

U R B A N   P L A N N I N G   A N D   E N V I R O N M E N T

# Nordic Experiences of Sustainable Planning

Policy and Practice



Edited by  
Sigríður Kristjánsdóttir

ROUTLEDGE

# Nordic Experiences of Sustainable Planning

For well over a decade, there has been a drive towards sustainability in planning throughout the Nordic countries. But are these countries experiencing a paradigm shift in planning research and practice with regards to sustainability? Or is the sustainability discourse leading them into an impasse in planning?

This book includes overviews of the planning systems in the five Nordic countries, drawing attention to their increasing focus on sustainability. A leading team of scholars from the fields of planning, urban design, architecture, landscape, economics, real estate and tourism explore how the notion of sustainability has shaped planning research in the Nordic countries. Case studies from Iceland, Sweden, Finland, Norway and Denmark shed light on what lessons can be learned and some possible future developments. By focusing on the actual settings and practices of local and regional planning activities, it enables a discussion on the current state of planning for a more sustainable future.

This book will be valuable reading for students and academics interested in planning policy, environmental policy, architecture and urban design work.

**Sigríður Kristjánsdóttir** is an Assistant Professor in the Faculty of Natural Resources and Environmental Sciences at the Agricultural University of Iceland.

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Policy and Practice

*Edited by Sigríður Kristjandóttir*

# Nordic Experiences of Sustainable Planning

Policy and Practice

Edited by Sigríður Kristjánsdóttir

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This book is dedicated to my sons Elías, Kristján and Hannes



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# Contributors

**Lúðvík Elíasson** is a senior economist in the financial stability department at the Central Bank of Iceland. His research is on the economics of housing markets and on economic growth in the face of limited resources. Elíasson has written reports, book chapters and journal articles on various aspects of the Icelandic economy and housing economics.

**Eva Irene Falleth** worked in land-use planning and policy, urban and regional development and environmental management at the Norwegian Institute for Urban and Regional Research (NIBR) before becoming a professor at the Norwegian University of Life Sciences (NMBU). She holds several professional positions nationally and internationally. Falleth is currently Dean at the Faculty for Landscape and Society.

**Jukka Heinonen** holds the position of Associate Professor in the Faculty of Civil and Environmental Engineering at the University of Iceland. His research concentrates on sustainability issues in the context of the built environment. He is one of the leading researchers in the field of urban carbon footprinting. His consumption-based assessment technique for urban greenhouse gas assessments is well recognized in academic communities around the world. He held Visiting Scholar positions in one of the world's leading universities, UC Berkeley in the USA, in 2012 and in 2013–2014. He has also been invited to design and edit a focus issue for a highly regarded academic journal *Environmental Research Letters*, and to act as an expert reviewer for the *5th IPCC Assessment Report*. He has written more than 50 academic papers since 2010 and was the lead author of the best paper in 2011 in *Environmental Research Letters*.

**Carsten Jahn Hansen** is Director of the Danish Centre for Spatial Planning/ Center for Fysisk Planlægning, and Associate Professor in Spatial Planning at Aalborg University in Denmark.

**Seppo Junnila** runs the Real Estate Business research group at the Department of Real Estate, Planning and Geoinformatics at Aalto University. He has written more than 100 academic papers and more than 40 journal

articles in highly regarded academic journals. His articles on environmental life-cycle assessment in the built environment have been widely recognized for their contribution in advancing carbon consumption assessment methodologies. He has acted as a guest editor for several academic journals, hosted scientific sessions, and has served on scientific committees for many high-level conferences.

**Olavi Kallio** (Doctor of Administrative Sciences) is Docent in Municipal Policy and Economics at the School of Management, University of Tampere. He has extensive experience in researching connections between municipal service production and the municipal economy. With regard to municipal economics, his research approaches different arrangements of municipal service production and respective changes brought about by municipal mergers and cooperation.

**Dag Kittang** is Professor in Urban Planning at the Department of Urban Design and Planning, Faculty of Architecture and Fine Art, Norwegian University of Science and Technology, NTNU. Kittang was Vice Dean of Research from 2010–2013, when he was responsible for the Ph.D. program at the faculty. He has working experience as a municipality planner, consulting architect and research manager. His main field of research is planning sustainable cities, with an emphasis on developing the urban fabric through urban transformation and conservation.

**Sigríður Kristjánsdóttir** is Director of the Master Program in Planning and Assistant Professor at the Agricultural University of Iceland. Her research has focused on the formation and development of urban areas as a part of wider territory, including the urban fringe; and the interaction between the business cycle, planning, housing, regulations and the urban landscape. Kristjánsdóttir is an active contributor to international research projects, particularly collaboration between the Nordic countries.

**Johanna Lilius** is a post-doctoral researcher at the Department of Architecture at Aalto University, Helsinki. Her research interests include urban middle-class families, multilocality, suburban revitalization, and strategic and cultural planning.

**Enza Lissandrolo** is an associate professor in the Department of Development and Planning, Aalborg University, Denmark. She joined the department after completing research in Italy and The Netherlands on spatial governance and transitions, deliberative and reflexive planning, and mobility. She conducts research and teaching in urban planning, public policies and governance. Her research and teaching focuses, in particular, on how spatial planning is performed in contemporary professional practice and the politics of transitions in spatial planning practices.

**Raine Mäntysalo** is Professor of Strategic Urban Planning and Vice Head at the Department of Real Estate, Planning and Geoinformatics, Aalto



University. He has been in charge of several research projects in the Land Use Planning and Urban Studies Group (YTK), which he leads. His own research focuses on strategic spatial planning, planning theory and the land use planning system.

**Hanna Mattila** works as a university lecturer at Aalto University, in the Department of Real Estate Planning and Geoinformatics. Her research interests include planning theory, planning systems, design theory and theories of planning education. Mattila has also worked as head of the continuous professional development team at the Centre for Urban and Regional Studies at Helsinki University of Technology; and as a planner for Uusimaa Regional Council.

**Petteri Niemi** is a student of geography at Helsinki University, Department of Geosciences and Geography, with a special focus on geoinformatics. Previously he worked as a research assistant at the Department of Real Estate, Planning and Geoinformatics, Aalto University, participating in several projects with themes varying from studies of urban structures to climate change.

**Kristina L. Nilsson** is Professor of Architecture at Luleå University of Technology (LTU) in Sweden. Kristina's research interests include sustainable urban planning and design, and management of planning processes and regulations to achieve a more sustainable and resilient society. She is trained as an architect and also has significant practical experience of how planning is handled in reality. Kristina is Second Scientific Leader of the Area of Excellence in Research and Innovation for Attractive Built Environment, a member of the Swedish Royal Academy of Engineers, and was President of AESOP, the Association of European Schools of Planning, 2010–2012.

**Berit Irene Nordahl** worked in housing policy, housing supply and urban development at Sintef Byggforsk, and at the Norwegian Institute for Urban and Regional Research (NIBR), before taking up her current position at the Norwegian University of Life Sciences (NMBU). At NMBU Nordahl teaches Real Estate Development, and she is leading national and international research on housing supply, urban land markets, and market actors and local government interaction.

**Torill Nyseth** is Professor in Planning at UiT, the Arctic University of Norway, where she teaches planning theory and place development. Nyseth has published extensively on a wide field of topics – including place development, planning theory, urban development, network governance and cultural heritage. Her latest publications are journal articles in *Acta Borealia*, *Town Planning Review* and *Planning Theory*.

**Juudit Ottelin** is a doctoral candidate in the joint doctoral program between Aalto University and the University of Iceland. Her dissertation

concentrates on the environmental impacts of transportation, and especially on the rebound impacts caused by changes in transportation choices. She has published research on the substitution effect between flying and private motoring – showing how flying tends to increase, and how greenhouse gases resulting from flying tend to offset the gains from reduced private motoring in denser urban settlements.

**Magnus Rönn** is Associate Professor at the School of Architecture, The Royal Institute of Technology, Stockholm, Sweden, where since 2004 he has served as Research Director. Rönn currently manages a research group called arc•plan, and has served as theme editor to four special issues on the specialist subject of competitions: the *Nordic Journal of Architectural Research* (2009:2/3; 2012:1) and *FORMakademisk* (2013:4; 2014:1). Together with colleagues he has produced three anthologies on competitions: *Architectural Competition: Research Inquiries and Experiences*; *The Architectural Competition: Research Inquiries and Experiences from 2010* and *Architectural Competitions – Histories and Practice from 2014*. Rönn is also co-author of two books in this specialist field of research; *Architecture Competitions – Experiences from Finland* (Arkitekturtävlingar – erfarenheter från Finland) and *Architecture for Growing Older – Living Well; Three competitions in Burlöv, Gävle and Linköping* (Arkitektur för bo bra på äldre dar – tre tävlingar i Burlöv, Gävle och Linköping).

**Tore Sager** is Professor in the Department of Civil and Transport Engineering at the Norwegian University of Science and Technology, Trondheim, Norway, where he teaches transport economics and strategic planning. His research is mostly directed at the interfaces between institutional economics, decision processes in transport, and planning theory. Sager has published on communicative planning theory in a dozen international academic journals. His main publications in English are: *Communicative Planning Theory* (Ashgate, 1994), *Democratic Planning and Social Choice Dilemmas* (Ashgate, 2002) and *Reviving Critical Planning Theory* (Routledge, 2013). Sager has recently been researching the moral responsibilities of planning theorists, the tensions between communicative planning theory and neo-liberalism, and the use of cost-benefit analysis in participatory planning.

**Jari Tammi** (Doctor of Administrative Sciences) is working as a researcher of local public economics for the School of Management, University of Tampere. His key interests concern municipal competitive bidding, activity-based costing and the use of municipal accounting information.

**Jarmo Vakkuri** is Professor of Local Public Economics at the School of Management, University of Tampere. Vakkuri leads several research projects in Finland, including ones that concern local government finance, productivity improvement in healthcare, and institutional and economic

change in the public sector. He is a partner in international research projects that include state auditing in the Nordic countries and performance rankings in European educational policy. Vakkuri is a board member of the School of Management.

**Arvid Viken** is Professor in Tourism at UiT Norwegian Arctic University, where he is in charge of the Ph.D. education in tourism programme. Viken has written extensively in the field of tourism, primarily addressing issues associated with indigenous tourism, tourism governance, tourism on Svalbard, and Arctic tourism in general. In recent years his research has focused on festivals, place and borders. His latest books are *Tourism Destination Development* (co-authored with Brynhild Granås, published by Ashgate) and *Grenseland* (co-authored with Bjørge Schwenke Fors, published by Orkana Forlag).

# Foreword

Emerging from the PLANNORD network of planning scholars from Denmark, Finland, Iceland, Norway and Sweden, this book offers 17 chapters and 17 different perspectives on current planning issues in the Nordic countries. The book title presents the overall topic as sustainable planning policy and practice. Interpreted in a wide sense, all chapters are arguably related in some way to the concept of sustainability, some more closely and others somewhat more remotely. The common context of the different contributions is the Nordic welfare states during a period of neo-liberal restructuring and contradictory policy goals. The Nordic countries were early to adopt the sustainability agenda in spatial planning, and combined with the 'Nordic model' for state-market relationships, and a comparably high popular acceptance of public planning, this context forms an interesting background for assessing what has been achieved and what has not in the endeavour of sustainable planning policy and practice. Under the section headings 'Setting the scene', 'Nature and economy', 'Government and regulations', 'Built environment', 'Liveable community' and 'Future scenarios' the chapters encompass topics and agendas at the forefront of current Nordic planning practice and research. Icelandic authors have written five of the chapters, reflecting the current proliferation of planning research in Iceland, as well as the domestic base of the volume editor.

Planning policy and practical experience across the Nordic countries offers interesting lessons for planning scholars, students and practitioners in a wider European and international context, as well as within the setting of each Nordic country. Enjoy reading!

*Petter Næss  
Professor in Planning in Urban Regions,  
Norwegian University of Life Sciences*



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# Preface

## **The only constant thing in life is change!**

Society is in constant flux as new ideas come forth and technology advances ever faster. The main purpose of planning is to guide society through changes in such a way that everyone benefits.

By looking back on recent history it becomes apparent that our surroundings are constantly changing. On a day-to-day basis the transition is slow, but history shows that over longer timespans change happens rapidly. Such changes do not happen by accident, but rather as a result of a series of deliberate planning decisions.

Planning issues are often the source of heated debate. Although everyone seems to have strong opinions about planning issues, academic discussions and research are needed in order to gain a proper understanding of the debated topics. It is important to think about the development of the planning field and the latest research, as well as the current issues.

## **The book's background: PLANNORD**

PLANNORD is a network of Nordic researchers and practitioners within the planning field, one which facilitates discussion of emerging planning paradigms, challenges, trends and practices in the Nordic countries – as well as the sharing of research and experience – in order to meet the future in a dynamic and constructive way.

This network is a platform for exchanging knowledge concerning spatial planning in connection with various development conditions and different scales of spatial governance activities, particularly at local-regional level. PLANNORD seeks to provide an opportunity to look across the spectrum of planning activities in search of the new settings and roles that spatial planning adopts in societal development in the Nordic countries.

In 2013 the PLANNORD symposium on Nordic experiences of planning for sustainability was held in the city of Reykjavík, Iceland. The research behind most of the chapters in this book were originally presented there. Reykjavík is the capital of, and largest city in, Iceland, with a population of

approximately 120,000 (and more than 200,000 if one includes the outlying suburbs). Sustainability is the main theme of the city's environmental and resource policy-making, making it the perfect place to launch a book on sustainability issues in planning.

This book serves as source material for researchers and professionals in planning, architecture, landscape architecture and related fields. It is of significance for academics and post-graduate students who are interested in planning in the Nordic countries and who want to draw on their experiences in planning for sustainability. Furthermore, it could serve as reading material for post-graduate courses on sustainability and planning, particularly in the Nordic countries.

*Sigríður Kristjánsdóttir*



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Part I

# Setting the scene



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# 1 Introduction

## The planning pyramid

*Sigríður Kristjánsdóttir*

### ***The argument for Nordic Experiences of Sustainable Planning: Policy and Practice***

The aim of this book is to explore how the notion of sustainability has shaped planning research and practice in the Nordic countries in recent years. By introducing the notion of ‘sustainable planning policy and practice’ through a main focus on the actual settings and practices of local and regional planning activities, it is the intention to facilitate a discussion on the current state of planning for a more sustainable future. Are we, for instance, experiencing a paradigm shift in planning research and practice with regard to sustainability? Or is the sustainability discourse leading us into an impasse in planning.

### ***Nordic countries***

The five Nordic countries are Denmark, Finland, Iceland, Norway and Sweden, including their associated territories (Greenland, the Faroe Islands and the Åland Islands). Together they cover 3.4 million km<sup>2</sup>. The Nordic countries generally have a mild climate compared to other countries that share the same latitudes, thanks to the Gulf Stream, which brings warm ocean currents from the tip of Florida. The Nordic countries form a geographical and cultural region in northern Europe and the North Atlantic, and share a common Viking heritage.

### ***Sustainability***

The term ‘sustainable development’ implies that economic activities, i.e. the production and consumption of goods and services as well as investment in capital, housing and infrastructure, need not deplete natural resources or degrade the environment. In 1987 the United Nations World Commission on Environment and Development (WCED) set forth the most widely used definition of the concept: ‘Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs’ (WCED 1987). This definition

attempts to weave together various combinations of societal values referred to as the three 'E's (environment, economy and equity), originally set forth by the WCED.

*Environment:* Planning for sustainability considers both the quality of local ecological resources and human health, as well as the regional and global impacts of local activities.

*Economy:* Sustainable approaches to development recognize that the world's growing population requires efficient use of resources while ensuring their continuous availability in order to meet growing demand.

*Equity:* Often referred to as social equity, this element of sustainability considers fairness in the distribution of resources and aims to reduce social and intergenerational inequality for improving conditions for all.

In a way planning is guided by the need to address current issues. At times these coincide with elements of sustainability. The concern for sustainability has been important in shaping planning research and practice in the Nordic countries in recent years. Recent research volumes of these and related issues include *Green Oslo* (2012), *Planning and Sustainable Urban Development in Sweden* (2013), *Sustainable Stockholm* (2013) and *New Approaches to Urban Planning* (2013). Published a little earlier were the books *The Compact City: A Sustainable Urban Form?* (1996) and *Future Forms and Designs for Sustainable Cities* (2005), which both focus particularly on urban density and sustainability.

## *Planning*

The purpose of planning is to guide society through changes such that everyone will benefit. Planning is therefore a tool to help municipalities steer through change. Planning policy has to be carried out in cooperation with local inhabitants, who contribute to the process as important creators and reviewers. A good plan uses the ideas of local inhabitants and lays the foundation for a neighbourhood in which they choose to settle.

Planning is about land use and urban development. It deals with the technical and political process involved in decision-making on land use, preservation and use of the environment, and the protection of public welfare. It also deals with the development and design of the environment, adapting it for the needs of the people –designing the urban landscape and transportation systems, communication networks and utilities. In this way planning affects all areas of our daily lives. Successful planning is an essential ingredient in general wellbeing.

Land is a scarce resource which has to be treated with respect. Planners specialize in the coordination of results from various specialists and in conforming the views of different stakeholders when decisions are made on the future use of land and resources, e.g., when developing new neighbourhoods,

transportation systems or choosing the location for a large factory. When laying out such policies planners should strive for the wellbeing of the local inhabitants, and not only those living in the area at that moment but also those who will in the future. Planning reflects the emphasis in the society from which it appears. Looking at the planning identities of urban areas reveals the economic, technical and social parameters driving its development. With continuing growth comes increasing demand for better conditions, leading to new and better planning solutions.

The Nordic countries have a strong tradition of a centralized welfare system. Planning in the Nordic countries has its roots in this tradition, which originated out of concern about the health and wellbeing of citizens. As a result of this tradition, welfare and health – and later environmental preservation – resonate with the ideas of planning in the Nordic countries; as opposed to ideas of zoning, land-use planning and maximizing the value of land. These ideas have, however, in recent years been gaining in importance in the planning systems of the Nordic countries.

### **Planning pyramid: The ideology of the book**

Planning is an interdisciplinary field that draws on theory, research and experience across a variety of fields. Sustainable planning policy stands on three pillars – environment, economy and equity. These three pillars can be quite difficult to balance.

When sustainability is implemented in a multidisciplinary field such as planning, the number of aspects multiplies, and conflicting perspectives need to be settled.

Plans need to take a balanced and holistic approach to guiding development towards sustainability. The planning pyramid is an attempt to demonstrate the complexity of contemporary planning. The cornerstones of the pyramid – nature, economy and government, and regulations – support the built environment which, in turn, is the creation of the plan while also forming the frame into which it must fit. The top of the pyramid highlights that it is necessary to think about planning in three dimensions so as to create the stage for society.

### ***Nature***

Nature provides the physical frame for planning. In 1967 McHarg wrote a book on the fundamentals of this subject, entitled *Design with Nature*. Planning should be carried out without degrading the natural environment. Land use and construction of the built environment should be in harmony with nature. Current and future generations must strive to achieve a decent standard of living for all people and live within the limits of the natural system. Natural hazards and mitigation are other considerations when preparing a plan (Kristjánsdóttir 2000).

## ***Economy***

Planning is often justified with reference to the government's duty to address market failure, i.e., when the private sector does not make use of land in the best interests of wider society (Berke *et al.* 2006). It is important to assess properly the benefit to people, and their opportunity cost, before making planning decisions (Boardman *et al.* 2011).

Planning also affects the market by steering the supply of suitable land for development.

Land use planning affects the development market by identifying land that is available or planned for development; by limiting the type, location timing and density of development that can take place; by programming the infrastructure to support development and allocating its cost between the public and private sectors; and by specifying the standards under which development proposals will be reviewed

(Berke *et al.* 2006, p. 19)

Nowadays, planning competition has increasingly become international, which encourages cross-border operations in engineering, architecture and construction. As Paul Krugman argues in his book *Geography and Trade* (1991) the location of production in space is a key issue both within and between nations.

## ***Government and regulations***

The law and regulations in each country set a frame within which planning has to be conducted. The issue of planning and building permits are government decisions which are based on the legal system. Planning programmes and policies are carried out at different levels: international, national, regional and local. Planning and building law are detailed in regulations.

## ***Built environment***

Decisions made in a two-dimensional plan form a three-dimensional environment. A plan is not simply a drawing or a map. It frames peoples' lives and thus shapes society. A plan is similar to a football pitch. A football pitch is a green field marked with lines. The lines have specific meanings related to the rules of the game. Thus they provide a frame for the game of football. If there were no lines on the field it would simply be a field with green grass. Plans are similar. They have markings which indicate what can be done, and where; how the land can be used; what to build; where to lay streets and paths; and where to locate the recreational areas of the future. The markings in the planning documents become a frame for the daily lives of citizens. The building mass, and the intermittent spaces between, create a stage on which

people act out their daily lives. If all goes well a spirit of the place – *genius loci* – is created. The built environment changes along with technological progress, as discussed by Vance (1990) in *The Continuing City: Urban Morphology in Western Civilization*.

Urban morphology is a branch of Urban Studies that deals with the form and structure of a settlement. It studies complex and intricate types of form, and how different factors set their mark upon the whole city. In this way urban morphology examines the configuration of the urban form as well as the relationship between the individual forms and the city as a whole – from the formative years of the city, and through all its subsequent transformations (Kristjánsson 2007). Larkham and Conzen (2014) look into how different factors have shaped the urban form by studying cases from different parts of the world.

### *Liveability*

Liveability involves human interaction with the physical environment in planning practice, focusing on designing and building places that fit the needs and aspirations of residents. Cities have often been the cradle of innovation and culture (Hall 1998). Liveability expands land-use planning to include urban design and thus combines planning with the fields of architecture and landscape architecture (Kasprisin and Pettinari 1995).

Liveability focuses on people, and deals with the configuration of land use, the integration of transportation systems, as well as the organization of buildings and the spaces between them – though not with the architectural design of individual buildings. This relates back to the early days of modern planning, such as Ebenezer Howard's *Garden Cities of To-morrow* (1902). Planning with respect to the nature and climate, particularly with respect to sunlight, is extremely important in the far north where the sun rises low in the sky and the days are short in winter.

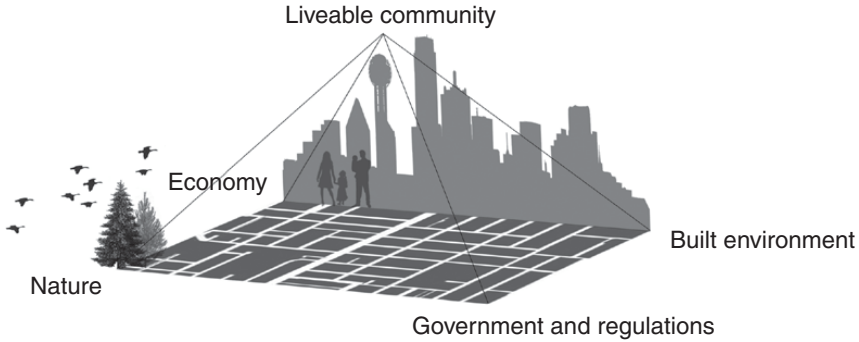
As in many other fields, fads in planning come and go and then return after travelling full circle. Nowadays, human wellbeing is at the centre of planning – which strives for improved health and improved quality of life. Examples of recent research in this area are found in *The Routledge Handbook of Planning for Health and Well-Being* (Barton et al. 2015).

### *Summary*

In a multidisciplinary field such as planning, it is helpful to be able to zoom in on specific issues. However, it is always important to keep the whole picture in mind.

The need for planning has never been greater than in the complex societies of today. Municipalities are facing problems that appear in multifarious ways, often creating conflict along the way.





*Figure 1.1* The planning pyramid – liveable community thrives in a built environment that rests on nature, economy, and government and regulations

## The organization of the book

For more than a decade, planning in the Nordic countries has been aimed at sustainability. The purpose of this book is to demonstrate how this aim has been achieved through planning policy and practice, in a series of chapters that focus on what lessons can be learned from the Nordic experience – as well as looking at possible future developments.

### *Part I: Setting the scene*

The book is divided into six parts. Its structure draws on the planning pyramid (Figure 1.1). Part I is made up of two chapters. The first is this introduction; and the second discusses planning's responses to the neo-liberal rollercoaster, written by Tore Sager. He clarifies the concepts of sustainability and resilience and discusses their connection to planning and neo-liberalism. The chapter reflects on the tension between neo-liberal ideals and the ideals of planning. It is maintained that good planning should move us towards more sustainable cities, but that neo-liberal thinking, and the cycles of economic boom and bust, make this a challenge. During boom years, planning has more freedom to attend to the environment and sustainability issues; but during recession it is forced to put economic growth at the forefront, with sustainability taking a back seat. The chapter focuses on the relationship between sustainability and resilience, and how they are affected by recessions in a neo-liberal setting. Tore suggests that to improve resilience of the economy and the environment, planning should be used as a tool for *controlling* the economic cycle, rather than adapting to it.

## ***Part II: Nature and economy***

The second section is made up of three chapters, two dealing with planning in connection with the natural environment, and one dealing with planning and the building cycle. In Chapter 3, Kristjánsdóttir discusses the meaning of the word ‘landscape’ in the Icelandic language and discusses methods for analysing the physical frame of the land in light of its suitability for planning.

Knowledge about nature is the basis for environmental planning. This is the topic of Chapter 4, written by Nyseth and Viken, which covers how to gain knowledge, the different types of knowledge, and how to use it in planning. This chapter underlines the challenges faced by the sparsely populated regions in the northern periphery of the planet when it comes to protecting the environment. With few local inhabitants, relatively large numbers of seasonal workers, and against the backdrop of vast landscapes, it is vital to gather as much local knowledge as possible in areas that are being encroached upon, by – for example – the tourism and mining industries. In the presence of uncertainty about environmental impact, the precautionary principle is often applied. The authors argue, however, that this can move the risk to other areas where the impact can be even more uncertain; and that a better approach would be institutionalization of a process whereby the various stakeholders pool their knowledge. The chapter uses the east coast of the Norwegian island of Svalbard as an example of how co-management of the ecosystem might be achieved with the cooperation of various stakeholders.

In Chapter 5 – which focuses on housing cycles, housing markets and housing finance – Eliasson discusses the building cycle with the aid of a simple economic model. Rising house prices are a result of a lagged response in the supply of housing to increased demand. Speeding up the planning process is a viable policy through which to counteract the housing cycle, but it is only appropriate when the rise in demand for housing is permanent. In the face of a *temporary* rise in housing demand, increased supply will inevitably involve a waste of resources. It is therefore important that planning responds differently to permanent and transitory demand shocks. Examples of transitory shocks include changes in financial conditions; but also the temporary migration of workers depending on economic conditions. It is suggested that a better policy response to such changes would be to reduce demand through application of the various financial incentives that have recently come to the fore under the banner of macro-prudential policy.

## ***Part III: Government and regulations***

In Part III, five authors, one from each of the five Nordic countries – Norway, Denmark, Sweden, Iceland and Finland – discuss the development of the

planning system in their respective countries, current affairs in planning, and the current structure of the system. Falleth and Nordahl describe the evolution of the planning system in Norway over the past 50 years as moving from national to local, from autocracy to democracy, and from public planning to market-based planning. This chapter gives an excellent review of the literature on planning theory and relates the changes in planning practice to changes in planning theory. A key evolution was in 1985 when local government gained the right to adopt both municipal plans and zoning plans. At the same time, private actors were given the right to submit zoning plans for political approval. Developers have been in contact with bureaucrats and it can be argued that this type of bottom-up, market-led planning, provides a frame for municipal planning.

The chapter on the Danish planning system, written by Hansen, emphasizes planning culture. He discusses the emphasis since the early years of the century on simplifying the planning system in order to increase transparency and efficiency. This has led to a shift away from the centralized emphasis of public planning on equal development. It has been substituted by a local focus by municipalities on facilitating economic growth and job creation.

In Chapter 8, Nilsson gives an overview of the chronology of the main steps in the adaptation of planning and building regulations, and formal environmental protection, in Sweden. The overview extends over the period from the 1800s to the present day.

In the chapter on the Icelandic planning system and its evolution, Kristjánsdóttir draws attention to three milestones of sustainability, which gradually materialized at different points in time in the system. First is the emphasis on health, welfare and equity, which evolved early in the twentieth century when planning appeared in Iceland with a focus on improving health conditions. In the latter part of the century, following an increase in motorized traffic, an increase in car dependence, and against a backdrop of urban sprawl, the focus shifted to environmental issues and the need to contain pollution. Finally, following the recent turmoil in international financial markets, the focus is again shifting. Now the emphasis is turning towards the negative effects of too-rapid development, driven by financial conditions.

Planning in Finland has mostly been the responsibility of architects rather than planners. In the chapter on the efficiency and sustainability of planning in Finland, Mattila emphasizes four types of sustainability: ecological, economic, social and cultural. Mattila points out that recently there has been movement away from the traditional Nordic welfare state type of public planning – which had come to be seen as too slow and bureaucratic, and slowing down economic growth. Deregulation, or privatization of regulation, followed. Competition between municipalities then led to ‘growth everywhere’ and increased urban sprawl to the detriment of ecological sustainability.