid in a more interpretive manner: the original brick elements were substituted with brightly colored aluminum as a contemporary interpretation of the graduating colours of the original brickwork. Together, the windows and the coloured elements constitute a reflecting surface which contrasts the matte surface of the concrete grid. This serves to accentuate the hierarchy of the frame and infill and indicates a step change. However, this happened at the expense of the tactility of the original brutalist brickwork.

In the interior, the alterations of the ‘infill’ provide increased access to daylight, which, together with partial demolition of inner walls, contributes to a spacious and light atmosphere. Furthermore, draught sealing the facades and the introduction of new sliding doors may improve the opportunity for furnishing the adjoining spaces.
SUMMARY: TECTONIC ALTERATION OF CONSTRUCTION?

In the previous section, alterations to the building envelope in the Park Hill project have been analysed. On the entrance deck, the ‘technical concept’—energy optimization of the building envelope—has been realized through two different approaches to alterations of the existing ‘construction’. The first continues the style of the original in the concrete repairs and remaking of the balustrades following the original design, and the second contrasts the original in the redesign of the existing building envelope into a spatial element which creates a semi-private entrance area shared by four dwellings. When we analyse the resulting spatial gestures in the building envelope, the chosen strategy for alteration of the construction allows for a visual expression in line with English Heritage’s requirements at the same time as introducing new spatial qualities to the complex.

On the floor above the entrance level (the living room facade), it can be seen that the energy optimizations have been realized by altering the facade elements within the existing grid. The renovation team substituted the original brick elements with coloured glass which contrasts the matte surface of the concrete grid and thereby accentuates this feature. Whereas the spatial reconfiguration at entrance level addresses the inhabitant at a scale close to the body, the surface alterations mentioned here mainly affect our perception of the building from a cultural-historical perspective when seen from the city, as a new dialogue is initiated between the original grid and the contemporary infill of the windows and adjoining coloured panels.

Through this analysis of the Park Hill residential area, we have sought to gain a deeper understanding of the tectonic interrelation between the technical concepts and the resulting spatial gestures. It has been established that even within the same building, the technical concept of improving the thermal performance has been realized through different degrees of alterations to the existing construction in order to obtain different spatial gestures. Following the analysis, the authors conclude that the renovation of the building envelope in Park Hill is an example of a tectonic alteration to the construction as it represents a high degree of mutually technical and spatial dialogue between the past and the present. The main integrity of the original architecture is preserved and reinterpreted to secure the renewed significance of the building. In the following section, we continue with an analysis of the Rosenhøj residential area in Aarhus, Denmark. Subsequently, the results of the analysis of both cases will be compared in the ‘Discussion’ section.
ROSENHØJ, AARHUS, DENMARK

The housing complex Rosenhøj was built from 1968 to 1970 and comprised 839 dwellings, arranged in twenty-seven four-storey apartment blocks with basements. Rosenhøj was built as a part of the Sydjyllandsplanen (South Jutland plan), which was developed and administered by the Ministry of Housing and was a plan for the support of prefabricated constructions to provide good, affordable dwellings. The architect behind the South Jutland plan was Børge Kjær, who developed the building type in collaboration with ten housing associations. The vision was to achieve production-related advantages from developing one building type which could be mass-produced and built in a number of places across the country. The South Jutland plan can be seen as a development of earlier decades’ influences from the international modernist movement and its ideals, with the aim of providing spacious dwellings with access to green areas, air, and light. The plan provided state-of-the-art dwellings with qualities such as large living rooms and bathrooms, modern kitchens, connections for washing machines, and an inherent flexibility and adaptability for future changes through the merging of apartments.

The South Jutland plan is also known as one of the so-called ‘crane track developments’ (kransporsbyggeri), which were characterized by building slabs organized in a geometrical pattern, in the case of Rosenhøj in parallel tracks. According to Jannie Rosenberg Bendsen and Anna Mette Exner, the crane track developments generally suffered from a focus on production, construction, and assembly at the expense of adaptation to local conditions and articulation of the spaces between the buildings. Other characteristics of the developments were the attention to infrastructural separation and an understanding of the settlements as independent units complete with institutions, grocery stores, and so on. Such qualities, over time, contributed to closing off the areas from the surrounding cities.

Despite the good intentions in the original layout, the socioeconomically advantaged families gradually moved from the area, and during later years the area experienced a troublesome development. According to the housing association, the housing blocks and the area in general faced serious building damage and social issues when the recent renovation process began. After years of preparatory work, an architectural competition was launched in the summer of 2010. The competition was won by Viggo Madsen consulting engineers in collaboration with Arkitema Architects and EFFEKT architects. As with the Park Hill project, the renovation formed part of a larger...
master plan. In Rosenhøj, there was a specific focus on opening the area to the surroundings through the redesign of the spaces in between the buildings, densifying the area through the addition of new building types, and breaking with the monotony of the area.\textsuperscript{61}

**EXISTING CONSTRUCTION (BUILDING ENVELOPE)**

In accordance with the South Jutland plan, the construction of the facades was based on prefabricated elements.\textsuperscript{62} This was reflected in the exterior, which was characterized by a repetitive facade expression in all of the twenty-seven blocks. Towards the south-west, the facade was dominated by large internal balconies. Towards the north-east, the entrance side, the building envelope was designed with continuous horizontal windows. These windows were separated by slender panels which emphasized the impression of an unobstructed horizontal element.

Since its completion, Rosenhøj has been the subject of a number of partial alterations. In the late 1990s, for instance, the balconies were covered with glass and the areas around the bathrooms and main entrances were reinsulated and emphasized in the facade in a characteristic postmodern way.\textsuperscript{63}

When the recent extensive renovation began, the building complex was in need of a general update. There were problems with leakage, cold bridges, and mould in the construction. As such, the aim of the renovation was to perform extensive improvements of the building envelope.\textsuperscript{64}

**ANALYSIS OF RENOVATION INITIATIVES (BUILDING ENVELOPE)**

In the following, we engage in an analysis of the tectonic interrelation between the technical concepts and resulting spatial gestures in the renovation of Rosenhøj. As in the analysis of Park Hill, we focus our attention on alterations to the building envelope, more specifically on the north facade which is the primary entrance facade (Figure 4).

*Technical concept:* The technical intention was to update the building envelope to comply with modern-day standards for thermal insulation. In this specific case, the intention was to meet the Danish building regulations. Furthermore, the technical concept included updating the heating system and implementing a mechanical ventilation system. The alterations resulted in a reduction in energy consumption of 30–40 per cent after the renovation.\textsuperscript{65}
Construction: In Rosenhøj, the technical concept was realized through reisulation of the original concrete facades with 200 millimetre insulation mounted in wooden cassettes and new double glazed windows. The apartment blocks are clad in either aluminum, slate, or concrete as the main materials. In this analysis, we focus on a building block which has been clad in aluminum.

Spatial gestures: The implications of the realization of the technical concepts on the perceived spatial quality are highly evident in both the exterior and the interior. Focusing on the specific section of the building envelope (Figure 4), changes in the exterior (Figure 5a) will be looked at first.

EXTERIOR (FIGURE 5A)
As opposed to Park Hill, it can be seen here that the majority of facade elements have been the subject of renewal (red). The building block has been dressed in a new aluminum facade which differs greatly from the original facade. The facade renovation has followed a scheme in which the blocks are ‘linked’ to each other in pairs around a courtyard by means of facade materiality and expression. This allows for an experience of a more differentiated area and a reduced scale. Rather than twenty-seven identical apartment blocks, they are now clustered in smaller units which define the exterior space between them. As such, the building block, which forms the outset for the present analysis, contributes to a more diverse expression in the area and to a better programming of the outdoor spaces.
Looking more closely at the facade, traces of the original horizontal window strips (green) are evident. The impression of a horizontal band is obtained through the use of wooden lamellas which visually connect the windows. The wooden elements also add a level of tactility to the surface. However, most dominantly, it can be seen that on every second storey, the horizontal

![Figure 5a. Sketch of the exterior before and after the renovation (left and right respectively), accentuation and addition/renewal. Source: The authors](image)

![Figure 5b. Sketch of the interior before and after the renovation (left and right respectively), renewal of the facade. Source: The authors](image)

Figure 5. Spatial sketches of the facade from the exterior (5a) and interior (5b) before and after renovation. Source: The authors
windows have been supplemented with new bay windows (red). The introduction of the bay windows fundamentally breaks with the original layout and adds to the overall impression of a completely altered expression, in which only few links to the original surface articulation remain.

INTERIOR (FIGURE 5B)
In the interior, the extensive alterations to the facade create a distinctly altered experience in the adjoining spaces (Figure 5b). Most distinct are the aforementioned bay windows, which utilize the extra depth of the walls to create a sitting niche. According to the engineer Søren Nielsen from Viggo Madsen consulting engineers, the tenants have responded positively to the alteration, especially as a place for sitting in connection to the kitchen area. This utilization of the additional depth of the wall due to reinsulation creates a new spatial gesture which was not there before.

SUMMARY: TECTONIC ALTERATION OF CONSTRUCTION?
In Rosenhøj, the building blocks have undergone extensive renovation including reinsulation, changing window formats, and applying new facade materials. In the exterior, the technical concept—namely to optimize the thermal performance of the building envelope—has been realized in the manner of focusing on renewal of the existing construction. This, to a degree, where the original expression (which reflected the technical concept of mass production and assembly), is almost hidden. The impression of a renewed facade is further strengthened by the introduction of bay windows which constitute a new formal motif in the area. However, traces of the original horizontal window bands, which are interpreted and accentuated through the use of wooden lamellas, can be found. The resulting spatial gestures in the exterior may be described through the ability of the building envelope to contribute to a new narrative in the area, focusing on differentiation and reduction of the experienced scale.

In the interior, the alteration of the construction—the reinsulation of the building envelope and the introduction of bay windows—is utilized to create new sitting niches. In the exterior, the pairs of blocks help to define exterior courtyards. As such, the chosen way of realizing the technical concept provides new spatial gestures which were not part of the original scheme.

In summary, it can be stated that the approach presented in Rosenhøj differs greatly from that of the Park Hill project. By focusing on renewal as the main
alteration strategy, the dialogue between the past and the present has a distinctly different character. It can be argued that by hiding the original intentions with a new ‘overcoat’, we are renouncing the fact that the original facade is of any value. Yet the intention of this article is not to pass judgement on either of the two approaches presented here, but rather to articulate how similar technical concepts can be realized in vastly different manners depending on the state or value of the original building. It can, however, be concluded that in relation to the building envelope, there is a limited dialogue with the past. Rather, there seems to be a focus on breaking with a somewhat shady reputation at Rosenhøj through extensive changes in architectural expression. The new facade cladding is contributing to this with more than a ‘facelift’, as it defines new spatial gestures in the interior and the exterior. In this light, the alterations can be viewed as tectonic.

DISCUSSION
In the previous section, two case studies, Park Hill in Sheffield, UK, and Rosenhøj in Aarhus, Denmark, have been analysed. The purpose of the analysis has been to examine if and how a tectonic approach to energy renovation might help to provide a framework for articulating the implications of energy-saving initiatives on the perceived spatial quality. This section is devoted to a discussion of the application of the suggested tectonic framework.

The consequences of reinsulating the building envelope on the overall expression of a building has been mentioned in a number of publications. Especially in the case of historical buildings, the facade expression may require alternative means of energy optimization in order to not disturb the qualities of the facade. This is the case in the Park Hill project, in which concerns related to thermal bridges in the concrete grid have been de-emphasized in order to preserve the characteristic grid structure. However, as seen in the case of Rosenhøj, there may be buildings in which the focus is on the renewal/addition of qualities rather than on preserving existing ones. Both cases, however, require tectonic insight in order to maximize the potential for added spatial value. The tectonic framework serves to nuance the discussion, so that it is possible to articulate the degree of alteration and address the potential for increased spatial quality relative to the chosen strategy.

In the analysis of Park Hill and Rosenhøj, we have focused on chosen details related to alterations of the building envelope. We have analysed if and how technical concepts are realized in a manner which contributes value to the
inhabitants by offering spatial gestures identifiable as a tectonic approach to alteration of the construction. In the Park Hill project, it has been shown how technical concepts related to energy optimization have been realized in a manner that accentuates the existing concrete grid (preservation/accen-
tuation) and adds new spatial values to the building by introducing changes such as semi-private entrance spaces at the entrance levels (renewal/addition). In Rosenhøj, it has been highlighted how the similar technical concepts related to the building envelope have been realized in a manner which favours addition/renewal over preservation. In this case, the tectonic exploitation of the building envelope is strengthened as the new facade (renewal/addition) induces spatial gestures in both the interior and the exterior, which the original facade failed to do and which may have been a contributing factor in its declining reputation amongst the users. Through the application of the tectonic framework in the two case studies, we have attempted to move beyond the somewhat ambiguous notion of ‘spatial quality’ put forward in contemporary renovation discourse, towards a more nuanced vocabulary for articulating the spatial consequences and potentials of the technical renovation initiatives. Using ‘technical concept’, ‘construction’, and ‘spatial gesture’ as guiding principles, the question of spatial quality has been positioned in direct relation to technical alterations to the construction. We hereby stress the importance of considering reinsulation not as a mere technical cladding, but as an architectural element that lends itself to strengthening existing spatial qualities or to adding new ones through critical assessment of renovation alternatives.

The tectonic approach opens up the discussion about the relation between technical and spatial concerns. However, an understanding of spatial quality in the context of social housing necessarily prescribes an understanding of cultural and socioeconomic matters. Such matters are crucial in both the case of Park Hill and the case of Rosenhøj but have only been addressed indirectly in the tectonic framework presented here. As such, there is room for further development of the framework to encompass such concerns as part of a tectonic approach to energy renovation of social housing.

FROM ANALYSIS FRAMEWORK TO PROCESS TOOL
Presented in this article is a framework for analysing the implications of technical initiatives on the spatial quality of a dwelling. The perspective of the research is to further develop the tectonic framework, aiming not only to analyse completed projects, but also to articulate potentials in ongoing
projects. The hypothesis is that the tectonic lens can help to position the question of spatial quality in the early design phases of renovation projects in which the outline of the project is drawn and design freedom is still relatively high. If the framework is to be developed as part of contemporary process tools or design guides, it would be natural to employ a different sequence starting with mapping the intended technical concept and spatial gestures and subsequently discussing how different construction alternatives support these aspects in a tectonic manner. Further development of the framework would involve moving from a theoretical lens to a more hands-on format.

The development of the tectonic approach to energy renovation will be based on further theoretical studies and empirical studies: the latter through investigations of how occupants in social housing complexes perceive the spatial implications of energy renovations in their dwellings.

CONCLUSION

In this article, we have addressed the architectural challenges related to energy renovation of social housing. The focus of the article has been to investigate if a tectonic approach to energy renovation might help to provide a framework for articulating and maximizing the potential of technical energy-saving initiatives on the perceived spatial quality. Since reinstallation of the building envelope represents an important focus area in many contemporary projects, the present article has focused on initiatives related to this particular part of the building.

Through a rereading of Eduard Sekler’s studies of tectonic architectural theory, we have proposed a simplified tectonic framework for analysis of renovation initiatives in relation to the building envelope. This has been linked to Fred Scott’s understanding of the act of renovation as a dialogue between the past, present, and future—as a way to target the domain of renovation and the specific challenges related to this discipline.

In continuation hereof, we have applied the framework in the analysis of two case studies of social housing projects which have undergone renovation within recent years: Park Hill in Sheffield, UK, and Rosenhøj in Aarhus, Denmark. Both complexes were built in the 1960s and represent two different approaches to the degree of alteration of the original. As such, they have been included as examples of how similar technical concepts can be realized in distinctly different manners depending on the state or value of the original
building. In the analysis, we have applied the framework as a means to articulate if and how the constructional realization of technical concepts related to the building envelope contributes to spatial gestures in the interior and the exterior, leading to increased spatial quality for the inhabitants rather than providing ‘mere’ additional cladding. Based on the analysis, we see a critical potential to explore the framework further as a lens through which to position the tectonic question of spatial quality in the early design phases of energy renovation projects.

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NOTES


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13 Scott, On Altering Architecture.


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62 Aarhus Municipality, Aarhus Omegn, and Viby Andelsboligforening, Konkurrenceprogram.


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LIVING ON THE THRESHOLD: THE MISSING DEBATE ON PERI-URBAN ASYLUM RECEPTION CENTRES IN NORWAY, 2015-16

Anne Hege Simonsen and Marianne Skjulhaug

ABSTRACT
In 2016, almost 40 per cent of Norwegian asylum reception centres (ARCs) were located in so-called peri-urban landscapes across the country. In media coverage and central planning documents, however, geographical location seems rarely to be considered as potentially crucial to the well-being of asylum seekers or their integration. While peri-urban locations do not necessarily mean poor living standards, the location certainly influences practical opportunities to participate in the host community. The key objective of this interdisciplinary study is to investigate location as a parameter for how asylum seekers engage in their temporary neighbourhoods/communities and as an essential factor in preventing hostile othering processes. By highlighting aspects of peri-urban conditions, such as temporality, sense of place, and community, this study identifies vital dilemmas and challenges connected to the intertwining of public and political discourse with the physical realities of regional and urban space.

KEYWORDS
location, peri-urban, asylum reception centres, othering, asylum seekers
INTRODUCTION
In 2015–16, the Syrian crisis prompted an unprecedented influx of refugees to Norway. At its peak, the Norwegian Directorate of Immigration (Utlendingsdirektoratet, UDI) offered approximately 39,000 beds in mostly improvised reception centres. Publications such as the Norwegian real-estate magazine Estate Vest bluntly and tellingly asked: ‘May anything serve as an asylum reception centre?’ The magazine argued for the economic possibilities of converting abandoned hospitals, military barracks, factories, warehouses, hotels, and even office buildings into asylum reception centres (ARCs). Even though ARC contracts must be renewed every three years, and there are limited resources to upgrade physical structures for housing purposes,
the magazine drew positive conclusions about the potential of asylum reception centres as temporary business opportunities.

By 2018, Norway had radically reduced the national capacity to receive refugees. According to the UDI, only 4,014 people lived in ARCs in April 2018 as a result of the Norwegian government’s new strict immigration policy. The year 2015 saw 31,150 asylum seekers come to Norway, but the number dropped by 89 per cent to less than 3,500 in 2016. These numbers show that the refugee influx is far from constant and partly explain the common use of permanent structures as temporary ARCs in Norway in urban, suburban, and peri-urban areas. The temporary nature of ARCs appears to be intended and is stressed in official documents (e.g. Rundskriv H-4/15). The former Minister of Justice Anders Anundsen further highlighted impermanence as a government decision in November 2015, when he rebutted asylum seekers’ complaints about the standards of the ARCs to which they were assigned. An ARC ‘is not a holiday home,’ Anundsen stated, and the asylum seekers were ‘free to leave’ if they were not content.

In Norway, ARCs accommodate refugees who are applying for asylum in the country, and all actors involved conceptualize ARCs as short-term dwellings. ARCs are established through collaboration among the government, municipalities, and public and private operators, organizations, and property owners. ARCs are centralized (often abandoned hotels, hospitals, and building complexes) or decentralized (individual apartments linked to a central office). It should be noted that these two types refer to the organizing principles, not the location.
In recent academic studies, the buildings’ physical condition has been described as crucial to how ARCs may contribute to the asylum seekers’ quality of life. Åshild Løppegard Hauge, Karine Denizou, and Eli Støa have highlighted the negative impacts of mediocre or low housing standards on asylum seekers’ lives. The location has not received the same scholarly attention, despite the expectation that Norwegian ARCs will provide means for residents to be ‘active participants’ in the local community. In July 2016, we found that many temporary facilities were located in peri-urban settings, far from everyday services, cultural amenities, and lively, populated urban environments. This situation can decrease asylum seekers’ opportunities for community participation, and there is little to no systematic knowledge of if and how peri-urban ARCs can perform this social function.

The refugee influx to Norway has diminished, but the international refugee crisis has not been resolved. While the number of ARCs in Norway has fallen dramatically since 2016, we find experiences from 2015 to 2016 still relevant for the discussion on how refugees can participate in Norwegian communities on an everyday basis. There are still lessons to be learned that relate to broader questions of migration, temporality, and community building in urbanizing regions. Our study centres on three research questions:

1. What was Norway’s actual response to accommodating asylum seekers during the acute refugee crisis in 2015–16?
2. To what extent is the location of ARCs a factor in the public debate on asylum seekers’ integration and well-being?
3. What do essential planning and policy documents say about community integration when accommodating asylum seekers?

Our goal is to identify critical dilemmas and challenges related to the reception of refugees when public and political discourse intertwine with physical realities on the ground.

THEORETICAL FRAMEWORK
This section explains three significant concepts that compose the study’s theoretical approach: nærmiljø (local community), used as the term for a particular view of community-based integration; peri-urbanity, viewed as a uniquely challenging location; and othering processes, which provide a way to understand the intersection of political, public, and experienced marginalization. These concepts relate to separate but overlapping academic fields,
including social anthropology, architecture/urbanism, and media studies. In general, most research agrees that host communities contribute to asylum seekers’ social, mental, and physical welfare. Official policies also highlight the importance of belonging to a community. Although asylum seekers in Norway should stay in ARCs only temporarily, the average stay is 625 days, slightly less than two years. A recent study by Nerina Weiss, Anne Britt Djuve, Wendy Hamelink, and Huafeng Zhang found no apparent connection between time spent in ARCs and the ability to connect to a community. This research, however, did not consider the locations of ARCs in different kinds of communities as a variable.

**Naermiljo: A Close-Knit Community**

‘Community’ is a rather blurry concept with a multitude of meanings that need to be untangled to be analytically useful. In a Norwegian context, a community can mean anything from the Norwegian society as a whole to a local neighbourhood. For our purposes, we focus on the concept of *naermiljo* as particularly relevant since the term is used in the Norwegian Directorate of Immigration’s official documents. The term *naermiljo* coins a local community where shared geographical location creates a sense of solidarity that, although significantly weaker, shares common traits with kinship. *Naermiljo* became a core term in urban planning in the 1970s as a result of, but also in opposition to, urban planning that people conceptualized as cold and dehumanizing compared to the idealized version of rural life. *Naermiljo* has since been reconceptualized as a reaction to, amongst others, neoliberal urban development and negative gentrification processes, exemplified through, for instance, the so-called *områdelaft* processes (area-based initiatives), a particular methodology developed to improve quality of living in deprived urban districts.

In a Scandinavian and Norwegian context, *naermiljo* is conceptualized as home-centred: an environment constituted around the home. On a symbolic level, the concept thus establishes an inherent structural challenge for any ARC, which by default emphasizes the temporary, in contrast to the permanent position of a home-based community.

*Naermiljo* has mostly positive connotations. The term is closely connected to everyday life and designates physical and social activities as well as feelings of belonging. The term emphasizes an arena where individuals participate and express themselves in ways anchored in their homes, or in other site-specific relations. A *naermiljo* further provides people with a certain degree
of social services, transport, and recreation. Since the term can be found in several central documents concerning approval of asylum reception centres in Norway, it is particularly relevant in our context. The concept of nærmiljø serves as a key term to better understand the role of community and belonging when accommodating refugees.

THE PERI-URBAN LOCATION
Asylum seekers are often located in spaces seen as ‘remote’ or ‘outside’ the traditional social systems of the city. In a crisis, this seems to be a rather universally established pattern, due to the need for short-term responses in combination with limited financial means. In a recent study, comparing the Netherlands, Germany, and the United Kingdom, Klaudia Mierswa documented that ARCs are predominantly located in remote areas and that this often provokes strong reactions from asylum seekers who feel cut off from society.

The term peri-urban can in its simplest way be understood as a condition in-between the urban (including the suburban) and the rural. Peri-urban areas are characterized by a multilayered coexistence of urban and rural land uses. They are often disconnected from local facilities and services as well as from public transportation, and they are often socially fragmented and unevenly populated. Studies claim that peri-urban areas suffer from a lack of political interest and, as a result, they become easily subjected to unplanned interventions and temporary uses.

The German urban planner and theoretist Thomas Sieverts claims that everyday life in peri-urban areas is insular and fragmented, as most transportation to different activities depends on motorized, private vehicles. Public space, if existing, often lacks operative coordination that can support an everyday living space where everyday needs are met and organized within reachable distances. Unresolved challenges in peri-urban areas are well documented, but appear not to be taken into account when a significant proportion of ARCs are established in these areas. The dominant pattern of locating ARCs in peri-urban conditions, confirms the dynamics and characteristics of peri-urban space as being a flexible receptor of functions of an immediate or temporary character, thus reflecting a range of emerging and yet unrecognized social uses of space.

Over the last few years, there has been a growing international awareness of the city as a productive place for accommodating refugees. The city is seen both as a hub for initial reception and transit, but also as presenting refu-
We suggest that peri-urbanity, which is currently a prominent location category for ARCs in Norway, does not provide these possibilities. Peri-urban locations do not necessarily equal bad living standards. They do, however, represent challenges that are not found in more central, urban areas. For instance, peri-urban social conditions can easily exclude certain groups, such as asylum seekers, in the unfolding of everyday life and from taking part in a larger community due to lack of communications and to an absence of points of interaction.

Recent studies of asylum seekers’ well-being point in the same direction. Hauge et al. have, as mentioned above, primarily examined housing qualities, but their study briefly mentions location as an aspect worthy of further investigation. The report states that location probably influences the physical and mental health of the inhabitants in 25 per cent of the ARCs analysed. Outside the scope of the study, Hauge et al. list a series of requirements for the asylum seekers’ well-being that is directly linked to location:

- seeing other people
- short distances to public transportation
- easy access to (leisure) activities and central areas, including schools, doctors, and grocery shops in walking distance.

Nice scenery and a clean and aesthetically pleasant environment are also mentioned as important factors for well-being. It should also be noted that the study suggests that location is of less significance if the ARC is socially and practically well-functioning and favourably connected to public transportation. On the other hand, we find substantial support in theory suggesting that the location of ARCs has implications regarding the asylum seekers’ relations to society at large. The urban theorist David Graham Shane explains the peri-urban condition as heterotopia:

It is an important place of urban experimentation and change, handling nonconforming urban activities and contributing to the overall stability of the city through its capacity to host change. . . . Foucault pointed to prisons, hospitals, clinics, asylums, courthouses and clinics as heterotopias of ‘deviance’ that helped give birth to the modern city by removing people who were ill, could not work or did not fit in the city, accelerating the shift to a modem, efficient, industrial society.
Shane underlines the peri-urban as a flexible receptor for several urban programs, or *urban activities* as he frames it, that for different reasons do not fit into the city. In our view, the location of ARCs fit this description.

**OTHERING PROCESSES**

Peri-urban location can be expected to have bearings on the asylum seekers’ likelihood to address and be included in a Norwegian *nærmiljø*. Mierswa’s study from 2016 establishes a pattern of peripheral and remote locations of ARCs in the European context, and their inhabitants perceive remote location as a sign of not being wanted. Peripheral and remote location patterns thus may be read as indicators of unwanted othering processes. When we invoke othering as a relevant concept in this context, we stand on the shoulders of influential authors writing about the powers of conscious and unconscious discourses that aim to create and maintain global political power structures. As highlighted by Foucault, locating marginal and possibly transgressing groups in peripheral areas is an act of political expression. However, how do we talk about such matters, and are we conscious of them?

We believe that it is relevant to analyse the location of ARCs through the lenses of othering processes in public discourse, and in particular in the media. Ultimately, othering processes in the media relate to the classification and division of people into insiders and outsiders. Such divisions may be activated on different levels, for example, politically (as citizens versus non-citizens), ethnically, religiously, and in other sorts of identity-shaping categories. When the media create categories of others, they also create notions of ‘us’. Benedict Anderson has noted, for instance, how newspapers contribute to nation-state building processes by creating so-called ‘imagined communities’ that connect people across geographical distance. Classification thus implies two processes: inclusion and exclusion. All sorts of classification also create an ambiguous zone, as chaos is a by-product of order. Ambiguity is often followed by uneasiness since we do not have preformatted behavioral schemes to lean on when we deal with them. Groups that we consider peripheral often appear as ambivalent, and thus as something unclean, disorderly, or what Mary Douglas has labelled ‘matter out of place’.

Asylum seekers can be seen as ‘matter out of place’, both physically and symbolically. They are strangers, not necessarily foes, but not necessarily friends either. According to Zygmunt Baumann, the stranger has traits of both:
The stranger . . . made his way into the life-world *uninvited*, thereby casting me on the receiving side of his initiative, making me into the object of action of which he is the subject: all this . . . is a notorious mark of the *enemy*. Yet, unlike other, ‘straightforward’ enemies, he is not kept at a secure distance, nor on the other side of the battle line. Worse still, he claims a right to be an object of *responsibility*—the well-known attribute of the *friend*. If we press upon him the friend/enemy opposition, he would come out simultaneously under- and over-determined. And thus, by proxy, he would expose the failing of the opposition itself. He is a constant threat to the world’s order.26

The stranger is physically close, yet may be mentally and culturally far away. The stranger synthesizes proximity and distance. In a Norwegian context, this may be even harder to cope with than in other European countries, because of a strong tradition to equal concepts of likeness and equality.27

**METHODOLOGY**

Our study examines how Norwegian ARCs are located, in what physical context their accommodation is chosen, and how these shelters are communicated, directly and indirectly, in Norwegian media. The media component was added because we believe that the mediation of physical shelters can provide important information about the way that refugees’ security, rights, and living conditions are negotiated within the Norwegian public sphere and its overlay with perceptions of the city, for the relocation of people is a spatial question.

As an organizing principle, we have triangulated quantitative and qualitative research methods with the aim of examining the agency of location in three entangled ‘sites’, namely:

- Physical location, according to three categories: central urban, suburban, and peri-urban
- Planning and policy documents, on a general level
- Domestic media discourse

We have triangulated a series of research methods to be able to produce relevant research material. The following studies have been conducted to inform our three above-mentioned ‘sites’:
To determine the physical location of the ARCs, we studied geographical maps and aerial photographs (mostly from Google Earth), and we classified them according to three categories: central urban, suburban, and peri-urban areas. (These categories should not be confused with the two governmental typologies mentioned in the introduction—centralized and decentralized ARCs—as they represent organizing principles, not location.)

Central-urban: Central urban areas are characterized by short transaction distances and offer public and private services, shopping facilities, and amenities. The category does not distinguish the sizes of villages, towns, or cities. Notably, the reception centres are quite evenly distributed throughout the country, except for the five largest cities, where we find the lowest number of ARCs per capita (see Figure 1).

Suburban: Suburban areas are limited to mainly residential areas and lack the diverse mix of programs (understood as functional content in the built-up fabric) that creates a central urban condition. The suburban category has longer transaction distances, however, and ARCs are often well connected to local centres, schools, sports facilities, and so forth, by cycle paths and public transport.

Peri-urban: Peri-urban areas are characterized by a multilayered coexistence of fragmented and different land uses found in-between the rural and the urban and an uneven pattern of habitation. Peri-urban areas often lack good connections to urban centres and also to well-established neighbourhoods. Transaction distances are fragmented and longer than in the two other categories.
FINDINGS: PERIPHERAL LOCATION AS A PERIPHERAL TOPIC

In this section, we present our findings according to the three ‘sites’ described above: physical location, planning and policy documents, and media discourse. We start with the physical site and present the concrete distribution of ARCs in Norway in 2016. We then give an account of some relevant international and national documents on UN/EU and national governmental levels that relate to planning, and we discuss in what manner and to what degree they actively

<table>
<thead>
<tr>
<th>Name of county</th>
<th>Population (2016)</th>
<th>Number of ARCs per county</th>
<th>Peri-urban location</th>
<th>Sub-urban location</th>
<th>Urban location</th>
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<tr>
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<tr>
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<td><strong>Total</strong></td>
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<td><strong>79</strong></td>
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</tbody>
</table>

*Fig 1. The number of ARCs in Norwegian counties in August 2016, correlated with location and population numbers*
deal with different types of location strategies or criteria. Finally, we look at how, and to what degree, location plays a role in public discourse, and whether or not the discourse can be seen as contributing to othering processes. The field observations and interviews conducted at our two selected ARCs serve to qualify and deepen the perspective on the other findings.

**Location Site: Remote Physical Study**

In August 2016, we found that a substantial number of the Norwegian ARCs were located in areas outside of villages and town centres.

It was discovered that 39 per cent of ARCs were located in peri-urban conditions, a finding that resonates with the remote location patterns found in other European countries. Regarding the rest of the ARCs, 17 per cent were located in suburban areas, 32 per cent in central urban areas, and 12 per cent were not identifiable by our research criteria as the address given likely refers to an administrative entity and not the reception centre location. Therefore, though not confirmed, we assume that this 12 per cent figure represents so-called decentralized ARCs and therefore cannot be defined geographically without access to sensitive information.

To illustrate the social aspects of a peri-urban location, we offer the example of the ARC at Bjørnebekk in Ås, some forty minutes outside of Oslo. The centre was closed in 2018. Bjørnebekk was a former centre for alcohol and drug use rehabilitation, located between agricultural lands and a small enclave of residential land. The reception centre is located outside of the municipal centre of Ås. Although a bus passes Bjørnebekk every hour and provides a connection to the town centre, it does so under restricted hours; there is no bus in the middle of the day or in the evening. The one-way ticket fare is 33 NOK, and an adult in a reception centre in 2017 received an allowance of 25 NOK per day. The ARC is within a 3 kilometre walking and biking distance from the community centre, yet it is clearly not an integrated part of the larger community.

To illustrate the social aspects of an urban location, we chose Torshov, a residential area centrally situated in Oslo. Torshov ARC was located in a densely populated urban district, well connected to bus lines (every 5 to 10 minutes) and within a 2.2 kilometre walking and biking distance from the Oslo central district. The ARC was in a lively neighbourhood close to amenities, parks, and shops. Interestingly, similar to Bjørnebekk, the ARC is a former facility for alcohol and drug use rehabilitation. Torshov was closed down in October 2017.
Figure 2. Ås, Bjørnebekk asylmottak and Oslo, Torshov asylmottak. Photos: Marianne Skjulhaug
THE PLANNING SITE: DOCUMENT STUDY

We have searched documents from the United Nations, the European Union, and the Norwegian government, including the Norwegian Directorate of Immigration, with the aim to understand what regulations and criteria are considered when locating asylum reception centres. The UN global site planning guidelines and camp manuals for reception centres have recently included more explicit location criteria. The overall approach in this guidance is to develop a selection methodology that enhances an ARC as ‘a potential catalyst for neighbourhood-upgrading processes in the host community’. According to the report, ‘optimizing solutions that are mutually beneficial for the new arrivals and the partner community are opportunities that should not be missed’. These explicit positions constitute a forefront that appears to be lacking from both EU and Norwegian governmental regulations and directives.

The EU has several documents referring to the refugees’ situation. The EU Reception Condition Directive aims to ensure a minimum of living standards for asylum seekers in Europe. The directive includes four main essential areas:

- access to housing, food, clothing
- healthcare
- education for minors
- access to employment under certain conditions

All four are implicitly related to geographical location; however, this is not explicitly defined or formulated in the directive. It is first and foremost adequate standards of living that can relate to a location; however, this is mentioned again as a part of building standards and not localization criteria as such.

According to the European Directive 2013/33/EU, where housing is provided in kind, it should take one or a combination of the following forms:

- premises used for the purpose of housing applicants during the examination of an application for international protection made at the border or in transit zones;
- accommodation centres which guarantee an adequate standard of living;
- private houses, flats, hotels or other premises adapted for housing applicants.
Moving to the Norwegian context, we find that the Norwegian Planning and Building Act serves as an overall framework that secures a certain quality in the built environment and living conditions for all people living in Norway. In principle, this also secures the living conditions for refugees in ARCs. ARCs are not specified as a particular land-use category in the Planning and Building Act. Nevertheless, it is in the authentication process of each ARC that we find the actual ability to influence both building standards and location. Several ministries are involved in the processes of running and approving new ARCs. The governmental document ‘Rundskriv H-4/15’ regulates the overall issues concerning ARCs. For a building to be approved as an ARC, location is viewed mainly as a technical parameter, regarding issues such as infrastructural capacities and inconvenience as a consequence of establishing an ARC. However, the directive explicitly states that neighbours’ fear of possible unwanted behavior from refugees cannot be used as an argument to decline an application.

Two other documents also play an important role in the approval processes of ARCs in Norway. The main governmental document stipulates that reception centres should secure, that basic needs are met, and that a feeling of safety and security are provided. The physical regulations are thus primarily directed towards the physical condition and technical quality of the buildings. Location is not mentioned as a criterion. Nevertheless, the governmental Document-ID: RS 2008-054 implicitly points towards the question of location. This is where we find the term nærmiljø in use. The document includes documentation on interaction between the local community (nærmiljø) and the reception centre. Requirements for a suitable neighbourhood to host an ARC is, however, not explicitly defined. The document requires good communication and interaction between people working at the ARC, refugees, and the host community. It also promotes principles of non-discrimination and respect for otherness. All of these requirements and responsibilities are primarily directed towards the ARC.

THE PUBLIC DISCOURSE SITE: MEDIA STUDY
Our media study examines how ARCs in Norway were presented and represented in Norwegian national and local legacy media in the period from February 2015 to February 2016. The study was conducted as a triangulation of basic quantitative content analysis, supplemented by qualitative analysis of selected news entries. This part of the study tries to answer the following research questions:
• How many news articles (paper and online) talk explicitly about ARCs?
• How are the ARCs represented visually and verbally?
• How are the asylum seekers positioned to their physical urban surroundings?
• What can this tell us about dominant discourses and stereotypes concerning asylum seekers and their needs?

The first sample consisted of more than 20,000 entries, a number that is beyond the scope of this study to analyse in detail. Some initial general findings are nevertheless presented and illustrated below.

First, the coverage based on the word *asylmottak* (ARC in Norwegian) retrieved 24,400 entries in the research period and peaked in November 2015 (see Figure 3). This corresponds with the arrival of asylum seekers largely exceeding the number the authorities had planned for, especially because a large number of people started entering Norway over its northern border with Russia. This situation was largely referred to as a ‘refugee crisis’ in political and popular discourse, as clearly seen in the media.

The data includes both online and paper editions of both local and national media outlets and is derived from the Retriever database where most (although not all) media submit their stories. Adjusted for some instances of foreign coverage, the final number of entries ended up at a total of 22,987 entries, some of which are more or less duplicates in both the paper and online versions.

![Figure 3. The distribution of 24,080 media entries that included the word asylmottak (ARC) in the research period from 1 May 2015 to 1 May 2016. The peak represents November 2015. Source: Retriever](image-url)
We suspected that there might be some interesting differences between the national and the local media entries. To narrow down this huge amount of material, we first tried to see if there was any correlation between the number of ARCs in a county and the number of media entries. To do so, we had to omit the web entries and concentrate only on the paper editions, since the database is more accurate where the paper version is concerned. The media material indicates that there was no correlation between the number of ARCs in a county and the number of media entries. The newspaper material consisted of almost 10,000 entries from newspapers, a little less than the total. Of these, local media published 64 per cent and national media 15 per cent. Regional media accounted for another 12 per cent. The rest was divided between magazines, specialized media, and the Norwegian news agency NTB.

We also did a rudimentary content analysis of the full media material, searching for words we would expect to indicate location as a topic. We found that location was rarely the main topic. Only 266 entries mention the word ‘location’ in relation to ARCs. The term nærmiljø was found 133 times, and a professional term like ‘quality of living’ (bokvalitet) came out with only 50 hits. Words like ‘home’ and ‘local community’ gave better results. 1,531 articles mention ‘home’ in relation to ARCs and 1,272 mention ‘local community’.

The overall finding was thus that the media seldom focused explicitly on aspects of the location from an ARC and not neighbourhood perspective. A term like ‘quality of living’ appeared almost exclusively in specialized media, such as architecture magazines, or when specialists in either architecture or planning were interviewed as sources.

We also did some qualitative readings of the 266 entries that did mention the location. One major finding in the material was that the social agency of buildings and their location was seldom explicitly mentioned or discussed, apart from a few that mentioned poor building standards. One example talks about a pregnant woman and a sick child that was offered nothing but simple mattresses in a bomb shelter. In articles like this, location plays a role but is not explicitly mentioned. The broader theme is a critical approach to asylum seekers’ living conditions, but, complying with the tacit rules for media narratives, the story is case driven and focuses on selected individuals.

The same can be said for political stories like the one referred to in the introduction where the Minister of Justice expresses his frustration about asylum
seekers wanting better conditions. Several media ran this story where the minister Anders Anundsen is quoted as saying that an ARC is ‘no holiday home’, implying that asylum seekers cannot be choosers when it comes to accommodations. Again, the agency is related to people, not the buildings or their location.

Another typical trait is that ARCs which have not yet been established receive more attention than those that are ‘facts on the ground’. In relation to planned ARCs, the media analyses provide insight into issues like whether or not, and on what grounds, an ARC is wanted in the community, how the local community will be affected, and what kind of localization is wanted/unwanted. An editorial from the local newspaper *Drammens Tidende* is a case in point. In the article ‘Frykt og avsky i Lier’ (Fear and Loathing in Lier), the political editor discusses negative reactions in the local community when presented with plans to establish an ARC for minors.36

We have found that such cases are not necessarily given a lot of editorial attention; it is generally local voices airing their frustration in the comments sections. One exception to this is a full reportage from a former hotel in a small village, focusing on how a local couple reacted with fear and anger when they realized that their newly bought luxurious apartment had become co-located with an ARC, since the hotel owner had put his facilities at the disposal of local authorities.

In the news sections, we mainly find stories about fires (whether arson or accidents) or criminal activities that generate a certain mention of location, but again, location is seldom explicitly discussed.

**URBAN OR PERI-URBAN: LIVED EXPERIENCES**

To further nuance our findings, we also visited and talked to people living in two ARCs, one central-urban and one peri-urban, although not the same ARCs as we used in the examples above. Both the ARCs and the people interviewed have been anonymized.

What we found was that people in both the central-urban and the peri-urban examples highlighted accessibility to their surroundings as a major quality. In both ARCs, they were concerned about the ARC being well run, that the ARC itself provided a safe and socially welcoming environment, and that people in their immediate surroundings or community were friendly and courteous.
In the central ARC, people expressed happiness with the proximity to almost anything. ‘It makes you feel part of society, and people can learn about Norway just by watching people in the streets,’ one informant said. In the peri-urban ARC, some of the inhabitants were psychologically vulnerable. For this group, the non-urban location served as protection against society’s demands and challenges, for example, drugs and petty criminal activity. For other inhabitants, the remoteness was experienced as difficult and traumatic, even if they praised the scenery. ‘I fled my country for political reasons, and I wish to be an active member of society. In this country, as an asylum seeker, I am not allowed to work, I cannot do anything. I am trapped in the land of waiting, and being so far from everything reminds me of this every day,’ one resident stated.

Both of our two selected ARCs are considered successful in terms of having good relations to the community and little to no bad coverage in the media. However, the centrally located ARC has much more daily contact with its neighbours than the peri-urban one. ‘Everybody likes us, and wants to help, but it is hard to get non-residents to join us when we arrange something. We are socially quite isolated,’ the peri-urban ARC manager complained. In contrast, the centrally located ARC reported that they often arranged activities in collaboration with neighbouring institutions, such as kindergartens, sports teams, artists, and architects. ‘It is not the location, but how you choose to use it,’ the activity leader in place told us, though still admitting that it helped to be close to relevant collaborating partners.

CONCLUDING REMARKS
Various studies confirm that we live in an era of migration, caused by war and environmental degradation. As suggested by Henrik Vigh, there is a good reason to prepare for crisis as the new normal, not primarily as a response to migration as such, but because climate-related issues, digital technologies, and the globalization of culture and economy have disruptive effects on people’s sense of stability. Migration represents a key challenge to most modern urban societies, and we predict that restrictive migration policies will not remove the need for new ideas, solutions, and approaches to how we receive asylum seekers for shorter or longer periods of time, as well as studies of how cities and regions can be part of the answer to this challenge. Our study suggests that Norway aligns to a pattern found in several other European countries regarding the accommodation of refugees. As pointed out by Klaudia Mierswa, ARCs are often, even if not necessarily deliberately, established at the fringes of urban society. While Mierswa’s study points to
the social consequences of remote placement, our interdisciplinary approach shows that aspects of ARC locations in peri-urban areas are barely recognized or problematized at all. Governmental regulations do not explicitly include location as a criterion; as mentioned above, the term *nærmiljø* is used as an essential term in UDI’s directives for the approval of asylum reception centres. Paradoxically, a large proportion of the ARC locations cannot be defined as part of a proper *nærmiljø*.

Othering has obvious spatial implications on several levels. It reflects popular and often toxic notions of who belongs where, but also physical power structures built into the urban landscape. A peri-urban location pattern represents a symbolic and a physical marginalization, geographically constituting asylum seekers as society’s others. However, location is in itself not articulated in the negotiation of the power aspects related to Norwegian migration politics. The regulating documents mention location only vaguely, and location-related issues mostly pass under the journalists’ radar. Also, as the Minister of Justice’s reaction to complaints from discontented asylum seekers shows, the asylum seekers themselves are expected to be silently grateful and accepting.

In our view, it is a dilemma that ARCs are not from the outset considered permanent parts of the *nærmiljø* in which they are located. We suggest that ARCs can, in fact, be permanent structures with temporary residents, but with permanent institutional ties to its social surroundings. This indicates that a focus on migration highlights relations between place and inhabitation that supplement architectural or urban planning readings of *nærmiljø* as ‘grounded’ and inherently static. We find that the peri-urban, which in theoretical discourse is largely perceived through its lack of ‘public sphere’, as well as scattered and uncoordinated land use, also seems to perform as a flexible receptor of suddenly emerging or urgent social programs such as ARCs. The question is then how this flexibility, which seems to run counter to prevailing notions of local community (*nærmiljø*), can be conceptualized in new and constructive ways. We therefore suggest further exploration of interdisciplinary methods as a means of arriving at new approaches emphasizing location as a key to accommodate asylum seekers.
NOTES


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Ibid.


The numbers have not been adjusted for articles published both in the paper and the online edition, but it seems probable that even if the number of original articles is lower than these figures indicate, the relation between the categories still holds.


ARCHITECTURAL REPRESENTATION, THE CONTROLLED FUTURE, AND SPATIAL PRACTICE
Otto Paans, Ralf Pasel, and Boukje Ehlen

ABSTRACT
In this article, we argue that the modes of thinking inherent in architectural design play a pivotal role in research, especially in problems related to urban sustainability. We first examine two tacit assumptions about architectural practice. Then, we explain how these assumptions still structure thinking about the architectural design, notably in its insistence on control and predictability. We support this claim by explaining how these assumptions structure thinking about achieving urban sustainability. Furthermore, we explain how these assumptions can be bypassed, by referring to the notion of drawing as tangible speculation and to Immanuel Kant’s doctrine of aesthetic judgement. This concise exposition is followed by examples from our own research, in which we demonstrate how this theory can be put into practice.

KEYWORDS
architectural design; design epistemology; architectural theory; urbanism; sustainability
INTRODUCTION

The precision of digital drawing techniques is breathtaking and seems omnipresent. No matter how closely one zooms in on a drawing, its lines remain thin and sharp, the corners well-defined. In turn, calculations afforded by building information modelling (BIM) or similar programs support the perception that all aspects of a building can be modelled, their properties viewed and juxtaposed at any moment. This sense of control and precision extends throughout the digital workspace enabled by computers.

This feature makes control the great equalizer throughout the design process: in all stages, maximum precision is possible. This extends well beyond the design process proper. It directly feeds into the construction process, as digital drawings can be used to manufacture prefab parts, extending numerical precision into the physical world.

In this article, we argue that architectural design plays a vital role in research, especially in problems related to urban sustainability. We first examine two deep-rooted assumptions about architectural practice and explain how these assumptions still structure thinking about the architectural design process (section 2). Then, we present a short theoretical excursus explaining how these assumptions structure thinking about achieving urban sustainability (section 3). Subsequently (section 4), we explain how these assumptions can be bypassed, providing explicit reference to the notion of drawing as tangible speculation and to Immanuel Kant’s doctrine of aesthetic judgement. Furthermore, we demonstrate with examples from our own research how this theory can be put into practice (section 5). In the conclusion (section 6), we reflect on some of the consequences of our methodology for architectural practice and the role of future-making.

TWO ASSUMPTIONS ABOUT ARCHITECTURAL PRACTICE

The emphasis on numerical precision in architectural design has existed at least from the Renaissance onward, when notably Leon Battista Alberti introduced scale in architectural drawing. Scale drawing linked architectural design to metric accuracy, allowing architects to externalize their thoughts into representations with a degree of precision that allowed for questioning and probing their ideas. With the introduction of the scale drawing, the representation increasingly became the site for experimentation and criticism. Alberti himself lamented that the building details which looked good in the imagination fell short of his expectations once drawn on scale and fell short
again once built in a model. Clearly, each form of representation, whether mental, on paper, or in a model, provided information on some properties that were not visible or deemed irrelevant in a previous step. Where architectural drawing historically represented an order of inference that ran from mental representation to externalized drawing or model and back, this loop has currently come to change shape. While drawing inferences from artefacts was mainly based on spatial and constructive properties, the numerical character of digital modelling tools has shifted the focus towards optimization and the structuring of spaces through digital simulation in a virtual space of total control.

From this point of view, numerical precision serves as a device for intellectualization, which in turn serves as a device for control. The early modern tradition of science, resting on the Cartesian idea of an external world that could be dominated and controlled by means of technology, finds its core premises affirmed by the numerical precision enabled by digital technology. Intellectualization of the design process is almost completely synonymous with full control over the design process and the properties of the object-under-consideration.

If control is the prime objective of architectural representation, then achieving exactitude naturally becomes the most important strategy for doing so. The focus on precision, control, and exactitude became a dominant theme in the development of functionalism in modernist architectural design at the beginning of the twentieth century. However, as Matthew Nowicki argues,
the term functionalism itself underwent significant change in the period from 1920 to 1950. Nowicki maintains that during the 1920s, when architects spoke of function, they meant *exactitude*: an organizational and spatial definition that could be precisely determined before realization started.³

This necessitated in turn a precise functional description of the object-to-come, a *descriptive geometry*, the grounding of which was sought in empirical science.⁴ Well into the 1960s, the tendency to think of problems as entities that should be completely understood before any solving (or designing) begins can be found in its paradigmatic formulation in the *Introduction to Design* (1962) by Morris Asimow:

> Synthesis refers to the fitting together of parts or separate concepts to produce an integrated whole. The synthesis step begins formally after the design problem is well understood, although some notion about possible solutions may have already been suggested during the prior steps. The point to be emphasized is deceptively obvious; concentration on possible solutions should not begin until the design-problem has been studied and identified, and a reasonably good working formulation of the problem set down.⁵

In a sense, Asimow contributed to the development of a certain view of the design process: all attempts at synthesis had to be preceded by analysis, giving rise to an impressive range of design models by theorists throughout the 1960s and 1970s. This type of procedure is in general undoubtedly useful for architectural practice, but it seems to support two deep-seated assumptions:

1) *That architectural representations accurately and exhaustively represent the object-to-come.*⁶ At first sight, this thought seems completely plausible, and it seems to support the current architectural practice: How can a building or city be built if it has not been designed and represented first? However, as Alberto Pérez-Gómez notes, what makes architecture unique as a discipline is that it creates the artefacts and representations that make good buildings (and cities) possible in the first place.⁷ The practice of architecture as a process of conception is a necessary condition for conceiving good buildings (in the Vitruvian sense of *venustas, firmitas, and utilitas*) in the first place. Moreover, this assumption lends credit to the idea that the abstract reality of representations is fully synonymous with the unmediated reality on which they are projected.⁸ In this view, arte-
facts like sketches or models embody attempts to predict the properties of the object completely in advance. However, extrapolating from Alberti’s case, this assumption is not as obvious as it seems. The idea of drawing as a descriptive (and predictive) geometry turns out to be questionable, as despite its descriptive properties, drawing and sketching still fulfil explorative roles. If the designer knew exactly what to make in advance, then preliminary sketches would not be necessary at all.

2) That design problems can be exhaustively represented and controlled in the process of solving them. Notwithstanding the refutation of highly formalized process models of the first generation of design thinkers, and the contemporary focus on reflexivity in design, digitally affordable precision throughout the design process has again introduced the idea that understanding a problem is synonymous with solving it, or is at least a critical precondition for starting to solve it. This idea is at least traceable to the seminal paper on wicked problems by Horst and Rittel, as they introduce the idea that describing a problem structure is synonymous with solving the problem. If one accepts assumption (1), then this thesis is correct, as the descriptive geometry represents a full understanding of the problem. If one does not accept the first assumption, then the notion of full control during problem-solving topples as well.

The focus on exactitude has a further consequence: it merges the roles of architect and building engineer. Asimow was an engineer, but thinking in Analysis-Synthesis models has proven remarkably persistent in theorizing about architectural design. In this sense, the influence of the first generation of design theorists continues, although in a form they probably did not foresee. Their view on design gave pride of place to defining functions, or more broadly, to the building or urban programme. Such functional programmes can be understood as devices for control and predictability, leading to guidelines and requirements for making design decisions. How this exactitude manifests today is discussed in the next section by reference to the problem of urban sustainability.

ARCHITECTURAL PRACTICE AND URBAN SUSTAINABILITY
A contemporary version of this ‘exactitude-oriented’ way of approaching the practice of architecture is visible in the way the problem of achieving urban sustainability is defined and approached. Given the complexity of this problem, the prevailing trend is to resort to technological means to bring the
problem scope under control. Notably data management has become a mainstream strategy for dealing with sustainability problems, replacing spatial practice, and redefining the problem to be solved as a set of interlocked quantitative parameters, thereby placing digital simulation and analysis at the centre stage of architectural practice.

The degree to which performance has altered the perception of what architectural practice is can be perfectly (albeit anecdotally) illustrated by reviewing two recommendations by the 2013 IEA Technology Roadmap Energy Efficient Buildings: the first stressed that architects should 'stay current with the latest building science advances, obtain sustainable design credentials and assist in educating other building practitioners'.12 The second recommendation stated that architects should 'help present a business case for going beyond traditional efficiency measures, through experience gained on value-added projects.'13

In both recommendations, the idea of architecture as a form of designing that extends beyond mere technical problem-solving, assignment of functions, or a process that is necessary to produce qualitative living environments seems conspicuously absent. Instead, architecture is presented as operating under the wing of building technology, obtaining its operational norms and values from sustainable design credentials, and is recommended as a tool to be used for showcasing what is possible with building technology.

A second case to demonstrate the influence of data management in dealing with urban sustainability problems is the usage of the term 'urban metabolism.' The idea is that cities function largely like organisms, exchanging goods,
resources, and information in a complex of processes and transactions that are isomorphic to metabolic processes found in nature. This concept appears useful, as it draws attention to resources used in realizing and sustaining an urbanizing world, as well as the logistic complexity of flows and streams. As a tool for designing, however, one may critically question its value. Foremost, because the notion of an interconnected web of resources almost demands that every conceivable consequence of realizing or proposing a new spatial design is reviewed in detail.

Two influential publications on urban metabolism recently published in The Netherlands stressed the quantitative ramifications of the functioning of urban areas and made the problem of the chain of consequences perfectly visible.\(^{14}\) In both cases, multiple resource flows to achieve urban sustainability were introduced as components of urban metabolism. Resources such as sand and clay, energy, food, waste, building materials, and water were presented as vital components of a complex network that had to be quantified to design responsibly.

This orientation changes the order of inference in architectural design fundamentally. Every design decision is conceived as something that must justify its existence by supporting the decision with data. This procedure reminds one of Nowicki’s observation: not functionality as such, but a search for continuous exactitude guides contemporary architectural design processes. Every inference drawn from architectural representations is viewed with the tacit demand for exactitude and justification in mind.

Obviously, justification is an integral part of an architectural design process. However, the questions immediately arise as to why the justificatory reasons being supplied are largely quantitative, or whether the architectural design process and its argumentative support can be reduced to the domain of numbers. As indicated, the pressing concerns and complexity of achieving urban sustainability, combined with the seemingly flawless precision and control of digital simulation, seems to push architecture and urbanism into a direction that is decidedly quantity-oriented.

Without denying the usefulness of quantification, or suggesting that simulation tools should be ignored altogether, we draw attention to the fact that architectural design practice cannot and should not be reduced to an all-too-exclusive focus on numbers or simulation outcomes. Nor is the assumption warranted
that descriptive geometry accurately or fully describes the object-to-come. Architectural practice attempts to catch more than just numerical performance indicators or descriptive properties. It does not concern itself just with describing objects-to-come. Instead, it is a practice that entails all this, but goes significantly beyond it. How it does so is discussed in the next section.

ARCHITECTURAL DESIGNING AS A CHAIN OF MODELLING SPACES

Architectural representation relies on the notion of different modelling spaces of its objects, starting from spatiality and architectural qualities which critically engage with modelling tools that allow for quantitative evaluation. Each modelling space brings out different aspects of the architectural object-to-come. A charcoal sketch of an urban plan catches, in broad strokes, its compositional essence or its most basic elements. However, a drawing made with a fine ink pen affords a very different sense of precision, as does the use of a physical cardboard model. In turn, digital tools allow for still further precision, arrived at through numerical and simulative precision. The range of artefacts ensuing from this chain of modelling spaces is a so-called ‘interpreted world’ in a dual sense: it is an architectural microcosm made up of many, often overlapping ideas and simultaneously it is an interpretation of how the physical world ought to look.

Michael Graves proposed a three-category model for this chain of modelling spaces: the referential sketch, which associatively unites ideas, fragments, and forms of spatial organization; the preparatory study, in which options are generated, refined, and compared; and the definitive drawings that catch as much of the object as possible.

On Graves’s classification, architectural drawing is an image of something incomplete. For a drawing (or, more generally, representation) to function as an interrogative or explorative device for an idea, its objects need to be incomplete, while visual representation is applied as a tool of exploration and explication. Various forms of visual and spatial representation are used in parallel to explore and shape an object whose outlines and contents are just dimly known, although its ultimate form remains in a realm beyond the reach of cognitive access.

Repeated representative efforts are used to explore the properties of such ideas, mediated via various types of modelling. The modelling spaces impli-
cated in this explorative process are not only numerical—they are constituted by different ways of working such as sketching, painting, and building. Moreover, they are focused on different themes, such as materiality, tectonics, contours, organization, or haptic qualities.

The realization of a building or urban plan is the culmination of insistent and directed questioning and the development of compositional variation by means of an interrogative, architectural practice centred around artefacts like drawings, sketches, paintings, referential scribbles, diagrams, and models. Graves echoes the insight of Pérez-Gómez when he states that even the final drawings of a building leave things open and unsaid about its ultimate intentions and properties.¹⁸ To rely on representation is to rely on a medium that depicts and leaves out properties at the same time.¹⁹ The power of effective representation is to leave out just enough to allow for depicted content to generate new knowledge. From this viewpoint, one could infer that the chain of modelling spaces jointly succeeds in capturing something that numerical simulation and digital exactitude cannot provide, but can only support. De Bruyn and Reuter put this point very precisely:

The whole is always more and something different than the sum of its parts. For the process of architectural production, it follows that it is not allowed to arrive from the characteristics of individual parts or their law-like interactions at a description of the whole. The relations and connections between parts are of differentiated strength and possibly unstable. Partial systems serve divergent goals like ecological efficiency, aesthetic concept, social acceptance etc. Their harmonisation follows no verifiable function.²⁰

The plurality of goals served by spatial designs like buildings, public spaces, neighbourhoods, and cities cannot be subsumed under one verifiable or quantifiable function: they are simply too divergent and may at best be balanced relative to one another. The chain of modelling spaces allows for this act of balancing goals and functions, as each tool allows for addressing the problem with a different degree of precision or thematic focus. The chain of modelling spaces captures different qualities of the object-under-consideration. In this chain, digital drawing, simulation, and quantification have their rightful place, but they are not the only players on the field. The modelling spaces that deal explicitly with quality should be an integral part of architectural design practice.
The reason for this is that digital modelling space excludes as much in terms of qualities as it adds in terms of control. The digital space is a tool that cannot depict the ‘invisible’ or the ‘unsaid’—precisely those quasi-phenomenal qualities that architects assumedly would be interested in, and that can be addressed by linking modelling spaces focused on different themes. One might think of the play of light and shadow on different surfaces here, the haptic, tactile qualities of materials, the atmospheric qualities of a composition—or, as Graves indicates, not so much the description of the object-to-come, but the tension between its elements.

It may be objected that these factors are perfectly predictable. The availability of lights and cameras, the existence of rendering programs, the myriad of programs to predict specific performance parameters all signify an expansion of the intelligible (real) space on the transcendental space of architecture. This objection draws attention to assumption (1) introduced earlier: this type of representation rests on certain assumptions, most notably on the idea that the architectural representation is an accurate, exhaustively descriptive depiction of the object itself. Furthermore, it rests on the assumption that numerical representation sets the most accurate agenda for drawing inferences from an architectural artefact. The notions of control and predictability are ingrained in the modes of representation, reducing an architectural idea to its technical, controllable factors, with the numerical expression as an operative device.

To revive the idea of an explorative architectural practice focused on spatiality and representation without being revisionist, we must give up on the idea of architecture as an accurate, descriptive geometry and the associated idea of total control and predictability. This also implies that we must give up on the notion of the designer as a merely technological subject. This theoretical move undermines both assumptions introduced earlier, and departs from spatial practice and architectural representation as core methods for projective reasoning. To give up the notion of full control, two preconditions must be fulfilled. The first precondition is to reconsider the nature of architectural representations that are generated in the chain of modelling spaces: they may be best understood as a hybrid of narratives, materials, and guided perception, expressed in an array of visual tools. Betty Nigianni defines architecture therefore as ‘image-space-text’—a rich texture woven of the representations of spaces, images, and texts that is not reducible to either one of them. This observation, when applied to the problem of urban sustainability, yields the outcome that the focus on efficiency and quantification misses an important point: the architectural side of the problem is under-represented and has been only sparingly investigated yet.
The incompleteness or tentativeness of architectural representation provides conceptual angles from which to question, refine, and shape an architectural idea that exists as an object that is not-yet-present. Attempts to represent an object cannot be exhaustively descriptive: the object itself comes only into existence through attempts at describing, delineating, or representing it. Multiple acts of drawing, sketching, rethinking, modelling, adding, subtracting, and modifying are necessary steps in a chain of reasoning without which the object cannot exist. As Foucault puts it:

The object does not await in limbo the order that will free it and enable it to become embodied in a visible and prolix objectivity; it does not pre-exist itself, held back by some obstacle at the first edges of light. It exists under the positive conditions of a complex group of relations.\(^26\)

The idea that objects pre-exist in ready-made form and can be hauled into existence by accurate description is refuted in this passage. The object does not come into existence through exhaustive description, but efforts of describing and depicting the object are necessary steps to investigate the conditions under which the object can possibly exist. Foucault draws attention to the fact that objects are fully embedded in the world—and this goes especially for architectural objects that are intimately linked to contexts and sites.\(^27\) This embedding does not happen without prior thought: the architect has to think of ways to establish links between object and context, a task that is made all the more difficult because the object being designed does not exist yet.

Individual representations only contain selected features, necessitating the chain of multiple modelling spaces. By overlapping all of these incomplete representations, the architectural idea can be questioned, probed, and explored from different perspectives, with different tools, material applications, and with varying degrees of precision. The overlapping chain of modelling spaces creates a kaleidoscopic, yet accurate model of the architectural idea, even if it is not descriptively and geometrically complete. The act of representing allows for drawing inferences, based on the assumption that the artefacts are somehow isomorphic with a wide array of phenomenal qualities of the object.

The second precondition is to rethink the designer himself: instead of assuming the role of a controlling, technological subject, we may reconstitute the designer as a reflective subject. We can already find such an account in the late work of Immanuel Kant.\(^28\) Peg Rawes has drawn attention to the fact
that Kant explicitly placed the imagination at the centre stage of creation.\textsuperscript{29} Imagination allows for reflective thinking: conceptualizing what one sees by reasoning from one’s subjective point of view. In turn, this skill allows one to make so-called reflective judgements—namely assertions about the composition of objects, their aesthetic value, the emotions they evoke, what they seem to leave unsaid, et cetera. In short, this capacity allows one to address precisely that phenomenal register which is largely excluded by reductive modelling space of the digital realm.

Kant viewed the formation of such reflective judgements as \textit{aesthetic} acts: the whole idea of a split between the aesthetics of an idea and its technological implications is non-existent by this account.\textsuperscript{30} Instead, it is the science of geometry when combined with the aesthetic sensibility of the reflective judgement that allows for an ‘aesthetic of feeling’, externalized in geometric forms but not reducible to them. For Kant, the artistic or architectural representation is not just a descriptive geometry. If anything, it is an aesthetic mark in the world, and its results can be scrutinized as products that are not simply descriptions, but also objects saturated with a tangible meaning that surpasses pure functionality. We may use Kant’s term ‘purposiveness’ for it. Therefore, if we view the design process from Kant’s perspective, the designer is not a technological subject; his grasp of geometry is just one side of the coin and is meaningless without reflective judgement, its integrative counterpart. Instead, the designer is a reflective subject, making aesthetic judgements throughout the design process, and using geometry as one instrument alongside imagination, instead of utilizing it as the main method of modelling.

Purposiveness—and with this, exactitude—is an important component of geometric description. It is ‘often admired’, but not ‘merely subjective and aesthetic’.\textsuperscript{31} In purpose, the beauty of geometry and aesthetics come together. Kant goes even so far as to say that our reason for the admiration of geometric representations is an interplay between the imagination and concepts.\textsuperscript{32} The understanding of rules, axioms, and guidelines must work in conjunction with the imagination to create judgements that are not merely subjective (in Kant’s terminology ‘without concept’) but objective (concept-based) and \textit{still} imaginative.\textsuperscript{33}

This short exposition provides a clue for explaining how architectural objects come into being. As Foucault pointed out, they do not wait ready-made, as even the concepts or ideas on which they are based must be gradually devel-
It is Kant who provides a formal model for their conception here. The imagination creates judgements that are grounded in the concepts of reason. Imagining is, on Kant’s account, not a kind of fantasy or idle conjecture. It is a synthetic, integrative capacity that links creative thought to the precepts of reason, embodied in concepts and expressed in geometry. Notably, Klaus Krippendorff provides a different conceptual angle to support this thought. His idea of the ‘ontogenese’ entails that designers work on artefacts that have no clear beginning or end. Each artefact includes some presuppositions of its predecessors, and its status is not even fixed at the end of a design project. It is as if it were genetically related to its predecessors and to the world at large. Moreover, the products of architectural design processes are not permanent. They are transitory products that must nevertheless be described and defined. The creative thought embodied in each artefact is as if it were readable in its form, its presuppositions and shortcomings. Conversely, in order to be able to read artefacts as such repositories of knowledge (and failures), a kind of formal representation is necessary. To judge merits and limits, Krippendorff suggests, architectural representations must be seen as transitory stages in a continuous chain of ideas extending into the past and the future. How this works in research practice will be discussed in the next section.

EXAMPLES OF DESIGNING AS RESEARCH PRACTICE
Positing the designer as a reflective subject, and rethinking the idea of full control over design problems, clears the slate for rethinking architectural design processes and future-making by starting from spatial representation. In several research projects, we developed a design approach that changed the order of inference—not in the direction of quantification, but in the direction of architectural representation. The underlying idea was to remain true to the core competence of designers: to think in spatial arrangements on the one hand, and to think in terms of different disciplines (design, construction, material, ecology, sustainability) on the other.

Our approach starts with an elaborate analysis of the area in need of redesign, but combines different types of scale drawings: classical maps, diagrams, and a sampling of data deemed relevant at that point in the investigation. In keeping with Krippendorff’s idea of the ontogenese, analysis is not just geared to mapping properties, but also to understanding the wider context for the intervention. Instead of focusing on single, well-defined problems, the idea is to see why the architectural context gave rise to the problems in the first place. During this analysis, any architectural ideas that come up—even if
they are preliminary and conceptual or downright utopian—are documented. No matter how narrow the focus of an idea is, or how unlikely it is to be realized, the option is documented and kept in mind. This collection of data, maps, diagrams, sketches, and representations is then mined for inferences: the idea is to analyse the output as a body of information from which patterns emerge, or in which certain solutions can be found that may be used as inspiration or ‘primary generators’ – as postulated by Jane Darke – for new and more refined series of representations. This process is iterative, becoming more refined and focused with each iteration. During later iterations, digital simulation can be applied to each of the proposals. However, in the first instance, the idea is to be generative instead of precise; projective rather than confirmative; explorative rather than decisive. In short, this approach starts with a general modelling space that is oriented not towards exactitude, but towards generation and variation.

The advantage of this procedure is that it advances by creating architectural representations primarily concerned with space, spatial qualities, and an integrative vision of the output. Instead of abstracting individual features of the project area, as one would do in a digital simulation, each representation aims at bringing different architectural aspects (like construction, program, ecology, materials) together in a series of deliberately open-ended design ideas. The act of designing is thus used in an explorative manner. It realizes the observation by De Bruyn and Reuter: multiple goals and functions of an architectural design proposal must be balanced and harmonized through specific designs in which functions are made specific in relation to each other. The representations make this struggle of multiple aspects visible and tangible. Each representation concretizes the abstract complexity of design problems by focusing on real objects with visible, spatial properties. This approach makes important factors for addressing design problems visible through representation. In turn, each architectural representation becomes an object of inquiry and of public scrutiny: its contents can be discussed, criticized, and compared in an explorative process.

One important point is that the body of output can be used to form integrative future visions. Especially in urban projects, this feature has proven to be extremely useful, as urbanism deals with multiple subject areas at once. In many cases, optimizing one factor over others would lead to plans and proposals that are suboptimal. This type of working allows fully for what Bryan Lawson once called ‘working in different mental modalities’, but also working
with different themes and balancing their interests relative to one another. In the research project *City and Wind: Climate as an Architectural Instrument*, multiple connections between urban climate and the layout of the built environment were investigated with the goal of deriving design tools from them. By studying the behaviour of wind in different architectural settings,
ranging from vernacular designs to complete urban areas, the fundamental mechanisms underlying the behaviour of wind were mapped and these insights were applied in a range of study projects.

For instance, the study project Windscape City proposed a new design scenario for the Maashaven area in Rotterdam. This city area is characterized by a homogeneous urban fabric that directs the wind stream in a haphazard way around and through the site, leading to unpredictable effects like falling winds and sudden changes in wind speed. By adjusting the porosity of the urban fabric, letting wind in at some places and redirecting it at others, the climatic influence is regulated, leading to a more predictable and friendlier climatic experience in everyday use. The parameters for building porosity had been defined earlier in a wind tunnel, translating the behaviour of wind into spatial arrangements and design principles.

The advantage of translating measured wind behaviour into spatial arrangements, such as carefully sculpted buildings, is that the output of the research is spatial instead of numerical, and therefore readily applicable in design processes. Wind tunnel tests produced not only a quantitative database, but a spatial database, the features of which are intelligible to designers. This type of research familiarizes designers with the links between measured data and its spatial implications, leading to an understanding that is immediately

Figure 4. Urban structure of the neighbourhood of Overvecht (Utrecht, NL) with repeated urban stamps (left) and a regularly recurring situation that negatively influenced the public perception: a dark entrance without social control and adequate street furniture (right). Source: The authors
applied, instead of being theoretical. It translates quantitative data into architectural objects, closing the gap between numerical exactitude and architectural idea by fusing the former into the latter. Admittedly, there is an act of translation (or interpretation) between the measurements and the design of building shapes or the formulation of architectural strategies. However, this act of translation is an act of designing (or, if we follow Kant, an aesthetic act) leading to architectural outputs. One could imagine a new, invigorated role for architectural research and the formation of urban visions here, especially in the context of achieving urban sustainability. Approaches like these enable problems pertaining to urban sustainability to be defined as architectural problems—actual issues that can be addressed from within the designing disciplines, while adhering to the core expertise of architecture: the conception of spatial arrangements.

In a different urban research project titled Situational Urbanism, we approached the translations from observations and quantitative data in a different manner. The target area for this research project was an impoverished post-war urban district of Overvecht in Utrecht, The Netherlands. Like numerous other urban expansions from the post-war period, this site had been designed according to strictly functionalist, modernist methods. To address the housing shortage at the time, the plan was produced in a very short time during the early 1960s and was realized almost directly afterward. With the influx of immigrant communities, the neighbourhood started to deteriorate, and the public perception of the neighbourhood was that of a typical failure of post-war architecture.

To map the chances and potentials of this neighbourhood, we developed a so-called situational analysis. Instead of just studying sociological and demographic data and urban plans, we identified potentially problematic situations on street level. This method was chosen because the urban area had been designed using urban stamps: well-defined block designs that were repeated around a central park. As the stamps were largely similar, situations that led to problems in one stamp often led to problems in the others as well.

By documenting the spatial characteristics of fourteen recurring problem points and identifying how these spots were distributed throughout the urban fabric, we proposed focused solutions to selected architectural problems jointly influencing the public perception of the neighbourhood. This type of analysis made the idea of a new masterplan superfluous. Instead, we proposed a transformation process that would run for fifteen years, and that
started with small, easy-to-solve problems. Over time, architectural inter-
ventions became more structural, but were focused on expanding the small
successes achieved earlier.

While designing solutions for the recurring problem situations, a broad body
of numerical data was used to conceive new interventions that solved multi-
ple problems at once. In the case of uninviting entrances, we proposed having
small 7-Eleven shops near the entrance that could be used by commuters. In
addition, we suggested providing stairs to the first floor, a direct route that
was accessible without entering the building. This decision was made once
we realized that many neighbourhood inhabitants ran small businesses like
physiotherapy, accountancy, or hairdressing from their homes. By proposing
to turn the first floor of each flat into a business corridor, the number of
people passing by the entrance would slightly increase, but just enough to
provide more social control and ‘eyes on the street’, in addition to making
these businesses more visible and accessible.

In this case, a selection of available demographic and sociological data was
used as a guiding theme for formulating design proposals, arguing not from
the viewpoint of a simulation, but from the point of view of creative recom-
bination of different ideas informed by selected data. The practice of layer-
ing and sketching on photographs, as well as visualizing the new situation
from a perspective similar to the existing one, provided direct insights into

Figure 5. Design proposal for uninviting entrances (left) and visualization (right). Source: The authors
the spatial implications of each design decision. In turn, this method made almost directly clear whether a new decision could plausibly facilitate the changes we envisioned. Not unlike multiple sketches on transparent sketching paper, this method provided feedback through repeated representation.

In a PhD project titled *Creating Knowledge Through Architectural Design*, we further developed the method of situational analysis and design proposal development. In this project, the focus is on proposing design strategies to reduce CO₂ emissions, improve energy efficiency of the built environment, enhance biodiversity, and effectively retrofit existing urban areas from the point of view of urban sustainability.

As discussed, the issue of achieving urban sustainability is often couched in quantitative or performative terms. The ubiquitousness of digital simulation suggests that in addressing these types of issues, numerical simulation guarantees a maximum amount of control and justifiability over the problem. Although simulation might play a useful role in designing, we elaborated the methodological reach of the situational analysis by again mapping recurring situations in two test areas: Pendrecht in Rotterdam (NL) and Hellersdorf-Süd in Berlin (DE). Both areas are post-war urban expansions in need of refurbishment, mainly because the building stock uses outdated isolation and technology, but also due to their focus on individual, car-based mobility, leading to public spaces that are largely car-oriented.

![Figure 6. Situational analysis with observations in the black boxes, and consequences or possibilities in the white boxes (left) and the schematic catalogue of operative architectural mechanisms (right). Source: The authors](image)
In this research project, the situational analysis was further refined by sharply decoupling observations from consequences and possibilities. For instance, an observation is that facades utilizing large glass surfaces enable transparency and visual contact, but also cause swift heating of inside spaces. In turn, this heating often necessitates air conditioning in summer, leading to increased energy consumption. Given the fact that prefab concrete parts form the basis for much of the post-war architecture, and given their thermal properties (like heat trapping), we can conclude that the Urban Heat Island effect, combined with the glass surfaces, leads to an unfavourable indoor climate. By mapping observations, consequences, and possibilities for redesigning in an ‘architectural catalogue’, numerical data and architectural solutions can be coupled and juxtaposed, leading to an increased understanding of operative architectural mechanisms in the built environment. This knowledge base is essential in proposing well-considered architectural responses to sustainability problems, especially since each intervention needs to new consequences that must be thought through.

Moreover, this approach provides new pointers for proposing future visions: instead of hoping to solve a multitude of problems with one stroke of the pen, it invites a form of scenario thinking centred around spatial objects, urban arrangements, and their architectural properties. In the next section, all lines of thought discussed up until this point come together.

DISCUSSION AND CONCLUSION

The examples listed above share several common characteristics. First, they are focused on spatial designing as a core method for thinking through architectural decisions. This entails that design practice is irreducibly focused on thinking about and working in space, and evaluating the results as architectural entities that should be conceived holistically.

Second, all examples are projective in the sense that they consider possibilities for redesigning while analysing phenomena, architectural properties, or surveying numerical data. The blurring of boundaries between analysis and design does away with the distinction proposed by Asimow: understanding or describing a problem cannot be completely decoupled from simultaneously considering new possibilities. These new possibilities suggest possible futures, and they make these futures intelligible and accessible to scrutiny and critique.
Architectural representation serves in this process of future-making as a critical and investigative tool by making ideas, consequences, and spatial qualities explicit enough to become comparable or to become a new object of inquiry. In this sense, representation serves to make architectural ideas discussable from different points of view. Different means of architectural representation highlight specific properties of whatever is being designed, by combining different tools and modelling spaces into a single integrated yet kaleidoscopic process of questioning and probing. In our experience, this type of representing is irreducibly holistic. It deals with topics like proportions, construction, ecology, economics, and materiality simultaneously, within the confines of a single image or model.

Third, the process of architectural design brings multiple bodies of information together into a single object. During analysis and design, one must shift fluently from one body of information to the other. Thus, ecology, material properties, functional patterns, aesthetic considerations, legislative requirements, and construction all come together in one projected future that addresses these issues to some degree. While designing, one must shift continuously between different ‘mental modalities’; Kant’s observation that reflective judgement was the integrative counterpart of technical know-how was thus remarkably prescient and accurate. Designing may be viewed as an explicitly integrative activity that creates meaning by utilizing technical and reflective knowledge, but that cannot be reduced to either one.

The objects produced by architectural design can be analysed and compared in terms of their constituent parts or their performance in terms of energy efficiency, material costs, et cetera, although they are compared as architectural objects instead of sets of individual parameters. The tendency to express architectural problems numerically may play an instrumental role in the generation of options, or in optimizing certain features. However, we may ask the question as to whether this strategy deals effectively with architectural objects *qua* architectural object. It is here that the two assumptions introduced earlier enter the debate again: if architectural objects are viewed as an exhaustively descriptive geometry, then it is tempting to reduce any architectural object to a collection of numerically expressed values. After all, following this logic to its end, such objects are decomposable into their constituent parts, which can be individually controlled.
In view of the challenge of achieving urban sustainability and the interconnected nature of this problem, architectural design must develop models that handle the required level of complexity, without falling into the trap of venturing too far away from its core competence of spatial designing.

In conclusion, the examples we discussed may serve to change the order of inference in architecture, although in a different direction than digital tools currently do. The classical order of inference proceeded by way of externalizing architectural representations that were incomplete and in need of exploration. The methods discussed here focus on the order of inference on representation: they proceed from representing and analysing selected data and architectural results (no matter how tentative) side by side. Drawings, diagrams, sketches, and visualizations are not incomplete stepping stones towards a result to be built. They are not like Alberti’s representations in this respect. Instead, they serve as probes in a space of possibilities. Paradoxically, this space does not come into existence if one does not start representing.

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**Figure 7. Representation as a dual core of design processes.** The imagination and concepts react on the representation, both in analysing and synthesizing ideas. The representation is simultaneously an analytical tool and the result of design activity. Multiple design themes (ecology, materials, function, etc.) are seamlessly integrated in the representation. Source: The authors
The representations produced in the process of designing are, as it were, focal points for thinking about the implications, limits, and qualities of an architectural idea. The representation is in this sense integrative. Every drawing contains elements from different themes that are relevant to the design. A single sketch may deal with ecological, technical, and aesthetic properties. The representation can be used as an analytical tool (for example to check proportions) but is not reducible to it. As Kant related, every time a representation is viewed, the imagination works together with the precepts of reason, and the aesthetic judgement emerges through the formal properties of the drawing.

The space of architectural possibilities is probed through the production and evaluation of a chain of representations. This integrated chain allows for the drawing of inferences from various representations. In turn, each inference may open up new questions and options. For instance, whether a certain theme should be analysed in more depth, or how a range of new variations should be developed. As analytical and creative activities both feed into new representations, the architectural ‘object-to-come’ gradually starts to exist as a ‘group of complex relations’, as Foucault put it. These relations are complex in the sense that they bridge different domains. For example, the relations between sustainable performance and material; durability and functional programme; construction and ecological footprint. These different—sometimes incompatible—aspects are weighed and juxtaposed in the representation, often with the help of graphical and spatial means.

By removing the distinction between analysis and design, architectural representations start to function as objects of inquiry in a targeted process that has some control over the developmental direction, without assuming that exhaustive control is necessary for making progress at all. In this sense, this method recognizes that architectural design is tentative and projective on the one hand, yet without having to justify itself on merely quantitative grounds. With regard to the problem of addressing urban sustainability through architectural design, the commitments sketched above open the door for an architectural practice focused on its core expertise of spatial design, without having to feel intimidated by the usual numerical formulation of sustainability problems. Indeed, it may be argued that precisely the integrative nature of architectural design will prove to be a perfect match for the analytical rigour of numerical approaches—provided its methods are well enough developed to take on this role.
NOTES


2 Ibid., p. 30


4 A clear and early expression of the reliance on empirical science can be found in Walter Gropius’s 1929 text The Sociological Foundations of the Minimum Dwelling.


7 Ibid., p. 13


11 Notably theorists of the ‘first generation’ like Charles Eastman, Allen Newell, Horst Rittel, Werner Kunz, Melvin Webber, and Herbert Simon.


13 Ibid.


15 Jörg H. Gleiter, ‘The Promise of an Object: Design Processes as Processes of Theory Construction,’ pp. 1–9, esp. p. 5 (original document has no numbering), paper given on 6 October 2014 at the Yale School of Architecture’s doctoral course.


Gerd de Bruyn and Wolf Reuter, Das Wissen der Architektur: Vom geschlossenen Kreis zum offenen Netz (Bielefeld: Transcript Verlag, 2011), p. 63.


Turkle, Simulation and Its Discontents, p. 83.


Ibid., p. 236.


Van Fraassen, Scientific Representation, p. 29.

Notably his Critique of the Power of Judgment, the work on which I focus in this discussion.

De Bruyn and Reuter, Das Wissen der Architektur, pp. 85–86.


Ibid., p. 236.

Ibid., p. 237.

Kant and Foucault would probably disagree about the ‘group of relations’ in which objects are entangled. For Kant, these relations are largely cognitive. He uses the pairs ‘subjective/objective, reason/imagination’, underlining his focus on the individual as a focus of his transcendental idealism. For Foucault, the relations are more social, disciplinary, and institutional. The whole of the Archaeology of Knowledge attempts to describe these relations.

In the Critique of Pure Reason, Kant does not give an unambiguous account of the imagination. In general—and without going too much in detail—it is safe to say that the imagination in the Kantian sense is a kind of dual capacity that is both integrative (’synthetic’) and creative (’productive’) in order to come to grips with the manifolds (Mannigfaltige) given in the sensual perception within time and space.


Incidentally, Horst Rittel already made the general point that planning is a process of variety creation and reduction in his 1970 article ‘Der Planungsprozess als interativer Vorgang von
Varietätserzeugung und Varietätseinschränkung (The Planning Process as Iterative Progression of Variety Generation and Variety Reduction). However, he phrased this idea in rather process-oriented terms, excluding largely the idea of architectural qualities and multiple modelling spaces.


NEGOTIATING THE PAST OF WAR AND THE FUTURE OF THE ATTRACTIVE CITY

Liv Bente Belsnes

ABSTRACT
This article deals with Ekeberg Park in Oslo, which is a sculpture and heritage park situated close to the city centre. My analysis of this park relates to the culture-led political strategy that aided the redevelopment of Oslo’s waterfront from the year 2000 onward, balanced against art theory and heritage discourses on the Norwegian World War II legacy. The latter aspect caused a great deal of commotion ahead of the official opening in 2013, due to its wartime function as a German burial ground. My focus lies on the ceremonial site that was established as part of the wartime cemetery, which was refurbished in the spring of 2013.

With the use of the French philosopher Jacques Rancière’s writings on the relationship between art and politics, I argue that dissensus could be a key term to understand transformations of a material space with connections to a past of war and a future of grand urban visions. As my empirical study shows, a space of this kind creates tension, disagreement, and turbulence, thereby generating a polemic public discourse which confronts the consensus-based idea of the attractive, culture-led city. Thus, meaning is produced beyond the intended parameters of the park design and the art program. Any study on such facilities should therefore take various negotiations of meaning into consideration in order to tease out their complex role in the remaking of urban space.

KEYWORDS
cultural heritage, Jacques Rancière, art, urban attraction, World War II, dissensus
INTRODUCTION

Ekeberg Park is situated up on a hill southeast of the city centre of Oslo, overlooking the city’s prestigious waterfront—the main product of two decades of culture-led urban development. The park is financed and operated by the real-estate developer and art collector Christian Ringnes. It was developed as a public-private cooperation project between The C. Ludens Ringnes Foundation and the Oslo municipality and opened on 26 September 2013. I consider the park project to be part of a well-known culture-led political strategy where aestheticized urban spaces play an important role in the vision of the attractive future city. Recreation and adventure are attractive commodities, and the Ekeberg Park could be described as a new aestheticized recreational space in the city.\(^2\)

The park involved re-establishing a ceremonial site connected to a World War II war cemetery, built by the occupational power. This sparked a heated debate concerning cultural policy, particularly between the Norwegian history professor and expert on war history Øystein Sørensen and the head of the Oslo Cultural Heritage Management Office (OCHMO) Janne Wilberg, who disagreed on the ethical aspects of the project. The ceremonial site has been re-established as a consequence of the development of the park as a whole. Private investment was necessary to fund such a large project. The site is thereby contextualized by the overall policies promoting the attractiveness of the city.

The transformation of a historical monument like the ceremonial site is normally discussed in the context of cultural heritage theory. In this article, the intention is to explore the application of the theory of the French philosopher Jacques Rancière as presented in his book *The Politics of Aesthetics: The Distribution of the Sensible.*\(^3\) Here, he rethinks the relationship between art and politics: politics exists in constant tension with the prevailing order because it is all about revealing dissensus. Politics is aesthetics to the extent that it opens up new ways of sensing and perceiving. Art is profoundly political because it involves a new distribution of the sensible; and since it constantly confronts our habitual perceptions, art opens up space for dissensus. I draw on the theory of Rancière to discuss the connections between power, politics, and art/architecture, and the oppositional forms of cultural policy involved in the case of the ceremonial site, with the aim of highlighting the significance of dissensus in discussions on Ekeberg Park.
EKEBERG PARK
The Norwegian landscape architects Bjørbekk & Lindheim have designed a park where places of historical significance are presented next to renowned artworks. The park has been criticized by neighbours, activists, and scholars, although the activist group for the preservation of the Ekeberg forest has been the most consistent protester. The critique has mainly revolved around the way private capital has been allowed to influence a publicly owned area, the feminine conceptual theme of the art selection, and the alleged neglect of the natural landscape and the cultural heritage.

About 10 per cent of Oslo’s protected heritage sites are found in the Ekeberg area. For this reason, most of the area is protected by the Cultural Heritage Act, which has itself been a cause of conflict. In spite of these findings, the foundation was permitted to continue the planning process, given that the concept included the heritage sites. The municipal planning authorities required protection of landscape qualities, cultural heritage, and biological diversity. The protesters have since questioned the developers’ ability to provide this protection, since the park is intended to increase the recreational value of the area.

Ekeberg can be accessed from the city centre either on foot or by tram, bus, or car. Two Swiss chalets are situated at the main entrance area. They are restored by the foundation for use as an exhibition venue and café, and they accompany a house specified for children’s activities. The Ekeberg restaurant is situated close by. This is now the oldest preserved functionalist building in Oslo, also owned and renovated by Ringnes. This part of the area offers a powerful view of the Oslo Fjord and the city.

The Ekeberg hill bears signs of cultivation through more than ten thousand years. The oldest investigated prehistoric settlement close to the stone-age shoreline in Oslo dates 10,400 years back and lies 130 metres above today’s sea level. The area also contains several traces of Iron Age farming. In the Middle Ages, Ekeberg played an important role in the establishment of Oslo as a city around the year 1000 AD by providing the main access from the south. The area was reserved for use as a public park in 1889. The Norwegian artist Edvard Munch (1863–1944) also had connections to the area. During World War II, the Nazi Party established an honorary cemetery and a ceremonial facility here.
Now forty artworks are implemented in the park (November 2018). The artwork committee curbed their emphasis on femininity during the planning process and today only half of the artworks depict the female body. Thematically, the park concept is now divided into three segments: art, nature, and history. Within the thematic segment of history, the ceremonial site has sparked the loudest debate.

THE CEREMONIAL SITE
The ceremonial site was part of an honorary cemetery placed at Ekeberg during World War II, involving the landscape architecture firm Norske Hager (Norwegian Gardens). The expanded version of the site had room for approximately 3,000 graves, and it was the largest burial ground in the country at the time.10 The cemetery was placed at and near the part of the area called the Swedish Meadow. The German military force overpowered the Norwegian resistance at Ekeberg on the second day of the invasion, 10 April 1940.11 The construction work started the following month. It turned into a gigantic facility with two flights of steps made of stone, a landing, and an ‘altar’ with the swastika, the German eagle in relief, and a cross that was eight to ten meters

Figure 1. War cemetery 1952. Source: Oslo byarkiv (Oslo City Archive)
The cemetery was constructed in terraces on both sides of the steps and on the field at the foot of the slope, and stone walls were built around the entire cemetery (Figure 1). The first burials took place at Ekeberg as soon as late May 1940. Further on, funerals for fallen German soldiers, and in total seven or eight Norwegian front fighters, were held here every week under performance of German cult rituals of heroism and solemn parades. During the ceremonies, a group of German soldiers would sing and fire gun salutes, and occasionally the facility was visited by Nazi leaders of high rank, such as Goebbels and Himmler (Figure 2). Each grave was given a wooden cross with name, date of birth, and date of death. Close to three thousand soldiers were buried here during the war.

After the war, members of artistic organizations who were accused of cooperating with the Germans, such as Norske Hager, were punished in the so-called 'honorary court cases' by being excluded from the Norwegian association for landscape architects, Norsk Hagearkitektlag. A large part of the Ekeberg facility was subsequently destroyed, and it was left to overgrow. Some of the graves were moved to Germany, but most of them were moved to Alfaset war...
cemetery in outer Oslo during the autumn of 1952. Then, this part of Ekeberg was released for recreational purposes. Although this is named the Swedish Meadow, today it is popularly called the Dog Field because people are allowed to let their dogs run freely here.\textsuperscript{19} During the planning of the sculpture and heritage park at Ekeberg, the OCHMO office of the Oslo municipality saw the ceremonial site as a particularly important element. When the landscape architects designed a single stairway, they opposed the suggestion and insisted on a solution closer to the original design.\textsuperscript{20} The ceremonial site now mainly consists of a double set of stairs adapted to the landscape at the site of the former facility, though not as an exact copy (Figure 3). Large parts of the original cemetery are included in the adjacent zoning plan for Ekebergsletta. Still, a part of the cemetery’s lower level is situated within the boundaries of the zoning plan for the park, including the original churchyard wall and the stairs that connect the two levels. In addition to the villas and a former water reservoir, this part of the park is defined as a cultural environment conservation area according to the recommendation of OCHMO.\textsuperscript{21} They suggested that vegetation be handled in a way that prevents the churchyard wall from becoming overgrown.\textsuperscript{22} This part of the park sparked a debate concerning
cultural heritage policy. The Norwegian history professor Øystein Sørensen was critical and underlined that refurbishing a Nazi memorial is too touchy, and that this is mainly a part of German, not Norwegian, history. On the contrary, the head of OCHMO, Janne Wilberg, claimed that this is an important part of Norwegian history, and that history is most dangerous when kept silent. She in turn regards this as a site for freedom.23

POLITICS AND AESTHETICS
While social democratic principles and welfare-state thinking remain strong in Norway, urban policy has been increasingly subjected to the logic of market liberalism over the past thirty years. This shift is characterized by free markets, competitive relations, and minimal state regulation of capital. The result for Norwegian cities has been an intensification of competition between cities for capital investment. The transformed areas are often the location for the city’s modern image.24 Economic growth has become the dominant imperative for urban policy and planning. Public-private networking has developed into a well-established practice in Norwegian planning policy, and private developers are given a prominent role.25 These partnerships are particularly common in urban settings and have been established to carry out projects replacing the overarching municipal planning regime in Oslo.26 Ekeberg Park is an example of such a project. Here the park area is publicly owned, while the upgrade, maintenance, and implementation of artworks are financed by Ringnes through his foundation. The artworks are, however, not part of a gift; they remain in the foundation’s ownership.

The notion of consensus is central to the theory of Rancière as presented in his book The Politics of Aesthetics: The Distribution of the Sensible.27 Rancière opposes what he terms police or the prevailing order and the consensus that characterizes it. He seeks a condition that he describes as politics opposed to police. He is critical of the consensus of contemporary politics because it excludes the ones who cannot inhabit the political discourse and be a part of the political landscape. Only through dissensus is it possible to open up to equality and a different world, according to Rancière. Politics is all about revealing dissensus and thus exists in constant tension with the prevailing order of consensus.28

The prevailing order surrounding the development of Ekeberg Park is influenced by market liberalization by application of strategies for urban attractiveness. This could be exemplified by the connection to the Bjørvika water-
front area. This part of the city is undergoing a transformation typical of such areas internationally, where ports and industrial businesses are replaced by offices, dwellings, and leisure activities. This area could be described as a packaged landscape designed for consumption. A gondola is planned to connect Ekeberg to Bjørvika. As Ringnes sees it, this results in the creation of an art triangle, consisting of the opera, the museum, and the park. He thereby ties the park in with institutions of national and international importance. The gondola could be said to draw the two areas closer together, both physically and ideologically, as two aestheticized environments. It is through ‘the distribution of the sensible,’ meaning what is perceivable by the senses, that Rancière connects politics and aesthetics. The sensible is the very foundation for politics, and the sensible is constantly activated within the political because it is profoundly concerned with how we sense and perceive the world, and with the possibility of understanding it differently, according to Rancière. Politics is aesthetics to the extent that it opens up new ways of seeing, hearing, sensing, and perceiving. Art is therefore profoundly political because it confronts our habitual perceptions and opens up space for dissensus, Rancière argues.

Rancière describes three different regimes: the ethical regime of images, the representational regime of art, and the aesthetic regime of art. These regimes can and do coexist, in productive tension, within single works and particular art forms; the regime of art is a concept both rooted in and uprooted from historical analysis. It could be termed a quasi-historical concept. A regime defines how art is identified as art in a given era, and how artistic expressions relate to the world. It specifies how certain practices are seen and how both of these practices, and the ways of seeing them, are understood. Even though the aesthetic regime of art has come to play a dominant role the last two centuries, aspects of the two former regimes can still be observed today, according to Rancière. In the following section, I will discuss the case of the ceremonial site with regard to the characteristics of these regimes.

THE ETHICAL REGIME OF IMAGES
The ethical regime of images is based on Plato’s philosophy and thinking about art and is concerned with how art is related to ethos, the individuals’ and communities’ way of being. By arranging images according to their origin and their end or purpose, the ethical regime separates artistic simulacra from the true arts. Art is considered as a practice which is edifying or destructive...
to individuals, groups, or the society as such. The effect of this practice is more important than the artwork itself. The ideological connotations of the ceremonial site are strong, and the potentially offensive aspects of the design came to dominate the debate, particularly as concerns the Norwegian Jewish community. Ervin Kohn, patron of the Mosaic Community, found that the refurbishment of a Nazi war memorial was insensitive and argued against the plans. He feared that this could become a meeting place for neo-Nazis. He was supported by Samuel Steinmann, who survived the Nazi concentration camps during the war. Sidsel Levin, director of the Jewish Museum, argued that renewing sites with such a historic background is still problematic and that it could be uncomfortable to enjoy such a place due to the fact that many of the people with bad experiences from the war are still alive.\textsuperscript{37}

According to Henriette Killi Westhrin, secretary of state in the Ministry of Environment, the resolution was the result of a proper and ordinary democratic process. No offences were committed and the ministry found no societal concerns that gave reason to reverse the decision. Still, Øystein Sørensen argued that this is not a question of zoning plans, but rather an ideological debate. He was part of a group of twenty-two professors from various fields who sent an open letter to Prime Minister Jens Stoltenberg, arguing against this refurbishment and the park in general. However, the government was not willing to intervene. Here the effect of art on society in general and on certain groups in particular has been important. This part of the debate is an example of how the characteristics of Rancière's ethical regime are still of relevance today.

THE REPRESENTATIONAL REGIME OF ART

The representational regime of art has liberated the arts from the moral, religious, and social criteria of the ethical regime of images and separated the fine arts from other techniques and modes of production.\textsuperscript{38} It is connected to the poetics of Aristotle, where works of art are assessed and appreciated by their accordance with art's own hierarchy of representation of reality.\textsuperscript{39} The representational regime identifies the phenomenon of art, or rather the phenomenon of the arts, in accordance with the concepts of poiesis/mimesis. Rancière does not regard mimesis as a method or procedure for art, but rather as a regime for the visibility of art, which he relates mainly to the period from 1660 to 1800.\textsuperscript{40} In the case of the ceremonial site, the details of the design itself were discussed and the question of whether to create a true copy of the original facility or not has been of particular interest. In the planning regulations for the park (§ 9.1.3 H570 3), it is stated that:
Existing remains of the stair construction from the German honorary cemetery, which is marked with special consideration on the map, is to be preserved, or to be renewed, in accordance with original materials and form. The spatiality, the views, and the original contact with the fjord landscape should be continued.\textsuperscript{41}

The stairs have been criticized for appearing even more dominant in the landscape than the original facility built by the Nazi Party. The landscape architects suggested a single set of stairs, but OCHMO insisted on a double set of stairs, which is a design closer to the original facility.

One of twenty-two authors of the open letter to the prime minister, and member of the activist group, professor of literature Dagne Groven Myhren argued that although dissemination of history is important, it is not necessary to rebuild the stairs. The history could be better told by leaving the remnants of the original facility as they were, she argued.\textsuperscript{42} Another one of the authors, professor of life sciences Klaus Høiland, drew a parallel to the act of terrorism that Norway had experienced on 22 July 2011 and argued that this could be compared to displaying the uniform of the terrorist Anders Behring Breivik.\textsuperscript{43} A third author, professor of philosophy Arne Johan Vetlesen, did not find that a Nazi document was suitable as an attraction in the capital of a formerly occupied country and argued that this would be looked negatively upon by other countries.\textsuperscript{44} It was, however, underlined by the director of the park, Ina Johannesen, that the new facility would be free of Nazi symbols and thereby have no direct references to the ceremonies that took place here during the war.\textsuperscript{45}

The fact that the first plan for the new facility, which included a single flight of steps, was replaced by a new design closer to the original design after the input of OCHMO caused a reaction from Bjørnar Moxnes, head of the Radical Socialist Party. He criticized that the plans were changed without the consent of the City Council, and he was supported in his assessment by Libe Rieber-Mohn, head of the Labour Party’s group in the City Council.\textsuperscript{46}

Christian Ringnes answered the critique by stating that the consent of OCHMO had been a premise of the original zoning plan. He felt wrongly accused since the agenda had been set by them rather than himself in this case.\textsuperscript{47} Ina Johannesen further underlined that only a small part of the original cemetery would be rebuilt. She argued that the construction would not be a true copy of the original design and that the impression would be softened
by benches that enable people to sit and enjoy the beautiful nature and views.\textsuperscript{48} This discussion about the design actualizes the representational regime of Rancière, particularly through the disagreement about whether or not to recreate the proportions of the original facility. Still, in the representational regime of art, the artwork is evaluated by how it is made rather than by what it represents. In this case, the critique of the politics behind the original flight of steps was highly present in the reactions to the design decision made by OCHMO. It thereby seems difficult to fully separate the ethical aspects from the representational aspects in this case. The political history of the site permeates the debate regardless of whether or not the topic reflects ethical concerns or cultural heritage policies.

THE AESTHETIC REGIME OF ART
An alternative to the representational regime of art was not present until the early 1800s and, according to Rancière, was connected to the early German Romantic Friedrich Schiller’s letters on the aesthetic upbringing of man.\textsuperscript{49} The aesthetic regime abolishes the hierarchical distribution of the sensible characteristic of the representational regime of art and is thereby more egalitarian. By promoting the equality of represented subjects, the indifference of style with regard to content, and the immanence of meaning in things themselves, the aesthetic regime destroys the system of genres and isolates ‘art’ in the singular.\textsuperscript{50} By the new distribution of the sensible, art is at once egalitarian, political, and democratic in the aesthetic regime. The core of this regime is constituted by a combination of the autonomy and the heteronomy of art. Art is both independent of and infiltrated by other forms of practice. It is the free play of the sensible that opens up room for equality in other fields. Even so, this also makes it more uncertain and hence more difficult to control.\textsuperscript{51} In the following section, I will discuss three aspects of the aesthetic regime of art with regard to the ceremonial site: how consensus and dissensus are at play, the relationship between documentation and fiction, and the role of the emancipated spectator.\textsuperscript{52}

CONSENSUS AND DISSENSUS
The new distribution of the sensible, as described above, is essential to the aesthetic regime. Rancière is critical of the limitations to social space caused by political consensus. He offers a view of art as a promoter of dissensus and thereby a possible role in the opposition to the prevailing order. According to the Oslo municipality, the park had an annual visitor number of around 60,000 before the upgrade, but after a year the number had exceeded 1,000,000.\textsuperscript{53} The combination of recreation, nature, and art increases attrac-
tiveness through a specific production of space, targeting the consumption of both place and landscape. In the case of Ekeberg, this combination is supported by politicians, investors, and visitors alike, who agree on a shared vision of urban attractiveness. This may then underline the consensus characterizing ‘the prevailing order’. Still, the citizens of Oslo did not all agree with the establishment of the park. A poll taken by the newspaper *Aftenposten* in 2011 showed that 52 per cent of Oslo’s population felt positively and 27 per cent felt negatively towards the park. Even so, people were the most positive in the western part of the city, with 60 per cent positive and 21 per cent negative, while the result for the local area was 45 per cent positive and 40 per cent negative. There was clearly an opposition to the project, particularly among the citizens who lived close by. The stairs built as part of this park project were contextualized by the strategic urban policy for increased attractiveness. In the case documents, it is underlined how this facility will provide the park with a nice space for recreation and make a contribution to a selection of varied spaces for children to play. Still, OCHMO had a different motivation when arguing for an expansion of the original design made by the landscape architects. As they saw it, the recreational value was secondary to the value of cultural heritage. This illustrates how the staircase facility had to serve at least two purposes: on the one hand providing an attractive recreational space for the future, and on the other hand documenting the past as accurately as possible.

The protesters who spoke up against the park project in general, mostly local citizens, did have an influence on the solutions, such as the amount of natural landscape kept untouched and the size and number of sculptures allowed. In this sense, it could be said that they played a role in the opposition of the prevailing order, to use Rancière’s term. This did not, however, happen in the same way in the case of the ceremonial site. The protesters, who were mainly scholars, wanted to prevent the facility from being built altogether, but they were not offered any adjustments as was the case with the park in general. On the contrary, OCHMO made sure that the stairs were given a more monumental design than what was first suggested.

**DOCUMENTATION AND FICTION**

Another characteristic of the aesthetic regime is that all topics can become art. This means that the relationship between art and reality becomes unclear, because there are no longer any apparent distinctions between the representation of art and fiction on the one hand and history and the documentation.
of reality on the other. Fiction and documentation thereby work under the same regime. The ceremonial site is clearly a documentation of reality. It documents a historic construction that has been placed in this landscape. At the same time, it could also be said to inhabit aspects of fiction through the vision of recreation as part of the narrative of the attractive future city. The ideological space in which the transformation of this site is negotiated consists of both the future and the past. They take part in the production of a new lived space. One possible consequence of this could be illustrated by employing the concept of spatial reductionism by the American geographer Edward Soja. He asks whether memory and historic preservation can reduce ‘the real-and-imagined power of lived spaces’. Value is added to the material space through contact with a particular part of the historical space at the ceremonial site. Soja sees the need for ‘a deeper understanding of the contemporary dynamics and political economies of urban design and development’. That is exactly what is happening here, as I see it. The spatial reductionism might be happening not entirely due to historical space, but just as much due to the motivation of creating an attraction based on the ideological construction surrounding the site. When it comes to the real-and-imagined-power of lived spaces, the imaginary suffers when the real is locked at this particular site.

THE EMANCIPATED SPECTATOR
Inherent in the art of the aesthetic regime, as Rancière understands it, is what he calls a political ‘promise’ of equality. In a study of public art in Bjørvika, the Norwegian scholar Charlotte Blanche Myrvold even concludes that by installing connections between the subjective experience of the city and a public arena, art enables a form of urban learning and generates knowledge about dimensions of the city that otherwise remain unarticulated. Eman-cipated, active spectatorship is the mode of engagement with the artwork which most fully realizes the egalitarian promise inherent in the aesthetic regime of art. However, Rancière thinks that this disposition of the spectator is invariably under threat from artists and curators who aspire to teach their audience a particular political message or intervene in the world directly to reconfigure social relations.

In the case of the ceremonial site, OCHMO could be said to have clear opinions about which way to perceive the facility. By stating that history is most dangerous when kept silent, Janne Wilberg at the same time expresses that the facility should convey the local history of war. The office also formulated
thematic restrictions on the artworks in this part of the park. It accepted the trail going through the area but recommended that the sculptures placed near the cemetery be related to the history of warfare and that they allow for reflection and contemplation. Today the sculpture *Anatomy of an Angel* (2008) by the British artist Damien Hirst sits close to the stairs (Figure 4). It depicts a female angel who is presented with the same anatomy as a normal, mortal woman (Figure 5). The structures under the skin are exposed as in a scientific research project. Although this artwork reflects the artist’s fascination with mortality, religious iconography, and the idea of the sacred with science, these were perhaps not the connotations that OCHMO had in mind when they wanted the artworks to relate to the history of the site. However, seen from Rancière’s point of view, it is perhaps positive to note that this sculpture does not convey a specific narrative of warfare, but rather that the expression of the artwork is kept open for the reflection of the spectators. Rather than particular manufacturing techniques, it is what the art portrays and how it thereby breaks with common perceptions that is essential for Rancière. At a site where OCHMO could be said to inhabit the role of the curator and to dictate the possible perceptions to some extent, the sculpture *Anatomy of an Angel* is a factor that dampens the threat against the disposition of the spectator, as formulated by Rancière. In the aesthetic regime, the role of the spectator is more active and this could in itself have a liberating effect because the spectator can perceive the artwork differently from what was intended by the artist or the curator.

CONCLUSION
The original stairs were built at a time when politics was dominant in a highly direct and interventional way. The facility was constructed as a direct consequence of the political regime of the time. Now the language of economics has influenced the language of politics to a certain extent and thereby changed the discourse with which we can discuss urban production. Art offers new possibilities rather than a negation of the existing, according to Rancière. The facility has opened up a new way of sensing and perceiving the site and the area, and it has sparked dissensus regarding both ethical and representational aspects. This underscores how the ethical regime of images and the representational regime of art both come into play within the aesthetic regime of art. This has further contributed to a strengthening of the political discourse when faced with the economic terms of market liberalism. Highlighting the monument could in itself be said to engender dissensus because of the conflict with the present ideals. A rare tension is revealed by the fact
Figure 4. The sculpture Anatomy of an Angel by the British artist Damien Hirst (2008). Photo: Ragnar Bendiksen

Figure 5. A close-up of the sculpture Anatomy of an Angel by the British artist Damien Hirst (2008), showing the exposed anatomy. Photo: Ragnar Bendiksen
that historical monuments only are promoted by their recreational values in exceptional cases. In this sense, it has enhanced a state of politics as opposed to a state of police, in Rancière’s terms. The Ekeberg case actualizes the theory of Rancière because the dissensus is caused by the implementation of art in urban space. Ekeberg Park contributes to the formation of new urban space, inhabiting a conflict between political consensus and public dissensus. As such, it may challenge the ethos of market liberalism and the vision of the attractive city. However, the actors in the debate about the ceremonial site have mainly been scholars and other professionals and thus do not represent what Rancière terms the ‘demos’, the part of the public who cannot take part in the prevailing order of consensus.
NOTES


6 Designed by the Norwegian architect Lars Backer and built from 1927 to 1929.


8 Archaeological finds made due to the park project showed that human activity in Oslo went 2,000 years further back than previously documented.


11 Egil Mikkelsen, ‘Mennesker på Ekeberg i 10 000 år’, in Malmanger et al., *Ekebergparken*, p. 82.

12 Ibid.

13 Ibid.


15 Mikkelsen, ‘Mennesker på Ekeberg i 10 000 år’, p. 88.

16 Ibid.

17 Ibid.


19 Mikkelsen, ‘Mennesker på Ekeberg i 10 000 år’, p. 88.


22 Ibid.


Ibid.


Ibid., p. 37.

Bjørvika has recently been studied by various researchers, such as: Heidi Bergsli, ‘Urban Attractiveness and Competitive Policies in Oslo and Marseille: The Waterfront as Object of Restructuring, Culture-Led Redevelopment and Negotiation Processes’ (PhD dissertation, University of Oslo, 2015); Jonny Aspen and John Fløgør, *Den vitale byen* (Oslo: Scandinavian Academic Press, 2015); and Halvor Weider Ellefsen, ‘Urban Environments of the Entrepreneurial City: From Aker Brygge to Tjuvholmen’ (PhD dissertation, Oslo School of Architecture and Design, 2017).


Ibid.


Ibid., p. 134.


Ibid., p. 21-22.

Ibid., p. 21-22.


Ibid.
Ibid.


48 Ibid.


57 City of Oslo, Byrådssak 101/11, pp. 8–9.


61 Ibid., p. 193.

62 Ibid., p. 192.


65 Davis, Jacques Ranciere, p. 154.


69 Ibid., p. 84.
THE MAKING OF ‘SCANDINAVIA’ IN THE VISIONARY DESIGN OF A THEME PARK
Gunnar Sandin

ABSTRACT
The envisioning of a Scandinavian Theme Park to be located outside Malmö, close to the anchor of the bridge to Copenhagen, is here discussed in relation to the culture and heritage that was represented in the design proposals. The public presentations of the project were directed by a small group of visionaries who were given space and economic support by the political leadership of Malmö City, including enrolling American consultants and theme park design corporations to give the project enough practical knowledge and prestige to brand it in relation to other similar facilities in northern Europe.

The theme park case in Malmö will here serve to illustrate how the image of a culture is mutually created by commissioners and designers in a large-scale architectural project. It also aims to show how representatives of different cultures try to agree on a mutual sphere of images that could represent a geographically, politically, and historically defined region, and thus also define a future understanding of a specific culture, in this case ‘Scandinavia.’ After analysing and commenting on the material that appeared in the promotion process lasting ten years, with an emphasis on the visual representations of the future theme park, this article ends in a discussion in which architectural design and spatial visualization are seen in relation to general models of culture, including how ‘culture’ is reciprocally construed by two or more dialogic agents.

The article shows the importance of recognising the construct of culture, and its representation in design practice, as a reciprocal process, where reciprocity means not only smooth mutual recognition and cooperation but also involves imitation and prejudice.

KEYWORDS
theme park design, promotion images, cultural reciprocity, the construct of culture in planning and architecture
INTRODUCTION: CULTURAL RECIPROCITY IN THEME PARK DESIGN

Theme parks have, since the early debates on postmodern architecture, been used to warn against ‘Disneyfication’ in built environments, meaning not only a scenographic or superficial building culture, but a ‘production of leisure according to the routines of industry’.¹ When the first Disneyland theme park opened in 1955, it was a deliberate attempt to create a ‘doubled inhabitation’ where you could both experience another world, but also become aware of, and enjoy ‘the theme’s difference from everyday life . . . and the ways in which the themed effect is brought about’.² The modern theme parks were also part of an American ‘practical utopianism’, bringing ‘an atmosphere of renovation and reform’ and an ‘optimist vision of the perfectible future’ that contrasted with ‘the increasingly degraded condition of the migrant-swollen industrial city’.³ Other types of cultural theming were commented in anthropological accounts of ‘supermodernity’, for instance the self-mediated versions of original places where towns no longer appear as themselves, but on ‘big signboards nearby’.⁴ Today, some twenty-five years after Sorkin’s and Augé’s reflections, the doubling of places and mediation of cultures has become solidly manifest in the daily handling of the digital representation of places, where our desire for addi-

Figure 1 Map showing location of the proposed Scandinavian Theme Park (image by author)
tional information and screen-based experiences—as parallel worlds—seem to have surpassed the modern/postmodern urge for physical renovation, at least if we judge from the number of ‘visitors’. Nevertheless, Disney-like theme parks have continued to be built all over the world, and as tourism markets they are currently increasing, but they are also, as we shall see in what follows, sometimes burdened by their own history. In this article, the theme park is not so much appearing as a metaphorical reflection of habitat paradigms as in the case of Sorkin and Augé, but as a factual proposal showing preliminary design ideas. Nevertheless, this proposal—to build a Scandinavian Theme Park—will here be seen as carrying general culture-shaping mechanisms.

In 2002, the City of Malmö in southern Sweden officially announced that 2.5 million SEK would be invested to evaluate the possibility of establishing an amusement park with the theme ‘Scandinavia.’ Three American specialist consultants—BRC Imagination Arts, ERA Economics Research Associates, and Jack Rouse Associates, all working with themed experience design and its realization as amusement parks—were invited in a first stage to work in conjunction with a small group of local initiators and visionaries who saw a theme park as a potential force in the future development of this Scandinavian region. Further investments were made to support the development of a park to be located in the farmland close to the Swedish-side anchor of the Öresund Bridge leading to Denmark and Copenhagen (Figure 1).

The estimation was that the park would open its doors to the public in 2014. A first visual rendering of the idea appeared in public news in the local newspaper *Sydsvenskan,* and it showed a bright and colourful visualization, in a bird’s-eye view, of an amusement area to be located in the flat agrarian landscape outside of Malmö, carrying a set of attractions in a style of rendering reminiscent of cartoonist fantasy worlds (Figure 2).

This bird’s-eye perspective was one image in a larger visualization package delivered by one of the American consultants, BRC Imagination Arts. The large part of this package of images was never revealed to the public, due to the trading policies that regulated the planners’ search for a main managerial solution. The years went by and the financing and management of the future park remained an unresolved issue. In 2013, the supportive funding from the Municipality of Malmö for the project had terminated and the idea of this particular theme park disappeared from the official agenda of future regional development in Malmö and its environs.
The envisioning of this theme park will here be discussed in relation to the culture and heritage represented in the images, texts, and diagrams of the design proposals. The public presentations of the project were directed by a small group of Malmö-based planners and visionaries, who were given free creative space and economic support by the political leadership of the city, including possibilities to enrol the American consultants and theme park design corporations that would give the project knowledge and prestige. That way, the ideas became anchored in actual amusement park business, including an economic evaluation of the geographical and societal prerequisites. Not least, the American consultants were also hired to create a more profound, detailed, and attractive visualization of the future park’s facilities, presenting the history and future of Scandinavia. The images were conceived as supporting the first steps in a realization of a themed place where Scandinavia would expose itself—its cultural heritage as well as its recent industrial advancements—in the form of amusement to the visitors. The designers thus had to ask themselves: What does Scandinavian culture consist of? How can it
be visually expressed? And, eventually, how might that be given architectonic shape in a forthcoming experience-, educational-, and amusement-oriented themed place of significant size (the proposal came to occupy 28 hectares—equivalent to forty or so football grounds)? These types of questions, and how they were handled as a joint venture, will here be reflected upon primarily in a culture analysis perspective that, apart from theorization on themed places, will also address cultural semiotics and seminal concepts in postcolonial theory. Furthermore, certain aspects of planning theory, like stakeholder effects and community participation, are addressed. Finally, explicit studies in theme park production and visitor studies are also referenced.

From an empirical point of view, the tying of postcolonial theory to this study could of course at first glance appear far-fetched, since we are here basically dealing with business agreements and design proposals made as a result of cooperation between two modernized Western nations, and not with the extreme type of governmental bias or right-out land theft that comes with the planning that we normally regard as colonization. However, since concepts like ‘mimicry’, ‘alterity’, and ‘subject-engagement’ point to general dilemmas of intercultural constructs, such as when agreements and rules are established and maintained between actors of uneven authority, then we can reach beyond the business jargon of design management and reflect on these dilemmas when we consider the dialogues of architecture and design. In a similar borrowing act, the modelling of cultural exchange that we find in the semiotics of culture, a modelling dealing with communicational exchange between differing cultures, can here contribute to an understanding of the effects of meaning-making design. Analogous to the view taken in postcolonial theory, the semiotics of culture also captures, in a more general communicational sense, the unevenness in mutual formation of cultures. So, through cultural semiotics and also through postcolonial cultural theory, the intention in this article is to bring to the fore some of the general mechanisms behind what in planning theory has been regarded as ‘communicative bias’ or ‘reduction to dependency status’. A main point of interest in what follows is therefore how suspicion, superficiality, and disrespect can be factors as much present as understanding, mutuality, and factual cooperation whenever cultural exchange is at stake. Here in the theme park example, these aspects of cultural exchange appear in the reciprocal process of how to visualize the culture of a specific geographical region in the design of a theme park. The theme park case can thus—in reflection of this complex reciprocity of
intercultural exchange—bring ideas to a question that in its extension is part of any architectural project which aims at presenting possibilities for future culture(s).

In the first and larger part of this article, I present and comment on some of the material that appeared in the promotion and planning of the theme park. The article ends in a theoretical discussion where architectural design proposals and spatial visualization are seen in relation to the models of culture mentioned above, including how ‘culture’ is inevitably construed as a carrier of both hope and prejudice. The case in Malmö will thus serve to illustrate how creative agents visually and architectonically define not only a mutual design project, but also each other as cultural representatives, as they try to agree on designs and images suggesting how a region is construed geographically, socially, and historically.

A SCANDINAVIAN THEME PARK WITH FAVOURABLE PRECONDITIONS

Architecture contributes to what defines a culture as soon as it physically manifests the current politics, habits, and history of that culture, but also, before that, through the more detailed requests from a variety of agents tied to the process of any specific project. The Scandinavian Theme Park is of course a highly specific case in this sense, since the task here was not only to contribute to the general cultural picture of a region, but to explicitly, as a theme, provide an image of a culture—Scandinavia—to an audience through architectural means. The case serves, alas, as an example of what it means to
thematize a place, a heritage, a culture,\textsuperscript{22} thematization being a strong force in the branding competition that goes on between self-asserting places on earth, not least through the tourism projects that ‘support cities in building their reputation’.\textsuperscript{23} But the case also reflects dialogical and relational issues\textsuperscript{24} that form part of each and every planning program: For whom is this place made? Who decides what belongs and what doesn’t? The Malmö-based theme park was economically motivated both as a local and a remote target point for paying visitors. The attempt was to attract visitors with a natural habitual connection to Scandinavia, but also visitors from neighbouring regions, including primarily northern European nations. The latter category was specifically targeted, having a slightly more exotic relationship to Scandinavia, with the desire to visit the theme park perhaps driven by interest, or merely by reasons of leisure or vacation. From an acquaintance perspective, one could see these two publics as quite equal, or as taking each other’s position: a Scandinavian visitor might want to learn what Scandinavia actually means as a historical and cultural region, whereas a foreign visitor might already be acquainted with Scandinavia as a historical and cultural region. The task then, considering the mixed constellation of audiences, would be for the designers of this park to take into consideration a broad spectrum of backgrounds, while—not least for economic reasons—addressing and hoping to catch primarily those looking for amusement with a pedagogical touch, as do a majority of theme parks today.\textsuperscript{25}

Already in a first preliminary report, presented to Malmö Municipality in 2002, the economic consultant ERA Economics Research Associates stated a set of preliminary sub-themes and attractions: ‘Scandinavian Kingdom; Viking World; Five Worlds/Holy Wood; Human Factor/Fantastic Factory; World of the Car; Film/TV Studio Tour; Music/Music; Other Attractions (Sky Tower, UN Plaza, Sculpture Park, World Train, International River, Visitors’ Centre).\textsuperscript{26} From this list, one may easily recognize labels that formed cornerstones in the twentieth-century history of Disney Parks in the USA—‘Kingdom’, ‘Fantastic’, ‘World’, ‘Tour’, ‘Tower’—suggesting the kind of experiential fairy-tale perspective where you as a visitor are met by an artificial set of presented landscapes, sometimes with moving parts à la classic horror ride attractions. Whether by foot, by boat, or by wheeled ride, in landscapes sometimes enforced by animatronic devices that make mythical figures suddenly appear in the surroundings, the programmed movement through such attractions during a visit typically tries to offer an experience that explicitly, unavoidably, turns to you, calling for your attention in each
moment of the journey as you move through it. The ERA list created for the Scandinavian park, even if it carries a few generic cues—such as ‘Studio,’ ‘Plaza,’ and ‘International’—connotes above all a child-oriented, or at least a play-oriented, world. The proposal was, however, not made solely for amusement reasons: similar to the concept of some American parks, companies were sought—well-known Scandinavian enterprises, mostly Swedish—as candidates to place offices and exhibition halls in a corporate division of the park, to be located in the far end of the park area (Figure 3).

The three American consultants that were contacted by the Municipality of Malmö to make preliminary concepts and calculations—BRC Imagination Arts, Economics Research Associates (ERA), and Jack Rouse Associates—were solidly established in taking on work on a global basis and had direct historical links or cooperative relations to the most well-known streams of modern American entertainment industry, including the animated film productions of Walt Disney and Hanna-Barbera. Malmö Municipality, when negotiating with these consultants about what was to be seen as ‘Scandinavian,’ was first and foremost represented by a strategy group of visionaries
supported by singular politicians, planners, and consultants. Preparatory consultations had included, for instance, Buzz Price, former chief consultant for Walt Disney, and Bo Kinntorph, former chair of the International Association for Amusement Parks and Attractions and former director of the amusement park Liseberg.\(^{27}\)

Before any images occurred that would help to visualize the actual park, ERA made preliminary calculations on the uptake area, the explorative conditions (ownership of land, etc.), and the audience attractors needed. They stated\(^{28}\) that the City of Malmö is well situated geographically in relation to possible visiting publics from a densely populated area: especially southern Sweden, Denmark, and northern Germany (Figures 4 and 5). The conditions were considered very favourable, since Malmö City owns the land, and the infrastructure is strong and the access to the area good.\(^{29}\)

One advantage especially stated by the consultant ERA was that the City of Malmö itself is in control of the permission for exploitation, that is, the planning and exploiting agent was to some extent one and the same. What ERA did not count with, however, was the fact that the proposal itself would have an impact on these conditions. At the time of the proposal, the development of the new southern part of Malmö was intense, especially the land adjacent to two new train stations, Hyllie and Svågertorp, that would welcome travellers coming via the new bridge over Öresund from Denmark (Figure 1). In the midst of this intense larger development of infrastructure, the land-consuming theme park had political priority, but the exact location of it could not be established so long as there were no financial and managerial agents for the running of it. The park thus became a fact that had to be counted on, but at the same time the planners had no exact information about the future of the theme park. This uncertainty caused delays and relocations of the park, which had to move outside of the outer ring road and away from the more intense city structure (Figure 5).

Statements in public media during the time period from 2003 to 2008 repeated the descriptions originating from ERA, emphasizing ‘fantasy’, ‘knowledge’, and ‘joy’:

The park will provide deepening adventures based on the fantasy world of Scandinavia, its cultural heritage and nature. . . . Visitors will be inspired by the Scandinavian people's rich fantasy world and cultural heritage, as well as have the feeling of being re-born through the healthy effects of the nature. . . . When the visitors leave the park they will want to know
more about the Scandinavian culture. They’ll want to spend more time exploring the nature/landscape of the region. They’ll want to return to the park. And they will remember Malmo and the Oresund region as a lively and joyful place, a place to visit again.²⁰

The tone of voice in these statements, more or less advising what seems to be mostly a remote public as to what it will mean to visit the park, is aligned with a long-standing business policy to ‘educate’ the public about the product. For instance, when establishing the new Disney Europe, ERA wrote: ‘The Disney megapark, by virtue of its scale and level of public interest, will directly impact the European theme park market by educating the public to the theme park product, creating marketing awareness, and establishing entertainment value standards.’²¹ These descriptions, taken from well-established rhetoric in the theme park industry,²² could also be seen as education aimed at the Swedish project partners. The visionaries and politicians involved were in fact the only clear stakeholders throughout the ten years of the project duration, and they consulted the American firms partly in order to educate themselves, and in that way to develop a ‘stakeholderness’²³ by which the role of being a stakeholder becomes dynamic and possibly transferable also to other future managers.

It has been shown in tourism management research that prior education may influence theme park visitors’ expectations, and ultimately the experience itself.²⁴ Even if such research confirms ERA’s strategy, aiming at ‘educating the public to the product’, the promotional objective in the consultant’s management- and business-oriented statement is about as far as you can get from participatory modes of education, where the wills and needs of several groups steer the interest of learning.²⁵ Education, in a participatory sense, requires a ‘subject-engagement’ that can provide tools for ‘life opportunities’²⁶ through close encounters between teachers and those receiving education. Engagement and the establishing of mutual learning situations between developers, clients, and users is what constitutes contemporary participatory planning where relational,²⁷ dialogic,²⁸ or therapeutic²⁹ approaches are foregrounded. Below, this article will conclude by returning to the complexity of reciprocal cultural learning and understanding, and some of its basic mechanisms, but only after some reflections on the visual promotional material of the theme park and some thoughts on why this theme park project did not succeed.
PROMOTIONAL IMAGES OF THE CULTURAL PASTS AND FUTURES OF SCANDINAVIA

While the managerial and economic calculations were developing, BRC Imagination Arts were asked to collaborate in a set of preliminary visualizations of possible attractions. Earlier projects and collaborations in Europe by BRC included both corporate- and heritage-oriented projects, for instance the theme park Volkswagen Autostadt in Germany. In 2005, BRC showed, as part of their digital product catalogue, a design of a park supposed to have opened in 2004, Mythos Theme Park in Athens, with similarities to the myth-based theme in the Scandinavian park. As it turned out, the Mythos Park was not realised, and the near future would come to prove that the Malmö-based theme park would meet the same fate.

How then, was the Scandinavian project, and the heritage of Scandinavia, visualized during the time it was alive in Malmö as a promoted project? Singular preliminary images had occurred publicly at small-scale exhibitions, for instance at the Malmö City Public Library in 2005, but not until 2008 would a more comprehensive visualization be presented in the mass media. The main promotion image, labelled ‘Bird’s-eye’ (Figure 2), showed the park’s position on high-quality agrarian land. In the visionary universe of the proposal, trains are depicted as having a separate track and station adjacent to the park, which suggests an idea that traffic from Copenhagen would be able to have a specific track ending close to the park’s entrance (Figure 6). This idea, never expressed in general comprehensive plans for urban deve-

Figure 6 Entrance area with possible train connection to the right (copyright: Ekspoloria Edutainment)
The first ‘attraction’ after having entered the park was Yggdrasil. The name Yggdrasil was also tested as the main title of the park itself during the years 2009 to 2012. Yggdrasil, being the life tree in Nordic mythology, is reminiscent of life tree symbols in other early cultures, and it was highlighted here as symbolizing wisdom and knowledge. The labelling of sketches in the promotion material shows the tree as a prioritized brand name.

The style of most of the sketches has a touch of modernity and future in a filmic and technologically advanced aesthetics. However, some images of parts that aspire to give an impression of traditional landscapes recall a European-type landscape, also reminiscent of popular English, French, or Italian castle garden representations. Again (as seen in Figure 10) clearly visible in the background, the Yggdrasil tree is given the position to mark the scenery. The identity and
shaping of theme park landforms in general, including ‘ride landscapes’ and artificial hills and mountains, is historically surprisingly consistent, following an aesthetics emanating from the early European garden parks as well as the early amusement parks in the USA that preceded the modern theme parks. While several depictions of Yggdrasil in modern times are dominated by a neo-gothic, quasi-realistic style, suggesting a ‘cinematic’ appearance of mythical figures, historical depictions are quite few, though they do exist. The most well-known one is the tapestry of Överhogdal (Figure 11), made
between 800 and 1100 AD, recognized in archaeology and in the history of textiles as carrying depictions of Yggdrasil, based on details like crows and branches that coincide with written (hieroglyphic) versions of the myths.

However, as little as these existing artefacts were considered as models in the project, the next theme that would be approached by a visitor in the park ‘The Vikings’ was also depicted merely from the point of view of fantasy. The culture of the Vikings, being perhaps the most internationally well known ancient history of Scandinavia, has also been interpreted in historical and archaeological accounts as relying on the mythology producing Yggdrasil, and some of the travels undertaken by the Vikings have been seen as attempts at exploring what Midgård (the world in the Nordic myths) was all about. Countless amusement facilities and outdoor historical festivals in the Scandinavian countries have exploited the Vikings and seen Viking helmets and swords become part and parcel of all sorts of popular events and souvenirs. In the theme park proposal, several images presented Viking attractions in a filmic kind of aesthetics, some of which suggest participatory events in water-born vehicles, others as screen-oriented attractions.
The visual material presented here shows, above all, how well-known amusement imagery, also in the knowledge parts (Figure 13), was the basis for the attraction architecture. Before returning to what kind of culture these images conveyed and what kind of cultural reciprocity this cooperation conveyed, we will engage in brief speculation on why the proposal did not succeed to realization.

THE THEMED PLACE AND THE FAILED THEME
The concept presented in Malmö was perhaps already obsolete at the design table as to what ‘amusement’ connotes in a digital era dominated by fast and
vast travelling of images and information. The fact that fantasy worlds, not least with slight pedagogical intent, had become a screen-oriented matter experienced at home by the time this theme park idea was presented—first in the format of TV and video, then through the Internet and smartphones—rather than as a physical and theatrical public activity, was probably one of the main reasons why this themed environment never took root. Even if there has been a proliferation of parks globally in the decades since the digital and home-based amusement worlds saw the light, the balancing of the time factor in planning and its relation to change of societal needs, interests, technologies, et cetera, is of special importance in large-scale theme park planning.\textsuperscript{45}
The Malmö-based park design relied to a large extent on classical rides and amusements. Another reason might be that the main attractions—Vikings and Nordic Mythology—were not original enough, or thoroughly enough researched, themed, and staged in the proposals, to convince the common public and the companies targeted as co-financiers. It seemed like the visitor satisfaction prognosis made by ERA and the Swedish visionaries was too much focused on a general remote visitor, seen as ‘wanting to return’ to the park. Research on visitor satisfaction and visitor attraction in relation to theme parks has pointed to the educational importance of images that present to the targeted visitors beforehand what can be experienced, but theme park research has also pointed out that measurement scales cannot be automatically applied to visitors from different nations (cultures), nor can it be taken for granted that response style is the same regardless of culture. In the Malmö case, the local visitors were not mentioned in their specificity and ethnical range in the preliminary descriptions in the same way as remote travellers.

The idea of allocating a part of the park to Scandinavian businesses and industry was hardly in line with contemporary historical examples of companies’ involvement with theme parks, where the tendency in the latter half of the twentieth century already had gone from a venue reminiscent of old marketplaces with several manufacturers showing their products, as in earlier European garden shows, to a concept where one company brands itself through the very existence of the park as a whole. The latter is basically the Disney concept: making parks conceived of as materializations of an already existing product (the movie). At Disney’s Epcot, which was one of the explicitly stated role models in the Malmö case, companies like GM and Kraft were invited as sponsors of the technological future- and global-culture-oriented themes and technologies, but in Malmö there were no obvious links between attractions and supposed sponsors, apart from the vague notion of ‘Scandinavian’. This amounts to what could be called a dialogic failure of a design management sort, meaning that the visions were not communicated openly enough for possible future managers and financiers to know enough about visitor categories and, consequently, what kind of values might be in it for them.

Another possible reason for not succeeding is related to a sense of democracy and participation. The development of the park was not properly negotiated locally, that is, with the citizens of Malmö, which would presumably be the most ‘safe’ audience as far as returning visitors are concerned. Local people were not really regarded as ‘co-owners’ in this proposal, or as having
the right to take part somehow in decisions influencing it, meaning that no ‘community of inquiry’ was established. Not even the representative planners and civil servants directly involved in making general plans for the larger southern outskirts of Malmö earmarked for this park were properly notified. The hermeticism created around the project was partially broken only after a couple of years, but still only as one-way communication informing the public about the outcome. Hence, the educational efforts could be said to neglect how ‘meaning arises out of a process of negotiation that combines both participation and reification’. Another way of putting it is that the project was not anchored well enough, neither towards locals (who were not part of the negotiations at all), nor towards potential managers (who consequently could not know what the public thought about it). In an article about the failure of the total Öresund cooperation, of which this project could be said to be a part, one of the leading local visionaries of the park expressed that too little had been done in connection with the existence of the new physical bridge between Sweden and Denmark. A personal responsibility as municipal strategist was admitted to in the article, at the same time as a critical message was sent to the national political leadership, for not having stimulated enough the labour and housing markets as well as the education and research cooperation between the two neighbouring countries. The statement implies that a theme park would perhaps have been better grounded had it been related to larger population issues. Again it could be concluded that such grounding implies that the population by preference could have been more involved. As part of a corporate way of thinking, focused strictly on economically developable sections, the statements made by the visionaries say nothing about how other forces in the region, such as the large immigration figures, could be more strongly acknowledged in the totality of the city planning efforts.

A last hypothetical factor for not succeeding in the end is of a more aesthetic nature, and it concerns the content and style of the images in the promotional material. The images, as pointed out above, were mostly part of a modern Universal Studio–like filmic aesthetics, but also to some extent borrowed expression from more archaic landscape depictions or fairy-tale illustrations. Taken together, they conveyed a somewhat scattered total image, with apparent borrowings from former park projects. We may ask: What might they say to a manager or a visitor? The promotional images convey the kind of density of attractions that is usually expected in a theme park, but at the same time they paradoxically, despite showing a lot of visitors, also convey a kind of placial emptiness, due to the choice of content. Placial emptiness,
lack of sense of place, or other versions of ‘non-place’ was for a long time an almost obligatory part of influential theories of modern places. Even if emptiness can be part of areas where tight social relations are difficult to establish, the idea of linking anthropological emptiness to modern places is also to some extent a disciplinary innovation created in descriptions of new architecture or new societies as incomplete places, neglecting that as soon as prospective sites are activated, and new architecture is established, there are also activities that anchor human activities to the place.

The theme park proposal shows a certain fear of emptiness, common to other similar promotional material, since the images need to show how a limited monofunctional establishment (place of attraction) is filled with people, at the same time being an immediate neighbour to the next visited attraction or ride. On a general level, one could say that this kind of visual kenophobia (the urge to fill a place) is by necessity linked to pictorial reduction, and that it is more present in prospective images than in real places, in the sense that design proposals often have to present life through a pictorial installation of people at the same time as eliminating activities other than the highlighted ones, such as the amusement activities as usual in this case. Kolb points to the fact that every themed place has to be consciously and continuously put forth as such, thereby suggesting that the place is anchored in a reality beyond—or behind—the theme itself, that is, that there is always a factual reality acting to produce the theme, a reality often hidden away in design renderings. One could go as far as to say that this general phenomenon in architectural visualization—of reducing, or articulating away, ‘unnecessary’ backdrop stuff for the sake of keeping an attractive visionary focus—is likely, if we trust people’s ability to judge images, to have unwanted consequences unbenefficial for a project, simply because the resulting risks are judged as unrealistic.

ARCHITECTURAL DESIGN AND THE RECIPROCITY OF CULTURAL ENCOUNTERS
The record of promotion images presented above, belonging to a failed project of urban and architectural planning, serves here to ask what it means to visualize, and eventually physically create, a culture as a joint venture between two parts, as here between a Swedish and an American conglomerate of design visionaries. As we shall see, these images cast light more specifically on the visual production of ‘otherness’, implying that otherness is a necessary part of the cultural interchange we call design. Clichéd theme park renderings of cultures or nations, like the Mexican section at Disney Epcot,
also appear in the Malmö set of ideas as specifically theme-park-oriented Scandinavianisms. The visual renderings made by BRC, and their stylistic unification that is reminiscent of Universal Studios projects, was completely in line with the clichés (see above) of ERA’s preliminary list of possible attractions. Both the images and the list of themes seem almost helplessly to emanate from a general amusement park parcel formed in relation to the success of mid-twentieth-century animation in the Disneyfied film industry.

It must be remembered, however, that the images of this project were not made by the sole hand of the design consultant BRC, but were produced in a dialogue between American firms and a Swedish group of entrepreneurs and visionaries, sanctioned by the political leadership of Malmö. The ideas emanated, so it was stated, not so much from one party ‘simulating’ the will of another, but were ‘a common construction of views, and agreements, with the aim of shaping a stereotypical culture’ (quoted from an interview with one of the leading strategists).

The stereotypes were thus not primarily a result of ignorance, but were rather desired, conceptualized as the ‘familiar’ and ‘well-known’ qualities aimed at catching the interest of an audience, and in the first instance possible financiers. On the whole, these depictions, like visions in general, are not images made to present a culture—or a representation of the actual future amusement environment—as true-to-life as possible, but they are ultimately made for selling amusement at a certain stage of negotiation. They are, like most visionary architectural imagery, or every depiction of an apartment for sale, made to evoke spatial attraction, made to arouse a certain desire to be part of the place rendered. The campaign had well-known figuration as an objective, and not—which could have been another point of departure—a slightly less-known culture, or even completely unknown details of a cultural heritage. Habits, history, language, art, and literature are usually brought to the fore as what define cultures. Explicit theorization on what culture is, and how it works, as found in diverse disciplines like anthropology, organization theory, or biology, takes greater care in defining who, or what, it is that forms a certain common interest, or the set of rules that define the culture of a population. While several of the human sciences regard their subject matter (culture) as a ‘positive’ one, in the sense that the matter studied simply represents, or reflects, the culture surrounding it, recent theorization on cultures, including postcolonial studies and cultural semiotics, has been more concerned with seeing those traits as conditioned by relations between
different cultures. They have been more occupied with how cultural difference and cultural exchange can be modelled, by giving some explanation on how appreciation, conflict, and dismissal not only appear in politics, in regional controversy, and in warfare history, but on how such affective and value-based views of one another reflect the actual decisive force of culture.

As a final theoretical reflection on what happened, and did not happen, in the case of the theme park project (and, in extension, in visualization and negotiation of architectural projects in general), a couple of postcolonial and semiotic concepts regarding the formation of culture will be addressed in the next section.

THE ROLE OF MIMICRY IN CULTURAL RECIPROCITY

In the early phase of what came to be labelled postcolonial theory, views of cultural encounters, such as those of Bhabha and Spivak, foregrounded a reciprocal view of ‘culture’, acknowledging the tactics needed to maintain a production of cultural difference while also mimicking the other culture. The basic figures of thought in early postcolonial theory concerned how essentially differing cultures (colonizer and colonized) are involved in mutual but uneven sharing of interests, and how silently accepted agreements or silenced voices regulate daily life together. Forced (and sometimes fake) reciprocity as well as simulated likeness between (members of) differing cultures can be seen as hiding patterns of dominance in their relationship, but such mimicry also makes jointly existing cultures get along on a daily basis by avoiding destructive conflicts (or cultural extinction). Such basic figures of thought will here serve to cast light on our case of specifically architectural co-production of cultural image-making.

Mutual dependency is a decisive force in cultures’ definition of themselves. Mimicry, or the tendency to imitate cultural behaviour and artefacts, can be seen on the one hand as a desired will from a dominant culture, enacted to eliminate unproductive difference. On the other hand, mimicry is also a (counter-)strategy from a dominated culture aligning to a certain degree with a dominating culture. Mimicry—seen in this situated way—is ‘at once resemblance and menace’. Mimicry, or the tendency to imitate the other’s behaviour, values and taste, is in other words not only a communicational tool, but always works by retaining a certain difference. Full elimination of difference is—for both parts—essentially a semblance, since difference in shared situations is also a fundament for co-existence. Resemblance, there-
fore, is here is a matter of ‘ambivalence of mimicry (almost the same, but not quite)’

Accordingly, in the theme park case, the clichéd images and themes can be seen as a compromise between really good amusement (challenging rides, etc.) and really good cultural and heritage knowledge.

Mimicry, as a tactic to gain an advantage, or to survive, is possible only if one in the first place has the position to be part of the deal. Some groups and individuals in societies, and as here, in design dialogue, are not even heard. And the subaltern—those who are not only ‘other’ but moreover do not have an opportunity to speak their voice—become non-belonging in the larger cultural encounters. In the context of land use and the planning business, this category is actualized when plans and designs do not intend for the existing communities to take part, but only concern them as stereotyped figures invented to fit the ideas developed between interests ultimately devoted to business. In the case rendered here, the subaltern is represented by the absent locals, but also the abstracted and demographically defined visitors mentioned in the interest of city branding and successful entertainment design. In the Scandinavian Theme Park case, subalternity was thus not only an effect of factual lack of user participation, but a subaltern category was also actively created already in the initial descriptions, formulated by ERA, when they—ironically in what they regarded as an educational effort—tried to apply their preferred visitor reactions to the wills of potential users, announcing to the public what they should want.

EVALUATION OF THE OTHER IN A SEMIOTIC MODELLING OF CULTURE

Branches of cultural semiotics that see culture as a matter of exchange of values and information take cultural reciprocity, or mutual evaluation of a culture, as a starting point, viewing appreciation as well as disregard of the other as the main driving forces in how a culture is perceived, modelled, and construed. Reciprocity is a fundamental feature of the notion of ‘semiosphere’, created as a concept capturing the idea of exchange of meaning and substance between groups familiar (inside the sphere) and unfamiliar (outside of it) with a culture. The idea of a semiosphere (containing known languages, behaviour, concepts, and values) includes the idea of violation towards its own borders, a violation both necessary and creative. Yuri Lotman thought of creativity as an act of circulating a cultural product to other cultures, or extra-cultures, in order to get a response and seeing it again with ‘new eyes’. Again, we can see in the design proposal that the ‘semiosphere’ of Scandinavia construed by the visionaries was not questioned, or ‘violated’ enough to also activate unknown stuff.
In a line of thought that follows Lotman, a cultural semiotics has evolved that questions the simplicity of the notion of ‘other’ by introducing the double character of ‘alter’ (neighbouring) and ‘alius’ (unknown or detested) cultures, standing in different positions to the ‘ego’ culture. In the case of design, and as here in the theme park project, these theories of semiotics point to the fact that cultural constructs include varying modes of cultivation, and that two cultures which sense a kinship with each other might, simply by expressing that kinship, also define an (unplanned) expulsion of a third culture. A more complete mutual knowledge of a jointly construed culture, such as in the projective case of the theme park, could in light of this semiotic modelling have been possible by allowing incorporation/rejection of ideas from both ‘alter’ (peers) and ‘alius’ (neglected) voices, in a more open form of negotiation.

In reciprocal cultural processes time plays an important role, and certain cultural features appear (for instance in design proposals) as instantly recognizable, whereas others need time to develop. If we accept the basic triadic description of parts involved in cultural exchange, then we may conclude that the difference that an Ego culture makes between an Alter culture and an Alius culture contains this temporal difference, where an Alius culture (initially ignored or detested) only stands a chance to be incorporated as an Alter culture (recognized, understood, and liked) after some time has passed. Here this could indicate that processes of dialogue in design—dialogue in the sense letting a variety of actors take part or lead certain issues—have to be allowed time to mature. This semiotic account, emphasizing temporality and the tripartite conceptualization needed in recognition of cultures, shows that cultural reciprocity in design and planning could be more strongly reflected upon. Joint views of a culture contain mutual imitation of manners, tastes, and procedures that assist the progress of projects, and in general terms we could say that constructs of culture are silently present in any apparatus of image production that supports the envisioning of new environments. Not only in the case rendered here, where the production of ‘culture’ was an explicit architectural task and the actual objective of the design, but in any co-designed image-making, cultural reciprocity is part of the actualization. In commissions where there are two or more agents that have an interest related to identity in the pictorial material that serves as visionary framing of an idea, or guiding of construction, a common view is often silently agreed upon, but in reality this ‘common’ is made on terms dominated by one set of ideas, and this discrepancy is bound to have effect in the end. A recognition of what has been discussed here as ‘reciprocal alterity’ in planning procedures
would see planning and architecture as allowing more negotiating parties to measure their voice against visual representations as they are being produced.

CONCLUSION
In this article, a theme park design proposal has cast light on the visual production of cultural ‘otherness’, and how that otherness can be problematized in visualized planning. A design proposal—partly driven by Swedish city developers and branding visionaries and partly by an American corporate tradition of presumably reliable amusement design—presented Scandinavia mainly through cultural clichés such as Vikings and simplified Nordic mythology, and to some extent through an imagined contemporary Scandinavian industry. An American influence appeared in the negotiations of this theme park proposal, partly in the corporate and consultative style of handling ‘visitor education’, but also in the film studio aesthetics of the images as such. Yet these views, or this aesthetics, can be seen as being produced partly by the ‘home culture’ of the Malmö visionaries, wishing that Scandinavian culture, formed as amusement, could attract tourists, businesses, and interested visitors to the park and the city.

The image of Scandinavia was returned by the American designers, as stereotypes for the local partner in this cooperation to use for further development. This mutual image was, however, not discussed or productively tested towards a broad range of possible concerned parties. In a critical view of the dialogue and the visualized architectonic representations of culture in this proposal, it was here shown that phenomena like alteration of the local population, actually existing subcultures, a recent increase in environmental awareness, but also historical facts like early visual representations of Scandinavian mythology were sacrificed when theme park familiarity was given preference over an actually existing typology of Scandinavian heritage and contemporaneity. Consequently, certain specific cultural values were ignored, overruled, or changed in the imagery of visionary design production, an imagery based in basically modernist themes, business objectives, and aesthetics. We have seen here for instance that lead concepts in corporate design culture, such as ‘educational’ and ‘popular’, need to be understood as related to a broader and more inclusive notion of aesthetics, an engaged aesthetics with several, and real, receivers in mind. That way, the subject that is actually in need of, or interested in, education and recreation can be heard and join the common work on future cultures. It was discussed here how ‘placial emptiness’—which is sometimes too easily attributed to newly established places that lack social density—could actually be a relevant concept in regard to what was left out of the visions and imaginative proposals. In relation to the lack (of
aspects of culture) in the renderings discussed here, a more general pragmatic question about architectural representation can also be asked: Do the sketches, drawings, and renderings, in order to become trustworthy, have substance enough as regards both historicity and real life embodiment? And further: Do the images have truthfulness enough to enable and foster public transparency, and designerly self-reflection? In short: Do they have agency as images to sufficiently mirror the depicted culture, as the architectural process goes on?

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NOTES


3 Sorkin, ‘See You in Disneyland’, p. 211.


8 See Sorkin, ‘See You in Disneyland’; Kolb, Sprawling Places; Augé, Non-Places; among others.


16 Bhabha, Of Mimicry and Man.

17 Spivak, ‘Can the Subaltern Speak?’.

Lotman, Universe of the Mind; Sonesson, Ego Meets Alter; Cabak Rédei, 'An Inquiry into Cultural Semiotics'.

Healey, Urban Complexity and Spatial Strategies.

Sandercock and Attili, 'Changing the Lens'.

Cf. Augé, Non-Places; Kolb, Sprawling Places.


Healey, Urban Complexity and Spatial Strategies; Innes and Booher, Planning with Complexity.

Clavé, The Global Theme Park Industry.


Clavé, The Global Theme Park Industry.

Metzger, 'Placing the Stakes'.


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Innes and Booher, Planning with Complexity.

Sandercock, Cosmopolis 2.


Ibid., p. 246.


Malmö Stad, ‘Förstudie: Publik Anläggning’.


Kolb, *Sprawling Places*.

Clavé, *The Global Theme Park Industry*.


Wenger, *Communities of Practice*, p. 135.


Ibid.


Kolb, *Sprawling Places*.


60 Gunnar Sandin, ‘Modalities of Place: On Polarisation and Exclusion in Concepts of Place and in Site-Specific Art’ (PhD dissertation, Lund University, 2003); Sandin, ‘The Construct of Emptiness in Augé’s Anthropology of “Non-places”’.

61 Kolb, Sprawling Places.

62 Ibid., p. 121.


64 Bhabha, Of Mimicry and Man; Spivak, ‘Can the Subaltern Speak?’.

65 Spivak, ‘Can the Subaltern Speak?’.

66 Bhabha, Of Mimicry and Man.

67 Ibid.

68 Ibid., p. 127.

69 Ibid.

70 Spivak, ‘Can the Subaltern Speak?’.

71 Lotman, Universe of the Mind; Sonesson, Ego Meets Alter.

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73 Ibid.

74 Ibid.


78 Innes and Booher, Planning with Complexity.
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**Ralf Pasel** has been professor and head of the Chair for Construction Design since 2012 at the Technical University of Berlin. He is a founding partner of the architectural studio pasel.künzel architects. Focusing on experimental housing typologies and construction in an international context, he explores the intersection between research, academic education, and architecture in practice. Pasel has received numerous awards for excellence in design and for innovative housing strategies. He is co-founder and co-director of the design-based doctoral program PEP at the Technical University of Berlin. His academic research is founded on practice-based design and centres on research by design and experimental design methodologies. In 2009, Pasel was the curator of the exhibition *Parallel Cases* at the 4th International Architecture Biennale in Rotterdam.

**Stina Rask Jensen** was trained as a civil engineer specializing in architecture at Aalborg University. After graduating in 2012, she worked as an architect in Oslo and Aarhus, before initiating research in the field of social housing renovation. Her research focuses in particular on the relationship between social and environmental sustainability, aiming to identify architectural strategies for promoting well-being in post-war social housing, while future proofing the buildings in terms of resource consumption. The PhD project forms part of the national research project ReVALUE, which is carried out as a collaboration between Aarhus University and ten industry partners. The main partners involved in the PhD are the Tectonic Design group in the Department of Engineering and AART architects.

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**Anders Strange** is a co-founding partner of the architectural firm AART architects. As CCO, he is part of the firm’s executive management and, in addition, he runs its Oslo division. He has worked in architecture and management for more than twenty years and has been at the head of several award-winning projects throughout Scandinavia. Over the years, he has gained deep insights into the field of architecture—from concept and project development to business development. These insights are also reflected in the positions of trust he has held, including as the former deputy chairman of the Danish Association of Architectural Firms and as the current chairman of the East Jutland section of the Confederation of Danish Industry.
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