



**KTH Architecture and
the Built Environment**

Just Sustainable Futures

Gender and Environmental Justice Considerations in Planning

ULRIKA GUNNARSSON-ÖSTLING

DOCTORAL THESIS IN PLANNING AND DECISION ANALYSIS, WITH
SPECIALISATION IN URBAN AND REGIONAL STUDIES

TRITA-SoM 2011-07
ISSN 1653-6126
ISRN KTH/SoM/11-07/SE
ISBN 978-91-7501-000-7

Division of Environmental Strategies Research – fms
Department of Urban Planning and Environment
KTH Architecture and the Built Environment
Royal Institute of Technology
100 44 Stockholm

Printed by E-print, Sweden, 2011.

Abstract

This thesis contributes and deepens knowledge on long-term planning for sustainable development through exploring environmental justice and gender discourses in planning and futures studies. It also suggests ways of working with those issues.

Environmental justice is explored through discussions with planners in Stockholm, Sweden, and through looking at images of future Stockholm and the environmental justice implications of these. These studies show how environmental justice issues can be manifested in a Swedish urban context and discuss how sustainable development and environmental justice can be increased, operationalised and politicised in planning. One key contribution of the thesis is in identifying the need to address procedural and outcomes values in both planning and futures studies.

Gender discourses are explored through analysing papers published in the journal *Futures* and through an examination of Swedish Regional Growth Programmes. The feminist criticism of futures studies mainly relates to the field being male-dominated and male-biased, which means that the future is seen as already colonised by men, that futures studies generally do not work with feminist issues or issues of particular relevance for women, and that they often lack a critical and reflexive perspective. There is therefore a call for feminist futures as a contrast to hegemonic male and Western technology-orientated futures. The case of the Swedish Regional Growth Programmes shows that gender inequality is often viewed as a problem of unequal rights and possibilities. This liberal view on gender equality has made it rather easy for gender equality advocates to voice demands, e.g. for the inclusion of both women and men in decision-making processes, but the traditional male norm is not challenged. If a different response is required, other ways of describing the problem of gender inequalities must be facilitated. One way to open up different ways of describing the problem and to describe desirable futures could be the use of scenarios.

Planning for just, sustainable futures means acknowledging process values, but also content (giving nature a voice!). It also means politicising planning. There are a number of desirable futures, and when this is clarified the political content of planning is revealed. These different images of the future can be evaluated in terms of environmental justice, gender perspective or any specific environmental aspect, e.g. biodiversity, which indicates that different futures are differently good for nature and/or different societal groups.

Sammanfattning

Den här avhandlingen bidrar till och fördjupar kunskapen om långsiktig planering för hållbar utveckling. Den gör det genom att belysa miljörättvise- och genusediskurser i planering och framtidsstudier. Den föreslår också sätt att arbeta med dessa frågor.

Miljörättvisa belyses genom diskussioner med planerare i Stockholm och även genom att undersöka framtidsbilder av Stockholms och deras miljörättvisekonsekvenser. De här studierna visar både hur miljörättvisefrågor kan manifesteras i en svensk urban kontext och diskuterar hur hållbar utveckling och miljörättvisa kan få ökad betydelse, operationaliseras och politiseras i planeringen. Ett viktigt bidrag med den här avhandlingen är att påpeka behovet av att adressera både processuella värden och resultat av planering och framtidsstudier.

Genusediskurser utforskas genom att analysera artiklar som publicerats i tidskriften Futures och genom en undersökning av de svenska regionala tillväxtprogrammen. Den feministiska kritiken av framtidsstudier handlar framförallt om att fältet är mansdominerat och fokuserar traditionellt manliga frågor, framtiden ses därför som redan koloniserad av män. Dessutom påpekas att framtidsstudier i allmänhet inte jobbar med feministiska frågor eller frågor av särskild betydelse för kvinnor, att framtidsstudier ofta saknar ett kritiskt och reflexivt perspektiv och att det finns en efterfrågan av feministiska framtider som en kontrast till hegemoniskt manliga, västerländskt och teknologiskt inriktade framtider. Fallet med de svenska regionala tillväxtprogrammen visar att ojämställdhet ofta ses som ett problem av ojämlika rättigheter och möjligheter. Denna liberala syn på jämställdhet har gjort det ganska lätt för jämställdhetsförespråkare att kräva och ge röst för krav som att både kvinnor och män ska inkluderas i beslutsprocesser, men den traditionella manliga normen ifrågasätts sällan. Om andra lösningar önskas, måste andra sätt att beskriva problemet med bristande jämställdhet underlättas. Ett sätt att öppna upp för olika sätt att beskriva problemet och även sätt att beskriva önskvärda framtider skulle kunna vara användning av scenarier.

Planering för en rättvis hållbar framtid innebär ett erkännande processuella värden, men även av själva resultatet (ge naturen en röst!). Det innebär också att politisera planeringen. Genom att tydliggöra att det finns flera olika önskvärda framtider kan planeringens politiska innehåll synliggöras. Dessa olika framtidsbilder kan utvärderas i termer av miljörättvisa, deras jämställdhetsperspektiv eller någon specifik miljöaspekt som biologisk mångfald. Detta skulle tydliggöra att olika framtider är olika bra för naturen och/eller olika samhällsgrupper.

Contents

Preface	7
List of papers	9
1 Introduction	11
1.1 Environmental justice	12
1.2 Gender	13
1.3 Futures studies perspective.....	14
1.4 Aims and objectives	15
2 Theoretical framework	18
2.1 Post-positivist planning and futures studies	18
2.2 Communicative planning and related criticisms	19
2.3 New urbanism as a clear urban vision.....	21
2.4 Prescriptive postmodern planning	23
2.5 Normative images of the future	24
3 Methodology.....	27
3.1 Scientific approach	27
3.2 Assembling data	29
3.3 Analysing data	32
4 Results from Papers I-V	35
4.1 Paper I.....	35
4.2 Paper II	36
4.3 Paper III.....	36
4.4 Paper IV.....	38
4.5 Paper V	39
5 Discussion of findings	40
5.1 Environmental justice	40
5.2 Gender	42
6 Planning for just sustainable futures.....	44
7 References	46

Preface

It has been fun and a privilege to write this PhD thesis. It has been stimulating for myself, and I hope others will find my research useful as well. At least that has been my driving force. I am passionate about environmental issues and gender equality and hope my research will lead to (at least some small) improvements in planning practice.

I have had the privilege of being a PhD student at the Department of Urban Planning and Development at KTH, working at both the Division of Environmental Strategies Research and the Division of Urban and Regional Studies. I had one supervisor from each division: my main supervisor Mattias Höjer and my secondary supervisor Göran Cars. I want to thank you both for your engagement, stimulating discussions and nice (mostly Indian curry) lunches.

There are several people who were important for the development of this thesis. Johan Hedrén, Linköping University, was the discussant at the ‘final seminar’ and also introduced me to Green Futures, while Christine Hudson, Umeå University, was the discussant at the ‘mid-seminar’. Thanks also to Tora Friberg, Linköping University, who participated in the same research project as I and contributed with valuable comments.

I am also grateful to my co-authors: Karin Bradley, Karolina Isaksson, Katarina Larsen and Mattias Höjer. It has been a pleasure working with you. Karin and Karolina, I have always enjoyed having interesting discussions about research and many more things with you, so it was great to have the opportunity to write a paper together. Katarina, we went to a conference in Naples, we got our idea, we went to Capri and we wrote the paper. That was great.

I have also been lucky to have so many nice colleagues who make all coffee breaks and lunches good moments. We talk about large and small, worldly issues and research and we laugh a lot. Some of you have read and commented on drafts, others have supported me with great encouragement when most needed.

My gratitude also goes to Mary McAfee, who language-checked most of this thesis.

VINNOVA, the Swedish Government Agency for Innovation Systems, and Formas, the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, are gratefully acknowledged for providing the funding for the research.

Last, but not least, I am grateful for having family and friends outside the academic world who support me and like doing and talking about different

things than research. You are many and you mean much. Many of you have been by my side since before 2006 when I started as a PhD student. One of those I love most, however, came late into the picture. In 2009 Robert's and my child Hjalmar was born. That was the greatest joy ever, and the two of you give me loads of love, laughter and happiness.

List of papers

- I. Bradley, K., Gunnarsson-Östling, U. & Isaksson, K. (2008) Exploring environmental justice in Sweden: How to improve planning for environmental sustainability and social equity in an “eco-friendly” context. *Projections: MIT Journal of Planning* 8, 68-81.
- II. Larsen, K. & Gunnarsson-Östling, U. (2009) Climate change scenarios and citizen-participation: Mitigation and adaptation perspectives in constructing sustainable futures. *Habitat International* 33, 260-266.
- III. Gunnarsson-Östling, U. & Höjer, M. (2011) Scenario planning for sustainability in Stockholm, Sweden: Environmental justice considerations. *International Journal of Urban and Regional Research*, forthcoming.
- IV. Gunnarsson-Östling, U. (2011) Gender in futures: A study of gender and feminist papers published in *Futures*, 1969-2009. Submitted manuscript.
- V. Gunnarsson-Östling, U. (2011) Gendered development and possibilities for alternative feminist futures. Submitted manuscript.

Comments on co-authored papers

Paper I: I wrote this paper together with Karin Bradley and Karolina Isaksson, with all of us contributing to the same extent. We wrote the introduction and conclusion parts together, while Karin took main responsibility for case 1, Karolina for case 2 and I for case 3. However, we all contributed to all parts in constructive ways.

Paper II: I wrote this paper together with Katarina Larsen, who was the main author. I was the main author of section 1. *Introduction*, and the parts on deliberation and legitimisation in section 2. *Scenarios and participating citizens*. I was also the main author of the part relating communication to game theory (also in section 2. *Scenarios and participating citizens*). Katarina and I were equally responsible for section 5. *Discussion*.

Paper III: I wrote this paper together with Mattias Höjer, but I was the main author for most of the paper. Mattias was the main author for the sub-section ‘Different developments of current suburban shopping nodes’ in the section *Analysis*. We were equally responsible for the sections *Introduction* and *Conclusions* and the sub-section ‘Images of the future’ in the section *Stockholm now and then*. We both also contributed to each other’s parts in constructive ways.

1 Introduction

One major challenge in contemporary research about planning is how to change societies in a more sustainable direction. However, in the last decades of planning research and practice for sustainable urban development, more radical transformations have been rare. Instead, planning for sustainable development is viewed as something that can be achieved within society's current frames (Bradley, 2009; Keil, 2007). However, futures studies often propose radical changes in terms of technological development and behavioural change to approach sustainable development (see e.g. Åkerman, 2011; Höjer et al., 2011), but social structures such as the vulnerability of different societal groups to environmental problems and gender roles are seldom explicitly analysed. The focus is typically on changing physical or technical aspects, but without asking who should change or highlighting social structures (Wangel, 2011).

The now classic definition of sustainable development can be derived from the report of the World Commission on Environment and Development (1987:14). It states that: 'Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future.' However, even though sustainable development is often understood as a uniting concept that will resolve tensions between social and economic development along with environmental protection, there are always balances and trade-offs made (Richardson and Connelly, 2003:84). The definition of sustainable development depends on norms and values and rather than one established definition, there are many competing discourses that are sometimes antagonistic and mutually exclusive (Harvey, 1996; Redclift, 2005).

Generally, sustainable development is seen as a 'good' thing that few people argue against (Batty, 2001:19). This thesis starts out from the idea that it is not sufficient to state that there are different sustainability discourses around, because depending on how sustainable development is understood, planned and implemented, the consequences for nature and for humans will differ. Such consequences include real issues such as being subject to climate change in terms of e.g. drought and floods or being stigmatised because of gender. When different sustainability discourses are transformed into politics and planning, they affect humans and nature in different ways. Thus, when operationalised, different discourses are not equally 'good' for nature and different societal groups. Conceptualising sustainable development involves developing different ways of defining and perceiving nature, theorising on the relationships between humans and nature and also humans and non-human nature, etc. (White, 2008:10). This thesis particularly explores gender and environmental justice discourses in planning for and visioning sustainable development.

1.1 ENVIRONMENTAL JUSTICE

Over the last three decades, scholars, activists and policymakers have begun to pay attention to the impacts of environmental pollution on disadvantaged communities – they have started to highlight what is now known as environmental justice. Environmental justice, both as a movement and a research field, can be seen as an environmental discourse that puts inequalities at the top of the sustainability agenda (Harvey, 1996). It brings ethical and political questions to the surface (Bullard, 2004:7).

Environmental justice differs from many other environmental discourses by defining the environment as the set of linked places ‘where we live, work and play’ (Turner and Wu, 2002:4). The definition is broad, but it differs from mainstream environmentalism or ‘deep green’ interpretations, which have a more nature-centred world-view (Haughton, 1999:234-235; Turner and Wu, 2002:4). Instead of seeing nature as remote and separated from everyday life, it is seen as the place where human activities of different kinds occur. The background of the concept can be found in studies primarily from the US showing that certain social groups bear a disproportionate burden of environmental problems (see e.g. Bullard, 1990; Harvey, 1996:385 ff). These studies show that disenfranchised, low-income, and/or minority populations are more at risk of being exposed to environmental risks and hazards than other groups. One starting shot was Robert Bullard’s research on a black community’s battle against a landfill, which he started in 1979. Bullard found that waste dumps in Houston were not randomly scattered throughout the city – instead they were more likely to be located in African American neighbourhoods, particularly near schools (Getches and Pellow, 2002). The findings were published in the article ‘Solid waste sites and the black Houston community’ in 1983. This work later culminated in the book *‘Dumping in Dixie: Race, Class, and Environmental Quality’* (Bullard, 1990). In 1999, the US Institute of Medicine made a review of available scientific literature together with site visits and concluded that in the US: ‘there are identifiable communities of concern that experience a certain type of double jeopardy in the sense that they (1) experience higher levels of exposure to environmental stressors in terms of both frequency and magnitude and (2) are less able to deal with these hazards as a result of limited knowledge of exposures and disenfranchisement from the political process’ (Committee on Environmental Justice, 1999:6). Thus, environmental justice began as a concern about the distribution of pollution and hazardous sites among disenfranchised, low-income and/or minority populations. This perspective has since been broadened to include not only the environmental burden, but also environmental benefits and resources, process justice and a concern with the production of unequal outcomes (Walker, 2009). Much of the research work in the mid-1990s was quantitative, but today it is becoming more cross-disciplinary. Knowledge, representation and meaning are being debated and social theory and diverse methodologies used in investigating both the material and political content of socio-environmental concerns

(Holifield et al., 2009:593). This has also meant that environmental justice must be concerned with several spatial scales, because pollutants move. Environmental justice is now a well-established field of research, especially in the US and more recently also in the UK, but it is still very limited in a Swedish context (see Papers I and III; Bradley, 2009; Chaix et al., 2006; Isaksson, 2001 for some exceptions). Recent critical research has underlined the need for contextualising environmental justice (Holifield et al., 2009:596). This thesis makes a contribution to contextualising environmental justice in Swedish policy, planning and futures studies. It contributes a critical perspective, highlighting that sustainability issues are not only technical issues to be solved by experts, but are also political and concern justice.

1.2 GENDER

A social dimension of sustainable development is gender, which is highlighted by e.g. the People's Earth Charter (The Earth Charter Initiative, 2000). Similarly to environmental justice, gender has become an issue in planning and politics since the late 1970s (Fainstein and Servon, 2005). Gender was first used as a contrast to sex, which means that it describes socially constructed characteristics. Simone de Beauvoir focused on this already in 1949:

One is not born, but rather becomes, a woman. No biological, psychological, or economic fate determines the figure that the human female presents in society; it is civilization as a whole that produces this creature, intermediate between male and eunuch, which is described as feminine. (Beauvoir, 1949/1997:295)

The concept of gender was introduced in order to 'affirm that of course men and women are 'different' in physique and reproductive function, while denying that these differences have any relevance for the opportunities members of the sexes should have or the activities they should engage in' (Young, 2002:412). Understanding gender as something we do shows that the meaning of femininity and masculinity is something that changes and is renegotiated (Elvin-Nowak and Thomsson, 2003:241). The term doing might suggest that many genders can be created in many ways. However, doing gender in another way than society has agreed upon is difficult.

Even though gender was first used as a contrast to sex, which means that it describes socially constructed characteristics, gender is today often used as a synonym for sex. In addition, much gender research focuses on women, even though gendered roles are created for all humans. Women having been an underrepresented group in planning practice and research can explain this, but it should not be forgotten that we are all (thus, not only women) subject to constructed characteristics.

The gender concern in planning resulted from a broader recognition of difference and marginality. Historically, planners have used a universal tone: they were planning for the best for all. However, according to Fainstein and

Servon (2005:3), 'most of this work assumed a male subject'. Using a gender perspective on planning practice and outcome means that gendered consequences of planning can be revealed.

Gender studies in the 1970s were provoked by the positivist research tradition that was excluding not only women, but also women's experiences. Thus, feminists wanted to create better science by adding women, but also by criticising positivist epistemology and challenging scientific and technical knowledge for not considering the political content of knowledge (Sandercock and Forsyth, 1992:45-46). However, since the 1980s feminist theory has been challenged by women of colour, non-western feminists, gay and lesbian people, postmodern feminists etc. for being universalistic (see e.g. Sandercock and Forsyth, 1992:46-47). In planning theory and futures studies, this criticism suggests that there is a need for developing futures that celebrate differences and plan for multiple publics – not *the* public. The postmodern critique includes arguments that feminism is diluted because of its focus on diversity, difference, pluralism and abolition of 'women' as a relevant category (Rahder and Altilia, 2004:108). The question is also asked as to whether this might be a reason for feminist issues once again disappearing from planning theory and practice. However, Young (2002) suggests that gender is still a relevant category, but for analysing social structures with the purpose of understanding relations of power, opportunities and resource distribution, rather than for making generalisations about men and women. Haug (2000) even claims that 'the situation of women today is so muddled and patriarchy is so solid, so alive and well, that improvements in the here and now do not suffice' and calls for more utopian feminism suggesting actual change for today and tomorrow. Similarly, Little (2007:16) writes that '[a]uthors of feminist dystopias need not go beyond historical examples. Their science fiction novels imaginatively mirror actual abominable treatment of women in the past and present: for example, institutionalized maiming, torture, rape, and execution for infidelity'.

Haug (2000) calls for a more future-orientated feminism. The Swedish Research Council Formas also views gender and power as disadvantaged perspectives that need more attention in the research field of socially sustainable urban development (From, 2011:26). This thesis does not restrict itself to criticising contemporary planning and futures studies research and practice, but also suggests ways of improving planning and visioning of sustainable development from a gender and environmental justice perspective. By that it makes a normative contribution, which is unusual, but necessary, for gender research. It also clarifies what a gender perspective can mean in futures studies.

1.3 FUTURES STUDIES PERSPECTIVE

This thesis sees a need not only for critically analysing today's structures, but also for suggesting alternatives. Therefore, futures studies are used as a lens for

understanding long-term planning. With its endeavour for change and utopian characteristics, feminist research approaches normative futures studies describing futures where specific targets are met and also discusses how to get there (Börjeson et al., 2006). Similarly, environmental justice is a normative research field striving for change in terms of entitlements, the distribution of environmental goods and bads and procedural justice in processes that make decisions about environmental change.

Futures studies methods such as forecasting and scenario creation are often used in both policy and planning. The futures studies perspective is brought into this thesis as a way to make planning long-term, forward looking and visionary, rather than just solving the most pressing problems. However, futures studies seldom have a gender perspective or a feminist aim (Paper IV). This thesis helps to bridge this gap. If gender and feminist research have had little influence on futures studies, the traces of environmental justice are even less influential. Even though environmental justice has become such a widespread research issue, it has not been a salient feature of futures studies. A search on ScienceDirect (*ScienceDirect*, 2011) for the terms ‘environmental justice’ together with ‘futures’, ‘futures studies’, ‘utopia’, ‘forecasts’ or ‘scenario’ in titles, abstracts and key words rendered few hits (17, 1, 0, 0 and 2 hits). By bridging the gap between gender/feminist theory and futures studies, and also environmental justice and futures studies, this thesis makes a contribution in revealing underlying assumptions in futures studies and scenarios for sustainable development. It adds a critical perspective and shows that sustainability issues are political and contested.

1.4 AIMS AND OBJECTIVES

The overarching aim of this thesis is to contribute new knowledge and deepen existing knowledge on long-term planning for sustainable development through exploring environmental justice and gender discourses in planning and futures studies. The aim is also to suggest ways of working with environmental justice, gender and futures studies perspectives in planning. In doing so, the thesis contributes to planning theory and practice. It contributes to the field of environmental justice through exploring what it could mean in a Swedish context. It contributes to the field of futures studies through adding a gender and environmental justice perspective and through suggesting ways of evaluating the consequences of futures studies on gender and environmental justice.

More specifically, the thesis explores the framing of environmental problems in Swedish policy and planning (Paper I and III), in order to identify consequences of this framing in terms of the issues and impact considered. This is a way of showing how environmental (in)justice issues can be manifested in a Swedish urban context, but also in scenarios for sustainable urban

futures. By revealing underlying assumptions in policy, planning and futures studies for sustainable development, political and contested issues can be elucidated. In a similar discursive approach, the framing of gender in Swedish regional planning and in the research field of futures studies is explored (Paper IV and V), in order to determine the consequences of this framing in terms of the issues considered and the futures suggested. Furthermore, the kinds of criticisms directed towards futures studies from a gender/feminist perspective and the reasons for these are examined (Paper V). This meta-study also explores alternative futures studies methods suggested from a gender/feminist perspective and analyses the problems they aim to solve. Further on, it explores how feminist futures are described.

Another recurring theme in this thesis is processes where plans or future scenarios are developed. These kinds of processes are explored in order to identify underlying assumptions affecting planning outcomes (Papers I, II and IV); the voices acknowledged in these processes (Papers I, II, IV and V); who gains and who loses from planning outcomes/scenarios (Papers I, III, IV and V); and how content sustainability is ensured in participatory processes (Papers I, II and III). Paper II also interprets participatory scenario processes as deliberative processes in order to reveal process-content dilemmas. Last but not least, this thesis discusses feasible ways of planning for just, sustainable futures (Papers I-V).

The specific objectives of each study are as follows:

Paper I focuses on planning practice in Stockholm, Sweden. The aim is to show how environmental (in)justices can manifest themselves in a Swedish urban context. This is done through exploring three cases of planning: municipal promotion of eco-friendly lifestyles, large-scale infrastructure planning and the attitudes of Stockholm City planners towards justice.

Paper II focuses on participatory scenario construction processes for climate change. The aims are twofold, to examine the inter-relationships between adaptation and mitigation and to interpret participatory scenario construction as a deliberative process. This is done through discussing adaptation and mitigation strategies as outlined in climate change scenarios in relation to participants' views and understanding of vulnerability and resilience and in relation to both content and process values and legitimacy.

Paper III focuses on some proposed future developments for the Stockholm region. The aim is to explore the role scenarios could play regarding local, global, intergenerational and intra-generational justice when planning for sustainable development. This is done through theoretically discussing the relationship between sustainable development and environmental justice, outlining the environmental justice situation in current Stockholm and analysing the different starting points of four future scenarios, the environmental discourses that they represent, the different processes in which they are de-

veloped and how they might materialise in a current suburban node of Stockholm.

Paper IV reviews and discusses papers related to women's studies, gender or the feminist perspective, published in the scientific journal *Futures*. The aim is to provide new understandings and remapping of futures studies by capturing how gender is created and understood in this field.

Paper V links long-term planning and futures studies with gender/feminist studies. The aim is to explore long-term plans from a gender and futures perspective. The intention is to deconstruct the multitude of meanings of gender equality by clarifying how different problem representations give rise to different images of the future. This is done through analysing Swedish regional growth agreements from a future studies and feminist perspective.

The findings in this thesis are addressed to, and of relevance for, researchers and practitioners. The target research community is especially futures studies and planning researchers, but also researchers within feminist theory. The target practitioners are especially planners, policymakers and politicians dealing with sustainable development.

2 Theoretical framework

This chapter places Papers I-V in a scientific context. First, some strands in planning theory are described and then planning is related to futures studies. When describing planning theory, it is also linked to the concepts of discourse and the real world. Each of the concepts is a huge topic under debate and this chapter should not be seen as an all-embracing literature review, but as an attempt to link Papers I-V to the theory and practice of planning for just, sustainable futures.

2.1 POST-POSITIVIST PLANNING AND FUTURES STUDIES

Modern urban life is carried out in a planned society—planned both up and down. (Perry, 1995:211)

As long as there have been cities, there have been people seeking to ‘perfect the art and science of city-building’ (Sandercock, 2003:1). The planning profession was born out of this vision of the good city (Fainstein, 2006:2). There has always been a utopian impulse and this was strong around the turn of the nineteenth century, when planners responded to the ills of Western industrialised cities (Sandercock, 2003:2). This utopian and modernist paradigm, based on science and technical reason, dominated planning in the twentieth century. According to Allmendinger (2002:4), planning seen as both practice and thinking has a history ‘that relates to philosophies, epistemologies and theories broadly associated with modernism and positivism’.

Modernist planning has been attacked from many directions and is now crumbling, but ‘there is still no agreement as to what might replace that grand social project’ (Sandercock, 2003:2). Perry (1995) noted back in 1995 that the planning profession is undergoing a crisis and Campbell (2010) even questioned whether those within the planning community still believe in the idea of planning. Similarly, Harris (2002:24-25) relates the crisis to the failure to develop convincing alternatives and Fainstein (2006:2) concludes that planning today is characterised by modesty and that most planners and planning theorists ‘argue that visionaries should not impose their view upon the public’. Much post-positivist planning theory has instead been characterised by criticism of both traditional and postmodern planning (Allmendinger, 2002:13; Fainstein, 2000:472). The ‘dark’ side of planning has been revealed by authors such as Flyvbjerg (1998/2003) showing that knowledge is power, but also the other way around: power is knowledge. This means that power can determine

what counts as knowledge and what interpretations are seen as valid. This is typical of the postmodern condition with the belief that there is no universal truth that can be uncovered by universal methods (Oranje, 2002:172). Instead, what is real is seen as constructed through social processes.

Both planning theory and futures studies as research fields have moved from a positivist to a post-positivist epistemology (see e.g. Allmendiger and Tewdwr-Jones, 2002; Bell, 2003, chapter 5). One of the basic epistemological questions concerns the nature of knowledge – how can we know things? The move by planning theory and futures studies from a positivist to a post-positivist epistemology follows the linguistic turn, one of the major developments in Western philosophy during the 20th century. Characteristic of the linguistic turn is the focus on the relationship between knowledge and language (Martinich and Stroll, 2011). The focus on language has made many argue that we cannot have knowledge about the real world because all ‘facts’ are dependent on the human mind – there is no mind-independent reality (Searle, 1995:2, chapter 7). We then approach ontology – the philosophical study of the nature of being, existence or reality as such. Ontology is about finding distinctions between the real and the fictive.

Even though this thesis is inspired by the linguistic turn and uses methods associated with it, it assumes a real world. It recognises power relations as influencing what is seen as good, what is highly valued, what is seen as knowledge, etc., but it also assumes that implementing plans and policies can result in both positive and negative impacts for certain groups. These consequences are actual and can sometimes be measured in terms of noise, contamination of water, women’s travel habits compared with men’s, etc. In addition, many actual consequences exist irrespective of our knowledge and our experiences. Thus, a person can be negatively affected by pollution irrespective of whether he/she has knowledge about the harmful effects of these pollutants. However, by using a critical and discursive perspective this thesis also acknowledges that what we choose to measure, what we set as minimum standards, what is considered gender equal and what is considered to be sustainable are debatable.

2.2 COMMUNICATIVE PLANNING AND RELATED CRITICISMS

The most significant planning theory that has emerged in the post-positivist landscape is communicative planning, according to Allmendiger (2002:16). Similarly, Harris (2002:22) denotes collaborative planning as one of the key phrases in the planning theory vocabulary. Healey (1996) even talks about a paradigm shift and notes that new ideas viewing collaboration, public participation and power as important concepts are sweeping over the field. Orrskog (2002:95) states that these ideas ‘concentrate on the role of planning as an arena for discussions between different private as well as public actors’.

Communicative, or collaborative, planning is a response to the rational, top-down planning performed by experts (Fainstein, 2000:453). It thus follows the 1990s deliberative strong turn in theory of democracy (Dryzek, 2000). Prior to that turn, democracy was understood in terms of aggregation of preferences through voting and representation. Now, democratic legitimacy is increasingly being seen in terms of giving the opportunity to participate in deliberations to come to collective decisions (Dryzek, 2000).

Collaborative planning is based on the idea that the participants will learn from each other and come to an agreement through the process (Healey, 1997). Thus, the planning process becomes a consensus-building process with the planner as mediator. Ideal speech becomes the goal of planning and there is an 'assumption that if only people were reasonable, deep structural conflict would melt away' (Fainstein, 2000:455). This is a discourse where planning processes are seen as carried out by equal actors (Richardson, 1996).

Writers such as Hendriks et al. (2007) underline the importance of deliberative processes being open and diverse and do not devote as much attention to the outcome. However, critics claim that communicative planning is likely to be vulnerable to different forms of power that can disrupt the process (Richardson, 1996) and that open processes do not necessarily produce just results (Papers I, II and III; Fainstein, 2000:457; Larsen et al., 2011). However, Connelly and Richardson (2009) see effective deliberation as a process where stakeholders are engaged and the primary assessment should be regarding the effectiveness of the process 'in delivering an intended policy'. They also underline that governance as a whole should be assessed regarding its possibilities to take action and achieve legitimacy, where legitimacy is understood as the recognised right to make policy. There are thus three dimensions that Connelly and Richardson (2009) identify as important: content sustainability, capacity to act and legitimacy. Mouffe (2005) instead criticises the whole idea of dialogic democracy because of its anti-political vision that refuses the antagonistic dimension of the political. She believes that the effort to achieve universal and rational consensus is the wrong track in democratic thought and argues instead that 'the task for democratic theorists and politicians should be to envisage the creation of a vibrant 'agonistic' public sphere of contestation where different hegemonic political projects can be confronted' (Mouffe, 2005:3). Today, much of the talk about dialogue and deliberation means nothing, since no real choices are at hand, and Mouffe (2005) claims that we are actually living in post-political times. Thinking politically means highlighting that e.g. planning is not just about technical issues that can be solved by experts. There are conflicts without rational solutions and planning involves choosing between conflicting alternatives.

Participatory processes are discussed in Papers I, II and V and to some extent also in Paper III. Paper I reveals that planners in Stockholm view justice issues as solvable by just planning processes. The process is the focus and not the

content. Thus, the assumption is that the participants will negotiate in an open and fair process and come to a just agreement. However, this approach fails to confront issues related to power. Paper II further problematises participatory processes, but here in the context of creating scenarios handling climate change mitigation and adaptation. Paper II highlights the political dimensions of climate change and concludes that depending on how the participants perceive e.g. vulnerability and resilience, questions of what and when climate measures should be taken become contested. It also points out the risk that a participatory process might deliver an unsustainable outcome when compared with scientific targets about the need e.g. for decreased CO₂ emissions. However, if the focus is instead only on the content, the resulting scenario may lack institutional legitimacy. Paper III compares different sustainability scenarios for Stockholm and concludes that scenarios developed by a rather homogeneous group of scientists are much more radical in terms of sustainability targets (large energy use reductions) than the Regional Development Plan. On the other hand, the Regional Development Plan contains more space for deliberation and the result is influenced by many actors. Paper V shows how the power and privilege to formulate what the problem of gender equality is represented to be affects the means as well as the end. Furthermore, the power to formulate the problem and set the agenda locks certain perspectives out of processes, here in the case of Regional Growth Programmes. Specifically, this meant that in two of the three regions examined in depth, gender experts did not feel involved or came very late into the process, when both problems and solutions had already taken shape. Gender equality was viewed as something that could be added to existing programmes. However, this is difficult since a critical gender perspective means questioning accepted knowledge and what is seen as good development.

2.3 NEW URBANISM AS A CLEAR URBAN VISION

Another strand in the leading edge of planning theory is new urbanism (Fainstein, 2000). New urbanism emerged in the USA during the 1990s and aims to recreate the traditional European small-town environments: cities with squares, small streets, sidewalks with space for outdoor cafes and local small traders (Andersson et al., 2005:30). The idea is that urban living can be radically improved and made more authentic by a return to the collective memory of community and vibrant neighbourhoods (Harvey, 1997:1). This should be recaptured by traditional symbols and structures. The movement has gathered stakeholders with differing values and interests: construction companies, city and transport planners, environmental activists and financiers, including such diverse actors as Prince Charles and the Disney Corporation (Andersson et al., 2005:30). It strives for an urban design that includes walkability, human scale, mixed use, connectivity, care for the public realm, green design and traditional neighbourhood structure (Congress for the New

Urbanism). Thus, physical form should contribute to a better environment and social conditions. It is a reaction against urban sprawl, anonymity, car dependence and large-scale modernist urban planning (Andersson et al., 2005:30).

Thus, while the communicative planning strand does not want to set any particular view as being better than any other, new urbanism has a clear urban vision. Sandercock (2003:197) sees this as one of the reasons for the appeal of new urbanism – it tells a story with a happy ending. However, a frequent criticism is that new urbanism ‘merely calls for a different form of suburbia rather than overcoming social segregation’ (Fainstein, 2000:463) and also that it is not sure to overcome car dependency, since many developments have been typically suburban (Harvey, 1997:2). In addition, new urbanism planning is viewed as being mainly addressed to an affluent middle class and creates strong boundaries against the surrounding community (Andersson et al., 2005:31). The idea of creating a strong community can also have a darker side and Harvey (1997:3) writes that ‘community has often been a barrier to rather than facilitator of progressive social change, and much of the populist migration out of villages (both rural and urban) arose precisely because they were oppressive to the human spirit and otiose as a form of sociopolitical organization’.

Keil (2007:56) criticises new urbanism’s attempts to be a solution to sustainable development since ‘they cannot reach deeply enough to fundamentally redirect the destructive dynamics of today’s urbanism’. Keil (2007) highlights today’s ecological crises resulting from global warming and criticises the idea that sustainability can be planned through smart social engineering and urban design. However, Fainstein (2000:465) underlines new urbanism’s utopianism as a contrast to communicative planning that only offers a better process. The new urbanism planner becomes an advocate of better quality of life in nicer surroundings. Even if the benefits are exaggerated, it depicts a different society. Harvey (1997:2) is concerned that new urbanism may ‘perpetuate the idea that the shaping of spatial order is or can be the foundation for a new moral and aesthetic order’. It presupposes that proper design will gain social, economic and political life. In a similar way, Paper III is critical of urban form being the key issue in making cities sustainable. However, Harvey (1997:3) does not criticise utopianism altogether, but emphasises that both spatial form and process must be considered. New urbanism is not explicitly handled by this thesis, but it is worth some attention because of its utopianism concerning spatial form. It has also garnered attention in the Swedish planning and architecture debate (Andersson et al., 2005).

2.4 PRESCRIPTIVE POSTMODERN PLANNING

So, one strand in the leading edge of planning theory concerns the usefulness of communicative rationality and another disagreement is about urban design's effect on social outcomes. The third strand pointed out by Fainstein (2000) concerns both process and outcome and is denoted the Just City approach. Similarly, Campbell (2010) highlights the need for envisioning alternatives in an Editorial to *Planning Theory & Practice*:

It is all too easy to identify obstacles and constraints, reasons why failure is inevitable. However, this is a moment in which we as planners need to focus attention on our capacities to envisage alternatives and demonstrate the possibilities for a better world. (Campbell, 2010:475)

Campbell (2010:473) states that planners and planning theorists cannot continue to blame others for the failings and inadequacies of planning and that the future is their responsibility.

Even if most post-positivist planning theory does not offer concrete appealing suggestions, there is some more prescriptive postmodern planning calling for politicised definitions of planning or even suggesting alternative visions (see e.g. Allmendinger, 2002; Bradley, 2009; Fainstein, 2000; Oranje, 2002). Since this thesis explores environmental justice and gender discourses in planning and futures studies *and* looks for ways of working with those issues, a critical perspective is necessary, but also a more normative approach.

By suggesting the Just City approach, Fainstein (2000; 2006; 2009; 2010) falls within the more prescriptive postmodern tradition. The Just City approach is a 'normative position concerning the distribution of social benefits' (Fainstein, 2000:467). It highlights process values *and* desirable outcomes. Thus, it recognises that just processes do not necessarily result in just outcomes, an issue which is also discussed in Papers I, II and III. Paper V exemplifies the issue using the Swedish Regional Growth Programmes and shows how gender experts can sometimes be locked out of the processes. Campbell (2010:472) also emphasises values and better outcomes and writes that planners and planning theorists 'have to be able to articulate our underlying values and demonstrate the beneficial outcomes which result'. This is a move away from the tradition of merely criticising urban and regional phenomena and instead trying to 'specify the nature of a good city' (Fainstein, 2000:467).

In the view of Fainstein (2000; 2006; 2009; 2010), the purpose is to recommend nonreformist reforms and thus improvements should be made within the current structures. Fainstein (2010:20) denotes this as a form of 'realistic utopianism'. The goal is to approach just cities with equity, democracy and diversity as the three primary qualities. Thus, '[t]he discussion does not go so far as to investigate the broader concept of the good city' (Fainstein, 2010:58) and e.g. environmental issues are not considered. Policy recommendations are e.g. that 'new housing development should provide units for households with incomes below the median' (Fainstein, 2010:172), 'megaprojects

should be scrutinised on their benefits for low-income people, planners should be active deliberators pressing for egalitarian solutions' (Fainstein, 2010:173), '[b]oundaries between districts should be porous' (Fainstein, 2010:174) and '[g]roups that are not able to participate directly in decision-making processes should be represented by advocates' (Fainstein, 2010:175).

Harvey (2009) is critical towards the approach of acting within the capitalist regime and questions capital accumulation and economic growth as prime targets in city development. He claims that the question of what city we desire is inseparable from what kind of people we want to become (Harvey, 2009:45). However, he also underlines that '[a] static endpoint is not desirable' and that 'a Just City has to be about fierce conflict all of the time' (Harvey, 2009:47). Sandercock (2003:2) also underlines dynamics and wants 'to *practice* utopia, a city politics of possibility and hope' and therefore wants to outline a utopian, critical, creative and audacious planning imagination. The goal is a multicultural city where diversity is accepted. Diversity, democracy and social justice are seen as important values in her call for Cosmopolis. This future is truly multicultural and is characterised by the acceptance of all people having a cultural identity (which is not static, but always evolving).

Researchers within the field of political ecology have also called for alternatives. Swyngedouw (2007) sees the need for imagining and naming socioenvironmental futures and Keil (2007:57) notes that radical change is needed and proposes a radical urban political ecology, meaning that sustainability cannot be achieved within capitalism as we know it.

2.5 NORMATIVE IMAGES OF THE FUTURE

The planning types described in the sections above are not all-embracing, but they represent a move away from a purely critical perspective. They are examples of attempts at providing a guiding ethic in a postmodern time. This thesis adopts a critical perspective and also suggests ways for more environmentally just and gender aware long-term planning practice. Thus, it follows both a postmodern critical tradition (but acknowledges a real world) and draws on ideas from the prescriptive postmodern planning approach. In describing desirable futures, the prescriptive postmodern planning approach comes near to futures studies, especially the branch of futures studies where images of the future are developed.

As Paper V notes, even though people have always been thinking of the future, futures studies as an academic field only rose in the mid-1960s (Andersson, 2006; Bell, 2003:279, chapter 1). The plural term 'futures' highlights that the future is uncertain and opens the way for several future visions or stories about the future. In addition, as described in Paper III, futures studies do not regard the future as a disconnected end-state, but rather as rooted in both the past and

the present (Bell, 2003; Koselleck, 1979/2004; Myers and Kitsuse, 2000). This means that there are some future events that we can be certain about (that we can predict), but also that the future is socially constructed. Futures studies is one way of dealing with uncertainty (Svenfelt, 2010). Myers and Kituse (2000:225) express this as the future having 'past, present, and future components'.

Another way of stating this is that images of the future will inevitably bear traces of yesterday as well as today's zeitgeist. Simonsen (2005) and Orrskog (2005) are two of many writers in the field of geography/planning showing that the dominant stories about today's and tomorrow's city tend to be rather streamlined. However, there are also challenging stories presenting alternative solutions. There are real, possible, dreamed and forgotten visions about the city (Orrskog, 2005:29).

The field of futures studies is characterised by plurality regarding research approaches and one way of classifying those different approaches is that they respond to one of the three questions 'what will happen', 'what can happen' and 'how can a specific target be reached'. They thereby belong to the three categories predictive, explorative and normative scenarios (Börjeson et al., 2006).

The prescriptive postmodern planning approach resembles most normative scenarios. These in turn can be divided into preserving and transforming scenarios, where preserving scenarios depict images of the future built on today's societal structures (Börjeson et al., 2006:728-729). In transforming scenarios the goals are seen as very difficult to reach within today's structures and major societal changes are therefore seen as necessary.

One form of transforming scenario studies is backcasting. Robinson (1990:822) writes that '[t]he major distinguishing characteristic of backcasting analyses is a concern, not with what futures are likely to happen, but with how desirable futures can be attained'. Dreborg (1996:814) states that backcasting is especially useful for 'long-term complex issues, involving many aspects of society as well as technological innovations and change'. The focus is on issues perceived as societal problems of great importance and its commonly used for describing low-energy futures (Dreborg, 1996). The approach is to involve many actors and one 'important aim of backcasting studies, in the Swedish tradition is, accordingly, to provide different actors in society with a better foundation for discussing goals and taking decisions-to act or to seek further knowledge' (Dreborg, 1996:824).

Backcasting studies often come up with new and unconventional solutions to societal problems, which have made objectors claim it is political rather than scientific. However, Dreborg (1996:825) underlines that 'solutions conforming to business as usual are seldom regarded as political' since they are in line with the habitual way of thinking and therefore their value dependence is just less

apparent. He also underlines the importance of describing value-related considerations lying behind images of the future and points out that backcasting studies can provide a set of different images of the future, based on different norms and values, which can facilitate different societal groups to grasp the issues at stake. Typically, the focus of backcasting studies is on changing physical or technical aspects, but without asking who should change or highlighting social structures (Wangel, 2011).

Planning is most often not so transforming in its nature, but can rather be seen as a form of preserving normative scenario work, since it often starts out with a set of targets concerning environmental, social, economic and cultural factors to reach within current structures (Börjeson et al., 2006:728).

This thesis (especially Papers III, IV and V) highlights normative scenarios as a way of clarifying political dimensions of planning and visioning about sustainable futures. They can be a way of depicting antagonistic futures.

3 Methodology

This chapter describes the scientific approach used in this thesis. It also presents the scientific methods used in Papers I-V for assembling and analysing data.

3.1 SCIENTIFIC APPROACH

This thesis is inspired by the linguistic turn and uses methods associated with it. The questions posed do not mainly strive to tell *how* much, but also *what character* something has (Johansson, 2003:90). The research methods used are mainly qualitative. Qualitative methods aim to find the *meaning* of texts, symbols, etc. Limb and Dwyer (2001:6) state that perhaps the most important aspect of qualitative methodologies is that they do not assume ‘that there is a pre-existing world that can be known, or measured, but instead see the social world as something that is dynamic and changing, always being constructed through the intersection of cultural, economic, social and political processes.’ Thus, according to Limb and Dwyer (2001:6-7) there is no ‘real’ world out there to be discovered. However, this is not something that applies to all post-modernists. For example, Hansen and Simonsen (2004:138-139) ask themselves whether critical realism and social constructivism are necessarily antagonist. One can ask *what* is actually constructed in the constructivist view. Is it the conception of reality, or the reality itself? *Who* is constructing? And *how*? They argue that seeing scientific concepts as influenced by both reality and social factors is a form of critical realism or moderate constructivism (Hansen and Simonsen, 2004:139-141).

Bacchi (1999:42-43) also questions the total relativism and raises two important questions: ‘Is the turn to the construction of meaning a gospel of despair? Or, is it possible to retain insights into the construction of meaning while endorsing programmes of political change?’ She identifies two groups, ‘affirmative’ and ‘sceptical’ postmodernists, where the first group is committed to political activities while the latter takes a purely relativistic standpoint. Feminists viewing policy as discourse are thus generally affirmative postmodernists – they have an agenda for change. ‘Sceptical postmodernists [...] dismiss policy recommendations’ (Bacchi, 1999:43). Any interpretation is as good as any other. Bacchi (1999:43, 54) underlines that it is possible to take a discursive perspective but still want change, as the affirmative postmodernists. One should then emphasise the implications that follow from particular representations or interpretations. These implications affect people’s lives.

This thesis is inspired by the linguistic turn in seeing social categories, patterns of actions and social institutions as constructed by history and culture, in which language plays an important role. Thus, the thesis sees the social world as socially constructed, what else would it be? However, both ‘social facts’ and ‘brute facts’ can be true or false and they can change (Searle, 1995).

Starting out from a critical realist position means that there is a real world consisting of both natural and social facts. The scientific way to describe the physical world and its limits is e.g. through climate change (International Panel on Climate Change, 2007) and ecosystems (Millennium Ecosystem Assessment Panel, 2005), which are part of nine suggested planetary boundaries¹ within which humanity can continue to operate safely without the risk of abrupt environmental change (Rockström et al., 2009). These are ways of describing that natural resources are not unlimited, another example being to talk about the carrying capacity of nature (Arrow et al., 1995). Thus, the physical world limits what we can do through e.g. geographical settings. However, the physical world is not static. The forest looks different after a storm than before, mountains erode, rivers meanders through the landscape, the construction of fields, roads and cities changes the landscape, etc.

The starting point of seeing the world as constituted by both natural and social facts is described in Paper I as understanding ‘sustainable development as focusing both on protecting the resource base and enhancing social justice, and – not least – on the connection between the two’ (Paper I: 70). The connection is pointed out as ‘how natural resources are distributed, how decisions affecting the environment are made, and how environmental qualities are defined’ (Paper I: 70). Thus, Paper I starts out from viewing environmental problems as real, but also shows that the effects of environmental degradation impact differently on different societal groups and that there are different opinions and interpretations of what e.g. constitutes the most important environmental problems.

Paper II describes climate change effects that cause real effects on humans and nature in several ways, e.g. that cities are ‘vulnerable to climate change that can give rise to inundation of large delta areas, saltwater moving upstream into freshwater rivers, uncontrolled air pollution, typhoons, floods and so forth’ (Paper II: 260). However, it also takes into account that people have different preferences, accept different policies, see different environmental problems as important, etc. Thus, it is concerned with natural as well as social facts.

¹ Seven of these are quantified: climate change (CO₂ concentration in the atmosphere), ocean acidification, stratospheric ozone, biogeochemical nitrogen (N) cycle and phosphorus (P) cycle, global freshwater use, land system change and the rate at which biological diversity is lost. The two additional planetary boundaries are chemical pollution and atmospheric aerosol loading.

In Paper III the physical limits are expressed as seeing ‘that the carrying capacity of nature is not unlimited²’ (Paper III: 3), but also through seeing social and ecological systems as interlinked. Paper III also demonstrates social facts in the form of different environmental discourses.

Papers IV and V take a discursive perspective and focus on texts and spoken words. They concentrate on social facts, but see that those social facts (e.g. plans, policies and futures studies) have real consequences on humans when implemented and that the consequences are somewhat different for women and men.

In Paper V people were interviewed about e.g. how they experienced the process where the Regional Growth Programmes were developed. The attitudes, thoughts and feelings of these interviewees are subjective in an ontological sense, but we can make objectively true or false statements about them. For example, when one of the gender experts reported that she felt rejected, Paper V makes a true statement about her feeling, even if there are other people that experienced the same process in different ways.

Paper IV is not only a discourse analysis, but also a meta-study of earlier attempts to integrate a gender/feminist perspective in futures studies. Thus, it is a study of how gender has been done in futures studies. In similar ways as nature can limit what humans can or cannot do, social institutions and facts set limits through e.g. expectations, laws and educational systems. There are different discourses in society with different interpretations of e.g. what are seen as acute environmental problems and what is the ‘right’ way for women and men to behave. However, this does not mean that e.g. climate change and air pollution are only in the eye of the beholder; these environmental problems have real consequences on nature and on humans. Furthermore, it does not mean that e.g. women’s and men’s different travel behaviours or different wages are just in the eye of the beholder. When deciding what constitutes e.g. vulnerability and what is the political action to be taken, we are making valuations.

3.2 ASSEMBLING DATA

The data on which this thesis is based were collected through literature reviews, through screening the planning and futures studies field for relevant cases and through different kinds of interviews. Interviews were conducted for Paper I (individual in-depth interviews) and Paper V (group or informal conversational interviews).

² Carrying capacity should not be seen as fixed or static, however; it is contingent on technology, preferences and the structure of production and consumption (Arrow et al., 1995).

Literature reviews

Paper II is based on a review of mainly scientific literature. Deliberative planning theories are combined with futures studies literature and cases are reviewed and analysed from these aspects. Based on the literature review and the analysis, we identify some crucial issues to think of when developing scenarios for how urban areas should adapt to and/or mitigate climate change.

A literature review is also an important part of Paper III for describing the environmental justice situation in today's Stockholm and for outlining a just, sustainable planning approach, inspired in particular by literature from the fields of planning theory and environmental justice.

Paper IV is also a kind of literature review, but more of a meta-study since it involves the analysis of theory, methods and findings of earlier research in feminist futures studies. Thus, the literature review is extensive and not only provides background information and a theoretical foundation (Paterson et al., 2001), but a synthesis of insights from the meta-study also helps to identify new ways of thinking of gender in futures studies.

In-depth interviews

Paper V explores Swedish Regional Growth Programmes from a gender and futures perspective. However, it is not only the final product (the Growth Programmes) that are explored, but also the process that resulted in these. Where a number of people take part in the same process, they can experience it differently and the meaning of the outcomes can be different for them (Patton, 1987:26). Therefore, in-depth interviews were held in the three regions selected for the studies. The intention of in-depth interviews is to enter another person's perspective (Patton, 1987:109). I

n Paper V, the person responsible for the Programme in each region and also the gender equality expert were interviewed. The interviews took between 30 and 90 minutes and generally covered a prepared list of topics, but the interviewees were also free to raise their own themes. Patton (1987:111) calls this an interview guide 'a list of questions or issues that are to be explored in the course of an interview'. The prepared list helps ensure that information about the same points is obtained from a number of people. However, the topics or subject areas need not be taken in any specific order and exactly how the questions are posed need not be decided in advance. Two of the interviews in Paper V were made face-to-face and four were made via telephone. The persons responsible for the Programmes were selected as interviewees because of their influence on the process by which the Regional Growth Programmes were developed. The gender experts were selected since they were responsible for integrating the perspective that this thesis wanted to explore. It could be argued that even though gender experts are important for making progress in gender equality issues, the focus on them and their knowledge could mean that

gender equality becomes putatively depoliticised and conflict-free (Verloo and Lombardo, 2007:26). However, more alternative or progressive feminist voices were excluded from the processes where the Regional Growth Programmes were developed.

Informal conversational interviews

Paper I uses three cases to discuss environmental justice in Sweden. I was responsible for writing the section on case 3, which is based on a series of seminars, organised by myself and some research colleagues,³ for planners in leading positions at Stockholm's City Planning Office (documented in Orrskog, 2008; Zimm, 2007). We arranged six seminars in 2006 on the theme 'Planning for Good Environment and Justice under Diffuse Circumstances,' with a follow-up seminar in 2007. The initiative came from the planners and was meant to give a deeper understanding of contemporary challenges in planning.

As described in Paper I, the seminars were arranged as a series of focused conversations on how discourse, mobility, justice and diversity can be understood in the context of various ongoing planning projects in Stockholm, urban planning trends in other European countries, and how the future role of planners could be shaped. Seven-eight planners and three-four researchers participated in each seminar. Even though the participants were not always exactly the same, the differences were small enough to allow for conversations to start in one seminar and continue in another.

Each seminar started with the researchers giving a short introduction, which was followed by discussion. All participants were also asked to read specific texts in advance. Often the discussions stayed close to the suggested topic, but sometimes the conversations followed other paths because the planners had other things that they wanted to talk about.

The researchers documented each seminar and these notes were sent to all participants. Themes from these seminars, without any direct quotes, were published as a research report (Orrskog, 2008) and in the follow-up seminar a journalist participated and published the conversation in RUM, an architecture magazine (Zimm, 2007).

These seminars resemble informal conversational interviews which rely 'on the spontaneous generation of questions in the natural flow of an interaction' (Patton, 1987:110). Patton (1987:110) writes that during these kinds of interviews, the interviewees may not even realise that they are being interviewed. Most questions flow from the context and it can be difficult to actually gather the information desired. However, my colleagues and I created the context by

³ Karin Bradley, Karolina Isaksson, Bertil Malmström, Lars Orrskog and Patrik Tornborg.

setting up the seminars. So even though we did not have interview guides as described above, we knew what topics we wanted to explore but were also open to new topics.

3.3 ANALYSING DATA

Texts such as planning documents reflect, reproduce and question issues such as power and what justice means. When implemented, read and referred to, they influence people's thoughts and behaviour (Bergström and Boréus, 2005b:13). That is why it is important to analyse texts such as planning and futures studies documents. In this thesis interviews are also analysed as text.

Content analysis

There are different kinds of text analysis. *Content analysis* is used when quantifying phenomena in a text (Bergström and Boréus, 2005a:43). Texts are thus analysed in isolation (Waitt, 2005:168). The strength of content analysis is to give an overview of a large body of material and to create a foundation for comparison (Bergström and Boréus, 2005a:84). Therefore, this is a method used in Paper IV for finding papers published in the journal *Futures* on which to make a discourse analysis.

Discourse theory and analysis

As has already been pointed out, this thesis reveals underlying norms and assumptions in planning and futures studies in order to show that these can have actual consequences for humans and nature and that these consequences can vary between different societal groups and different geographical places. By that, this thesis takes a discursive perspective.

Discourse theory starts out from seeing all objects and acts as meaningful (Howarth, 2007:17). Their meaning is socially constructed, which means that all objectives and acts are discursive. Discourse theory is concerned with critically analysing those social rules and practices that constitute our social reality. However, what does it mean that an object is discursive? It means that depending on one's discursive horizon, a forest can be something beautiful, something in the way of building a road or a unique ecosystem providing ecosystem services. However, this does not imply that there is no reality behind the language or that there is doubt that the world exists. Howarth (2007:17) even writes that since we are always in a world of meaning making practices and objects, it is impossible to deny the world. Discourses are concrete, but changeable, systems of social relations and practices.

Hansen and Simonsen (2004:88) start out from Foucault when they describe discourse as a specific way to talk about and understand the world (or a part of

it), where words do not mirror the surrounding world, but have an active role in creating it. Discourse decides what statements are possible and what truth-value they have. Discursive structures are not rules that we can choose to follow or not – they set limits to how people can think and act. Thus, ‘although material objects and social practices exist outside language, they are only ‘brought into view’ by language’ (Waitt, 2005:170).

Discursive structures impose a solidity and normality, but they change over time (Waitt, 2005:172). For example new perceptions of everyday occurrences such as comfort, cleanliness and convenience can alter what we experience as clean and how we use natural resources (Shove, 2003). The practice of bathing has not changed very much over the last century, but the norms have changed dramatically as the weekly bath has given way to daily or twice daily showers. This clarifies that one environmental challenge is very much about understanding how discourses and social practices change and how new conventions become the norm.

According to Foucault there are always many parallel discourses, but a particular discourse is held as ‘true’ and a particular discourse often becomes dominant in a particular time (Waitt, 2005:174). Thus, discourses are about power and the structuring of society. Mouffe (2005:25) therefore argues that ‘[p]olitical discourse has to offer not only policies but also identities which can help people make sense of what they are experiencing as well as giving them hope for the future’.

Discourse analysis is the process of analysing the meaning making practices (Howarth, 2007:18). As Bergström and Boréus (2005a:77) point out, it is often not the number of times something is mentioned that is important, but rather how it is said. Similarly, the reason for leaving something out might be either that it is not seen as important, or that it is taken for granted. Waitt (2005:164-165) writes that the aim of discourse analysis is:

- (i) to explore the outcomes of discourse in terms of actions, perceptions, or attitudes rather than simply the analysis of statements/texts; (ii) to identify the regulatory frameworks within which groups of statements are produced, circulated, and communicated within which people construct their utterances and thoughts; and (iii) to uncover the support or internal mechanisms that maintain certain structures and rules over statements about people, animals, plants, events, and places in existence as unchallengeable, ‘normal’, or ‘common-sense’ rather than to discover the ‘truth’ or the ‘origin’ of a statement.

This thesis is concerned with sustainability discourses within planning and futures studies, especially power relations, norms and values related to gender and environmental justice. It is concerned with processes as well as outcomes.

Paper I uses a discursive perspective to show how environmental injustices can manifest themselves in an ‘Eco-Friendly’ context, that of Stockholm. This is a way of illuminating environmental injustices in a context where sustainable development has been high on the agenda in policy and planning for the past

15 years. Paper III uses a discursive perspective to explore environmental discourses in scenarios for future Stockholm. Papers IV and V use discourse analysis to explore gender discourses in futures studies and in Swedish regional planning. Paper V is also concerned with identifying planning frameworks that produce and reproduce gendered roles and with uncovering internal mechanisms that maintain certain gender roles as 'natural'.

Paper IV could also be called a meta-study, an interpretative and qualitative research approach rooted in a constructivist orientation. The construction of research findings occurs at two levels in such work: first the primary researchers construct research findings and then these are interpreted by the secondary analyst (Paterson et al., 2001:6-7). Thus, 'no singular objective reality will be found' and there are other possible findings that could have been drawn (Paterson et al., 2001:7). In the same way as I, as analyst, am influenced by today's context and conceptualisations, the primary researchers were influenced by their specific context of the times. Meta-studies are about searching for meaning by discerning and reframing knowledge. This is a process that extends from 'what is' to a search for 'what might be' (Paterson et al., 2001:14). However, it is also a way of consolidating a body of scattered literature into a coherent whole (Paterson et al., 2001:14).

4 Results from Papers I-V

4.1 PAPER I

Title: Exploring Environmental Justice in Sweden: How to Improve Planning for Environmental Sustainability and Social Equity in an "Eco-Friendly" Context

Paper I illustrates issues of environmental (in)justices in a Swedish planning context. The findings are in themselves a criticism of the Swedish sustainability discourse. Paper I describes how 'Swedish' high energy consuming, middle class norms and habits remain unchallenged (see Bradley, 2009 for a more thorough description). It also shows how adverse environmental impacts of the Dennis Package (a large infrastructure planning project) mainly affect disenfranchised communities (see Isaksson, 2001 for a more thorough description). Last, but not least, it shows that planners in Stockholm perceive their work as related to justice, but they seldom express their view on justice in an explicit way. However, they work actively with participatory justice and apply new methods to involve different groups in the planning process to canvass their views on the local environment and the future. Even though some groups, e.g. residents with a foreign background, are still underrepresented in planning processes, the goal of getting them into the process was not contested. Thus, reflecting on the three broad categories of environmental justice (distributive, procedural and substantive/entitlements), procedural justice was the least contested form of justice. However, less attention was given to whether a formally just process necessarily results in environmentally just outcomes. Thus, less attention was given to distributive aspects of environmental justice. The planners were satisfied with substantive justice and saw that as being regulated by environmental norms and regulations. Discursive aspects, such as what constitutes a good/bad environment and who defines that, were not in focus for the planners.

Paper I argues the importance of adding a discursive approach to environmental justice when applying it to planning situations in Sweden. By a discursive approach is meant shedding light on tacit preconditions and underlying norms and assumptions in planning. It also means illuminating questions of what environmental goods and externalities are to be distributed, amongst whom, and according to what principles of justice.

An important change that happened during the seminars was that the planners started to raise the idea that they could become more pro-active by trying to put issues related to environmental justice on the political agenda. They did not

want to bypass democratically elected politicians, but saw an opportunity to raise political awareness on issues such as environmental justice. They suggested that they could e.g. communicate undesired environmental or social consequences (if there are such) of political decisions so that the politicians could redefine their 'order' to the planners.

4.2 PAPER II

Title: Climate change scenarios and citizen-participation: Mitigation and adaptation perspectives in constructing sustainable futures

Paper II discusses adaptation and mitigation strategies as outlined in climate change scenarios. The paper brings attention to tensions between sustainability content values, such as reduced climate impact, and more process-orientated values and legitimacy. There is a widespread acceptance of stakeholder involvement in scenario and policy making. The outcomes of participatory processes depend heavily on the participant and the climate change-related issues identified. Depending on the participant's view and understanding of e.g. vulnerability and resilience, questions of what and when climate measures should be taken become contested. Paper II points out the risk of assuming that participation will deliver a 'good' result. A target such as reduced climate impact will not necessarily be reached if the focus is only on process values such as building trust and creating mutual understanding. A participatory process might result in an unsustainable outcome. However, if the focus is only on content values, the resulting scenario may lack institutional legitimacy. So, in spite of Paper II bringing up several problems with participatory processes, it still sees such processes as important for creating legitimacy and also for bringing different issues to the table. Paper II therefore proposes iterative processes where the involvement of lay people is important, but experts should also evaluate their suggestions and then bring them back.

4.3 PAPER III

Title: Scenario Planning for Sustainability in Stockholm, Sweden: Environmental Justice Considerations

Paper III takes a closer look at some proposed future developments for the Stockholm region (Stockholm's Regional Development Plan and three scenarios from an eight-year research project). The analysis shows that even though they all start out from the concept of sustainable development, the futures described are very different and belong to different sustainability discourses. Depending on how sustainability is understood and operationalised, this has different real consequences on nature and on humans. None of the

scenarios is strong on the environmental justice perspective. The Regional Development Plan follows an ecological modernisation tradition, while the other scenarios are more inspired by ecological economics. The processes where the scenarios were developed can partly explain this – the Regional Development Plan contained more space for deliberation and influence from many actors, while a research group that did not have to compromise with other demands constructed the other scenarios. Thus, the process values of the Plan were higher, but the content values of the other scenarios were higher.

The most obvious difference between the four futures is the urban structure they propose. Thus, it seems that urban form is not the superior element for sustainable development. All forms could constitute sustainable lifestyles, but they could also encompass unsustainable lifestyles. However, when it comes to local environmental justice, changes in urban settings could mean a lot for e.g. air quality, access to green space, etc.

Paper III also points out the importance of acknowledging what kind of futures studies planners use or make – predictions, explorative scenarios or normative scenarios. Are they planning for what will happen if trends continue, for what might happen or for reaching some specific targets? Paper III suggests that one fruitful way of using scenarios in planning could be to confront different scenarios with each other and analyse them from various perspectives in order to highlight conflicting interests and values in the planning process.

Since environmental effects of planning vary between different societal groups, Paper III highlights the need for an explicit discussion on justice within planning and scenario making. As long as one's conception of justice is not specified, it is merely a positive but empty word. Planning theory and practice today relies heavily on procedural concerns when it comes to justice. Paper III highlights that this and the other broad categories of environmental justice (distributive justice and entitlements) can all be operationalised in planning, but the way that they are operationalised depends on planners' and politicians' understanding of justice.

Paper III stresses the need for just processes and points out that they can create legitimate outcomes, but also underlines the need for content values and, in line with Paper II, suggests iterative processes where experts and lay people or interest organisations evaluate/comment upon each other's suggestions.

Paper III also describes environmental justice in Stockholm within a planning context. This, in line with Paper I, is a critique of the Swedish sustainability discourse.

4.4 PAPER IV

Title: Gender in Futures: A Study of Gender and Feminist Papers Published in Futures, 1969-2009

Paper IV reviews and discusses papers related to women's studies, gender or the feminist perspective, published in the scientific journal *Futures*. The aim is to provide new understandings and remapping of futures studies by capturing how gender is created and understood in this field.

The gender/feminist criticism of futures studies mainly relates to the field being male-dominated and male-biased, which means that the future is seen as already colonised by men. The criticism is recurrent and while the first special issue on gender in *Futures* (Streatfeild, 1975) was positive (Let's start working with gender and futures studies!), the 1989 special issue (McHale, 1989) focused on the possibilities to question values and norms in a time of turbulence and rapid change. The last special issue (Milojevic et al., 2008) concluded that little has happened in terms of gender equality over the years.

When synthesising the insights from all 78 papers focusing on futures studies and feminism, gender or women, four conclusions linked to the research questions are especially striking 1) Women and non-Westerners are generally excluded from professional futures studies activities and so are feminist issues or issues of particular relevance for women; 2) futures studies usually make no attempts to reveal underlying assumptions, i.e. often lack a critical and reflexive perspective, which is needed in order to add a critical feminist perspective and envision feminist futures; 3) feminist futures (which are diverse, but focus the well-being of all humans) are needed as a contrast to hegemonic male and Western technology-orientated futures; and 4) futures studies often view women as victims, rather than as drivers for change, which means that their alternative futures are often ignored.

One result of this meta-study is the strong call for alternative feminist futures as a contrast to hegemonic Western, white and male futures. However, from a feminist standpoint images of the future are troublesome because of their universalistic notions of what is good. Feminist theory has been criticised for being white and Western and not acknowledging black women, the Third World, gay and lesbian people etc. It is now inspired by the post-modern criticism of universalism, which means that it is becoming more difficult to call for the feminist future (see e.g. Edelman, 2004; Sandercock and Forsyth, 1992). So, the call for feminist futures must be a call for a diversity of futures, since the feminist movement is so diverse. This diversity is evident in the papers studied and it is impossible to identify one feminist meta-theory, method or image of the future.

Many papers in this meta-study are not strongly linked to futures studies, which indicates that the fields still have much to learn from each other. Futures

studies need to be better at including women, and non-Westerners in general, in their professional activities. They need to include feminist issues and allow for radically different ways of describing gender relations in the future, and become better at revealing underlying assumptions and using critical and reflexive perspectives. It seems odd to imagine great changes in technological developments, the environment and so forth without any changes in gendered roles. Feminist/gender studies can benefit from the theories and methods available in the futures studies field to develop feminist images of the future. These should not be seen as a common united goal, but as something to base a political discussion on the future on.

4.5 PAPER V

Title: Gendered development and possibilities for alternative feminist futures

Paper V takes a closer look at the Swedish Regional Growth Programmes and zooms in on Norrbotten, Uppsala and Jönköping. It shows that in Norrbotten and Uppsala the problem of gender inequality is seen very much as a problem of unequal rights and possibilities, while in Jönköping gender inequality is not really addressed as a problem. The assumption underlying the representation of gender inequality in Norrbotten and Uppsala is largely a liberal view on gender equality. The outcome is that it is rather easy to claim and voice demands such as including both women and men in decision making processes related to the regional growth programmes. However, the assumed starting point of economic growth and the ideal of starting up business are not analysed or opened to other interpretations, nor is the male norm – women are seen as those who should change in a traditional male direction, not the other way around. More clearly outspoken visions or images of the future could clarify what desirable gender equal or feminist futures could be and the role of economic growth in those futures. This would also clarify the political aspect of planning and that desirable futures are antagonistic.

A way to open up different ways of describing the problem and also desirable futures could be the use of scenarios. Predictive scenarios could be used to discuss whether it is desirable to follow existing paths, or whether trends need to be broken. Explorative scenarios could be used to explore the potential influence of different factors on the goal, while normative scenarios could be used in order to open up for alternative images of the future, but also as a way of closing down alternatives depending on the perspectives are invited to take part in the creation of the images of the future.

5 Discussion of findings

This chapter discusses the findings from Papers I-V and relates them to each other and to the theoretical framework. An attempt is made to highlight similarities and differences and to identify findings that can enrich and deepen the analysis. The discussion is structured in two main sections: 1) environmental justice and 2) gender.

5.1 ENVIRONMENTAL JUSTICE

Papers I and III illustrate issues of environmental (in)justice in a Swedish planning context. An important contribution of Paper I is the finding that planners in Stockholm perceive their work as related to justice, but seldom express their view on justice in an explicit way. Their underlying assumption is that participatory processes will result in just outcomes; so one goal for the planners was to involve underrepresented groups such as residents with a foreign background in planning processes. However, discursive aspects on the environment and on the planning outcome, such as what constitutes a good/bad environment and who defines that, were not explored by the planners. This means that a good environment was seen as safeguarded because of rules and standards that regulate environmental qualities, what is allowed to be built and so forth.

Paper III shows that even though the studied plans or images of the future start out from the target of sustainable development, these futures might be described in different ways. This means that in similar ways as a good/bad environment can be described in many different ways, so can sustainable development. There are many different sustainability discourses. However, these discourses are not only in the eye of the beholder, as the operationalisation of different discourses affects different societal groups and nature in different ways. Globally, the amount of CO₂ emissions caused by heating, transport, etc. affects the climate, and locally urban design influences environmental justice. A road will pollute nearby areas even if the city as a whole uses no more energy than what is seen as sustainable, and so forth.

In similar ways to planning, participatory processes are frequently used in generating scenarios for e.g. adapting to and mitigating climate change. Paper II looks at such processes and concludes that focusing the process too much does not safeguard sustainability content. Thus, there is a risk in assuming that participation will deliver a 'good' result.

So, on the one hand, I state that the sustainability concept is discursive, and on the other hand, I state that the negotiated meaning of sustainability is not necessarily sustainable (that is, it may contribute to increased climate change, increased rate of decline of biodiversity, etc.). The negotiated sustainability is the collective decision from effective deliberation. However, nature cannot vote in these kinds of processes (nor can the very young, the mentally ill and so forth) and there is no guarantee that the result will be ecologically sustainable. Goodin (1992:168) even writes that advocating democracy means advocating processes, while advocating environmentalism means advocating substantive outcome. However, Dryzec (2000:148) argues that not only entities capable of engaging in dialogue by making claims should be part of deliberations, but also 'entities that can act as agents, even though they lack the self-awareness which connotes subjectivity'. But how can we listen to nature? Paper II shows that the involvement of lay people is important in coming to legitimate proposals of future ways of mitigating and adapting to climate change, but also proposes iterative processes where lay people's suggestions are evaluated by experts and then brought back to the lay people again. This iterative process can be seen as one way of bringing nature's voice into deliberative processes through letting it talk through both e.g. environmental experts and lay people/stakeholders. These groups can have different views on e.g. vulnerability and resilience, which means that opinions on what and when measures should be taken can differ.

Today's environmental problems are acute and affect different societal groups differently. There is therefore a need for policymakers to actively promote environmentally just planning processes and outcomes. Also, planners could take an active role in this by communicating environmental justice consequences of plans to politicians (Paper I). This thesis points out that justice can be understood in several ways (see especially Paper III), but an uncontroversial proposal should be that society's already vulnerable groups should not experience higher levels of negative aspects resulting from such projects such as expansion of roads and other disruptive activities. There is therefore a need to evaluate the environmental justice implications of proposed plans (locally as well as globally). This demands iterative planning processes where lay people and e.g. social and environmental experts can comment on each other's suggestions (see Paper II). In addition, as pointed out by Paper III, there is a need for mapping the environmental justice situation, even in cities with a high standard of living such as Stockholm. Such mapping should also be carried out on plans/scenarios of future cities. Using several images of the future could show different developments depending on how nature and justice are understood. This would clarify the environmental justice implications of different futures.

5.2 GENDER

As Paper IV shows, the feminist critique of futures studies is that women (and non-Westerners) are generally excluded from professional futures studies activities and that futures studies generally do not work with feminist issues or issues of particular relevance for women. This relates to Paper V's description of the processes whereby three Swedish Regional Growth Programmes were developed. Paper IV highlights that feminist issues missing in futures studies include e.g. reproductive rights, violence, maternity leave, equal pay, sexual harassment, street harassment, discrimination and rape, which means that women's experiences are left out. Paper V points out that a liberal view on gender equality has made it quite easy for gender equality advocates to claim and give voice to demands, e.g. for the inclusion of both women and men in decision-making processes, but the traditional male norm is not challenged.

The dominant discourse in planning practice is about process, and not about content. Deliberations are presumed to result in just outcomes. However, there are also processes preceding the planning process. Already when formulating a problem to solve by planning or choosing which problems to examine, certain solutions are made possible while others are excluded. This relates back to Paper IV, which shows that feminist issues are most often not handled in futures studies, but also to Paper V, which shows that the dominant discourse views gender as something that can be added on to regional planning. However, this is difficult since the focus is already on male-dominated areas and it has already been decided what is meant by economic growth and quality of life. In some of the cases studied, gender experts felt put aside and ignored in these processes, i.e. that it was not a true deliberation. Paper V shows how the power and privilege to formulate what the problem of gender equality is represented to be affects the means as well as the end. A critical gender perspectives means highlighting power and questioning concepts taken for granted. To use the terminology of futures studies, Paper V shows that there was no space for feminist transforming futures proposing radical change in the Regional Growth Programmes, but only for preserving futures where societal structures are expected to stay the same as today. There was a normalisation of a dualistic way of doing gender except in the region of Norrbotten, which partly opened up many ways of doing gender. Normalisation of a dualistic way of doing gender means that issues such as having a sex-divided labour market and different travel habits due to sex become (or continue to be) unquestioned.

According to Börjeson et al. (2006:728), planning is often a form of preserving normative scenario trying to make small adjustments to reach e.g. environmental targets within current structures. In the last decades of planning research and practice for sustainable urban development, more radical transformations or utopian thought have been rare. Instead, planning for sustainable development is viewed as something that can be reached within the society's current frames (Börjeson et al., 2006; Bradley, 2009; Keil, 2007). Bradley

(2009) shows that Swedish planning for sustainable urban development is part of a post-political project that fosters individualised small-scale actions. However, when it comes to feminist suggestions on changing the patriarchal order and traditional ways of thinking that support the subordination of women, this is difficult without challenging present structures. Thus, a more political approach to planning is needed. This would include questioning norms, values and frameworks taken for granted in planning theory and practice.

Even though feminist theory is diverse and there is not only one way to describe the feminist future, there is a call for alternative images of futures that are more transformative. If this is to be developed within the futures studies field, a critical perspective is needed to reveal underlying assumptions about the organisation of society. A source of inspiration and a way of strengthening the feminist storylines when planning or visioning sustainable development could be feminist political ecology. Similar to researchers within the political ecology strand criticising sustainable planning for just working with superficial improvements, feminist political ecology underlines the importance of recognising power relations in decision-making about the environment, questioning the presumption of technological progress and domination of nature, recognising the relationship between gender, knowledge, environment and development and addressing gendered structures in the economic system (Rocheleau et al., 1996). However, this is mainly a critique without any suggestions on how to transform societies to become more gender equal and more environmentally just.

Paper V suggests that a way to open up different ways of describing the problem and also the desirable future could be the use of scenarios. Predictive scenarios could be used to discuss whether it is desirable to follow existing paths, or whether trends need to be broken. Explorative scenarios could be used to explore the potential influence of different factors on the goal, while normative scenarios could be used in order to open up alternative images of the future. This could be a way of bringing back some utopianism into planning. Describing different futures could help in highlighting conflicting interests in the planning process that are not possible to solve by consensus. However, Paper V also notes that if few perspectives/interest groups are invited to take part in the creation of images of the future, instead of being a way of opening up alternatives, the process can be a way of closing them down.

6 Planning for just sustainable futures

Current planning for sustainable development can be understood in terms of different discursive (in)justices and ways of doing gender. In current planning, process is seen as a means to safeguard just outcomes. There can also be found a normalisation of a dualistic way of understanding and doing gender. A more political kind of planning for sustainable development would include making space for alternative images of the future. Important questions would then become: What is desirable? For whom? What risks (e.g. ecological crises and social issues) need to be handled? The goal is not to find one future kind of desirable arrangements, but rather to highlight multiple futures and thereby highlight that planning for sustainable futures is antagonistic and political. However, when operationalised, different images of the future are not equally 'good' for nature and different societal groups. It is therefore important to understand different sustainability discourses and also relate them to scientific discourses on e.g. climate change and ecosystems. These discourses are sometimes said to signal that there is one benign and sustainable nature to conserve, which means missing asking questions about the kind of socio-environmental arrangements we wish to produce, how these can be achieved, and the sort of natures we wish to inhabit. These questions are certainly important, but highlighting nature's boundaries need not mean that nature is seen as static. Instead, it is contingent on technology, preferences and the structure of production and consumption. However, when what is meant by sustainable development is not clearly elucidated, nobody is against it and most just keep on doing business as usual.

Even if change is wanted (for some reason), it is not easy to bring about. People can be reluctant to change, since the familiar status quo is usually seen as better than an uncertain future option. Change means uncertainty. Futures studies are one way of dealing with such uncertainty. Describing different images of the future can help people prepare for the future, but also choose between different futures. Formulating desirable futures can also help identify differences between current policies and planning and the policy and planning needed to achieve just, sustainable futures.

This thesis clarifies the discursive aspects of the concept of justice and shows that even when feminism is set as the future goal, the meaning of that goal varies between different interpretations. Thus, the idea of partisan conflicts being a thing of the past and that consensus can now be obtained through dialogue is incorrect. Instead, planning should be seen as political and acknowledge antagonistic dimensions. This would help people choose between differentiated alternatives, avoid path dependency and challenge habituated values and norms. Political planning would show that some choices are ir-

reversible and can create structures that are very difficult to change (e.g. car-dependent societies). The role of planners would not be to lead processes to consensus, but to work out different possible (and sometimes antagonistic) futures for the politicians to choose between. They also need to be evaluated since e.g. their different environmental and gender discourses will affect nature and different community groups in different ways. Planners possess a spatial knowledge that is important for that, and also for linking local and global environmental discourses to issues such as global climate change and values of the local cultural and social arrangements.

This thesis highlights the need for antagonistic planning and suggests that one way could be the use of scenarios. Predictive scenarios could be used to clarify what happens if we follow current trends (in terms of e.g. climate change, segregation, gendered division of the labour market, etc.) in order to discuss whether this is desirable or not. Explorative scenarios could be used to explore the potential influence of different factors on urban and regional development, while normative scenarios could be used in order to clearly describe different stakeholders/movements/political parties' visions of the future. This would be a way of making space for an active political debate about what future we want.

The idea of using scenarios, or images of the future, is not to find one future to form consensus around, but to clearly show that different futures need different actions in the here and now. Planning is an activity that affects the community long into the future. Decisions made earlier have locked us down in some structures. Similarly, supposedly small changes in the city and the region today could affect the possibilities of future citizens for organising their lives. Planning has always been visionary, but has often put forward one image suggesting not only new urban form and architecture, but also social suggestions. Diverse futures could stimulate debate about what future we want.

Planning for just, sustainable futures means acknowledging process values, but also content (giving nature a voice!). Although the content, such as climate change targets and gender equality, is negotiated and political, it is important to assess the outcome in terms of these widely accepted targets in order to see how they are influenced by the planning results. However, they need also to be evaluated because of their justice implications, Planning for just sustainable futures means politicising planning. There are a number of different futures desirable for different community groups, and by making this clear the political content of planning becomes visible. These different images of the future can be evaluated in terms of environmental justice, their gender perspective or any specific environmental aspect, such as biodiversity, which makes clear that different futures are differently good or bad for nature and/or different societal groups.

7 References

- Åkerman, J. (2011) Transport systems meeting climate targets: A backcasting approach including international aviation. PhD thesis, Stockholm: KTH.
- Allmendiger, P. (2002) "The Post-Positivist Landscape of Planning Theory." Pp. 3-18 in *Planning Futures: New Directions for Planning Theory*, edited by Allmendiger, P. and M. Tewdwr-Jones. London: Routledge.
- Allmendiger, P. and M. Tewdwr-Jones (Eds.) (2002) *Planning Futures: New Directions for Planning Theory*. London: Routledge.
- Andersson, J. (2006) "Choosing Futures: Alva Myrdal and the Construction of Swedish Futures Studies, 1967 – 1972." *International Review of Social History* 51:277-295.
- Andersson, O., K. Bradley, O. B. Wessel and M. Tunström (2005) *New urbanism – vadå? Conference Proceedings, Växjösamtalet 2005, Växjö, Sweden*.
- Arrow, K., B. Bolin, R. Costanza, P. Dasgupta, C. Folke, C. S. Holling, B.-O. Jansson, S. Levin, K.-G. Maler, C. Perrings and D. Pimenteler (1995) "Economic Growth, Carrying Capacity, and the Environment." *Science* 268:520-521.
- Bacchi, C. L. (1999) *Women, policy and politic : the construction of policy problems*. London: SAGE.
- Batty, S. (2001) "The Politics of Sustainable Development." in *Planning for a sustainable future* edited by Layard, A., S. Davoudi and S. Batty. London: Spon.
- Beauvoir, S. d. (1949/1997) *The second sex*. London: Vintage.
- Bell, W. (2003) *Foundations of futures studies: human science for a new era*. vol. 1, History, purposes, and knowledge New Brunswick, NJ Transaction Publishers.
- Bergström, G. and K. Boréus (2005a) "Innehållsanalys." Pp. 43-87 in *Textens mening och makt. Metodbok i samhällsvetenskaplig text- och diskursanalys*. Lund: Studentlitteratur.
- Bergström, G. and K. Boréus (2005b) "Samhällsvetenskaplig text- och diskursanalys." Pp. 9-42 in *Textens mening och makt. Metodbok i samhällsvetenskaplig text- och diskursanalys*. Lund: Studentlitteratur.
- Börjeson, L., M. Höjer, K.-H. Dreborg, T. Ekvall and G. Finnveden (2006) "Scenario types and techniques: Towards a user's guide." *Futures* 38:723-739.
- Bradley, K. (2009) *Just Environments: Politicising Sustainable Urban Development*. PhD thesis, Stockholm: KTH.
- Bullard, R. D. (1990) *Dumping in Dixie: Race, Class, and Environmental Quality*. Atlanta: Westview Press.

- Bullard, R. D. (2004) *Environment and Morality: Confronting Environmental Racism in the United States*. Geneva: United Nations Research Institute for Social Development.
- Campbell, H. (2010) "The Idea of Planning: Alive or Dead—Who Cares?" *Planning Theory & Practice* 11:471 - 475.
- Chaix, B., S. Gustafsson, M. Jerrett, H. Kristersson, T. Lithman, Å. Boalt and J. Merlo (2006) "Children's exposure to nitrogen dioxide in Sweden: investigating environmental injustice in an egalitarian country." *Journal of Epidemiology and Community Health* 60:234-241.
- Committee on Environmental Justice, I. o. M. (1999) *Toward Environmental Justice: Research, Education, and Health Policy Needs*. Washington D.C.: National Academy Press.
- Congress for the New Urbanism Learn About New Urbanism. http://www.cnu.org/Intro_to_new_urbanism. Accessed: 2011-02-08.
- Connelly, S. and T. Richardson (2009) "Effective policy-making in the uplands: a case study in the Peak District National Park." Pp. 376-392 in *Drivers of Environmental Change in Uplands*, edited by Bonn, A., T. Allott, K. Hubacek and J. Stewart. London: Routledge
- Dreborg, K.-H. (1996) "Essence of backcasting." *Futures* 28:813-828.
- Dryzek, J. S. (2000) *Deliberative Democracy and Beyond: Liberals, Critics, Contestation*. Oxford: Oxford University Press.
- Edelman, L. (2004) *No future: queer theory and the death drive*. Durham: Duke University Press
- Elvin-Nowak, Y. and H. Thomsson (2003) *Att göra kön: om vårt våldsamma behov av att vara kvinnor och män*. Stockholm: Bonnier.
- Fainstein, S. S. (2000) "New Directions in Planning Theory." *Urban Affairs Review* 35:451-478.
- Fainstein, S. S. (2006) *Planning and the Just City*. Conference Proceedings, Searching for the Just City, Graduate School of Architecture, Planning and Preservation, Columbia University.
- Fainstein, S. S. (2009) "Planning and the Just City." in *Searching for the just city: Debates in urban theory and practice*, edited by Marcuse, P., J. Connolly, J. Novy, I. Olivo, C. Potter and J. Steil. Abingdon: Routledge.
- Fainstein, S. S. (2010) *The Just City*. New York: Cornell University Press.
- Fainstein, S. S. and L. J. Servon (2005) "Introduction: The Intersection of Gender and Planning." in *Gender and Planning: A Reader*, edited by Fainstein, S. S. and L. J. Servon. New Brunswick: Rutgers University Press.
- Flyvbjerg, B. (1998/2003) "Rationality and Power." Pp. 318-329 in *Readings in Planning Theory: Second Edition*, edited by Campbell, S. and S. S. Fainstein. Malden: Blackwell Publishing.
- From, L. (2011) *Forskningsöversikt: Hållbar stadsutveckling*. Stockholm: Formas.

- Getches, D. H. and D. N. Pellow (2002) "Beyond "traditional" environmental justice." Pp. 3-30 in *Justice and natural resources: concepts, strategies, and applications* edited by Mutz, K. M., G. C. Bryner and D. S. Kenney. Washington, DC Island Press.
- Goodin, R. E. (1992) *Green Political Thought*. Cambridge: Polity.
- Hansen, F. and K. Simonsen (2004) *Geografiens videnskabsteori: en introducerende diskussion*. Frederiksberg: Roskilde Universitetsforlag.
- Harris, N. (2002) "Collaborative Planning: From Theoretical Foundations to Practice Forms." in *Planning Futures: New Directions for Planning Theory*, edited by Allmendinger, P. and M. Tewdwr-Jones. London: Routledge.
- Harvey, D. (1996) *Justice, Nature and the Geography of Difference*. Oxford: Blackwell Publishers.
- Harvey, D. (1997) "The New Urbanism and the Communitarian Trap." *Harvard Design Magazine* Winter/Spring:1-3.
- Harvey, D. (2009) "The right to the Just City." in *Searching for the just city: Debates on urban theory and practice*, edited by Marcuse, P., J. Connolly, J. Novy, I. Olivo, C. Potter and J. Steil. Abingdon: Routledge.
- Haug, F. (2000) "On the necessity of conceiving the utopian in a feminist fashion " *The Socialist register*:53-66.
- Haughton, G. (1999) "Environmental Justice and the Sustainable City." *Journal of Planning Education and Research* 18:233-243.
- Healey, P. (1996) "The communicative turn in planning theory and its implications for spatial strategy formations." *Environment and Planning B: Planning and Design* 23:217-234.
- Healey, P. (1997) *Collaborative planning: Shaping places in fragmented societies*. London: Macmillan.
- Hendriks, C. M., J. S. Dryzek and C. Hunold (2007) "Turning Up the Heat: Partianship in Deliberative Innovation." *Political Studies* 55:362-383.
- Höjer, M., A. Gullberg and R. Pettersson (2011) *Images of the Future City: Time and Space for Sustainable Development*. Dordrecht Springer.
- Holifield, R., M. Porter and G. Walker (2009) "Introduction Spaces of Environmental Justice: Frameworks for Critical Engagement." *Antipode* 41:591-612.
- Howarth, D. (2007) *Diskurs*. Malmö: Liber.
- International Panel on Climate Change (2007) *Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- Isaksson, K. (2001) *Framtidens trafiksystem? Maktutövningen i konflikterna om rummet och miljön i Dennispaketets vägfrågor*. PhD thesis, Linköping: Linköpings universitet.
- Johansson, L.-G. (2003) *Introduktion till vetenskapsteorin*. Stockholm: Thales.

- Keil, R. (2007) "Sustaining Modernity, Modernizing Nature." in *The Sustainable Development Paradox: Urban Political Economy in the United States*, edited by Krueger, R. and D. Gibbs. New York: Guilford Press.
- Koselleck, R. (1979/2004) *Futures past: on the semantics of historical time*. New York: Columbia University Press.
- Larsen, K., U. Gunnarsson-Östling and E. Westholm (2011) "Environmental scenarios and local-global level of community engagement: Environmental justice, jams, institutions and innovation." *Futures* 43:413-423.
- Limb, M. and C. Dwyer (2001) "Introduction: doing qualitative research in geography." Pp. 1-20 in *Qualitative Methodologies for Geographers – Issues and debates*, edited by Limb, M. and C. Dwyer. London: Arnold.
- Little, J. A. (Ed.). (2007) *Feminist Philosophy And Science Fiction: Utopias And Dystopias*. Amherst, New York: Prometheus Books.
- Martinich, A. P. and A. Stroll (2011) epistemology. *Encyclopædia Britannica*. <http://www.britannica.com/EBchecked/topic/190219/epistemology>
Accessed: 2011-02-15.
- McHale, M. (1989) "Introduction : Towards a renewed humanism." *Futures* 21:3-5.
- Millennium Ecosystem Assessment Panel (2005) *Ecosystems and human well-being: Synthesis*. Washington, DC.: Island Press.
- Milojevic, I., K. Hurley and A. Jenkins (2008) "Futures of feminism." *Futures* 40:313-318.
- Mouffe, C. (2005) *On the Political: Thinking in Action*. New York: Routledge.
- Myers, D. and A. Kitsuse (2000) "Constructing the Future in Planning: A Survey of Theories and Tools." *Journal of Planning Education and Research* 19:221-231.
- Oranje, M. (2002) "Planning and the Postmodern Turn." Pp. 172-186 in *Planning Futures: New Directions for Planning Theory*, edited by Allmendinger, P. and M. Tewdwr-Jones. London: Routledge.
- Orrskog, L. (2002) "Planning as Discourse Analysis." in *Reshaping Regional Planning: A Northern Perspective*, edited by Snickars, F., B. Olerup and L. O. Persson. Aldershot: Ashgate.
- Orrskog, L. (2005) "Stora och små berättelser om svenskt stadsbyggande [Great and small narratives about Swedish town planning]." in *Bor vi i samma stad? Om stadsutveckling, mångfald och rättvisa [Are we living in the same city? On urban development, plurality, and justice]*, edited by Broms Wessel, O., M. Tunström and K. Bradley. Stockholm: Pocky.
- Orrskog, L. (Ed.). (2008) *Planering för god miljö och rättvisa under diffusa omständigheter: Forskare och praktiker i samtal*. Stockholm: KTH/Royal Institute of Technology.

- Paterson, B. L., S. E. Thorne, C. Canam and C. Jillings (2001) *Meta-study of qualitative health research: a practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, Calif.: Sage.
- Patton, M. Q. (1987) *How to Use Qualitative Methods in Evaluation*. Newbury Park, California: SAGE Publications.
- Perry, D. C. (1995) "Making Space: Planning as a Mode of Thought." Pp. 209-242 in *Spatial Practices: Critical Explorations in Social/Spatial Theory*, edited by Liggett, H. and D. C. Perry. Thousand Oaks, Calif.: Sage.
- Rahder, B. and C. Altilia (2004) "Where is Feminism in Planning Going? Appropriation or Transformation?" *Planning Theory* 3:107-116.
- Redclift, M. (2005) "Sustainable development (1987-2005): an oxymoron comes of age." *Sustainable Development* 13:212-227.
- Richardson, T. (1996) "Foucauldian discourse: Power and truth in urban and regional policy making." *European Planning Studies* 4:279-292.
- Richardson, T. and S. Connelly (2003) *Value driven SEA: Time for an environmental justice perspective?* Conference Proceedings, Planning for Sustainable Development – the practice and potential of Environmental Assessment, Reykjavik, Iceland: Nordregio.
- Robinson, J. B. (1990) "Futures under glass: A recipe for people who hate to predict." *Futures* 22.
- Rocheleau, D., B. Thomas-Slayter and E. Wangari (Eds.) (1996) *Feminist Political Ecology: Global Issues and Local Experiences*. London and New York: Routledge.
- Rockström, J., W. Steffen, K. Noone, Å. Persson, I. F. S. Chapin, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C. A. D. Wit, T. Hughes, S. v. d. Leeuw, H. Rodhe, S. Sörlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen and J. Foley. (2009) "Planetary boundaries: exploring the safe operating space for humanity." *Ecology and Society* 14.
- Sandercock, L. (2003) *Cosmopolis II: mongrel cities in the 21st century*. London: Continuum.
- Sandercock, L. and A. Forsyth (1992) "Feminist Theory and Planning Theory: The Epistemological Linkages." *Planning Theory* 7-8:45-49.
- ScienceDirect. (2011) <http://www.sciencedirect.com/>. Accessed: 2011-04-04.
- Searle, J. R. (1995) *The Construction of Social Reality*. London: Penguin Books.
- Shove, E. (2003) "Converging conventions of comfort, cleanliness and convenience." *Journal of Consumer Policy* 26:395-418.
- Simonsen, K. (2005) *Byens mange ansigter: konstruktion af byen i praksis og fortælling* [The many faces of the city: construction of the city in praxis and storytelling]. Roskilde: Roskilde Universitetsforlag.
- Streatfeild, G. (1975) "Women's year and beyond." *Futures* 7:362-363.

- Svenfelt, Å. (2010) Two strategies for dealing with uncertainty in social-ecological systems. PhD thesis, Stockholm: KTH.
- Swyngedouw, E. (2007) "Impossible "Sustainability" and the Postpolitical Condition." in *The Sustainable Development Paradox: Urban Political Economy in the United States*, edited by Krueger, R. and D. Gibbs. New York: Guilford Press.
- The Earth Charter Initiative (2000) The Earth Charter. http://www.earthcharterinaction.org/invent/images/uploads/echarter_english.pdf. Accessed: 2011-04-06.
- Turner, R. L. and D. P. Wu (2002) *Environmental Justice and Environmental Racism: An Annotated Bibliography and General Overview, Focusing on U.S. Literature, 1996-2002*. Berkley: Institute of International Studies, University of California, Berkley.
- Verloo, M. and E. Lombardo (2007) "Contested Gender Equality and Policy Variety in Europe: Introducing a Critical Frame Analysis Approach." in *Multiple Meanings of Gender Equality: A Critical Frame Analysis of Gender Policies in Europe*, edited by Verloo, M. Budapest: CEU Press.
- Waite, G. (2005) "Doing Discourse Analysis." Pp. 163-191 in *Qualitative research methods in human geography*, edited by Hay, I. South Melbourne, Vic.: Oxford University Press.
- Walker, G. (2009) "Beyond Distribution and Proximity: Exploring the Multiple Spatialities of Environmental Justice." *Antipode* 41:614-636.
- Wangel, J. (2011) "Exploring social structures and agency in backcasting studies for sustainable development." *Technological Forecasting & Social Change* Article in press.
- White, R. (2008) *Crimes against nature: environmental criminology and ecological justice*. Abingdon: Willan Publishing.
- World Commission on Environment and Development (1987) *Our Common Future* Nairobi: United Nations Environment Programme.
- Young, I. M. (2002) "Lived Body vs. Gender: Reflections on Social Structure and Subjectivity." *Ratio: An International Journal of Analytic Philosophy* 15:410-428.
- Zimm, M. (2007) "Mellanrum och täthet. Ett utvecklingssamtal om staden med forskarna på KTH och Stockholms Stadsbyggnadskontor." Pp. 78-82 in *RUM – Arkitektur inredning och design*.