

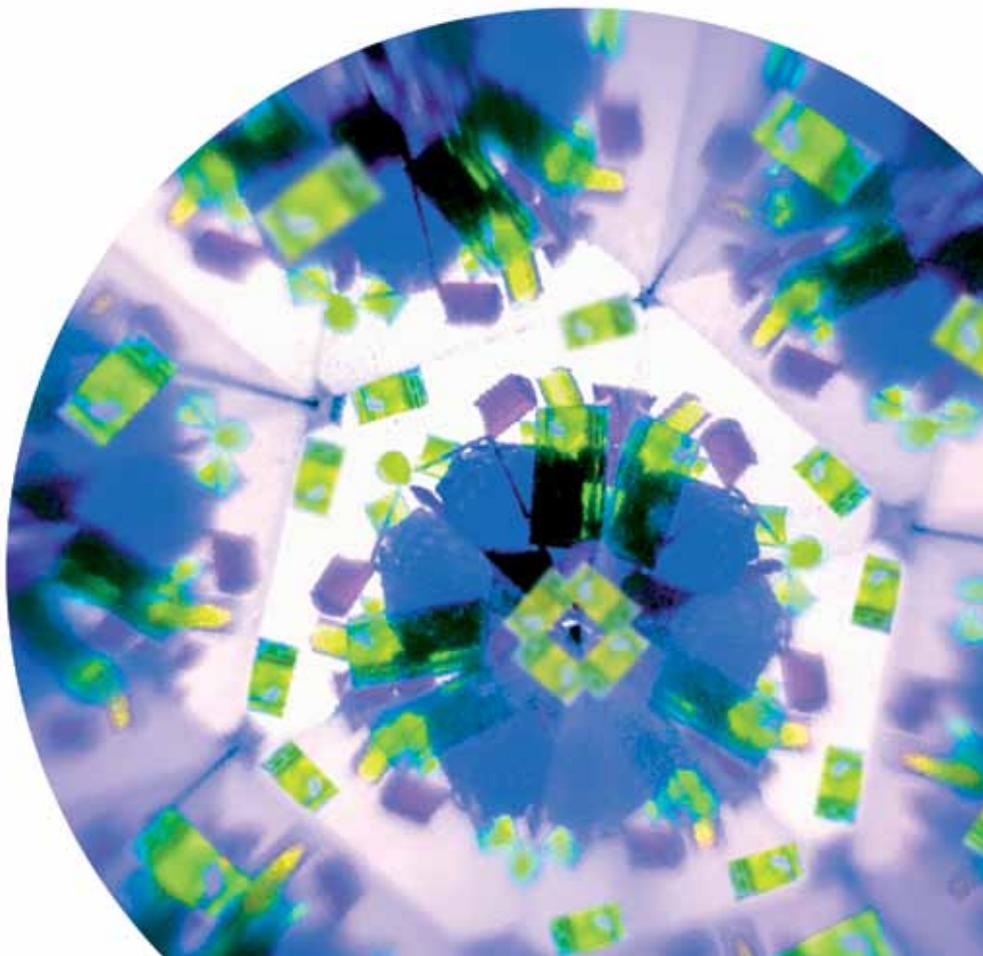


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VR 2012:08

PROMOTING INNOVATION

POLICIES, PRACTICES AND PROCEDURES

SUSANNE ANDERSSON, KARIN BERGLUND,
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VINNOVA is Sweden's innovation agency. Our mission is to promote sustainable growth by improving the conditions for innovation, as well as funding needs-driven research.

VINNOVA's vision is for Sweden to be a world-leading country in research and innovation, an attractive place in which to invest and conduct business. We promote collaborations between companies, universities, research institutes and the public sector. We do this by stimulating a greater use of research, by making long-term investment in strong research and innovation milieus and by developing catalytic meeting places. VINNOVA's activities also focus on strengthening international cooperation. In order to increase our impact, we are also dedicated to interacting with other research financiers and innovation-promoting organisations. Every year VINNOVA invests about SEK 2 billion in various initiatives.

VINNOVA is a Swedish government agency working under the Ministry of Enterprise, Energy and Communications and acts as the national contact agency for the EU Framework Programme for R&D. We are also the Swedish government's expert agency within the field of innovation policy. VINNOVA was founded in January 2001. About 200 people work here and we have offices in Stockholm and Brussels. Our Director General is Charlotte Brogren.

The **VINNOVA Report** series includes publications and reports, often by external authors, from programmes and projects that have received funding from VINNOVA. Includes also editorials related to VINNOVA's mission, by independent authors.

Promoting Innovation

Policies, Practices and Procedures

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Eds.

Foreword – The kaleidoscope effect

This anthology uses a gender perspective to analyse constraining structures in innovation systems. Focusing on mainstream policies as well as regional and organisational practices, it presents procedures, methods and methodologies to develop gender-aware, innovative organisations.

Fostering innovation requires ability to question what is taken for granted and perceived as the natural order. Challenging this order often requires a critical mind where a gender perspective can be useful. The experience of integrating a gender perspective can be likened to turning a kaleidoscope; the resulting shift in perspective causes new images and highlights new opportunities.

This anthology is the result of more than ten years' research and development work funded by VINNOVA and aimed at establishing a research field in gender and innovation. Ten years ago, there were few researchers and limited research focusing on this area. Today, the picture is different and this anthology presents the analyses of 31 researchers on how gender is a constraining structure within innovation systems. There is little doubt that integrating a gender perspective helps promoting innovation.

VINNOVA in November 2012

Charlotte Brogren
Director General

Klara Adolphson
Head of Organization and Management Department
Manufacturing and Working Life Division

Preface

This anthology is the result of an initiative taken in 2009 by Jennie Granat Thorslund to gather articles about gender and innovation. When I retired that year, she succeeded me as responsible for VINNOVA's work with gender and equal opportunities. Before that, for almost ten years, I had been engaged in forming a research field for gender and equal opportunities in accordance with VINNOVA's mission. At the time of my retirement, VINNOVA had established itself as an important founder of needs-driven research within the field of gender research for sustainable growth. This is the basis upon which this anthology rests.

VINNOVA's main task is to promote sustainable growth in Sweden by funding needs-driven research and the development of effective innovation systems. In addition to that, VINNOVA, like most governmental agencies, has a mission in connection to the political goal concerning equal opportunities. VINNOVA should "work for gender equality and support gender research within its field of mission". VINNOVA's general mission opens the way to the emergence of new ideas and innovation within new constellations and therefore fits well with integrating a gender perspective. Taken-for-granted norms and ideals about gender would be a hindrance to new thinking and the development of innovation; it is therefore necessary to question these.

Very soon after the establishment of VINNOVA in 2001, I was tasked with planning to fulfil VINNOVA's responsibility in gender equality and gender research. At that time, there were few gender researchers interested in innovation and growth and even fewer, if any, innovation systems researchers with knowledge about gender and the relevance of a gender perspective for innovations. A call for proposals in gender and innovation systems would not have interested the required number of applicants for a valid competition for grants.

In 2004, a call was opened asking for projects about "Gender perspectives on innovation systems and equal opportunities – R&D projects for sustainable growth". This call was a first step in raising interest in needs-driven research for sustainable growth among gender researchers. Twelve projects were funded through this call, most intending to present methods and models for raising awareness about gender within enterprises and organisations. One striking aspect of these projects was the relatively high number of enterprises taking part; this showed a growing insight among them about the importance of working with gender and equal opportunities for business. The political goal regarding equal opportunities had never included private enterprise and so previous development projects for equal opportunities had most often covered public organisations instead. For VINNOVA, enterprises were and still are very important, as they are one actor within the Triple Helix model of innovation systems.

With this call, a small group of gender researchers with an understanding of VINNOVA's mission was formed. The group was strengthened by seminars once or twice a year where the project members got to know each other and at the same time, VINNOVA's goals could be communicated to them. These seminars thus served to

support the development of a new research field. With this portfolio of projects, VINNOVA could cooperate with other organisations funding research into equal opportunities. Amongst other things, a webpage gathering information from four organisations about equal opportunities projects was created. VINNOVA took part in seminars during the political week in Almedalen together with these organisations. VINNOVA was a “player” in the gender and equal opportunities field but there were no plans for further calls within the field that we had begun to know as Gender and Innovation.

In 2008, however, an opportunity turned up. Vinnova had programmes for “strong milieus” on an innovations systems basis (university, enterprise and the public sector); the VINNOVA Centres of Excellence and the VINNOVA growth centres. A large number of initiatives were taken in 2008 aimed at strengthening these centres and I suggested a call for a “Gender Perspective to Strengthen Strong Milieus” which immediately was approved by management. One important aspect of the call was the ownership of the projects. Applications were to come from the centre leaders, not from gender researchers. The centres were expected to grow stronger in their normal tasks, i.e. developing innovations and growth; not just within equal opportunities as such, but through deeper gender knowledge. Another important aspect was that these centres were granted funding for ten years, assuming they passed the recurrent evaluations. A gender project within these centres which normally lasted for three years could therefore have an impact even after the project itself had come to an end.

The intention of the TIGER call was to tie gender researchers to innovation milieus and raise knowledge on both sides as well as contributing to growth i.e. innovations. Another 10 projects were started and the knowledge to be gained was now much closer to gender and innovation than during the first call.

In 2010, Jennie Granat Thorslund took over my responsibilities for VINNOVA’s work with gender and equal opportunities. With her deeper theoretical knowledge of innovation systems combined with her experience working for equal opportunities, she took initiatives to move the TIGER projects to the international innovation systems milieus by participating in the Triple Helix conference in Madrid 2010. The idea of an anthology about gender and innovation was raised during that conference.

Jennie took a very active part in forming the anthology by serving as one of its three editors. The two other editors were Ewa Gunnarsson and Elisabeth Sundin. In the spring of 2011 Jennie suffered a major stroke from which she has not yet recovered enough to resume her role on the editing committee. Two new members, Susanne Andersson and Karin Berglund, were thus brought into the editors’ group. Through the intense, competent work of the editors it now becomes possible to present this anthology. VINNOVA has thereby shown itself an important player within the field of gender and innovation and not just in Sweden.

Ulla Göranson

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Introduction

*Susanne Andersson, Karin Berglund, Jennie Granat Thorslund, Ewa Gunnarsson and Elisabeth Sundin**

Innovation – on all agendas?

Innovation has become an increasingly common and strategic topic in politics, research and the public debate all over the world. In politics we see innovations topping the European Union agenda, as illustrated by 2009, declared as “the year of creativity and innovation as a prerequisite for sustainable growth”. The Swedish Governmental Agency for Innovation Systems, VINNOVA, has been tasked with the responsibility of developing and implementing an adequate policy within the framework of the EU agenda. In implementing this complex policy agenda, cooperation has been seen as a key to strengthening a closer cooperation between public and private sectors and research in universities (see the discussions on Triple Helix for example). This idea of practitioners’ involvement in research is well in line with the tradition of interactive research (cf. Johannisson, Gunnarsson and Stjernberg, 2008, Brulin and Svensson, 2012). Involving different stakeholders in the research process ensures that different perspectives are accounted for and is therefore seen to result in a more socially robust knowledge production. This lays the ground for the emergence of innovative practices (Novotny, Scott and Gibbons, 2001).

Despite the success of the innovation concept it has some shortcomings, one of which is neglect of the gender perspective. Dimensions such as gender must be elaborated in order to fully understand how innovation can be promoted in contemporary society. In this context we want to underline the following three themes – *policy*, *practice* and *procedures*. Policy represents the guidelines on how innovation should be done, practices illustrate the everyday routine in regional and organisational contexts which can become more innovative and procedures demand its explanation. In this book, procedures will be referenced to as the various strands of methods (with their methodological and theoretical particularities) combined in multifaceted ways but with the common purpose of increasing innovativeness. We acknowledge that it may be difficult to distinguish between policy, procedures and practice and that from one aspect we can always discern the other two. Thus, there is a point in laying them bare in order to understand each of their limitations and possibilities for creating innovation. For instance, looking at a policy text we read about the practices that will be changed by using procedures. Conversely, a policy text in itself is not enough; procedures must be adopted and used in practice by members of an organisational context if they are to become part of everyday routine.

To sum up, innovation has been placed on the overall policy agenda. However whether this means that innovation is on all agendas needs to be scrutinised from a gender perspective. This will be analysed in the light of policy, practice and procedures.

Innovation – a buzzword not drawing on its full potential

Overall demand for innovation has turned innovation into a positive buzzword. This can be understood from the notion of competition, which is increasing discernibly in the global and international arenas. Competition is also a key concept in the New Public Management context as is the aim to change the public sector. These dimensions are depicted throughout this book, from the school environment to food clusters and industrial networks. Competition is also a cornerstone of a market society, in which individuals (entrepreneurs) and organisations compete with each other to make new achievements. The assumption is that those with the most resources (skills, intelligence, abilities etc.) are those who succeed. The ultimate resource is novelty, as it may create new products and services for the market. This explains why innovation has been turned into the utmost competitive means of winning the game. Elaborating the production processes within and between organisations is an alternative way of winning the competitive game. As will be illustrated and problematised in this book, competition is visible not only among companies and industries, but also between policies and programmes.

However, as pointed out by Burr (1995: 33) competitiveness and greed can be understood as “products of the culture and economic structure in which we live rather than as features of an essential human nature”. This means that as long as competition stays fundamental we continue to “create” competitiveness according to a model of constructing differences among people, industries, businesses, values and of course amongst innovations too. Whilst many “things” can be new and therefore called innovations, it is anticipated that some will bring about greater competitive advantage than others. Among the different kinds, the technological innovation and medical have come to be highest ranked. This may not so surprising since we are seen to inhabit a technological society which has led to an increasing emphasis on performativity, at least in the sense of productivity, functionality, and efficiency (Lyotard, 1979/2002). Innovation, technology and competition thus fit together perfectly, emphasising the importance of research and knowledge production. However, the issue is no longer whether knowledge is true or not; it is a matter of whether such knowledge is useful in producing more and better innovations. This, in turn, has consequences for what kind of ‘useable’ knowledge/innovation is privileged. The current emphasis is on technical and economic rationales and marginalises other potential uses. According to the rationale of Sveiby et al (2012), there are unintended consequences of mainstream understandings of innovation, with “commercial waste, ineffective policy and human suffering caused by the way that policymakers have regulated innovation and corpora-

tions have implemented it” (Ibid:11). Our interest in this book lies in highlighting the role of gender in creating unintended consequences and contributing to unintended solutions when the way innovation is understood crosses mainstream knowledge boundaries.

Although many innovations have negative consequences (at least from some perspectives) this is disregarded and silenced. Irrespective of which reflected and problematised view of innovation is held up, they seem to vanish in the positive rhetoric and are blurred by the many different voices and articulations in the united call for innovation. In these respects, the innovation concept has similarities with entrepreneurship. Firstly, both concepts share their legacy from Schumpeter (1934), according to whom entrepreneurship and innovation are independently connected and inter-linked. Hence, without innovation, entrepreneurship has unclear significance to individuals, organisations and the economy and vice versa. Thus, both innovation and entrepreneurship convey positive meaning. For instance, it has been suggested that entrepreneurship has become the “story of creation” for modern society (Berglund and Johansson, 2007a), with the entrepreneur as “saviour for the creative age” (Sørensen, 2008) bringing hope of a better world (Cremin, 2011). Innovation fits nicely into this story, “built on the dominant assumption that ‘everything is good’ regardless of consequences” (Sveiby et al. 2012: 1). For some time, entrepreneurship has been criticised for producing knowledge about the entrepreneur that is gender-biased, ethnocentrically determined and exclusive (cf. Sundin and Holmquist, 1989, Ogbor, 2000; Holmquist and Sundin, 2002; Ahl, 2004; Bruni, Gherardi and Poggio, 2004; Berglund and Johansson, 2007b; Bill et al., 2010). However, innovation seems harder to call into question. Some exceptional examples appear in *Gender and Innovation*, a book by Danilda and Granat Thorslund (2010), many of the articles referenced in these chapters and in the recently published book *Challenging the Innovation Paradigm* by Sveiby et al. (2012). Alongside these, we hope to contribute to a constructive rethink and rewrite of how innovation might be perceived when liberated from a normative understanding in terms of ‘goodness’.

The dictionary definition of innovation is “to renew”, “to create something new” or “something that is new”. It is also emphasised that inventions are not innovations until they reach the market. This definition is also used in research, or rather in scientific discourse. Discourse here refers to a set of meanings, metaphors, representations, images, stories and statements, which jointly produce a particular version of the world (e.g. Foucault, 1971/1993; Laclau and Mouffe, 1985; Burr, 1995). Thus conversation, language and text are not neutral, transparent media; rather they generate effects, since they both define boundaries and constitute the resources for what it is possible to say and do. In short, the concept of innovation produces a particular version of the world. Let us take a closer, more critical look at how this version is constructed.

Innovation from a discourse perspective

Even if the idea is that innovation includes everyone in contemporary society, our historically tinted spectacles bring a skewed understanding of what constitutes innovation. For a long time, innovation was seen mainly as the number of patents a company had achieved. In this vein, innovation research still relates primarily to industry and technology, technology and natural sciences are prioritised as politically important. The same applies in everyday discourse, where innovation is related mainly to technology.

Recently however, social innovation has been acknowledged as important to both individuals and societies. The ideas on social innovation can be seen as a reaction to innovation as the rational way of recreating the market society. One important reason for highlighting social innovation has to do with the need for innovation and innovative solutions in welfare society contexts, other than the traditional industrial setting with its focus on technological solutions. Another connection to the welfare state is emphasised by some debaters and researchers who argue that the deconstruction of the welfare state demands new solutions to social needs and societal problems, which are strongly politicised. The public sector and its focus on healthcare and the search for education are contexts in which innovations are visible in new ways of organising and providing new services (see Sundin 2012, Nählinder et al 2012). This demand may be an opening for more extensive integration of a gender perspective in relation to innovation as well as for reconceptualising innovation.

Hence, in innovation discourse we do not only relate to “innovation”, but also to “gendered innovation”, and “social innovation”. However, innovation per se does not provide us with a means of understanding social dimensions, either as part of the process or as the result of that process. Not only are particular social groups excluded, it should also be recognised that some values (such as economic and technological ones) are ranked above others, such as social inclusion, egalitarianism, and democracy. While innovation is the mainstream, more dominant, fixed, and taken-for-granted concept, the notion of gendered and social innovation nevertheless constitutes a version which tries to emphasise something else; something missing in mainstream discussions on innovation. Recognising these other versions of innovation discourse is vital since this provides a justifiable place in policy, practice and procedures for all kinds of novelty. Thus, to understand practices and procedures it is important to highlight how assumptions about innovation are made and how they create limitations and exclusions.

Excluding effects

Following the reasoning above, the innovation discourse can be seen as both inclusive and exclusive, comprising a complex web of possibilities and closures. It is inclusive in the sense that it refers to something new and embraces the idea that anyone can be part of processes which bring the new into existence. However it has also been recog-

nised that innovation excludes women and men in multifaceted ways. Innovation has been related to industry, technology, natural science, and constructed as a gender and ethnocentrically biased concept. Research into innovation and gender has highlighted how the dominating image of innovation and innovators builds on stereotypical notions of gender; promoting men and certain forms of masculinity as the norm (cf. Blake & Hanson 2005, Pettersson 2007, Nyberg 2009, Lindberg 2012). Furthermore, innovation policy has been criticised for being exclusive, giving priority to a narrow range of actors following a distinct gender pattern, reproducing social exclusion, strengthening traditional masculine gender-marked areas and thereby failing to identify promising future innovative areas.

Even though innovations developed by women are not part of the mainstream understandings, this does not mean that they do not exist. On the contrary, feminist studies are full of stories of women, made invisible, whose actions have been crucial to innovative practices. Grace Hopper, the founder of programming language, can be mentioned as one example (Beyer, 2009). However, it has also been illustrated that women are not only disregarded as innovators, but feminine gender-marked sectors are also made invisible even though men are part of producing innovations in these sectors (Nyberg, 2009). Hence, in innovation, men count as long as the sector is masculine gender-marked.

This prioritisation of men and (certain) masculinities within research and policy on innovation is founded upon a dichotomy which separates the categories of “men” and “masculinity” from the categories of “women” and “femininity”; the former are regarded as crucial to innovation, whilst the latter are not. In short, a man with an idea on how a high-tech product can effect renewal processes in a traditional industry fits better as innovation than an ethnic minority woman with an idea on how a process may bring about social justice in society. Innovations with the potential to reduce poverty and combat inequalities may be easily excluded since they seem unclear (and perhaps also incomprehensible) in relation to what has traditionally been presented as innovation. Thus, it is easy to dismiss promising innovations or, for that matter, entrepreneurial men and women with innovative ideas that do not “fit” according to traditional understandings. Thus the innovation discourse may itself be an obstacle to the release of agency and action. In the opposite direction, using the concept of innovation to describe phenomena other than competition, growth and technology may be an innovation in itself. In that sense, this book is promoting innovation.

By way of expanding the discourse, innovation can be challenged, questioned, and altered; embracing the social idea as vital to making innovation. Arguably, this gives those interested in innovation a new filter through which to view it. It may be regarded as: a service, a process or something other than just a technical product of the actors involved; embedded in relational and learning processes, rather than as part of an anonymous system; emphasising “social” as a core value, rather than the side-effect of

economic growth. In conclusion then, some statements must be made regarding the (implicit or explicit) assumptions about innovation in the chapters of this book:

- Innovation is on both the political, public and research agenda.
- Innovation is accorded a positive understanding.
- Innovation as negative changes or changes with negative dimensions (at least for some actors or actor groups, or from some perspectives) are neglected.
- Innovation is carelessly equated with entrepreneurship.
- Innovation is given too restricted a meaning.
- Politics and research into innovation is gender-blind.
- We will add one more statement to these – doing gender is an adequate perspective in organisational studies when analysing what constrains and what can promote the development of innovations, as elaborated below.

Innovation – why gender matters

In order to develop innovations, it is necessary to be able to question what is taken for granted, what is perceived as the natural order and to find new pathways to things. Challenging the “natural order”, requires a critical perspective and a gender perspective can then be helpful (Danilda & Granat Thorslund 2011). On an overarching level, the gender perspective challenges the traditional concept of innovation. However, it can also be seen as leveraging innovation and as an impetus in promoting a paradigm shift in innovation science (Gunnarsson, 2011; Ghaye and Gunnarsson, 2009). This would contribute to a knowledge transcending the normative boundaries of today’s innovation science. This knowledge moves beyond what the philosopher Kamarck Minnich (1990) describes in her book *Transforming Knowledge* as “add women and stir”. Arguably, this is an inadequate way of solving the problem of an absent gender perspective.

What characterises the multifaceted and multidisciplinary research field of gender studies is the importance of problematising all the assumptions made (implicitly or explicitly) about women and men (Thurén, 2003). The focus is therefore directed at such questions as; who is seen as a “man” or a “woman”? What is perceived as “female” or “male”? How can we understand the gendering of everything from particular people (and their bodies), artefacts, organisations, to certain descriptions of the world which have come to represent a particular gender? And not least of all in this book, what are the consequences of gendering innovations?

If these questions are new, they may appear as difficult to come to grips with and they might even be seen as provocative. Putting on the “gender glasses” illustrates how difficult it can be to create distance to everyday life and the practices we are involved in. Using the metaphor of glasses bring about the assumptions that ‘viewing things from a gender perspective is easy’. Nothing could be more wrong. Applying a gender perspective is in itself an achievement, something that is acquired. That takes training, patience and the ability to determine one’s own stance. In this process, indi-

viduals start to see new things, look differently at their surroundings and see solutions from other angles. This process resembles innovation insofar as it unfolds reality in novel ways. This is what the innovation procedures seek to attain.

In the previous section we argued that innovation may be superficially regarded as open and inclusive. However a closer look reveals discernible exclusive effects which narrow the potential that innovation can bring about in contemporary society. For that reason, promoting innovation is discussed from a gender perspective. The purpose is to highlight the many possibilities for future innovative areas which we may stumble upon today, but which are yet to be recognisable in its gendered position.

Arguably these areas benefit not only a particular group (women), but also industries currently struggling with the transformation from a product-intensive society to one requiring knowledge of services and processes. Moreover, getting to know innovation from a gender perspective, we come close to the *innovating* which is the emergence of innovative processes. Arguably, this knowledge benefits all those interested in promoting innovation irrespective of position, gender, and industry. This requires reflection on the concept of innovation; how it is addressed in policy and practice, as well as how we can understand the procedures which actually promote innovation in contemporary society and organisations.

Gendered organisations

The development of innovations is always taking place in an organisational context through organising processes. Acker (1992), who has influenced many Nordic researchers and authors in this anthology, argues that gender is a constitutive element in all organising. Gender is something that people “do”, intertwined with everyday life in workplaces. It will therefore both influence and be influenced by the organisational context and thus the innovative processes. Acker’s research focuses on the processes forming a gender order and can be placed within the research field known in the international literature as “doing gender”. The “doing gender perspective” was originally developed and based on work by West and Zimmerman (1987) and Fenstermaker and West (2002). This tradition embraces very different orientations in relation to scientific views, emanating from ethnomethodological, cultural, processual and performative views¹. Some advantages with the doing gender perspective, according to Korvajärvi (1998), are that it conveys a sense of creation, focuses everyday practices, stability and change, allows pluralism and variation and finally makes gender patterns and practices visible. Additionally, Acker’s theoretical model makes it possible to highlight quantitative as well as qualitative dimensions of an organisational context.

To be an innovative organisation, it is necessary to be able to reflect on one’s own culture; the norms, values and ideals which constrain development. Here Acker’s

¹ For a typology see Korvajärvi, (1998), Kvanne (1998) and for a Nordic overview Gunnarsson, Andersson, Vänje Rosell, Lehto and Salminen-Karlsson (eds. 2003). The common thread in the different perspectives is that gender is seen as an activity and an interactive action, done differently in various settings.

model can help systematise necessary reflection, learning and development processes whilst focusing on structures, symbols/notions/ideals, interaction and identity work. This creates a more appropriate platform for change processes for the development of gender-aware, innovative organisations and innovative systems.

Gender mainstreaming

Over the last few years, various measures and procedures have been initiated aiming at *gender mainstreaming* innovation systems and Triple Helix constellations. The main challenge has been to open up these formations to competences and innovations among a broader spectrum of actors and areas, reaching beyond segregating gender constructions. The aim of these is to contribute to the political goal of sustainable growth, with the main assumption that this requires inclusion of the whole society. Gender mainstreaming is one of the strategies for integrating the issue of gender equality into all policy areas, scrutinising social constructions of gender and their implications for women and men. The initiatives have very great potential, so we suggest that mainstreaming has the potential to be an innovation in process and organisation and thus also in other dimensions.

Acker's model and contextually tailored versions of it have served as central platforms for many current projects as well as in the TIGER programme² projects aiming at developing gender-aware and innovative organisations. In many of these projects, the doing gender perspective has been beneficially combined with other theoretical perspectives (such as learning theory from action research) with the aim of both strengthening the possibility of sustainability in the change and learning processes in organisational contexts and to promote innovation. The procedures used in this type of research and development projects will be elaborated upon further in the contributions to Part III of this book.

The content of the anthology

The anthology consists of three parts. The first includes contributions analysing the gendered structures of innovation policies and programmes and scrutinising the prospect of policy measures built on less segregating and hierarchical gender constructions. This part also includes strategies and initiatives for mainstreaming gender in innovation systems and Triple Helix constellations on the national or regional level. The second part consists of contributions dealing with the relationship between entrepreneurship, innovation and innovation systems in regional and organisational contexts. The organisational perspective is a common factor in these contributions.

² The lack of a gender perspective and gender equality in the major Swedish innovation systems financed by VINNOVA led to its announcement in 2008 of the TIGER programme for applied gender research for strong research- and innovation milieus. (TIGER is the acronym that derives from the Swedish name of the call). Many contributions in this anthology are from projects financed by the TIGER programme.

The third section of the anthology concerns gender mainstreaming strategies and methods/methodology used when organising innovation systems in different milieus. It deals with issues such as how to achieve a successful and sustainable gender mainstreamed innovation system and how to handle different forms of resistance. Part III highlights contributions focusing on how innovating is organised in relation to innovation systems. As the reader will discover, there is no obvious way of locating the contributions in one part or the other as everything is interconnected. Our decisions have been guided by the main focus chosen by the authors.

The overall aim of this anthology in the field of gender, innovation, organisation and entrepreneurship is to highlight and promote an important, emerging research field. It will help meet a need with wide policy implications. Hence, we see no restrictions if the contribution has been published in conference proceedings or the like. The important aim here is to make the field visible to a broader spectrum of researchers, policymakers and politicians.

* The authors appear in alphabetical order as all authors have contributed equally to the introduction.

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PART I: Policies for Innovation

Susanne Andersson and Karin Berglund

The first part of this book addresses policies for innovation. By “policy” we mean broadly the guidelines under which innovation is done. More precisely, this relates to the courses of action and funding priorities made by supranational, national and regional governmental bodies and which we are interested in examining more closely. Whilst all contributions – sometimes explicitly, at other times more implicitly – share the view of policy as a means of change, they simultaneously acknowledge that changing something does not alter gendered relationships. Therefore, the question formulated by Bacchi (1999), of “what is the problem represented to be?” forms a background to the contributions in this section. The primary purpose of all the chapters is to draw attention to the ongoing production of meaning in policy texts and debates. This will be reported in five contributions which address the production of meaning in policy from different aspects. The first contribution looks at what unites and separates the growth policies, labelled as “innovation” and “entrepreneurship”, on a supranational and national level. The next contribution looks in more detail at how innovation policy constructs masculinities. The third contributions scrutinise the regional level and identify different competing discourses. These three chapters focus on the Swedish context, whilst the two concluding chapters addresses policy issues in two other Scandinavian countries, Finland and Norway. The contribution addressing the Finnish context looks into the energy market, whilst the Norwegian example examines what happens when gender (in terms of women) is addressed in a programme aiming to implement innovation on a regional level. To sum up, these contributions jointly provide a rich picture of how innovation policies are gendered on different levels and in different contexts. However they give suggestions as to how this could be dealt with.

The first contribution focuses on whether innovation and entrepreneurship policies can be said to be innovative from a gender perspective. In short: do innovation and entrepreneurship policies adapt to, challenge, or even transform the gender system? “The gender system” is referenced here as a theoretical concept which recognises how men and women are horizontally and vertically separated in society. The authors, Karin Berglund and Jennie Granat Thorslund, examine two significant policy texts, representing entrepreneurship policy on the one hand and innovation policy on the other. Policy research in the field of entrepreneurship addresses the need to provide a more entrepreneurial and innovative way of creating policy and bridges entrepreneurship and innovation policy in a way that leverages an outcome. Taking this as a starting point, a discourse analysis will illustrate that these policies are constructed differ-

ently. Whilst entrepreneurship focuses mainly on the individual (who is not just anybody, but a masculine gendered person who creates new businesses), human beings are surprisingly non-existent in innovation policy. Instead, innovation policy addresses technology, research and development and the aggregated level, emphasising the need to stimulate masculine-dominated sectors. Despite the differences, innovation and entrepreneurship policy share two significant features. They both primarily address economic growth (rather than other kinds of societal change) and are constructed against a background of combined masculinities. Thus, entrepreneurship and innovation policy neither challenges nor transforms the gender system. Rather, it adapts to old-fashioned gender norms which become consolidated in the policy discourse on innovation and entrepreneurship.

The next contribution, *A Striking Pattern – Co-construction of Innovation, Men and Masculinity in Sweden’s Innovation Policy*, is authored by Malin Lindberg. This chapter explores the mutual interconnectedness of gender and innovation in innovation policy, using Sweden as an empirical case. Firstly, the priority pattern of actors and industries in innovation policy programmes and strategies is examined. Secondly, the link from the priority pattern to men and masculinities is scrutinised. Thirdly, the dynamics of this link are discussed in relation to the prospects of a policy not based on segregating and hierarchical gender constructions. It is exposed that the groups of Basic and Manufacturing Industries and New Technologies (both primarily dominated by men as employees and entrepreneurs) have been given high priority in Swedish innovation policy, whilst the group of Service and Experience Industries (employing mostly women) has been given a low priority. On a symbolic level, the two priority groups can be connected to two forms of masculinities: one based on physical strength and mechanical skills and the other on a calculating rationality among technological experts. The concept of co-construction of gender and innovation is introduced, highlighting how gender/masculinity and innovation are mutually constructed within the innovation policy when the pattern of prioritisation coincides with the gender-segregated labour market. Three different strategies are suggested which could be combined to change these gendered patterns: inclusion, reversal and displacement.

In the third text, Chris Hudson asks whether there are “*New Subject Positions for Non-Traditional Actors or Business-as-Usual in the Strong Region Discourse?*” Swedish regional policy has moved from being a highly centralised, national government regional policy aimed at levelling out territorial differences and aiding problem regions to a more decentralised, neo-liberal policy focusing on promoting growth in the whole country. In this new policy, emphasis is placed on the need for increased entrepreneurship and the development of innovation systems in order to facilitate the region’s economic growth so that it becomes a strong region. Applying Carol Bacchi’s What’s the Problem? approach to government policy documents and reports on regional policy between 1993 and 2010, this chapter analyses the gendered consequences of the strong region discourse and asks what spaces and subject positions are being

created for those who do not fit the strong region image? Who is constructed as the entrepreneurial citizen capable of promoting innovation? The chapter identifies several competing discourses at work: the Strong Region discourse, the Gender-Equality for Growth discourse, and the Women as a Problem in Achieving Regional Development discourse. It argues that these are (somewhat paradoxically) complementary and contradictory, both opening and closing spaces and opportunities for subjectivities for women and other “Others”, particularly when gender, ethnicity and age intersect. It concludes that the male norm underlying the construction of entrepreneurship and innovation still continues to dominate and that the networks and clusters which women engage in are generally not ascribed a place in innovation systems and consequently not defined as “innovation”. Nevertheless, although it still appears to be business as usual, potential may be lurking in the cracks between the representations of women, immigrants and young people as both problems and assets. These can provide opportunities to challenge the dominant, gendered, radicalised and sexualised power relationships in regional policy and the construction of innovation as “masculine”.

In the fourth chapter, Mari Ratinen examines *Innovation and Energy Policies* and asks the provocative question, “*Only a few women, so what?*” she scrutinises the electricity markets, whose ongoing restructurings parallel the technological revolution. However, regardless of apparent demand for innovation, the pace of the changes is rather slow. This article addresses the reasons for this slowness by analysing the sameness in terms of gender of those involved in the policy processes and outcomes. The focus is on innovation and energy policies, two inherently interlinked policies which influence liberalisation of the markets. A typology is presented for evaluating sameness in terms of degree of inclusion in policy processes and policy outcomes. A qualitative case study of Finland and Sweden is then presented. In Finland, few women are included in the processes or outcomes. In Sweden, the processes are more parliamentary and women as an electorate are included in the processes. However, even in Sweden, only a few women are included in the outcomes. Based on the findings presented here it seems that similarities among actors persist in both Finland and Sweden and that these have slowed down the liberalisation and innovativeness of the electricity markets.

Lastly, Trine Kvidal and Elisabet Ljunggren give an insight to what it means to implement innovation in a regional context. In their chapter *Implementing a Gender Perspective in an Innovation Policy Programme: More Innovation or Ambivalence and Uncertainty?* they examine what happens in practice when gender is introduced in an innovation policy programme financed by the Norwegian innovation programme, VRI. VRI aims to promote innovation, knowledge development and value creation through regional co-operation, thereby supporting research and trade development efforts in the regions. The authors have looked at the national, regional and project level and found that gender is articulated as a non-issue with regard to innovation processes. On the national level, gender perspective demands are vague and lacking in

explicit rationale. On the regional level, there are struggles and competing ideas associated with articulations of gender. Several gender perspective rationales are at play, including a rationale of “political correctness.” At project level, the “gender thing” was solved by supporting a (non-relevant in terms of innovation) women’s project. This allowed gender to be ticked off when reporting. The authors conclude that the externally-oriented rationale can undermine lasting efforts to change gender inequalities. However, it also has the potential to become a first step towards a proper focus on gender in innovation policy.

To sum up this introduction to the policy chapters, it is clear that innovation has been placed on the overall policy agenda. However, whilst some things can be called innovative, gender is not a part of this. Rather, an improvement in inequality and gendered relations and conditions seems to be at the expense of a how policy prescribes the development of new ideas, and their implementation in practice. Hence, recognising gender highlights how gender-biased policy meanings of innovation are maintained and how they can be eased in future generations of innovation policies.

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Innovative policies? - Entrepreneurship and Innovation Policy from a Gender Perspective

Karin Berglund and Jennie Granat Thorslund

Abstract

Innovation and entrepreneurship are no longer two words that only assist in describing societal phenomena of “newness”, “change” and “diffusion”; they have also grown into important policy areas for assisting the European Union Member States to establish conditions for creating economic growth, new jobs and social cohesion. Our interest lies in understanding the gender dimension of innovation and entrepreneurship policy. Do entrepreneurship and innovation policies consolidate, adapt to, challenge, or even transform the gender system? The gender system is referred to here as a theoretical concept which recognises how men and women are separated in society, horizontally as well as vertically. This chapter provides a discourse analysis of two texts within the framework of the Lisbon Strategy - Innovative Sweden (2004) and the Green Paper of Entrepreneurship (European Commission, 2003), with the aim of looking into how innovation and entrepreneurship policies are gendered.

Keywords: discourse, gender, policy, innovation, entrepreneurship

Introduction

In 2000, the heads of state and government in Europe “committed themselves to making the European Union the most dynamic and competitive knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs, greater social cohesion and respect for the environment” (Lisbon European Council, 2000). This is commonly referred to as “the Lisbon Strategy”. In embarking on this strategy, entrepreneurship was given high priority on the EU policy agenda. It was proffered as a solution for creating not only economic growth and new jobs but also social cohesion. Although problems such as industrial restructuring, unemployment and social exclusion appear complex and difficult to handle, entrepreneurship was nevertheless (or perhaps, for that reason) seen as an important force which mobilises humans’ ability to take action, giving wo(men) space and control in the market game. As part of this initiative, the Green Paper on Entrepreneurship was presented in 2003, followed by an action plan in 2004 which concluded that “entrepreneurship is a major driver of innovation, competitiveness and growth (European Commission, 2004a: 3).

In 2005, the Commission hesitated about moving ahead with the Lisbon Strategy as it was made clear that progress had, at best, been mixed. While many of the fundamental conditions were in place, there had not been enough delivery at European or

national level (European Commission, 2005: 3 ff.). Consequently, a gap was disclosed between what was stated in policy and what policy programmes were delivered. It was acknowledged that the explanation for this gap was not only a matter of difficult economic conditions since the strategy was launched, but also a conflicting and overloaded policy agenda. Nevertheless, the Commission proposed a new start focusing their efforts around two principal tasks: delivering stronger, lasting growth and creating more and better jobs. In a follow-up to the Lisbon Strategy, the EU launched a new ten-year strategy, presented in 2010 as Europe 2020. The new keyword that appeared was “innovation” with a focus on creating a European strategy for “smart, sustainable and inclusive growth” (European Commission, 2010). Thus, the actions falling under this strategy were to reinforce the Union’s potential to achieve and further develop our environmental and social objectives, emphasising the need for sustainable development and social objectives. In our interpretation, this includes gender and equality aspects.

Hence, “innovation” and “entrepreneurship” are no longer only useful in describing societal phenomena of “newness”, “change” and “diffusion”; they have also grown into important policy areas for assisting European Union Member States to establish conditions for creating economic growth, new jobs and social cohesion. In short: policy implies “doing things” with entrepreneurship and innovation. Both concepts have turned into overall policy keywords for addressing problems which are seen as necessary for contemporary society to tackle. Consequently, particular problems (e.g. unemployment, competitiveness, social inclusion, growth) find their solutions in particular policy measures (e.g. innovation, entrepreneurship).

Our interest lies in understanding the gender dimension of innovation and entrepreneurship policy. Do entrepreneurship and innovation policies consolidate, adapt to, challenge, or even transform the gender system? The gender system is referred to here as a theoretical concept which recognises how men and women are separated in society, horizontally as well as vertically (e.g. Hirdman, 1990, Wahl et al., 2001, Thurén, 2003). Taking Sweden as an example, the horizontal level teaches us that men and women are active within different sectors (Statistic Sweden, 2008). The vertical separation emphasises how male and women-dominated sectors are valued differently (see Lindgren, 2008). This is reflected in a continuous discussion on the pay gap between men and woman, as well as between women and male-dominated sectors.

Applying the notion of a gender system to innovation and entrepreneurship in contemporary society, high-tech firms (mainly populated by men and connoted by masculinity) are easily related to innovation, whereas the public sector (mainly populated by women and connoted by femininity) is often made invisible (cf. Sundin, 2004). This does not mean that women are not innovative and entrepreneurial in the public sector, but that everyday assumptions on gender, entrepreneurship and innovation - referred to as discourse - makes them invisible. Moreover, the scientific discourse constructs them as ‘insufficient’ or ‘lesser’, at least when it comes to innovation and entrepreneurship

(Ahl, 2004). This has also laid the basis for policy programmes specifically focusing on strengthening the entrepreneurial and innovative capability among women, but also for asking why there are no women in male-dominated sectors, which are viewed as innovative. See, for example, Sundin's chapter in this book on promoting entrepreneurship in the women-dominated healthcare sector, and Scholten et al.'s chapter on promoting gender awareness in a masculine-dominated innovation industry. Thus, when it comes to equality, it can be seen that innovation and entrepreneurship policies face major challenges in their ambition to create a strategy for "smart, sustainable and inclusive growth" (European Commission, 2010).

The texts of interest in this chapter are both situated within the framework of the Lisbon Strategy - *Innovative Sweden* (2004) and the *Green Paper on Entrepreneurship* (European Commission, 2003). These two documents can be seen as examples of a "discourse community" of growth policy, echoing other discourses of economic growth. We acknowledge that there may equally be policy texts framing entrepreneurship and innovation in other ways than the texts scrutinised in this chapter. Nevertheless, these are two examples of how entrepreneurship and innovation policy is constructed, on an EU policy level and on the national Swedish level. Analysing the two policies documents therefore facilitates discussion on how innovation and entrepreneurship is constructed from a gender perspective, as well as scrutiny of the ways in which these two texts echo each other. The approach is explorative and, rather than coming up with a clear-cut answer we hope to stumble upon incongruities and oddities which benefit the process of posing new questions leading to how entrepreneurship and innovation policy is being gendered. The purpose of this chapter is thus to gain a gender understanding of entrepreneurship and innovation policy, as separate policies but also as entwined discursive practices. The question posed is whether entrepreneurship and innovation policies consolidate, adapt to, challenge or even transform the gender system?

Policies for economic growth are then discussed, followed by a section in which innovation and entrepreneurship is scrutinised from a gender perspective. The method used is discourse analysis, which is presented, before the policy discourses of innovation and entrepreneurship are delineated from the documents analysed. Finally we will discuss the gender aspects of entrepreneurship and innovation policy. Are they really the key to the smart, sustainable and inclusive growth that is called for in contemporary society?

Polices for economic growth

Tracing the theoretical relationship between entrepreneurship and innovation to Schumpeter (1934), the actor in realising ideas is seen both as the innovator who invents the idea and as the entrepreneur, the founder of the business who launches the product onto the market. During the last century, research on innovation and entrepreneurship has developed in two parallel, albeit somewhat different, paths. While inno-

vation research has discussed innovation as a system, emphasising a structural level (e.g. Lundvall 2006, Lundvall, 1992, Edquist, 1997), entrepreneurship theory has been more interested in those who are realising ideas from which our society can benefit (e.g. Lundström, 2005). The same separation appears to occur in policymaking where there is one policy for innovation and another one for entrepreneurship. This is also apparent in the context of supporting entrepreneurship and innovation in Sweden where two separate governmental agencies are responsible; one for supporting entrepreneurship (the Swedish Agency for Economic and Regional Growth) and the other for supporting innovation (the Swedish Governmental Agency for Innovation Systems). Together with regional actors (e.g. regional development councils and county administrative boards) these organisations generate a setting in which innovation and entrepreneurship is constructed in Sweden. Furthermore, within the European Union there are several scene-setting organisations and programmes which directly (by way of new programmes) or indirectly (by way of expressed assumptions) support the different members' incentives.

In policy research it is acknowledged that, whilst entrepreneurship policy has emerged primarily from small and medium-sized enterprise (SME) policy, innovation policy has largely evolved from science and technology (S&T) or research and development (R&D) policy (e.g. Lindholm Dahlstrand and Stevenson (2007). Lundström and Stevenson (2005) see an overlap between entrepreneurship, SME and innovation policy in several countries. In its attempts to stimulate a greater number of innovative, technology-based startups, innovation policy crosses over into entrepreneurship policy. On the other hand, traditional SMEs can be seen to cross over to entrepreneurship policy in their efforts to support new firm creation by way of information, advice, counselling and micro-loans (*ibid*: 150 ff).

Lindholm Dahlstrand and Stevenson (2007) set out to create a theoretical bridge between innovation and entrepreneurship policy, thus integrating them since the two are now considered different yet complementary policy areas. In this vein, Lundström and Stevenson (2005) argue for policy convergence and an integrated approach towards entrepreneurship, innovation and SMEs. However, it is also argued that neither scholars nor policymakers yet fully understand the role of entrepreneurship in today's society (Audretsch, 2007). Entrepreneurship policy, as it has developed, is not a modernised version of SME policies, but can to some extent be seen as new and innovative policy (Audretsch et al, 2007). Audretsch and Thurik (2001) claim that this kind of emerging policy illustrates applications of a cohesive and pervasive policy approach. This new approach is better suited to the entrepreneurial economy, spanning all facets of a society; this is in contrast to the managed economy, which only requires a cohesive economic policy approach (*ibid*).

Referring to the introduction and the gaps disclosed in the EU process for implementing the goals of the Lisbon Strategy, there is not only a gap between what is stated in policy documents and what is delivered by policy programmes, but there is also a

gap between two policy areas that often are integrated in praxis. The view of innovation as a system with the idea of separate parts has also been critically scrutinised as a poorly defined policy concept (Miettinen, 2002, Danilda and Granat Thorslund, 2010). Informed by policy research it thus seems important to integrate entrepreneurship and innovation into policy practice and thus create innovative policies which can achieve the EU's overall strategic goals.

To sum up, the concept of “innovative entrepreneurship policy” is formulated in the context of policy research, but has not yet emerged in practice. However, the notion of *innovative policies* is considered a promising concept (e.g. Audretsch and Thurik, 2001, Lundström and Stevenson, 2005, Lindholm Dahlstrand and Stevenson, 2007). Nevertheless, innovation and entrepreneurship are persistently seen as necessary prerequisites to increase the innovative and entrepreneurial potential in the European Union's member countries. Criticising the very ideas of entrepreneurship and innovation seems too far-fetched. Rather, the work continues with the aim of creating better and more appropriate policies to match up to the global challenges expressed in the EU2020 strategy.

According to Hjalmarsson and Johansson (2003: 94) “public advisory services towards SMEs represent a multi-billion pound industry”; this is only one area put forward in entrepreneurship and innovation policies. Thus, entrepreneurship and innovation have created a multi-billion Euro policy market (see also Lundström and Kremel, 2011). Arguably, there is a strong wish to create innovation systems in which entrepreneurs can develop ideas and realise products and thus provide ever-increasing growth (in monetary terms) to solve problems such as climate change, and include people in the economy (social cohesion). However, the wish to integrate innovation and entrepreneurship seems difficult to fulfil in policy practice; the as-yet unanswered question is how these policies integrate gender?

A gender understanding of entrepreneurship and innovation

The Schumpeterian view on the entrepreneur as innovator and norm-breaker has gained acceptance in entrepreneurship research (Landström, 2005). According to this theoretical landscape, the entrepreneur is seen as a person with certain talents and a pioneer by introducing innovations that distinguish his (sic!) business from others'. However, in Schumpeter's *Capitalism, Socialism and Democracy* (Schumpeter, 1947), the source of innovation has turned into the large company with experts working together in R&D teams to find new solutions. Schumpeter thus started to view the entrepreneur as an innovator and entrepreneurship as one man's work, but ended up in focusing on the process within a company where experts and research teams contributed to betterment and innovations.

Still, entrepreneurship research has not paid so much attention to the many people who are working together to produce and diffuse “newness”, but has instead helped

construct the entrepreneur as an almost superhuman masculine being. Several studies also illustrate how entrepreneurship and also innovation make up gender-biased concepts (Sundin and Holmquist, 1989, Bruni, Gherardi and Poggio, 2004, Blake and Hanson, 2005). Accordingly these studies have illustrated how men and masculinities are part of constructing men as entrepreneurial and innovative (e.g. Lindberg 2009, Pettersson, 2007), diminishing women and femininities (e.g. Berglund and Granat Thorslund, 2010), and even strengthening the idea of men and woman as different species (Ahl, 2004). Some of them have a direct focus on policy. Lindberg (2009), for instance, identifies two prioritised areas of technology in Swedish innovation policy, connecting them to two types of masculinities; part of co-constructing gender and innovation. The groups of basic and manufacturing industries and new technologies, primarily employing men and creating a market for male entrepreneurs, have been given high priority within Sweden's innovation policy (*ibid.*). On a symbolic level, Lindberg connects the two prioritised groups to two forms of masculinities: one based on physical strength and mechanical skills and the other on a calculating rationality among technological experts. In the same vein, Pettersson (2007), in her study of innovation strategies in the Nordic countries, states that production of gender can be seen as creating innovation as a masculine activity, which makes male and men the norm.

The co-production of gender and science, technology and innovation results in an interpretation of men as technically or scientifically skilled and women as unskilled in these areas (Nyberg 2009). Private high-tech firms, generally populated by men and being given a masculine connotation, are thus usually related to innovation and entrepreneurship. On the other hand innovation and entrepreneurship within the public sector, generally populated by women and given a feminine connotation, is often invisible (e.g. Sundin and Holmquist, 1989; Holmquist and Sundin, 2002). Thus, women and men remain separated, not only by employment structures but also in the way in which entrepreneurship and innovation is conceived in contemporary society.

It is of interest to study how the hero entrepreneurship discourse and the technological innovation discourse have been taken up in the policymaking context; arguably these lead to separation, not only between sectors and branches but also between men and women, as well as between the almost non-human, but ideal, entrepreneur and the rest of us. The myth we carry about the entrepreneur upholds the very idea of the great rational self-made Western man who "conquers the environment to survive in a Darwinian world" (Ogbor, 2000: 618). According to Nicholson and Anderson (2005), the everyday conception of entrepreneurship holds people back from identifying with the entrepreneur, since it is so strongly interlinked with a mythicised figure. In particular, this figure seems to have consequences for women's ability to identify with being involved in innovative and entrepreneurial endeavours (e.g. Berglund, 2006, Warren, 2004).

One way of perceiving innovation would be as a way of innovatively changing societal structures to equally recognise wo/men's innovative potential, irrespective of gender, class, ethnicity, religion, and so forth (Berglund and Johansson, 2007b). However, it should be acknowledged that there are also studies illustrating how a gender analysis can reveal untapped innovative opportunities (Schiebinger, 2008, Nyberg, 2009) and bring about counter-discourses which benefit innovation in novel ways (Berglund, 2006).

Discourse analysis

Taking a poststructuralist feminist stance, we relate to the concept of “doing gender”, acknowledging that gender, as well as other social categories and phenomena, can be seen as socially constructed. West and Zimmerman (1987) propose that gender should be seen neither as a set of traits, nor as a variable or a role, but instead as the product of social doings of some sort; they claim that gender itself is constituted through interaction.

“One is not born a woman, one *becomes* a woman,” Simone de Beauvoir (1949) once declared. Accordingly, neither society nor people are viewed as “natural observable facts”, but as social constructs which are constantly being produced, reproduced and transformed (e.g. Berger and Luckmann, 1966/1991; Gergen 1991). A common denominator in this approach is to view conversation, language and texts not as a neutral, transparent medium, but as something which produces discourse, making discourses performative in the sense that they both define boundaries and constitute the resources for what it is possible to say and do (e.g. Burr, 1995). A discourse can thus be seen as a web of interconnected words which make up a particular version of something, such as entrepreneurship and innovation (Berglund and Johansson, 2007a).

The reason for studying policy texts of innovation and entrepreneurship is because our interest lies in what words that are used to shape our understanding of innovation and entrepreneurship as a gendered phenomenon. The point is that these texts are not only “texts”, they create boundaries for what we perceive as innovation and entrepreneurship, as well as who we perceive as innovative and entrepreneurial; this was partly illustrated in previous sections. Thus, discourses of innovation and entrepreneurship create different scopes of action, albeit in diverse ways, for men and women in our society.

Informed by Bacchi's (1999) method of understanding policy from a “what's the problem represented to be?” approach encouraged us to delve into how problems and solutions are constructed in entrepreneurship and innovation policy. A guiding premise of this approach is “that every policy proposal contains within it an explicit or implicit diagnosis of the ‘problem’” (ibid: 1). Since every description of a particular problem implies making interpretations, judgments and choices, it is of interest to study how the gender system is accounted for in the context of innovation and entrepreneurship

policy. Furthermore, Bacchi has challenged us to look “beyond” the problem and problematise not only what is on the policy agenda, but also what is excluded.

A discourse community refers to groups which actively share goals and communicate with other members in order to pursue those goals (Swales, 1990). A discourse community thus unites written and spoken communication which jointly form interaction practices among its members in providing information and feedback. Practices within a community shape the discourse and discourse shapes the practices (ibid); this touches on how a discourse community reproduces itself and how difficult it can be to break with established norms. Ahl (2004) provides a good illustration of the discursive practices shaping the scientific entrepreneurship discourse. This community of scholars thus shapes how knowledge on women’s entrepreneurship is formed, which regulates the discourse. Similar to the research texts analysed by Ahl, the policy documents analysed here can be understood as an expression of the prevailing innovation and entrepreneurship discourse, as regulated by a discourse community. In Sweden this community consists of government agencies working nationally and regionally on entrepreneurship and innovation policy. In order to delineate the discourse of innovation and entrepreneurship, we pose the following questions to the two policy texts:

- Who is seen as an actor?
- How is the actor described?
- What is seen as the contribution?
- What is seen as the output?
- What are the means required?
- What does the process look like?
- Where does it take place?
- What is the level of description?
- What are the important facts to know?

The development of these questions was inspired by the theoretical review of gender, innovation and entrepreneurship. The purpose of the questions is to clarify in what ways and with which words innovation and entrepreneurship are gendered in the two policy texts.

To sum up, policy texts are seen as a way of making the policy community’s discourse explicit, as applied in constructing innovation and entrepreneurship. Policy texts thereby highlight what statements it has been possible to express and also that they are part of the formation of ideas, programmes and projects. Moreover, they are assumed to improve the capability for men and women to come up with ideas, realise them and put them into practice to create value in our society.

Next we will analyse Innovative Sweden (2004) and the Green Paper on Entrepreneurship (European Commission, 2003) respectively. The first text addresses innovation policy; the latter entrepreneurship policy. It should also be mentioned that both discourse analyses build on a more extensive study (including a more extensive dis-

course analysis) of Innovative Sweden (Granat Thorslund, 2009) and the Green Paper (Berglund, 2007).

Innovation policy discourse

Sweden should be one of Europe's most competitive, dynamic and knowledge-based economy and thus one of the world's most attractive countries for investment by large and small knowledge-based enterprises. World-leading knowledge will flourish in a number of priority research areas. Well-developed interaction between the research community, public sector, industry and trade unions will guarantee the large-scale transformation of knowledge into goods and services. (Innovative Sweden, 2004, p. 15)

In the spring of 2002, the government initiated a process to formulate an innovation policy. The result was Innovative Sweden officially launched in 2004, with a vision closely related to goals which came out of the Lisbon Agenda (Granat Thorslund et al. 2005). It is stated that the process of developing the strategy (i.e., the contribution of a common understanding of innovation and how to draft a policy which enhances innovation) is as important as the strategy itself and emphasis is placed on the notion of learning (ibid). Furthermore, even though the policy was published as far back as 2004 it is still relevant, since no new overall strategy has replaced it. The above quote is also the introduction to the strategy presented in Innovative Sweden. This statement contains key expressions which emphasise cutting-edge knowledge and the importance of research for producing innovations; jointly, these form the policy discourse of innovation.

One important feature of the document is its images of gardening. The cover shows a greenhouse with everything flourishing; the door is open and there is a chair inside. The sun glitters through the foliage and there are garden tools leaning against the greenhouse wall. Everything needed to tend the garden is there, except the gardener. This image relates about an important discourse on the Innovative Sweden strategy. It illustrates how the aggregated and structural levels (represented by the greenhouse) are accentuated, whilst the actors, the gardeners cultivating the innovations, are absent. Considering innovations are products of human conduct, something is obviously missing from these pictures.

The greenhouse



Innovative Sweden, 2004

This focus on structure (in contrast to process and learning) creates a black box from which humans are absent, but highlighting outputs from the innovation processes where humans need to be involved. This is apparent in the fact that knowledge is stressed, but learning (i.e. processing knowledge) receives less attention. This inconsistency is also found in relation to entrepreneurs and enterprises, where enterprise is mentioned 96 times in the document but entrepreneur only 19 times. Human beings are downplayed, as is the *process* of innovation. Paradoxically however, learning is stressed as important for the actors involved in producing this policy text.

Throughout the document it is apparent that the foremost objective is economic growth. Apart from this emphasis on growth, structure, production and system are stressed as important, downplaying the notion of process, reproduction and individual. It is also striking how competitiveness is emphasised in relation to other countries and other regions and how it is emphasised as a means of (and a threat to) reaching the overall goal of economic growth. This competition discourse ably illustrates how Sweden's performance is compared and measured in relation to other countries. For example, the strategy emphasises heavily Sweden's identity as the world's leading investor in knowledge. This brings in the notion of learning, but from a structural

perspective it is not learning processes that are discussed; the emphasis is on the importance of globally competitive education:

The strategy aims to set an offensive agenda which highlights some priority areas where we in Sweden can improve the conditions for innovation and guard our lead. The strategy takes a broad approach, even if the emphasis is mainly on issues in the education, research, trade and industry policy areas. (Innovative Sweden, 2004:1)

Sweden's investments in education have long been among the largest in the world relative to the size of the economy. In 2001 our total spending on research and development (R&D) amounted to 4.3 percent of gross domestic product (GDP), which is the highest level in the OECD. (Innovative Sweden, 2004:3)

Hence, it is stated that Sweden should become Europe's leading economy, and the discourse also reveals areas in which Sweden is expected to compete. According to the strategy, these areas are "Sweden's basic industries, which include the timber, forestry and pulp, metallurgy and motor vehicle industries" (Innovative Sweden, 2004: p. 6). Moreover, it is argued that a continued development of basic industry is crucial for the competitiveness of Sweden, which we presume will contribute to economic growth within EU countries. The strategy also mentions areas in which Sweden *may become* competitive and how they can help increase the competitiveness of this nation:

In a historical perspective, long-term strategic interaction between the business sector and the public sector has been crucial for the emergence of knowledge-based activities. This interaction has played a very significant role in Sweden's industrial development and international competitiveness. This is especially true of telecommunications, energy and railways. (Innovative Sweden, 2004:5)

In Innovative Sweden there is also an emphasis on production as prior to reproduction. While production is related to the making of artefacts within the manufacturing industry, reproduction can be interpreted in a broader sense. Apart from the fact that reproduction reminds us of the seemingly inevitable division between private and public life, in which the former is seen to be populated by women taking care of children and the latter populated by working men, the notion of reproduction might well be extended to include services, such as daycare, which calls this division into question. This way of perceiving reproduction also make us aware that services can be used over and over again compared to the throwaway mentality of the consumer society which serves the market for products. Throughout the strategy, products are emphasised and made important, whilst service is given little attention. As illustrated literally in the strategy, the ideal enterprise is knowledge-based and may even be research-based and a spin off from the university. It has extensive, international contacts and cooperation and is ranked first in its class.

The main conclusions according to our reading of Innovative Sweden are that organisations are regarded as actors and their roles in the system are emphasised, while the people and the content in the interaction, the key processes (such as creating trust and learning) in the innovation system, are overlooked. The innovation system perspective dominates the innovation strategy. Paradoxically, whilst innovation system theory attempts to include all factors relevant to innovation (e.g. Lundvall, 1992; Edqvist, 1997), the innovation strategy constructs a discourse which excludes important innovation aspects such as relationships and processes.

It is interesting that humans and their relations are overshadowed by the aggregated level in innovation policy, while research on innovation systems has the opposite view (Lundvall, 2006). Why is it that policy understands innovation system research in this narrow way? What consequences will this interpretation of theory cause for men and women in the innovation system? What causes policy to focus so strongly on the organisational and structural level, while making the individual and relational level invisible? In our view, it is equally necessary for policymakers as it is for researchers to understand relations and co-dependence; not only between individuals but between individuals, organisations and society as well.

Entrepreneurship policy discourse

Europe needs to foster entrepreneurial drive more effectively. It needs more new and thriving firms willing to reap the benefits of market opening and to embark on creative or innovative ventures for commercial exploitation on a larger scale. (European Commission, 2003:3)

These are the opening words of the Green Paper on Entrepreneurship, the entrepreneurship strategy formulated by the European Commission to initiate a debate on how entrepreneurship could be stimulated in Member States so they are better equipped in times of uncertainty and sudden change. The following year, 2004, an action plan was presented as a “framework strategy for stimulating entrepreneurship, grounded on the public consultation that followed the announcement of the Green Paper” (Ibid: p. 5). The Lisbon Strategy is an elaboration of an entrepreneurship perspective in the Green Paper and, with the action plan, forms the agenda on how European Member States should work on entrepreneurship. Thus, the Green Paper may be seen as an important text which may tell us something about how entrepreneurship and its relationship with innovation are constituted in the policy-making community.

Structural changes are a recurring theme in this policy text and are emphasised as the reason why the Western world is in trouble. The Green Paper covers similar ground, but is introduced with a discussion on how industrial structures are changing and how new knowledge-based markets are more global in the way they are floated and reliant on small firms. Although the Green Paper admits that entrepreneurship can take place in many types of contexts, it is business that gets the emphasis.

Entrepreneurship is multi-dimensional and although it can occur in different contexts, economic or otherwise, and in all types of organisations, this Green Paper focuses on entrepreneurship within a business context.
(European Commission, 2003:5)

The Green Paper acknowledges that entrepreneurship can occur in many different contexts (such as the public and non-profit sector), but that these other possible settings are bracketed and instead emphasising the strong connection between entrepreneurship and (starting up or developing) a business. Entrepreneurship is thus narrowed down to being about starting a business, or being creative and innovative in order for a business to grow.

Hence not all contexts seem to be as meaningful as that of business, which is associated with growth, new jobs, innovation and development. It is therefore unsurprising that the rhetorical question “Why is entrepreneurship important?” is answered with arguments in the following order.

- Entrepreneurship contributes to job creation and growth.
- Entrepreneurship is crucial to competitiveness.
- Entrepreneurship unlocks personal potential.
- Entrepreneurship and societal interests.

As in the policy discourse on innovation, entrepreneurship is seen primarily as a prime mover of economic growth but instead of being related to “newness” like innovation, entrepreneurship (when it comes to developing entrepreneurs) is mainly related to the growing number of people in the labour market, or more specifically to the growth of entrepreneurial people. The common denominator is that the targeted entrepreneurs contribute to the economy by starting a business:

Entrepreneurship is first and foremost a mind-set. It covers an individual's motivation and capacity, independently or within an organisation, to identify an opportunity and to pursue it in order to produce new value or economic success. It takes creativity or innovation to enter and compete in an existing market, to change or even to create a new market. To turn a business idea into success requires the ability to blend creativity or innovation with sound management and to adapt a business to optimise its development during all phases of its life cycle. This goes beyond daily management: it concerns a business' ambitions and strategy. (European Commission, 2003:5)

The key to creating entrepreneurship seems to lie in bringing about entrepreneurs.

“Entrepreneurship is about people, their choices and actions in starting, taking over or running a business, or their involvement in a firm's strategic decision-making” (European Commission, 2003, p. 5-6).

For policy the challenge seems to be to create programmes which can unlock skills on a personal level and produce more entrepreneurs.

The challenge for the European Union is to identify the key factors for building a climate in which entrepreneurial initiative and business activities can thrive. Policy measures should seek to boost the Union's levels of entrepreneurship, adopting the most appropriate approach for producing more entrepreneurs and for getting more firms to grow. (European Commission, 2003:9)

Arguably, given the narrow view of growing a business, the human being in entrepreneurial clothing seems a necessary figure if entrepreneurship to happen.

Entrepreneurship policy aims to enhance entrepreneurial vitality by motivating and equipping entrepreneurs with the necessary skills. A supportive environment for businesses is key if businesses are to start, stop, take over, thrive and survive.

The cover of the Green Paper on Entrepreneurship



European Commission 2003

In contrast to the cover of the policy text Innovative Sweden, where actors are invisible, the cover to the Green Paper can be seen as complementary. Here we find a human being in the guise of an entrepreneur. This picture shows a Western businessman with proper suit and briefcase in hand. He seems self-confident and is on his way

somewhere; perhaps to set up a new business? However, this entrepreneur is not just anyone, but a Caucasian man who (according to the policy text) is a person with some special skills. Even though it is argued that entrepreneurs are a heterogeneous group, this group is connected with individuals who have a flair for taking risks and a taste for independence and self-realisation.

Reading the Green Paper, entrepreneurship seems to be of the utmost importance if the European Member states are to sustain and contribute to growth by starting and developing firms. Entrepreneurs are the ones who do this. So, in making Europe flourish with entrepreneurship, the challenge seems to be to produce entrepreneurs by equipping societal members with the special skills required. Hence, the individual is in focus; not everyone fits that description. The cover is quite striking with its image of the businessman (not woman) who seems to be on his way to seek opportunities for his company to develop, thrive and contribute to growth.

Innovation and entrepreneurship policy from a gender perspective

We have hitherto striven to draw a picture of how the discourses of entrepreneurship and innovation are expressed in policy documents. Starting from a discourse perspective, our point is that these texts are not merely “texts” but that they comprise the realities of how policymakers construct, and are shaped by, boundaries. These texts do not only constitute a resource for what it is possible to say, but also for what it is possible to do in constructing measures for entrepreneurship and innovation which contribute to the development of European Member States.

Clearly, there are linkages between the two discourses, but also disconnections. Because, even though innovation and entrepreneurship make up two different paths, the analysis reveals a construction of economic growth as an undisputed policy goal which seems impossible to call into question. For both innovation and entrepreneurship policy, the problem being addressed is supplying a constant need for increasing growth. Informed by Bacchi’s (1999) “What’s the problem represented to be” approach, it is obvious that both innovation and entrepreneurship policy construct problems which need to be solved by increasing the level of innovation and entrepreneurship in contemporary society. The problems that are constructed concern issues which could happen, and which would have repercussions for economic growth. At worst, economic growth would turn into regression. Thus in both policy texts, a sense of worry is constructed for what could happen if innovation and entrepreneurship were to cease. The fact that the very content of innovation and entrepreneurship could be something other than new technologies and flourishing businesses is not reflected upon. However growth remains in focus, even though the means to achieve it differs. Innovative Sweden stresses investments in research and development whilst the Green Paper emphasises the specific traits that entrepreneurs bear; this, in order to bring about more entrepreneurs.

The action to achieve the common objective of economic growth also seems to take place on different levels. While innovation policy calls attention to the aggregated level (where the individual is absent), entrepreneurship policy emphasises the individual level as the most important. Moreover, while the main output in the innovation discourse points towards new products, in the entrepreneurship discourse new companies are regarded as the important output. In this vein, a number of differences can be stressed by studying the policy discourses of entrepreneurship and innovation, as further elaborated in below table.

Innovation and entrepreneurship in policy discourse

Perspective/question	Innovation policy (Innovative Sweden)	Entrepreneurship policy (Green paper of entrepreneurship)
The actor	Organisations	The individual
Description of the actor	Not defined	Business man
Contribution	Growth	Growth
Output	New product	New company
Means	Research and development	Specific traits
The process	Linear	Black box/hidden
Context	Black box/ hidden	Incubators, science parks
Level of description	Aggregated level	Individual level
Required knowledge	Technology	Management

The entrepreneurship discourse constructs the businessman of a high-growth firm as the actor. This actor however remains invisible in innovation policy, which instead points toward organisational structures. Thus, in entrepreneurship policy the man with a flair for taking risks and a taste for independence and self-realisation is visible. Paradoxically, even though the individual is made invisible, we can still see a clear construction of masculinity in innovation policy since it stresses particular organisations in traditional masculine industries, where innovation is expected to come about; the growth areas stated in Innovative Sweden for example. The focus on the individual in entrepreneurship policy discourse and the focus on the aggregated level in the innovation policy discourse create an empty space where relations, co-operation and interaction take place in praxis, but which are downplayed and made invisible in policy. From a gender perspective this implies that women are not only excluded by the male-connoted traits that make up the entrepreneur, but are also excluded by the properties that make up an innovation. And, on the contrary, men carry the burden of being seen as the major contributors of innovation in society.

These constructions of innovation and entrepreneurship are also perpetuated by policymakers governing accessibility of policy grants for different areas and for men and women. As illustrated by the case of Innovative Sweden and that of the Green Paper, the construction of innovation and entrepreneurship end up as a division between men and women; constructing males as innovative and females as not innova-

tive (though perhaps imitative?). Arguably, this guides how priorities are made and ranked in policy. Some areas and branches must be prioritised if there is not to be a “let all the flowers bloom” logic. Apparently, policy boils down to budgetary decisions, which may inevitably fail to recognise areas and problems which are not highlighted in policy documents. Men and masculine sectors are much more likely to get access to public funds; this has also proven true in the Swedish context in an analysis looking into how different entrepreneurship and innovation funds are gendered (NUTEK, 2007). Whilst mostly women received micro-credit loans, this was however the only initiative which tipped in the “women direction”; all other initiatives prioritised men. The reasons may be many, but it is argued that women are less capital-consuming and therefore ask for, and receive, less funding, (*ibid*). However, from the discourse approach taken here it should also be acknowledged that different sectors are constructed as more or less innovative (*cf.* Lindgren, 2008). Obviously, “female” sectors are seen as less innovative than “masculine” sectors. Innovation has thus been constructed to refer to certain kinds of economic activities (largely those associated with certain kinds of technology) and to exclude others.

Hence, the power of how taken for granted assumptions construct innovation and entrepreneurship is not commented upon in entrepreneurship and innovation policy. As we have seen in the texts analysed, the features of innovation and entrepreneurship are repeatedly stated as facts. Nevertheless, both concepts create hopes, dreams, threats and visions in the policy contexts, based on taken for granted assumptions on what is considered necessary for the progress of society. However, these assumptions are not made explicit. With a slightly ironic tone: this tends to be the way of things; it’s always been this way; therefore history repeats itself. It is the breaking of this circle of conduct and routine that Schumpeter (1934) claimed to be a core part of innovation and entrepreneurship. Arguably taken for granted assumptions of entrepreneurship and innovation in the policy context not only narrow efforts in creating a more equal society in terms of gender, they also narrow our conception of what is perceived as innovation. From the analysis of the policy texts, calling into question “the narrowing” is made even more difficult due to the gap created.

To sum up, the innovation and entrepreneurship policy discourses are constructed against a background of combined masculinities. Besides the physically strong and mechanically skilled man there is also the technological expert and the businessman with the absence of women is obvious from this perspective. Not only are women excluded by the male-connoted traits that make up the entrepreneur, they are also silently excluded in the technological innovation policy which focuses on male-connoted industries and makes female-connoted organisations invisible. Thus from a gender perspective, there is certainly no gap between innovation and entrepreneurship policy; they are reinforcing and perpetuating the gender system.

Towards innovative policies

How innovation and entrepreneurship are depicted in texts shape what is regarded as innovation and entrepreneurship as well as who is regarded as an innovator or entrepreneur. This entails gender implications. If the words “innovation” and “entrepreneurship” do not suit women’s identity construction, the doors will be more challenging to pass through (cf. Holmquist and Sundin, 2002). Having said that, women may still make innovations and be highly entrepreneurial, but they may not be described as such. This is what we mean when we say that the discourses are gendered. The chances for women in public sector in Sweden to clothe their inventions in the language of innovation is, we believe, more far-fetched than men being engaged in building a new robot in a high-tech company. Thus, gendered discourses have social consequences.

Despite the gaps discussed in the introduction between policy and practice, between different policies and between policy institutions, innovation and entrepreneurship policy stand united in their relationship to gender and economic growth. Rather than challenging and transforming the gender system, this study illustrates how entrepreneurship and innovation policy texts adjust according to gendered bias and exclusive norms, giving advantage to male industries whilst downplaying female organisations. Arguably, from a gender perspective, these policies cannot be described as innovative.

Thus the entwined discursive practices in the policy texts neglect issues of gender, but give priority to the importance of contributing to economic growth. According to Friman (2002) this should not be a surprise as the concept of economic growth has come to replace that of societal development. Discussions on economic growth usually rest on the assumption that growth is a means of delivering an improved standard of living, even though it appears to treat economic development as an end in itself and disregards actions which may contribute to a more ecologically sustainable society (Jackson, 2011) and those which may combat inequalities (Walby, 2009). Informed by Friman (2002), Rönnblom (2009) draws the conclusion that growth can be perceived as a master narrative which permeates Western politics and policy.

Development being placed on an equal footing with economic growth and the fact that innovators and entrepreneurs have become an engine in this process seems to have become an ‘objective truth’. In other words, it has become so taken for granted that we have difficulty questioning whether it could ever be put another way. However, with a discourse perspective we learn that this meaning has been constructed over time in different contexts and by several co-operating discourses. In the same vein, our point is that questioning the shortage of women in policy documents on innovation and entrepreneurship is one thing, but we should also make clear which masculinities are constructed in these texts as well as which societal values they uphold. The fact that innovation and entrepreneurship policy have developed along two parallel paths does not mean they are separate in our minds. On the contrary, they are intertwined in an appealing pattern. However this pattern has gender implications; it constructs mascu-

linities at the expense of femininities. It also has consequences for how and what societal values are emphasised. Obviously, economic growth makes up an undisputed and unquestioned goal. What is more, both innovation and entrepreneurship refer to certain kinds of economic activities and exclude others.

Thus economic growth has turned into an obvious, all-embracing and prioritised policy goal which is impossible to question. There is an absence of any nuanced language for discussing how different values may point our future in a different direction than the one marked out by the discourse on economic growth. Economic growth thus remains hegemonic and other issues, such as gender equality, are stretched and bent to fit to diverse policy objectives; simultaneously serving to leave the idea of economic growth unquestioned (Lombardo, Meier and Verloo, 2009). In this vein, criticism has been directed towards the prevailing view of innovation and entrepreneurship policy, arguing that it is too narrow and exclusive (Pettersson, 2007, Lindberg, 2009, Hjalmarsson and Johansson, 2003). In view of this, there is a call for a more innovative policy approach towards innovation and entrepreneurship among policy researchers. From a gender perspective this ambition should be cherished, since both policy areas reinforce the gender system, which from a feminist perspective, is not very innovative. Thus, entrepreneurship and innovation policy neither challenge nor transform the gender system. Rather it adapts to old-fashioned gender norms which become consolidated in the policy discourse on innovation and entrepreneurship. This is not what we would call creating a key to the smart, sustainable and inclusive growth that is called for by the European Union. Consequently, we agree with the policy researchers as to the necessity of developing innovative policies. We propose that gender can be an important lens through which to understand how innovation and entrepreneurship policies really could become more innovative.

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A striking Pattern

- Co-construction of Innovation, Men and Masculinity in Sweden's Innovation Policy

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Abstract

This chapter explores the mutual interconnectedness of gender and innovation in innovation policy, using Sweden as an empirical case. Firstly, the priority pattern of actors and industries in innovation policy programmes and strategies is examined. Secondly, the link from the priority pattern to men and masculinities is scrutinised. Thirdly, the dynamics of this link are discussed in relation to prospects for a policy that is not based on segregating and hierarchical gender constructions. The empirical data covers all national (and a selection of regional) policy programmes promoting innovation systems and clusters since the turn of the millennium in Sweden, as described in public policy documents. It is revealed that the groups of Basic and Manufacturing Industries and New Technologies, both primarily employing men as employees and entrepreneurs, have been given high priority within Sweden's innovation policy whilst the group of Service and Experience Industries, employing mostly women, has been given low priority. On a symbolic level, the two prioritised groups can be connected to two forms of masculinities: one based on physical strength and mechanical skills and the other on a calculating rationality among technological experts. Introducing the concept of co-construction of gender and innovation, it is highlighted how gender/masculinity and innovation are mutually constructed within the innovation policy when the pattern of prioritisation coincides with the gender-segregated labour market. Three different strategies could be combined to change these gendered patterns: inclusion, reversal and displacement. These reduce formal barriers to women and men in the formulation of policy programmes and strategies, acknowledge the importance of areas employing many women in policy priorities and reach beyond dualistic gender constructions by including a wide range of actors, areas and innovations. Innovation systems and clusters which manage to bridge the gap between different industries have the potential to reach beyond segregating and hierarchical gender constructions in Sweden's innovation policy.

Keywords: Innovation, innovation policy, innovation system, feminist science and technology studies, gender-segregated labour market.

Introduction

In the research field of Feminist Science and Technology Studies, extensive analysis has been conducted into how science and technology is characterised by continuous

gender constructions (cf. Lie 2006, Lykke 2007). This has included a critical analysis of dualistic conceptions about women, men, femininities and masculinities in relation to such things as product development. The understanding of gender and technology, as mutually constructed, is central to this research field and this chapter will suggest that the same understanding can be applied to the relationship between gender and innovation (cf. Faulkner 2001).³ The all-embracing aim of this chapter is to highlight the mutual interconnectedness of gender and innovation in innovation policy, using Sweden as an empirical case. This aim will be fulfilled by a three-step procedure. Firstly, the priority pattern of actors and industries in innovation policy programmes and strategies will be examined. Secondly, the link from the priority pattern to men and masculinities will be scrutinised. Thirdly, the dynamics of this link will be discussed in relation to prospects for a policy not based on segregating and hierarchical gender constructions.

One major issue relevant to all three steps concerns how symbolic constructions of masculinity interact with resource distribution in a manner that benefits certain actors and areas while marginalising others. The notion of “symbolic constructions of masculinity” refers to one of the four dimensions of gender suggested by Acker (1999) and further developed by Gunnarsson et al. (2003): structures, symbols, interactions and individuals. The symbolic dimension implies linguistic and graphical representations of gender. The four dimensions highlight how gender is “done” in the everyday life of organisations. One of the main contributions of gender research is to reveal how gender often is done in ways that create dichotomies between men and women as well as between femininity and masculinity (cf. West and Zimmermann 1987, Butler 1990, Acker 1999, Fenstermaker and West 2002). This leads not only to segregation – e.g. on the labour market – but also to hierarchies where areas associated to men and masculinity often are ascribed higher value – e.g. by higher wages, faster career progression and political prioritisation (Gunnarsson et al. 2003). This implies an uneven distribution of power and resources between women and men (Acker 1999). This pattern of inclusion and exclusion serves as a backdrop to the interconnectedness of gender and innovation in innovation policy, as examined in this chapter.

Innovation policy is a growing area of interest in gender research. Some pioneering work has been performed in Sweden, Norway, Britain and the United States.⁴ The conclusions uniting these studies are threefold: 1) that public investments in innovation systems and clusters focus primarily men as actors and male-dominated sectors, and 2) that innovation and innovation systems are usually described with metaphorical

³ In this chapter, innovation is defined as new or improved products, processes or services with community benefits (cf. Lindberg 2010).

⁴ The pioneering work has been performed in Britain and the United States by e.g. Blake and Hanson (2005), in Norway by e.g. Foss and Henry (2010) and Kvidal and Ljunggren (2010) and in Sweden by e.g. Balkmar and Nyberg (2006), Petterson (2007), Fürst Hörte (2009), Forsberg and Lindgren (2010), Lindberg (2010), Danilda and Granat Thorslund (2011).

references to mechanical machines rather than human relationships and referencing high-tech products rather than services, which can be interpreted as masculine traits, and 3) that the prospects of evoking creativity and innovative processes by public investments are hampered by gendered stereotypes. No extensive review has so far been done of the prioritisation pattern of innovation policy, besides the study presented in this chapter. This chapter intends to fill this knowledge gap by drawing upon an empirical study comprising all of the policy programmes directed at innovation systems and clusters in Sweden at the national level, and a selection of policy programmes at the regional level.

The chapter begins with a brief explanation of the empirical data, methodology and purpose of the empirical study of priority pattern in Sweden's innovation policy. This is followed by a description of the innovation policy goals and means in Sweden together with a review of the results of the empirical study. With the help of Feminist Science and Technology Studies, the link between the priority pattern of innovation policy and the words "men" and "masculinity" is examined. This is accompanied by an examination of those actors and activities which have been given a low priority in the innovation policy, leading to a discussion about the prospects of an innovation policy which reaches beyond the prevailing dualistic and hierarchical gender constructions.

Research design and context

The analysis in this chapter builds on an empirical study of policy programmes and strategies for the promotion of innovation systems and clusters in Sweden (Lindberg 2011). Innovation systems and clusters are two different types of joint action networks, enhancing innovation by cooperation between actors from different industries and sectors of society (cf. Asheim 2005, Nuur 2005, Uhlin 2005, Lindberg 2010). The need for a comprehensive examination of the priority pattern in Sweden's innovation policy was raised by the participants in the R&D project *Lyftet* (The Raise) implemented 2005-2008. The project was conducted in collaboration between Luleå University of Technology, Mälardalen University and four regional networks. The aim of the project was to raise the network's efforts to promote women's entrepreneurship and innovation to a common platform of knowledge (Lindberg 2011).

The data informing the study includes all the national programmes promoting innovation systems and clusters that I have managed to identify and a selection of regional programmes implemented in Sweden since the turn of the millennium. At the national level, the Swedish national innovation strategy and the key industries being designated there has been examined alongside the *Visanu* programme managed in cooperation between the national public authorities NUTEK, VINNOVA and ISA 2002-2005, NUTEK's regional cluster programmes implemented 2005-2010, VINNOVA's priorities for 2003-2007 and VINNOVA's *VINNVÄXT* programme in 2001-2005. At the regional level, four regional growth programmes conducted in

2004-2007 in the counties of Norrbotten, Västerbotten, Västmanland and Södermanland have been examined. The selection was limited in order to maintain a manageable amount of data and these specific counties were singled out since they represent two different parts of the country, northern and central Sweden. The study was carried out as a document study in which the policy texts of the respective strategies and programmes were examined. Reading these texts, choices of words were identified that indicated which actors and areas were regarded as good examples of clusters and innovation systems. To avoid any misunderstanding, it is important to note that a comprehensive discourse analysis of the texts has not been carried out (cf. Bacchi 1999). Rather, the findings were sorted under three headings: good examples of innovation systems and clusters, names of highlighted formations, and these formations' main areas of activity. Thereafter, the areas of activity were classified into three groups of industries: Basic and Manufacturing Industries (BM), New Technology (NT), Services and Creative Industries (SC). This classification was based on assessments of these areas' main alignments.

Innovation policy – The Swedish case

Over the last twenty years, innovation has become an increasingly common subject of political action in Sweden. Officially, these activities are not yet embodied in one specific policy area but are distributed among existing policy areas such as entrepreneurship policy, educational policy, labour market policy, research policy and regional growth policy (Government Offices of Sweden 2004). The very existence of policies encouraging innovation in Sweden has to do with the widespread understanding that development and dissemination of innovations will transform the economy, making it more dynamic and knowledge-based (Uhlin 2005). Sweden is thus following the goals of the European Union strategy *Europe 2020* and its flagship initiative *Innovation Union*. Within the EU, innovation is defined as new or improved products, services, processes and models (European Commission 2010a, 2010b). One of the tools which the member countries have pledged to use in order to encourage innovation is innovation systems (Uhlin 2005). These systems consist of actors from different societal sectors interacting in ways which lead to the development of new, relevant knowledge and to the transformation of this knowledge into innovations useful to society. Thus in this context, innovation is considered to be dependent on a system of institutional and cultural contexts (Asheim 2005). Another tool used in the policy to encourage a systematic approach in industry is clusters. Such formations include groups of businesses located within the same geographical area, exchanging knowledge, personnel, goods and services. They all share a common focus area, specific to the current location. Clusters thus bridge the boundaries between different lines of business (Nuur 2005).

In Sweden, public funds are allocated to innovation systems and clusters by public authorities at the national level (e.g. VINNOVA and the Swedish Agency for Economic and Regional Growth/NUTEK) and regional level (e.g. county administrative

boards, county councils and regional development councils). This is done within the framework of programmes and announcements; VINNOVA's VINNVÄXT programme and NUTEK's regional cluster programme and regional growth programmes for example, in which candidates may compete for grants. In research, this systematic approach to innovation was launched in the early 1990s (Granat Thorslund et al. 2006). Since then, research into innovation has expanded considerably and has revealed how functions, actors and relationships affect the organisation and results in innovation systems (Edquist 2005). Since much of the research on innovation systems and clusters in Sweden has been carried out in cooperation with the formations which receive public funding from innovation policy programmes, the theoretical knowledge builds primarily on empirical data from the prioritised formations (cf. Laestadius et al. 2007). The fact that the actors and areas being down-prioritised in the innovation policy have rarely been studied in innovation research implies that the conclusions drawn about the character and processes of innovation systems may be incomplete.

To overcome the skewed empirical basis of innovation research, a first step would be to examine which actors and areas are prioritised in Sweden's innovation policy. The empirical study presented here maps the innovation systems and clusters being promoted in public policies and programmes at national level (Sweden's innovation strategy, VINNOVA's priority areas, Visanu, the regional cluster programme, the VINNVÄXT programme) and regional level (regional growth programmes of Norrbotten, Västerbotten, Västmanland and Södermanland). Due to lack of space, specific details about the priorities in all of these strategies and programmes cannot be presented. However, to provide the reader with an example of priorities, below table illustrates the selection of clusters/innovation systems in the VINNVÄXT programme, their main areas of activity and their group of industries. The groups of industries are abbreviated as follows: Basic and Manufacturing Industries (BM), New Technology (NT), Services and Creative Industries (SC).

Prioritised formations in the VINNVÄXT programme 2001-2008

Programme	Formation	Area	Group
VINNVÄXT 2001	Biotech (Original name in Swedish: Bioteknik)	Biotech	NT
	IT Consultancy Sector (In Swedish: IT-konsultsektorn)	ICT ⁵	NT
	Suppliers in Cooperation (In Swedish: Underleverantörssamverkan)	Telecom Vehicles Manufacturing	BM/NT
	Innovation City (In Swedish: Innovationsstaden)	Start-up of businesses Business development	No data
	Cooperation Industry, Society and University (In Swedish: SISU – Samverkan industri, samhälle och universitet)	Industry	BM
VINNVÄXT 2003	Innovation at Interfaces (In Swedish: Innovation i Gränsland)	Food Biotech Health Commerce	NT/SC
	Robot Valley (In Swedish: Robotdalen)	Robotics	BM
	Uppsala Bio	Biotech Pharmaceuticals Diagnostics	NT
VINNVÄXT 2004	Process ICT Innovations (In Swedish: ProcessIT Innovations)	Process industry Manufacturing ICT	BM/NT
	Biomedical Development (In Swedish: Bio-medicinsk utveckling)	Biomedicine	NT
	Triple Steelix	Engineering workshop Steel	BM
	Fiber Optic Valley	Fiber optics	NT
	New Tools for Health (In Swedish: Hälsans nya verktyg)	Care Health Medical technology	SC/NT
VINNVÄXT 2008	Biorefinery of the Future (In Swedish: Framtidens bioraffinaderi)	Bio refinery	BM
	Peak of Tech Adventure	Tourism Sports ICT	SC/NT
	Smart Textiles	Textiles Fashion	BM/SC
	Printed Electronics Arena	Paper electronics	BM/NT

VINNOVA 2007, 2009

⁵ ICT = Internet and Communication Technologies

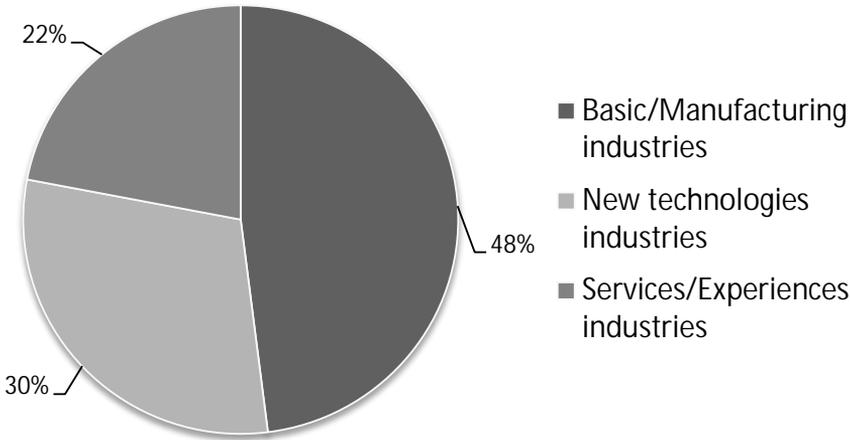
Aggregating the priorities made in the national and regional strategies and programmes, the distribution of groups of industries looks as follows in below table.

Pattern of prioritisation in Sweden’s innovation policy

Programme	Basic industry/ Manufacturing	New technology	Services/ Experiences
Visanu	13	11	9
VINNVÄXT	9	10	3
Regional growth programmes	25	8	10
- Norrbotten	8	4	5
- Västerbotten	4	3	2
- Södermanland	5	1	1
- Västmanland	8	0	2
All programmes	47 (48 %)	29 (30 %)	22 (22 %)

The overall priority pattern in all of the studied strategies and programmes, reveals that it is primarily two groups of industries which have been prioritised in the national and regional strategies and programmes: 1) one group which can mainly be described as Basic industry and Manufacturing industries, accounting for nearly half of the priorities (48 percent) and 2) another group which can be labelled New Technology including areas identified as high-tech (e.g. ICT and biotech). The latter group has been prioritised in one third of the cases (30 percent). In addition to these two groups, a third group can be discerned: Services and Creative industries. This group has been down-prioritised in the analysed policy programmes and represent only a fifth of all priorities (22 percent). The overall priority pattern is illustrated in the figure.

Overall priority pattern in Sweden’s innovation policy strategies and programmes



The link between the priority pattern and men

So how is the above priority pattern linked to “men” and “masculinity”? To elucidate this issue, I will begin with an account of the relationship between these two terms. Mellström (2003) points out that “masculinity” refers to male bodies – incorporated by “men” – but is not determined by male biology. The analysis of the link between the priority pattern, men and masculinities in this chapter thereby takes place at the intersection of social, material and biological aspects of dynamic gendering processes in innovation policy. Defining and exploring the terms “men” and “masculinity” and their mutual relationship has been a crucial task for masculinity studies. Mellström summarises the main conclusions of masculinity studies as 1) that there is a multiplicity of masculinities, 2) that gendering processes of men are active and dynamic, and 3) that the field is characterised by internal contradictions and complexity. Consequently, Ericson (2011) notes that masculinity studies have been preoccupied with distinguishing and describing different types of masculinity and their internal relationship. Connell (2005) emphasises that a multiplicity of masculinities does not mean that each type of masculinity is a fixed category. As Mellström (2003) also acknowledges, gendering processes are dynamic due to specific places, contexts and actions. Ericson (2011) notes that masculinity studies have tended to get stuck in distinguishing different types of masculinity and their relationship, neglecting the power relationships among men as well as between women and men. Rather than scrutinising relationships between different masculinities, he argues for analyses of how “men” is reinforced as a dominant social category by the construction and promotion of certain types of masculinity. Hearn (2004) specifically emphasises the importance of studying what is taken for granted about categorisations and constructions of “men” and how these distinctions serve to maintain demarcations between men and women. Inspired by Ericsson (2011), the data presented in this chapter can be used to interpret how “men” is reproduced as a stable social category by the construction and promotion of certain types of masculinity, rather than mapping and describing these masculinities in detail.

Before continuing to the analysis of the connection between the priority pattern in innovation policy and “masculinity” in the next section, this section will specifically scrutinise the link between the priority pattern and “men”. In the case of the horizontal dimension of gender segregation, Sweden has a clearly sex-segregated labour market. The summary of the public investigation of gender equality policy presented in 2005 stated that, even if “the primary sex segregation between paid and non-paid work is broken by women being active on the labour market to the same extent as men”, it is still the case that “the secondary sex segregation /... / is strong, with women and men working in different sectors, industries, professions and positions in the labour market” (SOU 2005:66, 11-12, *authors translation*). By combining data from Statistics Sweden, the equality index developed by the Swedish insurance company Folksam and two published research reports (Balkmar 2006, Balkmar and Nyberg 2006) an overall

picture of the gender distribution in different sectors and industries in Sweden has been constructed, presented in the table.

Distribution of women and men on Sweden’s labour market

Distribution	Areas
Dominated by men (over 60 % men)	ICT, Cars/Trucks/Machines, Mining/Metal, Chemistry, Forestry, Telecom, Transportation, Other industry, Agriculture, Manufacturing industry, Steel, Biotech, Wood, Computer technology, Electronics, Telephone/Television/Sound technology → Mainly Basic/Manufacturing industry & New technology
Balanced (60/40) ⁶	Healthcare, Consumer goods/Commerce, Media/Entertainment, Services, Textiles/Clothes, Recreation, Restaurants/Hotels → Mainly Services/Experiences
Dominated by women (over 60 % women) ⁷	Biomedicine, Nursing, Childcare, Elderly care, Healthcare, Personal services, Education/Research, Retail trade → Mainly Services/Experiences

Comparing this data about the gender-segregated labour market with the priority pattern in Sweden’s innovation policy, it is apparent that almost all the men-dominated sectors and industries are among the industry groups given a high priority in the innovation policy, namely Basic and Manufacturing Industries and industries based on new technologies. Moreover, almost all the women-dominated sectors and industries belong to the group of industries being down-prioritised in the innovation policy, namely Services and Creative Industries. The only exception is biomedicine, which might equally well be linked to the group of new technologies. Even those industries which are gender-balanced belong primarily to the low priority group of Services and Creative Industries, with the exception of the textile industry which is a female-dominated industry which might be classified as a manufacturing industry. From this comparison, it can be noted that the great majority of the innovation systems and clusters being prioritised in Sweden’s innovation policy are based on areas mainly employing men. In the empirical study presented here, this is true in 80 percent of cases. Thus the link between the priority pattern and men is strong.

The link between the priority pattern and masculinity

So how is the above priority patterns linked to “masculinity”? As stated earlier in this chapter, the main difference between “men” and “masculinity” is that even though the latter refers to male bodies incorporated by the former it is not limited to biological traits (Mellström 2003). Instead, “masculinity” refers to a symbolic dimension of gender, articulated in terms of linguistic and graphical representations (Acker 1999, Gunnarsson et al. 2003). In this section, it will be explored how Sweden’s innovation poli-

⁶ In larger companies, the balanced distribution between men and women is only valid for the employees, not the management.

⁷ These statistics are only valid for the employees and not the management, except in personal services where the main proportion of entrepreneurs are women.

cy symbolically constructs gender. As Hacker (1989) stated early on, the interpretation of technology as masculine has ascribed innovation the same gender labelling. Other researchers have since uncovered how the dominant understandings of how innovation occurs and ought to be promoted by public authorities are based on a masculine view of the economy, in which technology is often attributed a central role (e.g. Blake and Hanson 2005, Pettersson 2008, Sjögren 2011). Wajcman (1991) has contributed with an analysis of how technology – and hence innovation – can be linked to two symbolic forms of masculinity. Firstly, a form focusing on physical strength and mechanical skills and secondly, one based on a professional and calculating rationality attributed to technological experts. A similar distinction has been made by Lie and Sørensen (1996).

According to Carrigan et al. (1987) and Connell (2005), these two symbolic masculinities can be regarded as hegemonic, in that they are ascribed a predominant and normative role. Ericson (2011) clarifies that the term “hegemonic” applies to certain forms of masculinity which appear as more natural than other forms and thus occupy a dominant position. Masculinity studies have consequently focused on the power relationships between different types of masculinities. However, Seidler (2006) argues that by denoting certain masculinities as hegemonic, experiences of powerlessness among men are ignored. He critiques Connell for defining the relationship between different masculinities exclusively as ones of power. Therefore he suggests that masculinity studies should adopt the same device as second-wave feminism, namely that “the personal is political”. Otherwise, he claims, studies of masculinity are doomed to promote a disembodied vision of power. In regard to innovation policy, an embodied vision of power could imply an analysis of both symbolic priorities and men’s actual experiences of inclusion/marginalisation. Even if this specific chapter exclusively focuses on the symbolic level, in that it scrutinises the overall pattern of prioritisation in innovation policy programmes, the embodied aspects could later be studied in terms of actual experiences of resource distribution e.g. among men active in the marginalised group of Services and Creative Industries. This focus makes it relevant to consider the hegemonic position of those masculinities which contribute to reinforcing “men” as a superior social category in innovation policy, regardless of Seidler’s critique (cf. Ericson 2011).

The hegemonic position of certain masculinities is reinforced both by symbolic constructions of masculinity and by the resource distribution of public funding, as reflected in the presented study of Sweden’s innovation policy programmes. The two types of masculinity – physical strength/mechanical skills and calculating rationality/technological experts – correspond to the priority pattern revealed in the survey of Sweden’s innovation policy. The first prioritised group, Basic and Manufacturing Industries, is often described precisely in terms of physical strength and mechanical skills. Work in basic industries is considered as being characterised by the fact that it by its nature can be more risky and/or physically demanding than average (Ministry of

Enterprise, Energy and Communications 2001). Basic industry has the highest percentage of employees with only primary education compared to other manufacturing industries in Sweden, which can be interpreted as signifying that mechanical skills are more highly valued than academic skills. The second group, New Technologies, comprising lines of businesses characterised by high-technology, is often referred to as the second form of masculinity reflecting a professional and calculating rationality (cf. Lindblom Dahlstrand 2005). For example, the core of the ICT industry is defined as mainly including tasks which directly contribute to the production of computer systems, such as systems development, programming and graphic design, rather than activities pursued in the areas of management, economics and social interaction. This is despite the fact that the latter tasks may also be considered essential in order for the ICT industry to function (Augustsson and Sandberg 2006, Sjögren 2011). In this way, most of the innovation systems and clusters prioritised in Sweden's innovation policy are active in areas linked to certain types of masculinity on a symbolic level. These masculinities thus contribute to reinforce "men" as a superior social category in innovation policy at the expense of women and men incorporating/performing other types of masculinities and femininities (cf. Dahl 2011, Ericson 2011).

Mutual construction of gender and innovation

The link between innovation, technology and gender/masculinity varies in time and space. Launching the concept of "co-construction of gender and technology", Faulkner (2001) contributed with a tool for analysing gender and technology, as mutually constructed. Instead of treating technology as neutral or as a deterministic force, it is possible to discern how the design of new technologies is affected by both material conditions and social relationships, and vice versa. Paying attention to these aspects means that technology is no longer treated as a "black box", a given and unchanging phenomenon. This counteracts the risk of (on a symbolic level) automatically equating technology with (certain types of) masculinity. It also contributes to an understanding in which *all* people are considered potential contributors to innovation and technological development. Since the priority pattern in Sweden's innovation policy can be traced to two kinds of hegemonic masculinities, it is beneficial to modify Faulkner's concept to read: "co-construction of gender and innovation", that is, as a mutual construction of gender and innovation. Or even more specifically: "co-construction of masculinity and innovation", since it specifically concerns the construction of certain types of masculinities.

The concept of "co-construction of gender and innovation" (or "co-construction of masculinity and innovation") makes it possible to examine how social relationships and material conditions interact with understandings of innovation and innovation systems. Gender and innovation are created mutually in innovation policy when the range of sectors being prioritised corresponds to the sex-segregated labour market and when the innovation system concept is mainly linked to two kinds of technology, both

related to hegemonic masculinities (physical strength/mechanical and calculating rationality/technological experts). Thus, people are attributed different importance for innovation and growth. This estimation is based on the understanding that it is beneficial to divide people into different groups based on gender in relation to innovation and innovation systems and that it is possible to distinguish masculinity from femininity – and certain types of masculinity from others – when prioritising different actors and activity.

In summary, the empirical study presented here reveals that there is a link between innovation policy, men and masculinity, in that the two industry groups prioritised in the policy programmes are both men-dominated and linked to two specific types of masculinity on a symbolic level. Thus, innovation policies construct gender in a way which distinguishes men from women, masculinity from femininity, thus creating a hierarchy between these groups in relation to innovation and innovation systems. The policy also constructs segregation and hierarchy between different types of masculinities. These conclusions illustrate the interplay between the terms “men” and “masculinity” as certain masculinities serve to reinforce a superior position for “men” as a social category in innovation policy. After revealing this link between innovation policy, men and masculinity the upcoming section scrutinises the prospects for an innovation policy that reaches beyond segregating and hierarchical gender constructions.

Down-prioritised actors and areas

This chapter has examined the priority pattern of actors and industries in innovation policy programmes and strategies as well as its link to men and masculinities. Firstly, the dynamics of this link will be discussed in relation to the prospects for a policy not based on segregating and hierarchical gender constructions. In order to do that, attention will be paid to the group of industries which – in the presented study of Swedish innovation policy – has been down-prioritised, namely Services and Creative Industries. The data presented on the sex-segregated labour market shows that this group consists almost exclusively of industries where the workforce is gender-balanced or women-dominated. In this section, it will be discussed whether a higher priority of these industries might change the prevailing gender constructions in innovation policy, so that they become less segregating and hierarchical. It will be explored whether this can be achieved by incorporating women (and sectors which employ a lot of women) into the symbolic understanding of innovation and thus deconstruct the link between innovation, men and masculinities and reconstruct a link between innovation, women and areas associated with women. Wajcman (1991) discerns how women have often been associated with values such as humanism, pacifism, social care and mental/spiritual development. She further notes that areas and industries occupying a lot of women have seldom been associated with innovation. The fact that several of the industries included in the group of service and creative industries offer physical, spiritual

and material services – evoking associations with typically women-dominated activities – might have contributed to them being down-prioritised in innovation policy programmes, similar to earlier gender scientific findings of gender segregation and hierarchy in organisations (cf. West and Zimmermann 1987, Butler 1990, Acker 1999, Fenstermaker and West 2002).

Lie and Sørensen (1996) have shown how technology and innovation are often allowed to represent the opposite of what is associated with the home and daily life – areas with which many of the gender-balanced and women-dominated industries may be associated (such as health and social care, healthcare, personal services, retail, media and entertainment). Lie and Sørensen believe that it is possible to broaden the view of technology and innovation to include activities which occur within households. In this way, the users' freedom of action is taken into account since this determines the actual function of different technologies in everyday life. Everyday innovation has also been acknowledged in other scientific publications (e.g. Nählinder 2010, Nählinder and Sundin 2010, Johansson and Lindberg 2012). However, it may be hazardous to equate Services and Creative Industries on the one hand, and home/everyday life on the other – especially without an ensuing discussion as to the labour and technology content of different industries. It is the very way that different industries are characterised which creates and maintains segregating and hierarchical gender constructions. The symbolic link between industries employing mostly women and home/daily life is a result of certain discourses in policy and research, being reinforced by the priority pattern of resource distribution revealed in the presented survey of Sweden's innovation policy programmes and strategies (cf. Lindberg 2010). Thus the preferential right of interpretation determines how different industries are characterised and assessed (cf. Bacchi 1999).

An alternative way of assessing different industries is to break the symbolic associations between industries employing a lot of women and home/daily life as well as between men-dominated industries and mechanics/high-technology. The everyday aspects of the latter and the technical aspects of the former would instead be acknowledged. Based on data on the sex-segregated labour market, it is possible to associate, for example, the women-dominated field of healthcare with the high-technology increasingly being used there. Industries employing many women could equally well be described in terms of the technological development, design and production that they involve. Likewise it is possible to associate the men-dominated fields of ICT and telecom with the increasing presence of computers and televisions in our homes and daily life. The men-dominated industries being prioritised in Sweden's innovation policy also rely on marketing, users, services, organisation and interpersonal relationships. Such border-crossing associations blur the symbolic link between men, machines and high-technology as well as between women, domestic services and low-technology – thus challenging segregating and hierarchical gender constructions. Blurring this link even further, Lie and Sørensen (1996) suggest that the concept of “everyday life”

ought to be redefined. From simply referring to daily life in households, they suggest that the concept should include all major actions and events taking place in all parts of society. They highlight the futility of the distinction between work and daily life, since it creates a dichotomy based on segregating gender constructions. This can be interpreted as a proposal to include the everyday life aspect in the concepts of innovation and technology. The everyday aspect ought then to be highlighted in all spheres of society, not only in relation to spheres associated with women.

Returning to the question concerning the prospects of an increased prioritisation of Services and Creative Industries evoking less segregating and hierarchical gender constructions in innovation policy, the answer is somewhat nuanced. A greater degree of prioritisation of industries employing mostly women would break the gendered segregation and hierarchy between different industries in innovation policies and thus break the biased symbolic associations between innovation, men and masculinities. However, this might not be enough to truly transform gendered structures in innovation policy. As Squires (2005) suggests, three different strategies must be employed simultaneously in order to induce change: inclusion, reversal and displacement. Inclusion means formal equal rights of women and men to participate in and benefit from policies, e.g. by drafting and distributing calls in policy programmes in a way that addresses both women and men. Reversal means acknowledging women's contributions to growth and innovation, e.g. by equal prioritisation of men-dominated industries and industries employing mostly women in policy programmes and strategies. Displacement means altering discourses and practices into less segregating and hierarchical gender constructions, e.g. by acknowledging a broad spectrum of actors, areas and innovations in innovation policies. While the first two strategies require dichotomous thinking, distinguishing "men" from "women", the last one implies a problematisation of how discourses ascribe gender to people, attributes and activities. Following this line of argument, an increased prioritisation of Services and Creative Industries represents a strategy of reversal, acknowledging women's contribution to innovation and growth. However, in order to transform segregating and hierarchical gender structures in innovation policy, this strategy must be accompanied by strategies of inclusion and displacement. This implies a strategic re-formulation of policy programmes and strategies so that these reach beyond dualistic gender constructions. Technology, production, users, organisation and innovation must be acknowledged and equally esteemed in regard to all industries, regardless of whether these industries are men-dominated, gender-balanced or women-dominated.

The potential for crossing boundaries

Having highlighted the potential for combining three different strategies – inclusion, reversal and displacement – aimed at changing segregating and hierarchical gender constructions in innovation policy, this section will specifically explore the potential for crossing boundaries in innovation policy programmes and strategies. The empirical

material reveals some nuances in the symbolic link between innovation, men and masculinity. As pointed out in the initial description of innovation systems and clusters as policy tools, their basic function is to link actors and sectors across industrial and sectorial boundaries. Where this has been done in such a way as to cross the boundaries between men-dominated, women dominated and gender-balanced industries, gendered dichotomies may be blurred. This claim is supported by Balkmar (2006) who emphasises that if it is only about crossing boundaries between different men-dominated industries belonging to the same research paradigm, segregating and hierarchical gender constructions will not be challenged. Balkmar discerns beneficial combinations and boundary-crossing potential in the areas of services, education and food (the latter in cases where the cultural and social aspects of food are also focused). A detailed study of the empirical data presented here reveals some examples of such boundary-crossing; some of the innovation systems and clusters being promoted involve the food industry and this includes the gender-balanced and women-dominated fields of tourism and retail as well as the men-dominated fields of agriculture, biotechnology and manufacturing. Public investments have also been made in innovation systems and clusters involving design and communication, where the men-dominated fields of ICT, telecom and image/audio are included alongside the gender-balanced areas of media and entertainment. A third case is VINNOVA's efforts to promote e-services in the public sector, embracing both the women-dominated fields of healthcare and personal services as well as the men-dominated field of ICT.

The data also reveals other areas such as services, education and food which reveal a similar crossing of borders. Among the key industries highlighted in Sweden's national innovation strategy are pharmaceuticals, biotechnology and medical technology. These areas include men-dominated fields such as chemistry and biotechnology just as much as gender-balanced and women-dominated fields such as biomedicine, healthcare, education and research. Another example is the investment in clusters and innovation systems focusing health technologies, which includes the women-dominated fields of healthcare, nursing and personal services as well as the men-dominated fields of manufacturing, electronics, biotechnology and chemistry. In the textile and fashion industry, innovation systems and clusters have been supported involving both the men-dominated field of manufacturing industry as well as the gender-balanced area of textile manufacturing and refinement and possibly also the women-dominated field of retail. One of the innovation systems featured in both national and regional innovation policy programmes is working with robotics, which primarily involves the men-dominated fields of automotive and mechanical engineering, electronics and ICT, but also brings in the women-dominated field of healthcare and nursing, in that certain parts of the development of new robotic technologies are intended to be employed in that field.

The boundary between the men-dominated field of ICT and the women-dominated field of healthcare and nursing can be illustrated by earlier research within Feminist

Science and Technology Studies. Haraway (1991) argues that high-technology challenges the dualisms of body/mind, nature/culture, feminine/masculine, passive/active. In the relationship between man and machine the boundaries between these dualisms are floating, she states. Machines can do what humans are incapable of doing with our physical bodies. Lie and Sørensen (1996) add that modern technology is ambiguous because it theoretically implies standardisation, globalisation and bureaucracy. When used in practice, however, it may be adapted to the local context. The technology is filled with meaning only when it interacts with everyday life, comprising both a practical and an emotional adjustment. Over time ICT has come to be a men-dominated industry in regard to tasks such as systems development, programming, graphic design and content work. Still, a possible change of prevailing gender constructions can be discerned in the innovation systems and clusters which connect ICT with the gender-balanced and women-dominated areas of Services and Creative Industries (e.g. media and entertainment, education and research or tourism). In addition to e-services in the public sector, ICT for healthcare in the home and design/communication constitute boundary-crossing potential in the innovation policy strategies and programmes examined here. The transformative effects of these border-crossing initiatives should not be taken for granted, though. Segregation and hierarchy can still be constructed within these constellations by prioritising those actors, areas and innovations that are symbolically linked to men and hegemonic masculinities. This was the case in a regional innovation system in the food industry in Sweden which employs women and men to the same degree but where actors, areas and innovations associated to high-technology, men and certain masculinities were prioritised over those associated with low-technology and women (Scholten et al. 2010).

Conclusions

The all-embracing aim of this chapter has been to highlight the mutual interconnectedness of gender and innovation in innovation policy, using Sweden as an empirical case. Firstly, the priority pattern of actors and industries in innovation policy programmes and strategies was examined. Secondly, the link from the priority pattern to men and masculinities was scrutinised. Thirdly, the dynamics of this link were discussed in relation to the prospects of a policy not based on segregating and hierarchical gender constructions. In this last section, conclusions will be drawn from the results of each of these three steps.

After analysing the empirical data on innovation policy priorities in Sweden, it can be stated that in 80 percent of the cases, the promoted innovation systems and clusters are active within basic industries, manufacturing industries and industries based on new technologies, all of which are men-dominated industries. The remaining 20 percent of cases belong to the group of Services and Creative Industries, comprising gender-balanced and women-dominated industries. The prioritised groups of basic industries, manufacturing industries and industries based on new technologies may be sym-

bolically linked with two particular types of imagined masculinity: One that is associated to physical strength and mechanical skills and another linked to a professionally calculating rationality of technology experts. The empirical study thus confirms the link between innovation, men and masculinities in Sweden's innovation policy.

By reformulating the Faulkner's "co-construction of gender and technology" to read "co-construction of gender and innovation", it is exposed how gender/masculinity and innovation are mutually constructed in innovation policy, since the priority pattern corresponds to the sex-segregated labour market in a way that presumes and reinforces segregating and hierarchical gender constructions. Thus it is revealed how symbolic constructions of masculinity and resource distribution interact in a manner that benefits certain actors and areas while marginalising others. The key to widening the range of actors and areas eligible for public funding in Sweden's innovation policy may be found in a combination of strategies: inclusion, reversal and displacement. This means reducing formal barriers to women and men in the formulation of policy programmes and strategies, acknowledging the importance of areas employing many women in policy priorities and reaching beyond dualistic gender constructions by including a wide range of actors, areas and innovation. Dualistic gender constructions can be blurred by highlighting the everyday aspects, technology, organisation and social relationships in *all* industries. A potential can also be discerned in promoting innovation systems and clusters crossing sectorial boundaries, thus connecting women-dominated, gender-balanced and men-dominated fields. Such border-crossing can take place in areas such as food, health technology and ICT in the public sector. These conclusions can be understood in the light of Pettersson's (2008) sketches of how gender equality in regional policy might look like, envisioning how several different forms of innovation and economic activities are allowed to occupy key positions in private and public sectors, in people's homes and in their workplaces. This way, the sort of policy called for by Haraway (1991) might be achieved; one that is able to deal with incomplete, contradictory and ever-ongoing gender constructions. Innovation policies could thus reach beyond segregation and hierarchy in the co-construction of gender/masculinity and innovation, acknowledging a more varied set of gendered identities, experiences and visions.

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New Subject Positions for Non-Traditional Actors or Business as Usual in the Strong Region Discourse?

Christine Hudson

Abstract

Swedish regional policy has moved from being a highly centralised, national government regional policy aiming at levelling out territorial differences and aiding problem regions to a more decentralised, neo-liberal policy focusing on promoting growth in the whole country. In this new policy, emphasis is placed on the need for increased entrepreneurship and the development of innovation systems in order to facilitate the region's economic growth so that it becomes a strong region. Applying Carol Bacchi's "What's the Problem?" approach to government policy documents and reports concerning regional policy between 1993 and 2010, this chapter analyses the gendered consequences of the strong region discourse and asks what spaces and subject positions are being created for those who do not fit the strong region image? Who is constructed as the entrepreneurial citizen capable of promoting innovation? The chapter identifies several competing discourses at work: the strong region discourse, the gender equality for growth discourse, and the women as a problem in achieving regional development discourse. It argues that these are, somewhat paradoxically, complementary and contradictory – both opening and closing spaces and opportunities for subjectivities for women and other "Others", particularly when gender, ethnicity and age intersect. It concludes that the male norm underlying the construction of entrepreneurship and innovation still continues to dominate and the networks and clusters that women engage in are generally not ascribed a place in innovation systems and consequently not defined as "innovation". Nevertheless, although it still appears to be business as usual, potential may lurk in the cracks between the representations of women, immigrants and young people, both as problems and as assets. These can perhaps provide opportunities to challenge the dominant gendered, radicalised and sexualised power relations in regional policy and the construction of innovation as "masculine".

Keyword: Gender, regional policy, growth, neoliberalism, subject positions, innovation

Introduction

The move towards governance and the concomitant growth of neo-liberalism have had a profound effect on regional policy in Sweden. In much the same way as we have seen the development of the concept of the *active citizen* associated with neo-

liberalism (Rose 1999) where citizens are constituted as self-governing, responsible subjects (Newman 2005), we have seen the rise of the *active region* responsible for its own wellbeing and growth. Emphasis is placed on the need for increased entrepreneurship and the development of innovation systems in order to facilitate the region's economic growth so that it becomes a strong region. Thus, since the 1990s, Swedish regional policy has moved from being a highly centralised, national government regional policy closely associated with the social democratic aim of levelling out territorial differences and aiding lagging or declining regions to a more decentralised, neo-liberal policy focusing increasingly on promoting growth in the whole country (Hudson & Rönnblom 2007, Hudson 2009). There is a powerful rhetoric of inclusion – of all being needed in the struggle to be successful and achieve economic growth and with co-operation between different actors and sectors playing a vital role in stimulating innovation.

In this discourse of “strong regions” with active, entrepreneurial citizens, what spaces and subject positions are being created for those who do not fit the strong region image? What happens to those not usually associated with economic growth or innovation? Who is constructed as the entrepreneurial citizen capable of promoting innovation? What identities are being constituted for, say, declining rural regions and non-traditional regional actors such as women's groups, immigrants and ethnic minorities? What are the gendered consequences of this? Using Carol Bacchi's “What's the Problem?” approach (Bacchi 1999, 2009), these questions will be explored in relation to regional policy in Sweden, focusing mainly on the gendered consequences. The chapter also draws on governance theory and the concept of the active citizen in understanding these processes. The analysis is based on government policy documents and reports on regional policy between 1993 and 2010.

The chapter is structured as follows. It begins by presenting the “What's the Problem Represented to be?” approach and then charts the rise of the neo-liberal strong region discourse. There is subsequently a discussion of the active regional citizen and then gender equality as a driving force for regional growth. Next, the consequences of the gender equality as growth discourse for women and other “Others” are discussed and finally some conclusions are presented.

The “What's the Problem Represented to be?” Approach

Carol Bacchi's “What's the Problem Represented to be?” approach to policy analysis (Bacchi 1999; 2009) is used to enable a focus on *how* arguments concerning the new forms of regional policy assign different subject positions to different categories of people; in particular, what kind of subject positions are being given to women as a group? (See also Hudson & Rönnblom 2007). Who benefits and who loses from the way of seeing the world imposed by the dominant regional discourse i.e. what are the effects of the discourse? Based on Foucault, Bacchi (2009:15) identifies three interconnected and overlapping kinds of effects. Firstly, there are the *discursive effects* which follow from the limits imposed on what can be said and who can say it, when

and where and with what authority (Ball 1990, Bacchi 1999) and what is left silent. Thus “the problem representations and the discourses that frame them make it difficult to think differently” (Bacchi 2009:16), closing off and leaving alternative ways unexplored. Secondly, there are the *subjectification effects* i.e. the ways in which subjects and subjectivities are constituted in discourse. Discourses make certain subject positions available – stigmatising some (for example, as “needy” or “disadvantaged”) and “exonerating others and keeping change within limits” (Bacchi 2009:42). Bacchi draws attention to dividing practices, for example, unemployed versus employed and how these can create members of the targeted groups as responsible for the problem. This may work to disempower those targeted, drawing attention away from the gendered, racialised and disabling structures which shape the possibilities of their lives and reinforce the existing power relations. Thirdly, there is what Bacchi calls the *lived effects* i.e. the *material* impact of problem representations. Policy representations of problems have “effects *in the real* by materially affecting our lives” (Bacchi 2009: 18). In this paper, it is mainly the *discursive* and the *subjectification* effects that will be discussed⁸.

Materials Analysed

The article is based on an analysis of official documents dealing with regional policy over a nearly 20-year period. The early 1990s is chosen as the starting point as this marks the beginning of a fundamental shift in Swedish regional policy towards a more neo-liberal emphasis on achieving economic growth through strong, competitive, entrepreneurial regions in all parts of the country. The documents analysed include government white papers, official government reports, ministry publication series (mainly from the Ministry of Enterprise, Energy and Communications) and reports from government agencies dealing with regional development, NUTEK9 (see table below). The focus has been on regional policy which has meant that documents dealing with reforms of regional administrative structures have been omitted in order to keep the textual material manageable. Nevertheless, the documents chosen interact with each other and together create “a powerful version of social reality” (Atkinson & Coffey 2004: 74), constructing shifting meanings of regional development/growth and problem representations that have consequences, for example, for the type of subject positions made available, the limits imposed on what can be said and who can say it (Bacchi 1999).

⁸ See Lindberg (2010) for an example of the “lived effects” of innovation policy in relation to regional development.

⁹ Originally NUTEK from 1/4/2009 Tillväxtverket.

Regional Policy Reforms in Sweden

1993-1997	<p><i>From lagging regions to promoting growth in all regions; regional policy to be formulated from a gender perspective, explicitly taking into account women and men; regional resources centres for women introduced</i></p> <ul style="list-style-type: none"> · Ds 1993:78 <i>A Growth Promoting Regional Policy</i> · Prop. 1993/94:140 White paper, <i>Settlements and Regions in Development</i>. · Prop 1994/95:161 White paper, <i>Regional Policy</i>
1997-2001	<p><i>From regional policy to regional business development and enterprise policy; regional growth agreements and regional partnership introduced; gender equality as a horizontal goal permeating growth agreements</i></p> <ul style="list-style-type: none"> · Prop. 1997/8:62 White paper, <i>Regional Growth – for Work and Welfare</i> · Ds 1999:32 <i>Development and participation – agenda for the Department of Industry's growth policy</i> · Ds 2000:7 <i>Report on the Regional Growth Agreements Growth in the Whole of Sweden (1998/99)</i> · SOU 2000:87 <i>Regional Policy Commission's Final Report</i> · Ds 2001:15 <i>Report on the Regional Growth Agreements, First Year (1999/2000)</i> · Ds 2002:34 <i>Report on the Regional Growth Agreements, Second Year (2000/01)</i>
2001-2007	<p><i>Regional policy and regional business development and enterprise policy amalgamated to form a new regional development policy; regional growth agreements become regional growth programmes; gender equality subsumed into social dimension of sustainable growth</i></p> <ul style="list-style-type: none"> · Prop. 2001/2: 4 White paper, <i>A Policy for Growth and Vitality in the Whole Country</i> · NUTEK (2002) <i>Strong Regions – for National Growth in a Global Economy</i> · Ds 2003:43 <i>Report on the Regional Growth Agreements, Third Year – from growth agreement to growth programme</i> · NUTEK (2004a) <i>Strong Regions – for increased competition and welfare</i> · NUTEK (2004b) <i>Resource Centres for Women – a force for sustainable regional development?</i> · NUTEK (2005) <i>On the way to sustainable regional development? – Regional Growth Programme 04</i> · NUTEK (2006) <i>On the way to more strong regions? Regional Growth Programme 05</i> · NUTEK (2007a) <i>Regions at work for increased growth</i> · NUTEK (2007b) <i>Annual Report 2007</i> · NUTEK (2007c) <i>On the way to a focused approach to growth, Regional Growth Programme 06</i> · NUTEK (2007d) <i>Follow up of the regional development programme 2007</i>
2007-	<p><i>Regional development policy transformed into regional growth policy to better reflect the activities to be carried out; emphasis on economic growth and strengthening local and regional competitiveness and entrepreneurship; gender equality returned to being a "numbers" game.</i></p> <ul style="list-style-type: none"> · SOU 2006: 3 <i>Strengthened competitive power and employment in the whole country</i> · Ministry of Enterprise, Energy and Communications (2007) <i>A national strategy for regional competitiveness, entrepreneurship and employment 2007-2013</i> · Prop. 2007/08:1 <i>Government Budget Bill 2008</i>. · Ds 2009:69 <i>Strategic follow-up of a national strategy for regional competitive power, entrepreneurship and employment 2007-13</i> · NUTEK (2008) <i>Co-operation for Growth, Regional Growth Programme 07</i> · NUTEK (2009) <i>Annual Report 2009</i> · Näringsdepartementet (2009) <i>A strategy for strengthening the development capacity of Sweden's rural areas (Skr.2008/09:167)</i> · Tillväxtverket (2009) <i>Regional growth with focus on attractiveness and the good life, Regional Growth Programme 2009</i> · Skr. 2009/10:221 <i>Strategic growth measures for regional competitiveness, entrepreneurship and employment</i> <hr/>

The rise of the Strong Region Discourse

The economic crisis in Sweden during the 1990s, coupled with the increasing influence of neo-liberalism and the shift towards governance led to a fundamental reconsideration of the aim of regional policy. It changed from being something that was just for “problem” regions (resource equalisation) to a more neo-liberal discourse on achieving economic growth in the whole country through developing strong, competitive regions capable of stimulating innovation and entrepreneurship. These changes were considered so far reaching as to constitute a paradigm shift in the way regional policy is viewed in Sweden (NUTEK 2004a; Lindström 2005). A number of themes can be identified running through the policy documents and government reports from the early 1990s to today. These include an emphasis on: achieving sustainable growth (particularly in economic terms); decentralising regional policy and creating strong regions able to take responsibility for their own wellbeing and development; creating active, innovative, entrepreneurial citizens; fostering inclusion – i.e. women and men, young and old, immigrants needed to achieve growth; and using gender equality as a driving force for regional growth. At the same time, there is a counter-theme of women as problematic in achieving regional development. For example, the networks and clusters in which women engage are not ascribed a place in innovation systems (Lindberg 2010) and are thus not defined as contributing to regional growth. These themes weave in and out of each other – sometimes contradictory but mostly reinforcing the emphasis on economic growth.

Turning first to the growth issue; an emphasis on regional policy as a means of achieving economic growth becomes increasingly apparent from the 1990s onwards. (See Table for an overview of the development of the new regional growth policy). An early example is the 1993 Labour Market Department report entitled *A Growth Promoting Regional Policy* (Ds 1993:78) which formed the basis for the white paper *Settlements and Regions in Development* (Prop. 1993/94:140). These documents argue that the original focus of regional policy on aiding lagging or declining rural regions, particularly in Northern Sweden, was no longer appropriate. What was needed was a regional policy that embraced all the country’s regions as it was no longer clear which ones might be growth regions in the future and that high growth in a few regions was insufficient to achieve national economic growth. Furthermore, the white paper states that regional policy should be formulated from a gender perspective and “*explicitly take into account that there are both women and men in the country’s regions*” (Prop. 1993/94:140 page 31). The economic growth goals of regional policy and the need to involve all the regions is emphasised even more strongly in the white paper *Regional Policy* (Prop 1994/95: 161), so that “*the stronger growth oriented policy the government wishes to pursue will be successful*” (Prop 1994/95: 161 page 13). Furthermore, it states that more attention must be paid to women in regional policy as “*there are too few measures specifically directed towards women’s enterprise*” (ibid page 15). The move towards governance expressed in these documents i.e. from a highly centrally

controlled regional policy to a more decentralised one in which responsibility is passed to the regions themselves and attention drawn to gender, appears to be opening up new spaces for and allowing in new actors in the formulation of regional policy (see also Hedlund & Hedfeldt, 2012, for a similar argument in regard to the European regional structural fund partnerships). In terms of Bacchi's *discursive effects*, this seems to offer the potential for non-traditional regional actors to "speak" (and perhaps be "heard"?) in the formulation of regional policy.

The white paper *Regional growth – for work and welfare* (Prop. 1997/8:62) introduced a new *regional business development and enterprise policy* (*regional näringspolitik*) (see table above). It argued that economic growth and competitiveness in Sweden would be increased by making better use of the growth potential in all regions. This was to be achieved through a more decentralised regional business development and enterprise policy better adapted to local and regional circumstances. The emphasis was on regions themselves taking responsibility and it argued that:

*“every region needs to utilise its assets and thus strengthen its competitiveness” ...and “stimulate a sustainable economic development that can contribute to more and expanding businesses and thereby increase employment for both **women and men**”* (Prop. 1997/98: 62, page 1, my emphasis).

Regional growth agreements (*tillväxtavtal*) were introduced as an important tool for achieving the goals of the new regional policy. National government was to sign a broad development “contract” with each region which, in return, would get a greater say in the disposition of both the Swedish and EU resources designated for the region – its “growth capital” (Hudson 2005). The agreements were to:

*“be guided by the demands of business and the local and regional requirements for measures to promote growth and employment. The involvement of representatives for business and industry is crucial. **Gender equality between women and men** as well as social and ecological aspects should be taken into consideration. The agreements should also promote sustainable development.”* (Proposition 1997/98:62, p. 203, my emphasis).

A new form of organisation, regional partnership, was established to work with the growth agreements. The partnerships were to have a broad membership of regional stakeholders from all sectors including local, regional and national government, higher education institutions with particular prominence given to the inclusion of business representatives (Prop. 1997/98: 62; Ds 1999: 32). However, it was emphasised that other interests such as voluntary organisations, women's groups (particularly the regional resource centres for women, NUTEK 2004b) and other representatives of civil society could and should also be invited *“as sustainable growth can only be obtained when everyone's ability and competence is utilised”* (Ds 1999: 32 page 5). This, plus

the fact that gender equality was to be a horizontal goal that permeated all the work on the growth agreements, seems to strengthen the salience of gender in regional policy. These developments appear to be extending the possibilities for women (as a group) to be constructed as active subjects, able to influence and shape the regional discourse (cf. Bacchi's *subjectification effects*) rather than just the passive recipients or objects of regional policies and measures.

Following the Regional Policy Commission's final report (SOU 2000: 87) arguing for the replacement of the existing policy rationale with a better regionally adapted welfare and growth policy for the country as a whole, the dominance of the growth and competitiveness perspective becomes even clearer (see table above). In the subsequent white paper *A Policy for Growth and Vitality in the Whole Country* (Prop. 2001/2: 4), regional policy and regional business development and enterprise policy are amalgamated to form a new regional *development* policy (*regional utvecklingspolitik*) (Prop. 2001/2: 4 page 100) and the regional growth agreements are transformed into regional growth programmes. The reason given for having a regional development policy applicable to all parts of the country is that national growth is comprised of the sum of the growth that is created locally and regionally and is, therefore, dependent on how well the local and regional growth potential is utilised. The need to create strong regions is emphasised and responsibility is clearly shifted to the regions themselves and the individuals in them. However, these individuals are presented in gender-neutral terms as:

“local and regional actors with the greatest knowledge of their regions and thus also which measures are most appropriate for achieving long-term sustainable regional development” (Prop. 2001/2: 4, Page 119).

Further examples are: “Growth is created at the local and regional level by people in businesses” (Prop 2001/2: 4, page 6) and “people’s willingness and opportunities to develop are crucial to Sweden’s prospects of continued economic growth” (Prop 2001/2: 4, page 33). Nevertheless, the white paper is very critical, drawing on previous evaluations of the growth agreements (see Ds 2000: 7 and Ds 2001: 15)¹⁰, of the failure to include a gender perspective in the growth agreements. It is interesting to note that the way in which gender equality is to be incorporated changes in the growth programmes. Sustainable growth is conceptualised in terms of three, supposedly equal, dimensions: economic, ecological and social. Instead of being a horizontal goal to be integrated throughout the whole of the policy field, gender equality is subsumed into the social dimension of sustainable growth (Hudson & Rönblom 2007). Furthermore, despite the increasing formulation of growth as sustainable growth comprising economic, ecological and social dimensions, the economic dimension dominates. Indeed as Rönblom (2009) points out:

¹⁰ The subsequent evaluations see Ds 2002: 34 and Ds 2003: 43 were also critical.

“Ecological growth and social growth are constructed as results of economic growth – not as dimensions of parallel importance. This hierarchical ordering shrinks – and bends – the integration of gender equality to a consequence of economic growth, whereby economic growth is regarded as gender-neutral” (Rönblom 2009, page 112).

These developments have implications in terms of both Bacchi’s *discursive effects* in that the subsuming of gender equality into the social dimension seems to be closing off and limiting the way in which gender equality can be framed (cf. Rönblom 2009) and *subjectification effects* in that economic growth is presented as gender-neutral. It is interesting to note that, after this change, evaluations of the inclusion of gender-equality in the regional programmes become less and less critical. As Rönblom (2009) remarks, the fifth evaluation of the programmes (NUTEK 2005c) has (despite its focus on sustainable growth) only a limited discussion of gender equality. The report’s main comments concern the lack of women in the regional partnerships but it states that issues concerning gender equality are, nevertheless, quite well integrated into the regional growth programmes. However, as Rönblom (2009) points out, the women in the partnerships seem more hesitant than the men to come to this conclusion. This finding holds for the subsequent evaluations (see NUTEK 2006; NUTEK 2007c; NUTEK 2008), where gender equality is discussed largely in terms of being the best integrated of the three sustainability aspects (i.e. environmental, gender equality and integration aspects). The only deviation from this is with regard to the inclusion of Regional Resource Centres for Women. Here it is considered that, whilst the inclusion of representation from the centres has helped women gain access to the regional partnerships, it has not enabled them to influence the content of the regional programmes. Thus, to reformulate the old Victorian adage concerning children – women should be seen but not heard. In terms of Bacchi’s *subjectification effects*, the representatives from Regional Resource Centres for Women have been constructed as “peripheral”. This helps limit challenges to, or changes in, the existing gendered and racialised regional power relations which might otherwise have followed from the inclusion of representatives from the Resource Centres in the regional partnerships.

Perhaps even more telling are the evaluations of the Regional Development Programmes (RUP)¹¹. The RUPs were introduced in parallel with the regional growth programmes both with the aim of achieving better sectorial co-ordination and as an expression of the emphasis that the government wanted on sustainable development. In RUP, the economic focus was to be: “*complemented with the necessary and hitherto missing ecological and social perspective on regional development*” (NUTEK 2007d). However, despite this pronounced emphasis on sustainable development, gender equality is notable largely for its absence both in this report and in the subsequent evaluation of RUP (see Tillväxtverket 2009). In terms of Bacchi’s *discursive*

¹¹ These were introduced in Prop. 2001/2: 4 *A Policy for Growth and Vitality in the Whole Country*.

effects, this silence closes off and makes it difficult for alternative ways of conceptualising regional growth to be explored.

The most recent shift in regional policy (see table above) can be discerned in the final report of the Government Commission for the Organisation of Regional Growth (*Strengthened competitive power and employment in the whole country*) which argues that regional policy has become regional development *and* regional growth policy (SOU 2006: page 87, my emphasis). This change is subsequently clearly expressed in the Government Budget Bill for 2007/8 where regional development policy is renamed Regional Growth Policy (Prop. 2007/08:1, page 11, post 19 Regional Development). This is to be sustainable growth “*i.e. it will contribute to enabling current and future generations of women and men to be offered sound economic, social and environmental conditions*” (ibid page 15). However, the emphasis is largely in terms of economic growth. “*A new policy for growth in the whole country must be given a clear focus specifically on growth.*” (ibid page 38, my emphasis). The government states its intention is to pursue an “*active renewal policy that will give all parts of the country opportunity to develop on the basis of their own strength and contribute to the collective good*” (ibid page 38). The emphasis on economic growth can be seen in that the growth potential in the whole country is to be improved by strengthening local and regional competitiveness and creating better conditions for business, innovation and investment. The policy states explicitly that:

“The policy for regional growth builds on that each region is given responsibility and powers that provide the possibility to grow on the basis of their own preconditions. Sweden’s growth is nothing more than the sum of the growth that is created in all parts of the country”. ... More strong regions are also good for Sweden’s weak regions. (Prop. 2007/08:1 page 38).

The small rural regions, particularly in northern Sweden, are portrayed as weak and trailing behind their European counterparts, whereas the large urban regions are portrayed in terms of dynamism, creativity, innovation and growth. This can be seen as an example of what Bacchi (2009) calls dividing practices whereby, through juxtaposing the weak regions with the strong, the small, rural regions are implicitly responsible for their own weaknesses. The heavy emphasis on economic growth also has *discursive effects* in that it constrains and limits the way in which regional growth can be conceptualised.

Interestingly, gender equality seems to have returned to being constructed largely in descriptive, quantitative terms, as for example, numbers or percentages of women and men starting new businesses, obtaining new job opportunities, commuting, or in leadership positions. Deeper analyses of the discriminatory power relations in society are lacking.

The Active Regional Citizen

Turning to who can be the active subject participating in formulating regional policy, leads into a discussion of the active regional citizen. The neo-liberal concept of the “active” citizen is closely linked to the processes of governance whereby power is dispersed within and beyond the state and “*the image of a hierarchical relationship between state and citizen ... is displaced by the idea of multiple parallel spaces in which power is encountered and negotiated*” (Newman 2005 page 4). Furthermore, Newman (2005) suggests that this dispersal of power opens up new ways in which citizens can engage in the politics of localities and regions. The active citizen exercises responsibility and participates not just in the public sphere “*but in a variety of private, corporate and quasi-public practices from working to shopping*” (Rose 1999, page 166), and is constituted as a self-governing, responsible subject. However, the transformation of citizenship into a more active, performing subject is profoundly gendered and racialised (Newman 2005). Regulatory practices become intertwined with the new modes of provision of welfare that work not only to constrain individual behaviour but also to define and limit subjectivities. The shift from welfare to neo-liberal citizenship regimes (Lister et al 2007) has been seen as having a profound effect on women’s citizenship. The “good” citizen is the active, working citizen (Lister 2003). The “de-gendering” of the active citizen (i.e. women as worker-citizens becoming “equal” with men as worker-citizens (Newman 2005)) means that women in general are being made “invisible” i.e. they “*seemingly “disappear” or fall off of the political radar*” (Dobrowolsky 2008, page 466). It seems that the neoliberal discourse of the active citizen is being translated into the “active region” in the same way as, under new ways of governing the social sphere, “*citizens are expected (or themselves expect) to play more active roles in handling risks and promoting their own welfare*” (Johansson & Hvin-den 2005 page 101).

It is increasingly clear from the Swedish regional policy documents and reports that active regions require active citizens. Interestingly, the gender-neutral tones of, say, the white paper Policy for Growth and Vitality in the Whole Country discussed above in regard to “*people in businesses*” and “*people’s willingness and opportunities to develop*” are subsequently “embodied”. For example, NUTEK (NUTEK 2004a) argues that:

*“Sustainable economic development and strong regions are dependent on individuals being given the prerequisites to enable them to realise their ideas and innovations. The concept of multiplicity is, therefore, central even in the work with regional development. Multiplicity means a multiplicity of people with regard to **gender, ethnicity, experience, age and sexuality**”* (NUTEK 2004a page 25, my emphasis).

The way appears to be opening up for non-traditional regional actors to participate in the regional discourse; in terms of Bacchi’s *discursive effects*, for the silent to speak

and in terms of *subjectification effects*, perhaps for new subject positions to become available to them.

The need for active, entrepreneurial, innovative citizens becomes even more pronounced when regional policy becomes regional *growth* policy. Under section 19 of the Budget Bill for 2008 (Prop. 2007/08:1) dealing with regional development, it is stated that regional growth policy is to be adapted to regional conditions in order for individuals and businesses to work better, be successful and utilise the development potential and dynamics where they live and work. Interestingly, a requirement for this is that:

“women and men, regardless of ethnic and cultural background or sexuality¹² should have the same opportunities to develop in all parts of the country. Systems that conserve the distribution of power and resources from these perspectives will be counteracted” (Prop. 2007/08:1 page 38, my emphasis)

However, despite the radical nature of the latter part of this quote, no suggestions are made in the Budget Bill or later bills, as to how the present gendered, racialised and sexualised power relations are to be counteracted. Indeed this idea is not developed in the later government report *Regions at work for increased growth* (NUTEK 2007a) which evaluates the work of the regional growth programmes. Instead, this shifts the focus back to a “genderless” individual who should work actively for growth, i.e. regional growth policy should be based on individuals’ own activity:

“Actors at regional and local level will be given even greater influence over – and responsibility for – achieving growth. The government will strengthen growth potential by creating better conditions for business, innovation and investment... The value of the improved conditions always comes back to individual actors Sweden’s collected development potential depends on how well citizens and businesses utilise their unique opportunities” NUTEK (2007a, page 4)

This suggests that the challenge to the dominant power relations inherent in the earlier quotes has, once again, been silenced in this new representation of the problem of achieving growth (cf. Bacchi’s *discursive effects*). In Forsberg, Pettersson and Lindbren’s (2012) terms it, ignores the homosocial (male-dominated) power relations. Nevertheless, there is also (a competing?) discourse linking gender equality with growth in general and emphasising its importance for regional growth. Whilst this discourse in many ways risks essentialising women in terms of their possessing the “right” characteristics for the new economy (e.g. flexibility, communication skills, networking etc), it may also open up new opportunities for women as a group to be ascribed more active subject positions. This will be considered in the next section.

¹² The parliamentary communication, Skr. 2009/10 page 7, adds disability and religious background.

Gender Equality as a Driving Force for Regional Growth

Prior to the 1990s, regional policy had largely ignored women (see Hudson 2008; Hudson & Rönblom 2007) and from the late 1980s onwards, there was mounting criticism of regional policy's "one-sidedness" (see Friberg 1993; Lindsten et. al. 2001) which saw only men. Both inside and outside the formal political arena, women began to lobby for the inclusion of a "woman's perspective" (Hudson & Rönblom 2007). Attention was drawn to the male dominance in regional politics, both concerning the kind of policies that were prioritised, and the overwhelming predominance of men involved in actually forming these policies. A critical study of regional policy carried out by Friberg (1993) highlighted the highly gender segregated labour market. It pointed out that regional policy's almost total focus on male-dominated branches meant that the problems and requirements of female occupations were rendered invisible. In particular, the difficulties facing women in sparsely populated, rural areas with regard to the labour market and earning their living were ignored.

In the knowledge and information-based economy, increasing importance is ascribed to human capital. In Sweden, women's economic activity rates are not far below those of men.¹³ They are employed predominantly in the service sector, which, according to NUTEK¹⁴, now makes a more important contribution to the country's growth than manufacturing (NUTEK 2005b). Furthermore, according to government reports, women as a group are extending their knowledge skills to a greater extent than men as a group¹⁵ and thus, "*Trends indicate that women have broadened their educational and employment choices to a greater degree than men.*" (Ministry of Enterprise, Energy and Communications 2007, page 19). This is seen as likely to become even more pronounced in the future as "women continue into higher education in greater numbers than men" (Näringsdepartementet 2009, page 34).

"Specifically, women as a group have a higher level of education and are more likely than men to continue learning throughout their working lives, which makes them attractive on a labour market undergoing rapid transformation" (NUTEK 2002, page 25).

These developments are seen as underlining the importance of women's productive role. Indeed, it has been argued that what are often described as typically "women's skills", such as networking and co-operation, mean that they are well equipped to meet the requirements of the new economy (NUTEK 2004a; NUTEK 2004b, page 18;). They are also at an advantage in regard to the more subtle management style required by the new economy, where people and communication skills are at a premium (see

¹³ 81% for women and 88% for men aged 20-64 in 2009 (Statistics Sweden 2010).

¹⁴ Part of Tillväxtverket, Swedish Agency for Economic and Regional Growth since 2009.

¹⁵ 50% of women and 37% of men, aged 25-44 had post-secondary education in 2009 (Statistics Sweden 2010).

Leidner 1991).¹⁶ This could be seen as an example of what Bacchi (1999) calls “lived-effects”. Women as a category become commodified; their labour power and expertise are commodities to be bought and sold in the market. At the same time, women’s reproductive role is also presented as important, as they continue to take the lion’s share of the responsibility for the care and nurture of the young, the old and the sick. Thus women as a group are ascribed economic importance through both their productive and reproductive roles. Skjeie & Borchorst (2003) have drawn attention to how gender equality is increasingly being expressed in terms of a rhetoric of profitability. Put simply: women + production = efficiency (Hudson 2008).

“When gender equality is argued as a means to secure competitiveness, the category of ‘women’ accordingly becomes a representation of ‘means’ for companies and organisations to use.” (Skjeie & Borchorst 2003, page 7).

In the neo-liberal growth discourse, gender equality becomes a product that can be packaged and marketed in achieving regional development (see Hudson 2008). For example Swedish Agency for Economic and Regional Growth (NUTEK, in its report on creating strong regions, argues that:

“Promoting a change in traditional gender roles, so that women are increasingly able to share the benefits of regional enlargement, has an intrinsic value and can also strengthen the competitiveness of trade and industry.” (NUTEK 2002, page 26)

Indeed, the idea of using gender equality as a means for improving regional competitiveness and innovation has begun to feature more frequently in relation to government directives for regional policy. For example, the government guidelines for the regional growth programmes from 2002, state:

“In order to create the conditions for an increase in the number of entrepreneurs and businesses, it is important to encourage a positive attitude towards entrepreneurship in both women and men and to promote a climate in which individual’s entrepreneurial skills, regardless of sex, can be utilised and developed.” (Näringsdepartement 2002, page 10)

and in a Ministry of Industry, Employment and Energy, Enterprise and Communications (*Näringsdepartementet*) publication on regional processes and co-operation in relation to achieving sustainable growth, there is a section headed “Gender Equality – a Prerequisite for Growth” (*Näringsdepartementet* 2004, page 44). The report states explicitly that a gender-equal society is an important factor for sustainable development. This connection continues to be made. For example, the National Strategy for

¹⁶ There is obviously a risk of essentialising women. Why, for example, should women be “innately” better at communicating than men?

Regional Competitiveness, Entrepreneurship and Employment 2007-2013 declares that:

“Special focus must be placed on equality between women and men, integration and diversity, and environmental issues. Equality between women and men must be promoted at all levels” (Ministry of Enterprise, Energy and Communications 2007 page 39).

There is an idea that everyone is needed and in this way nothing is wasted. *“Equality between women and men contributes to economic growth through everyone’s skills and creativity being utilised”* (Näringsdepartementet 2009, page 39). Interestingly, in the latest parliamentary communication on regional competitiveness, the gender equality for growth discourse is complemented by an “integration for growth” discourse in which it is argued that in a globalised world, the need for dynamism and innovation means that, *“access to competence with an international background and experience is increasingly important”* (Skr. 2009/10: 221 page 29). However, what are the consequences of coupling gender equality or integration to growth? Does it just serve to essentialise women or immigrants? Does it turn them into a resource that can be utilised? Or does it also open the way for new spaces and subjectivities in the regional policy discourse? The next section will consider these issues.

Consequences of the Gender Equality for Growth Discourse for Women and Other “Others”

Drawing on Bacchi’s *discursive* and *subjectification* effects, the consequences for non-traditional regional actors will now be considered. The reports and policy documents concerning regional policy studied here highlight considerable differences between regions in terms of their preconditions for creating growth and innovation. Furthermore, there has been an increasing polarisation between regions with growth taking place mainly in the major city regions whilst the weakest regions are the peripheral, sparsely populated rural regions above all in northern Sweden (NUTEK 2007b). In these latter regions, particular emphasis is placed on the importance of individuals and individual firms, entrepreneurship and innovation in realising growth (NUTEK 2002). Interestingly, when the gender equality for growth discourse appears in relation to regions, it becomes conflated with a discourse of women as problematic for achieving regional growth. Women as a group are portrayed as failing to fulfil not only their productive role but also their reproductive role i.e. they are not realising their potential or contributing their “fair share” to the achievement of growth and are thus constituted as a problem. Furthermore, the tendency to ascribe men and male-dominated branches a key role in achieving innovation (Lindberg 2010) means that women also become problematic with respect to stimulating innovation. This is evident even in the documents from the early 1990s which, whilst arguing very strongly for the inclusion of women in regional policy (particularly in terms of justice), nevertheless portray women as “lacking” when it comes to achieving economic growth. This can be understood

in terms of Bacchi's *subjectification effects* as stigmatising women, especially those in small rural regions; women themselves become responsible for the problem. It is interesting that when the category "women" is defined in some way such as by age, ethnicity, health, education or even type of employment, it is always in terms of a problem. Indeed, the intersection of power dimensions relating to gender, ethnicity and age constitute women as "extra needy"; for example, stigmatising immigrant women as particularly problematic and requiring help and thus limiting the subject positions open to them.

Firstly, young women in the fertile age groups are given particular mention as having contributed to the depopulation problems faced by the small rural regions (Prop. 1993/94: 140, page 31; Prop. 1997/98: 62 page 50; Näringsdepartementet 2009 page 37) by leaving these regions in larger numbers than young men. Furthermore, they are less likely to commute than men or more likely to commute only shorter distances; this is considered negative for labour market flexibility (NUTEK 2002; Prop. 1993/94: 140). However, no connection is made with women's lower wages or the fact that they work part time to a much greater extent than men as reasons for their more limited commuting. This is explained solely in terms of their greater responsibility for the home and the family (NUTEK 2002) i.e. essentialising women as "mother" and "care-giver". Thus women, through their bodies (and the absence of these bodies in certain regions), are constructed as problematic for regional growth.

Secondly, women as a group work in the "wrong" sector. The 1993/94 white paper *Settlements and Regions in Development* points out that the sex-segregated labour market is even more prominent in these problem regions (sparsely populated, rural) than in other regions. In these areas, "women's" employment is largely in the public sector and "men's" is in traditionally male-dominated sectors such as forestry and mining (Prop. 1993/94: 140, page 31). This dominance of public sector employment is even "to blame" for women's higher levels of education, for example:

"Large differences in the percentage of highly educated men and women can be explained to a large extent by the fact that women work in the public sector where the requirement for higher education has traditionally been greater than in the private sector which is often dominated by men" (NUTEK 2007c, page 21).

Furthermore, as Lindberg (2010) shows, areas where many women are employed and where women take an active lead have been systematically excluded from classifications of innovation systems. The networks and clusters in which women engage are not defined as contributing to regional economic growth or innovation. Thus regional policy becomes a homosocial policy, defining and limiting what is considered to be an innovation, an economic cluster and so forth (Forsberg, Pettersson and Lindgren 2012).

Thirdly, the problem of decreasing employment in the public sector is predicted to hit women's employment hardest, particularly in the problem regions where both

women's and men's economic activity is already below the national average. Here it is the turn of older women (aged 45-64) to be portrayed as especially problematic as their levels of economic activity are 9% under the national average. Younger women (aged 20-29) appear less of a problem (possibly because many of them have already left?) as their activity rate is only 2% below the national average (Prop 1993/94: 140 page 25). More recently, the Swedish Agency for Economic and Regional Growth's (NUTEK) annual report for 2009, in its section headed *More strong regions*, only mentions women in terms of problems. It, for example, points out that the difference in employment growth between men and women has increased in all types of region and: "the employment activity rate is lower for women than men and the difference between women and men has increased during the period 1996 – 2007" (NUTEK 2009 page 84). Once again Bacchi's *subjectification effects* can be discerned – women are stigmatised as deficient, as a problem, whereas the silence surrounding men serves to exonerate them from blame.

Fourthly, although Sweden is generally portrayed as lacking an enterprise culture, the small rural regions and women in general are identified as having particularly low levels of entrepreneurship and innovation. The gap between women and men with regard to running their own businesses is pointed out as larger in Sweden than in other European countries (NUTEK 2009). Although the situation has improved since the beginning of the 1990s when women ran only 15% of businesses, women still lag far behind men when it comes to starting new businesses (Prop 1993/94: 140; NUTEK 2009) and are underrepresented in applying for business support. However, they are not seen as completely to blame for this as it is considered that the present form of assistance for start-ups disadvantages "women". It is geared to providing seed capital for machinery and such whereas women tend to apply for small sums of money for "soft" enterprises (Prop 1993/94: 140 page 66). Implicit in this is that women are not adventurous enough and fail to be innovative. At the same time, women's enterprise is seen as an untapped potential (Prop 1993/94: 140 page 134) that is needed, particularly in the rural regions where it is considered that they can make an important contribution to creativity within business (Prop 1993/94: 140 page 81). This view of women as lacking enterprise even appears in more recent reports. For example, the government policy document *A National Strategy for Regional Competitiveness, Entrepreneurship and Employment 2007-2013* points out that there are still:

"differences between the enterprise habits of men and women, and fewer women than men run businesses in Sweden. Women have a great potential for running businesses. If more women started and ran businesses, Sweden's economic development would be boosted. It is therefore important that initiatives to promote enterprise among women be reinforced." (Ministry of Enterprise, Energy & Communications 2007 page 15)

Added to this is the problem that women, as a group, apparently lack the “right attitude” to starting a business. Fewer women and young people born abroad can see themselves as starting their own business compared with men and young people born in Sweden (NUTEK 2009). A survey carried out in 2008 showed that only 67% of young women aged 18-30 could consider starting their own business compared with 80% of young men in the same age group. (NUTEK 2009 page 20). Here the conflation of the discourses of “gender equality for growth” and of “women as problematic in achieving regional development” is evident. Women as a group are constructed as problematic, as in need of special measures, but at the same time essentialised as possessing potential for contributing to the creation of growth. Somewhat contradictorily, this both extends and limits the subject positions available (cf. Bacch’s *subjectification effects*).

Fifthly, women have a far greater level of absence from work due to ill health. For example in 2005, 62% of those on sick leave were women (Ministry of Enterprise, Energy and Communications 2007). Interestingly, this is one of the few “problems” with women that is couched in terms of the gendered power relations in society.

“Particularly high sickness figures are recorded in municipal areas of work, i.e. healthcare, schools and nursing. The combined picture shows that many of the reasons put forward as possible explanations of women’s absence due to sickness can be attributed to shortcomings regarding equality between men and women – at both social and individual levels.” (Ministry of Enterprise, Energy & Communications 2007 page 62, my emphasis)

However, no suggestions are made as to how this unequal power relationship can be changed.

Sixthly, when ethnicity is added to gender then it becomes even more apparent that women are failing to contribute to growth to the same extent as men.

“In 2005 employment intensity amongst men born abroad was 64.8%, compared with 77.8% for men born in Sweden. For women the equivalent figures were 58.7% for those born abroad and 74.2% for those born in Sweden” (Ministry of Enterprise, Energy & Communications 2007 page 61)

In NUTEK’s annual report for 2009 in the section on strong regions, women and “people with a foreign background”¹⁷ are found wanting when it comes to entrepreneurship. Although, as a result of special measures, the proportion of women and people with immigrant background starting a business has increased, “men still account for the majority of new enterprises” (NUTEK 2009, page 44).

¹⁷ This is the term used in the report.

It is acknowledged that women and “people with a foreign background” often have greater difficulty financing their businesses, but again it is implied that this is their own fault because they are overrepresented within the service sector which is characterised by “small-scale activities”. Women in particular work more often in professions where the opportunities and conditions for entrepreneurship have been limited, such as healthcare, nursing and education. It is regarded as more difficult to assess the viability of such activities compared with more traditional businesses in the manufacturing sector. However, because of the growing economic significance of the service sector, it has become increasingly important that women and “people with a foreign background” start businesses in this sector. Thus requiring that measures are taken

“to improve the competence of financial advisors to assess viability of businesses in the service sector” (NUTEK 2009, page 21).

This has necessitated that “special efforts” have been made to provide different types of information, advice and financing e.g. micro loans

*“to create positive attitudes and encourage enterprise amongst **young people, women and people with a foreign background**”* (NUTEK 2009, page 34, my emphasis).

However, it is also pointed out that even if the number of women and people of foreign origins starting new businesses have increased, their business survival rate is lower than for ethnic Swedish men (NUTEK 2009, page 50). Once again these groups are accorded a subordinate subject position. It is also apparent that people with an immigrant background are created as a unified (monolithic) category possessing certain characteristics which constitute them as a potential resource in achieving regional economic growth (in much the same way as women). For example the Swedish Agency for Economic and Regional Growth (NUTEK) argues that:

“the population born abroad should be utilised as a labour power resource in order to meet the projected needs of business and industry (NUTEK 2004a page 22).

Thus we see that women and people with an immigrant background are constructed, somewhat contradictorily, both as problematic for regional economic growth and as a resource that has potential to be used in achieving economic growth. This draws attention to “the complexity and uncertainty of performed spaces and subjectivities” (Larner & Le Heron 2005, page 858). Can this fracture between problem and resource open up possibilities for the “Other” (out-groups) to challenge the dominant discourse of the strong region?

Conclusions

The problem of creating strong regions has been represented largely in terms of achieving economic growth particularly through entrepreneurship and innovation. This has limited and closed off alternative ways of thinking about regional development in

other than economic terms. The social dimension of growth has been subordinated to the economic one and gender equality has thus largely remained an issue that can be “tagged on” to regional policy in a way that does not fundamentally change or challenge the gendered power relations. However, there are several discourses at work – competing, complementing and contradicting each other. The strong region discourse, the gender equality for growth discourse, and the women as a problem in achieving regional development discourse are, somewhat paradoxically, complementary and contradictory – both opening and closing spaces and opportunities for subjectivities for women and other “Others”, particularly when gender, ethnicity and age intersect.

Women, people with an immigrant background and even small rural regions and young people are mainly constituted as lacking, in need of special measures and deviant – as “the Other” – in the discourse of regional development policies (cf. Bacchi’s (2009) *subjectification effects*). This makes it difficult for these groups to get their voices heard and to challenge the dominant discourse. They are accorded a subordinate subject position, whilst the “silence” concerning white, middle-aged men implicitly accords them a subject position as the “active entrepreneurial citizen” capable of promoting innovation and with a self-evident position as an actor in the field of regional development, exonerated from blame for any lack of growth or innovation in the region (cf. Forsberg, Pettersson and Lindgren’s (2012) *homotopical space*). As Hudson & Rönnblom (2007) have pointed out in relation to women, the “lived effects” that these constructions carry with them could be quite severe for groups attempting to challenge the dominant discourse.

In the gender equality (and integration) for regional growth discourse, women and other “Others”, particularly “people with a foreign background”, are portrayed as a resource, a potential, that needs to be included if growth is to be achieved. This construction of these groups as a resource is not unproblematic (e.g. there are risks of essentialisation); nevertheless, it seems to offer some potential for the construction of women as a group and immigrants as a group (or at least those within these categories who are constructed as entrepreneurial) to be accorded more active subject positions. However, this discourse also intersects with the women and other “Others” as a problem discourse, constraining and limiting the subject positions available. This is also reinforced by the gendered construction of entrepreneurship and innovation – where a male norm dominates. Thus as Lindberg (2010) points out, the networks and clusters that women engage in are not ascribed a place in innovation systems and consequently are not defined as “innovation” and are accordingly not seen as contributing to regional growth. Nevertheless, although superficially things still appear to be very much business as usual, potential may lurk in the cracks between the representations of women, immigrants and young people both as problems and as assets. These may provide opportunities in which the dominant gendered, racialised and sexualised power relations in regional policy and the construction of innovation as “masculine” could be challenged. They may also facilitate the construction of active subject positions for

non-traditional regional actors (“Others”) enabling to them influence and shape regional policies rather than be the passive recipients of these policies. In the words of the song *Lies*¹⁸ by Glen Hansard:

“*The little cracks they escalated*”... “*So plant the thought and watch it grow.*”

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¹⁸ From the soundtrack of the film *Once*.

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Innovation and Energy Policies

- Only a few Women, so what?

Mari Ratinen

Abstract

Electricity markets are undergoing restructurings which can be paralleled with a technological revolution. However, regardless of apparent demand for innovations, the changes have taken place rather slowly. This article addresses reasons for this slowness by analysing the sameness in terms of gender of those involved in the policy processes and outcomes. The focus is on innovation and energy policies, two inherently interlinked policies that influence liberalisation of the markets. A typology is presented for evaluating sameness in terms of degree of inclusion in policy processes and policy outcomes. A qualitative case study of Finland and Sweden is then presented. In Finland, few women are included in the processes or their outcomes. In Sweden, the processes are more parliamentary and, as part of the electorate, women are included in them. Also in Sweden, however, only few women are included in the outcomes. Based on the findings presented here it seems similarities among actors seem to persist and appear to have slowed the liberalisation of the electricity markets.

Keywords: Liberalisation, electricity markets, gender, inclusion, policy process and outcomes

Introduction

Liberalisation of the electricity markets began in the aftermath of the oil crises and is based on the idea that it speeds up changes in generation technologies, lowers electricity prices and improves services. Liberalisation was supported by the rise of Thatcherism, by a need to increase competition in the electricity markets and by technological change (Vogel 1996). However, changes in the electricity industry have progressed rather slowly and considerable entry barriers persist in the national electricity markets, plus rising electricity prices (European Commission 2007).

Energy and innovation policies are assumed to be rational, neutral and benefitting everyone equally. However, this might not always be the case (as also noted by Bacchi 1999). When looking at the content of the research and development policies new energy technologies are apparently the focus area of EU research and development programmes (Commission of the European Communities 2009, Künneke 2008, Jenkins et al. 2000).

There are considerable differences in how national electricity markets have been liberalised (Green 2007). For example, the manner in which the same EU renewable energy policies are implemented differ from country to country (Campoccia et al.

2009), as do the technologies which are developed and deployed (Blok 2006, Johnstone et al. 2008, Lewis, Wiser 2007, Lund 2009). There is no clear evidence that dominance by a particular political party or model of capitalism (Neumayer, 2003, Hoffmann, Trautmann, 2006), or the entry of a green party into government (Müller-Rommel, Poguntke, 2002) would lead to changes in the electricity markets. Thus, it seems that, although energy and innovation policies would be able to transform the electricity industry from a utility into many different kinds of businesses (See Storbäck et al. 2009 for example), the transformation appears to be rather modest. For example, liberalisation of electricity markets and deployment of renewable electricity technologies remains rather marginal if compared to the traditional markets and technologies (European Commission 2010).

According to Vogel (1996), regardless of which model of capitalism is exercised, existing companies seem able to influence energy policies. As pointed out by Hendriks (2008) those often excluded from policy procedures are small and medium-sized enterprises and social movements, such as environmental and non-governmental organisations. In other words, those who would gain the most from any changes are those most often excluded from the processes. Wedel (2009) similarly concludes that governmental processes can be rather exclusive and that decisions may be made outside of democratic processes.

Although a similarity of educational background for those involved in innovations is known to reduce innovations and innovativeness (Chesbrough, West & Vanhaverbeke 2006, Tidd 2001, Trist, Bamforth, 1951, van de Ven, 1986), it is seldom treated as a problem in relation to changes in the electricity markets. Similarly, although sameness of gender has been noted to reduce innovativeness (see e.g. Essed, 2005), gender is seldom among the dimensions discussed in the mainstream innovation literature. Even so, the electricity industry seems a particularly male-dominated one (Carlsson-Kanyama, Råty, 2008). Moreover in research, women and energy policies are mainly discussed in relation to domestic energy use in less developed countries (Röhr, 2001). Thus more knowledge is needed about gender in energy and innovation policies.

The aim of this paper was to analyse why electricity markets are changing slowly, by examining the actors involved in the policy processes and outcomes. The research question addressed by this paper is: *How does the gender of those included in energy and innovation policies influence liberalisation of electricity markets?*

The focus is on energy and innovation policies for liberalisation of electricity markets in the developed countries. Societies, economic activities and electricity markets are perceived as unique and dynamic social constellations (Granovetter, 1985, Granovetter, 2005). Accordingly, the facts and rationalities are seen as subjective and thus organisations and groups of people have a self-interested focus, mainly on achieving their own goals and objectives (Callon, 1980, Wright, 1998). Electricity markets consist of actors in and around the markets and their relationships. Liberalisation of elec-

tricity markets will be evaluated in terms of relative changes of actors in the electricity markets and technologies (Granovetter, McGuire, 1998).

Several dimensions can be used to analyse similarities among the actors, including education, gender, race or class (Essed, 2005, Acker, 2006b). The focus in this article is gender, which is defined as a biological quality (Nelson, 1996). Hence, in this article attention is paid to men and women. Gender was chosen over other qualities because the empirical research is conducted in two Scandinavian countries (Finland and Sweden) generally acknowledged as gender-equal in international comparisons. However, gender segregation in the labour markets does persist in these two countries.

The focus of this article is electricity. Electricity has some special features, which influence the analysis of energy and innovation policies. Electricity cannot be stored in large quantities, therefore the markets are mature. Electricity generation is always greater than the consumption at any given time, hence market niches or demand for innovations do not exist the same ways as they do in consumer goods. Electricity remains under the jurisdiction of national governments, which influence how markets are liberalised by means of energy and innovation policies. Therefore, assumptions of technology development and market potential as drivers of innovations and liberalisation are not applicable (Rogers 1995, Murmann, Frenken 2006, Anderson, Tushman 1990).

Gender and changes in electricity markets are discussed below. A typology for evaluating inclusion and exclusion in policy processes and outcomes is then presented. The methodology of this paper is presented and is followed by the empirical case studies of Finland and Sweden. The paper ends with a discussion and we present our conclusions.

Women and men in the electricity markets

We will now discuss the actors in the electricity markets and share of men and women in the markets. The discussion will be firstly in terms of gender segregation in labour markets then in terms of changes which liberalisation can bring to electricity markets (depending on the relative degree of inclusion in policy processes and outcomes).

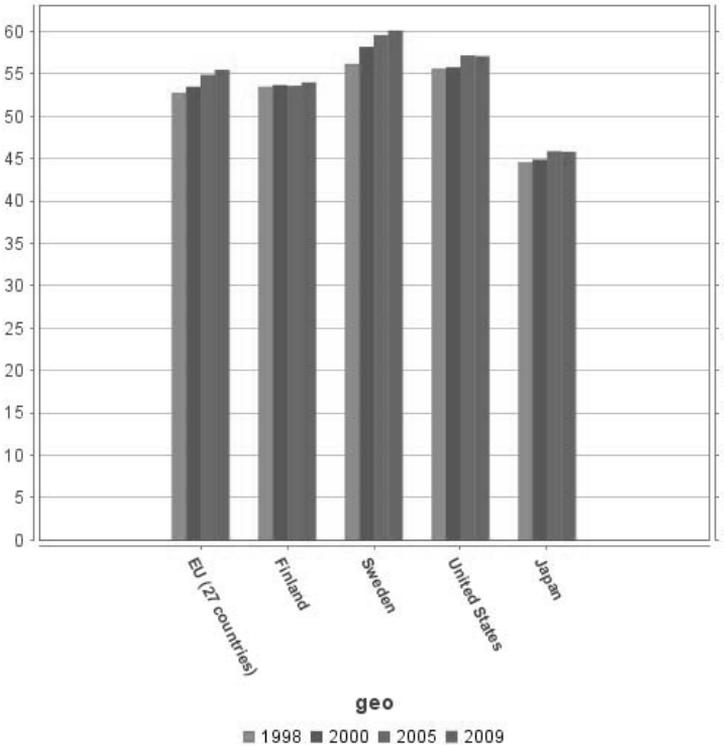
Prior to the rise of environmentalism and liberalisation, electricity markets comprised relatively low number of actors, that is, few utilities generating energy in large-scale generation units. Decisions as to markets and generation were made at the national level by relatively small number of actors. The electricity markets have been a rather male-dominated labour market, one reason for which has been gender segregation.

According to Walby (1997), the two main forms of gender segregation in labour markets and industries are horizontal and vertical. Horizontal segregation refers to industrial segregation and the creation of male or female-dominated industries. Vertical segregation refers to hierarchical segregation and limiting women's access to high ranking positions. Traditionally typically female-dominated industries are the service

sectors and caring professions, while men dominate the energy and construction industries. Vertical segregation exists in almost at all professions regardless of industry. However, despite efforts to decrease labour division and include women in high ranking positions, gender segregation persists (Terjesen, Singh 2008, European Commission’s expert group for gender and employment 2009).

Looking at the statistics on the share of women in energy, in terms of female students enrolled in the science, mathematics and computing field (the fields relevant to electricity), there seems to be a trend of reducing horizontal labour segregation. The share of women in these fields is relatively high and has been growing. As can be seen from the figure below, the share of women in mathematics, science and construction per 1,000 people in the EU (27 member states), Finland and Sweden and the US is growing, but remains rather low in Japan.

Share of women in science, mathematics and computing per 1,000 people in the EU (27 member states), Finland, Sweden, the US and Japan



(Eurostat, 2009)

The managers of the energy companies are selected from this group and thus it is likely that the share of women in leadership positions may increase in the future. However at the moment female managers are still rare in the electricity industry, suggesting that vertical segregation persists (Carlsson-Kanyama, Rätty 2008).

There are also efforts to reduce gender segregation. For example, the European Commission has taken measures to raise awareness of gender in research. Gender is also included in EU-funded research programmes and projects as an evaluation criterion. There are also efforts to encourage women to study sciences and technologies, in particularly clean technologies and renewable energy technologies. Examples include the internationally launched initiative by the US government called Womens-C3E-Initiative (US government, 2009). Efforts to include women in decision-making and research are positive. However, targeting a particular kind of profession for women may have adverse effects and can lead to a reconfiguration of professions and marginalisation of women and renewable energies (See for example, Acker 2006a, Tienari, Quack & Theobald 2002).

Actors and inclusion in innovation and energy policies

To continue the discussion of actors and men and women in the electricity sector, their inclusion in energy policy processes and policy outcomes will be analysed and discussed. Inclusiveness can be perceived as a dimension of liberalisation (Vogel 1996), unlike pre-liberalisation energy and innovation policies which were based on the preferences of national governments. Liberalisation should lead to policies which are based on assuring competition and which should subsequently allow new actors to enter the markets. Thus, liberalisation should lead to more inclusive policies and reduce the similarities among actors in the markets (Lyhne Ibsen, Skovgaard Poulsen 2007).

Two dimensions are evaluated in order to analyse the relative degree of inclusion in policies. These dimensions are a) inclusion in policy processes and b) outcomes. These dimensions were chosen not only to evaluate who can participate in decision-making but also who gains from the policy outcomes (Acker 2006b, Risman 1998). They were chosen because formal access to policy processes does not necessarily entail any gains from the policies (as also noted by Vogel, 1996). Unless one is able to gain from the policies, liberalisation remains rather marginal.

The scale of inclusion in policy processes and outcomes runs from low to high. Evaluation of the degree of inclusion is based on an analysis of two dimensions. Firstly, the number of organisations or individuals included in the processes will be evaluated. Secondly, the share of men and women included will be evaluated. The number of organisations included indicates the inclusiveness in general, whereas the share of women and men indicates the relative degree of gender segregation (Vogel 1996, Hendriks 2008, Acker 2006b, Kreimer 2004). The following figure depicts the typology and identifies four types of liberalisation policies.

Types of liberalisation policies

Inclusion in policy processes	High	Ostensible liberalisation	Full liberalisation
	Low	Private monopolies	Distinctive liberalisation
		Low	High
		Inclusion in policy outcomes	

As can be seen from the above figure, depending on the level of inclusion in policy processes and policy outcomes four different types of liberalisation policies can result which are private monopolies: Ostensible liberalisation, Distinctive liberalisation and Full Liberalisation, which will be described below.

Private monopolies

The term “private monopolies” refers to a situation where inclusion in policy processes and outcomes are low. That is, very few actors can participate in policymaking and equally few gain from the policies. Liberalisation has thus not really progressed beyond privatisation of state-owned utilities. Electricity markets are often similar to oligopolies, dominated by few utilities, hence the name. Energy and innovation policies are mainly based on preferences and tend to favour utilities and energy-intensive industries.

Ostensible liberalisation

In Ostensible liberalisation, the inclusion in policy processes is high. However, the inclusion in policy outcomes is low; hence the processes are ostensible. The liberalisation of electricity markets in Ostensible liberalisation is similar to that of Private monopolies. However, the policy processes are rather inclusive, the policy outcomes mainly favour utilities and centralised electricity generation. And the markets are dominated by few utilities and the policies also favour them (following Vogel, 1996).

Distinctive liberalisation

Distinctive liberalisation refers to a situation where, regardless of the inclusion in policy processes being low, the inclusion in policy outcomes is high. Consequently, the liberalisation is rather extensive. For example, some new energy technologies are developed and deployed. Also the entry of some new actors into electricity markets is supported by the policies.

Full liberalisation

Full liberalisation refers to a situation where inclusion in both policy processes and outcomes is high. The electricity markets are fully liberated and the energy and innovation policies support the entry of all types of new actors and the development and deployment of all renewable new energy technologies. The policies are based on increasing competition in the markets, as opposed to the private monopolies where they were based on preferences (following Vogel, 1996)

These categories can also be perceived as reflecting different periods or phases of liberalisation. *Private monopolies* can be perceived as representing the actors and technologies when liberalisation begins and as a first step from electricity generation as a state-owned monopoly. Liberalisation can begin with changes in technologies or actors, and *ostensible liberalisation* represents the first changes in technologies, while *distinctive liberalisation* represents that of actors. Finally, *full liberalisation* depicts the fully liberalised electricity markets.

Methodology

In analysing actors in energy and innovation policies, the empirical research focuses on analysing the actors included in the policies. The focus is on number of men and women. Therefore, this paper is based on a case study method. Use of this method is justified because the liberalisation of electricity markets and respective policy processes are contextual (Yin 1989, Stake 2000). Two countries are compared in order to shed more light on the contextual differences and how they influence liberalisation and inclusion and exclusion in this article.

Finland and Sweden were chosen for this case study as they are rather similar in that both are within the Scandinavian welfare system. At the same time, these countries are different enough to make an interesting comparison.

Analysing similarities between the actors requires material from multiple sources. This means primary and secondary material about energy and innovation policies, mainly qualitative in nature (Anderson 1997). The material consists of research reports, governmental and non-governmental reports and publications and other written materials as shown in the list of references. Statistics were also used to analyse the share of women in the labour markets and within the main organisations involved in energy policies.

The material was analysed manually. I began by reading the material several times to put together the story of the developments, actors involved in them and end results of the processes. I then continued by going through the documents of the governmental policy working groups and going through the list of participants. Simultaneously, I collected data on the gender division of the labour markets and developments in wind and solar technologies sectors. Thus I was able to collect the information needed to analyse who was taking part in the processes and who gained from them.

Since the focus of this research is to analyse inclusion and exclusion in energy and innovation policies, the data analysed will stem from the time period ranging from the early 1970s to 2006. A relatively long period is necessary because energy and innovation policies consist of several interlinked and overlapping elements – such as discovery of environmental problems and changes in perception arising over longer periods (Sairinen 1991).

Electricity markets and similarities among actors in Finland and Sweden

Finland and Sweden are both Nordic countries and are rather similar in many ways. Both countries have unicameral parliaments, universal suffrage, free education for all, and laws and social policies to promote equality, including gender equality. Both countries joined the EU at about the same time, so they have been and are subject to the same EU policies and directives. Their electricity markets are also rather similar, though there are also some notable differences which will be presented and analysed below.

Liberalisation of electricity markets

Regardless of the deregulation of electricity markets, in Finland the state-owned energy companies were never fully privatised, and the state remains the majority shareholder. This also applies to the grid, which is partly constructed and owned by private companies and partly by state. Thus, unlike most countries the grid in Finland has been open to third parties for decades (Pineau, Hämäläinen 2000). However, there are no feed-in tariffs to support deployment of small-scale, private electricity generation. Quite the contrary, all the costs of grid connection and interface are born by the producer. Therefore, the generation must be constant and substantial to become profitable. In Finland liberalisation has led to consolidations and two companies – Fortum and PVO/TVO – currently account for more than 60 percent of Finnish electricity generation. Finally, there is considerable cross-ownership between utilities, the state and the forestry industry.

In Sweden the liberalisation of electricity markets has progressed as in Finland. The governmental body, Vattenfallsverket, merged with other governmental bodies to form Vattenfall AB, a state-owned utility company which has not been privatised. However, in Sweden the grid is owned by the state. In Sweden, liberalisation has led

to rather extensive consolidation. The markets were previously controlled by five utilities. However, the German company E.ON entered the Swedish market and gained control of it by acquiring seven of the ten nuclear power stations in Sweden. Hence, the markets are currently controlled by E.ON and Vattenfall. Cross-ownership also exists in Sweden, although not quite to the same extent as in Finland (Glachant, Finon 2003).

Women in policy processes

Both in Finland and in Sweden research and development is based on cooperation between industry, academia and government. However, the manner in which this approach is implemented differs between Finland and Sweden. In Finland, the majority of the research and development funds are directed towards companies who are then encouraged to cooperate with universities. Sweden employs the opposite strategy; the majority of funds are directed towards universities who are then encouraged to cooperate with companies.

There is no significant difference in the share of women in mathematics, science and technology in Sweden (60%) and Finland (54%). However, whereas in Sweden the share of women has grown steadily during the 2000s, in Finland the share has remained rather constant. An interesting feature is that the share of women has grown, especially among the students of new energy technologies in both countries (Eurostat 2009).

Although the political parties in both countries are rather similar, in Finland collective bargaining is still exercised. In Finland the state has been closely involved in industrial relations, particularly the economic development of the forestry industry and other energy-intensive industries (Lilja, Räsänen & Tainio 1992, Massa 1984). For example, energy policies are developed in the Ministry of Trade and Industry and approved by the Cabinet. Policies are developed according to the preferences of the forestry industry which means the strongest actors are the forestry industry, unions and civil servants (see also Massa 1984, Lampinen 2009, Vehmas 2002).

In Sweden the political parties are the main actors in energy policy (Ruostetsaari 2007). The parties' alternative energy policies are contested in parliamentary elections which take place every four years. However, the details of various tools and methods of energy and innovation policies are also contested within governmental working groups (Pettersson 2007). Thus in Sweden too the energy-intensive industries are able to influence the policies, though not quite to the same degree as in Finland.

The most notable difference between Finland and Sweden is that in Sweden, citizens are included in the political processes for energy whilst in Finland they are excluded. As citizens are included in the political processes in Sweden there are also more women included involved in the processes. In turn, since Finnish citizens are excluded from the political processes there are only few women included compared to Sweden. Women have traditionally been more opposed to nuclear energy than men (Finnish Energy industries 2007). During the 2002 debate on construction of a fifth

nuclear reactor Prime Minister Paavo Lipponen (Social Democrat) supported the construction of the fifth nuclear reactor. The Minister of Trade and Industry, Erkki Tuomioja (a Social Democrat) had in turn expressed opinions that were critical of nuclear energy. He was substituted for Sinikka Mönkäre of the same party and an avid supporter of nuclear energy. One interpretation of this is that women are being used as tokens for nuclear energy (Berg 2009).

Looking at men and women in senior positions in the largest utilities, there seems to be more men than women in them (information collected from the corporate websites). The largest Finnish utilities – Fortum, PVO/TVO – are still managed by men. Fortum has three women on its board of directors of seven. PVO has two women on a board of directors of 16 and TVO has no women at all in its board of directors. The board of Swedish Vattenfall has five women in its board of 12 members. E.ON Sweden does not have a board of directors although there are women on the management of these utilities in both Finland and Sweden. However, they tend to manage support functions such as personnel, legal and communications.

There have been several rather successful programmes to reduce gender segregation in the public offices in Finland and in Sweden. Based on information published on the internet sites of Finnish and Swedish governments, the share of women in the parliament in Finland is 43%. In Sweden the figure is slightly higher, 45%. Men and women are currently equally represented in the Cabinets of Sweden and Finland, with 12 women out of 24 and 9 women out of 19 respectively. Gender segregation has also been decreasing in the ministries in Finland, with approximately equal division between men and women. However in Finland, fewer than 30% of top-ranking civil servants are women. In Sweden there are often more women than men working in the ministries with women better represented in high-ranking positions.

Finnish Energy and Innovation Policy outcomes

Finnish energy and innovation policies have remained relatively unchanged. In Finland, energy policies have focused on the development of nuclear energy and biofuels. From the 1970s onwards, in response to oil crises, the development of peat and biofuels such as black liquor and other residuals from the forestry industry have received the most funds (Kivimaa 2008). Financing of wind and solar technologies has been less systematic and more modest in terms of funds granted (see Tekes 1998, for example).

Finnish energy policies are based on large-scale, centralised energy generation; no systematic feed-in tariffs or similar subsidies have been introduced for small scale generation technologies. The development of nuclear energy was tied to bilateral trade with the former Soviet Union. The first two nuclear reactors were commissioned from the Soviet Union with two more constructed by a private utility. Permission for a fifth reactor was withdrawn in 1986 due to the Chernobyl accident. This was reinstated at the beginning of the 1990s, but parliament voted against it in 1993. A new application

was submitted in 2000 and according to the 2001 national climate and energy policy, nuclear energy is the only way to reduce greenhouse gas emissions. In 2002, parliament accepted the decision in principle to build a fifth nuclear reactor. Again in the 2005 energy and climate policy, there was a considerable cost burden from reductions in greenhouse gas emissions to fulfil EU requirements. Therefore, the conclusion of the policy was that a sixth nuclear reactor must be constructed in order to reduce greenhouse gas emission in the most cost-effective manner. However, in the energy policies wind power is noted as having a lot of potential in the coastal and mountain areas and research and development of solar power is needed to integrate, say, solar panels into construction materials. However, no systematic measures have been proposed to promote solar or wind power (Ministry of Employment and Economy 2001, Ministry of Employment and Economy 2005, Ministry of Employment and Economy 2008).

Swedish Innovation and Energy Policy outcomes

In Sweden there is less state support for particular technologies but the support is more focused on systems development. Swedish energy research also appears more diverse in terms of technology than in Finland. For example, in Sweden there is more research into renewable transport systems and fuels than in Finland (Commission of the European Communities 2009).

Swedish energy policies have mainly focused on whether or not to phase out nuclear energy. Recently, there has been more focus on the construction of new electricity generation capacity. In Sweden, 12 nuclear reactors were constructed around the 1970s (Strålsäkerhetsmyndigheten, 2011). The majority party at the time, the Social Democrats, drafted an ambitious nuclear energy programme with 24 reactors (Lidskog 2001). However, by the mid 1970s nuclear energy had become politically unpopular. In the 1976 parliamentary elections, the Centre Party ran a strong anti-nuclear campaign and, as a result, won the election. After the accident at Three Mile Island in 1980, a nuclear referendum was held. Based on its results, the government issued a bill saying that those reactors which were under construction would be completed and taken into operation. However, no future investments in nuclear power would be made (Jamison et al. 1990).

After Chernobyl, Sweden's Social Democratic government developed a programme to close the first nuclear reactors of the Barsebäck nuclear power plant in 1995 and 1996. This resulted in a public campaign against the decision and against the Social Democratic Party. The campaign activists were energy-intensive industries and the unions. The campaign was based on the growing needs of energy-intensive industries for electricity and the need to ensure over-production in order to keep electricity prices reasonable. The campaign resulted in a change of the decision to close the reactors into a vague plan. Though the first reactor was closed in 1999, a decision was made to indefinitely postpone closure of the second Barsebäck reactor (Kåberger, 2007). The second remaining reactor in Barsebäck was closed in 2005, after more than a decade of political debate. At the same time the conservative government established

funds to refurbish some of the remaining reactors to prolong their lifespan and increase their capacity. However, it can be argued that the decision was most likely influenced by Danish politicians as Barsebäck is very close to the Danish capital.

To support technological change and deployment of renewable energy technologies, green electricity certificates for renewable electricity generation were launched in 2003. The system was created for large-scale generation; in practice, biofuel technologies and large-scale wind energy technologies. The actors supported are mainly for municipalities and energy-intensive industries, especially the forestry industry (the Swedish Energy Agency 2008). Private consumers' small-scale generation technologies are not included in the green electricity certificates.

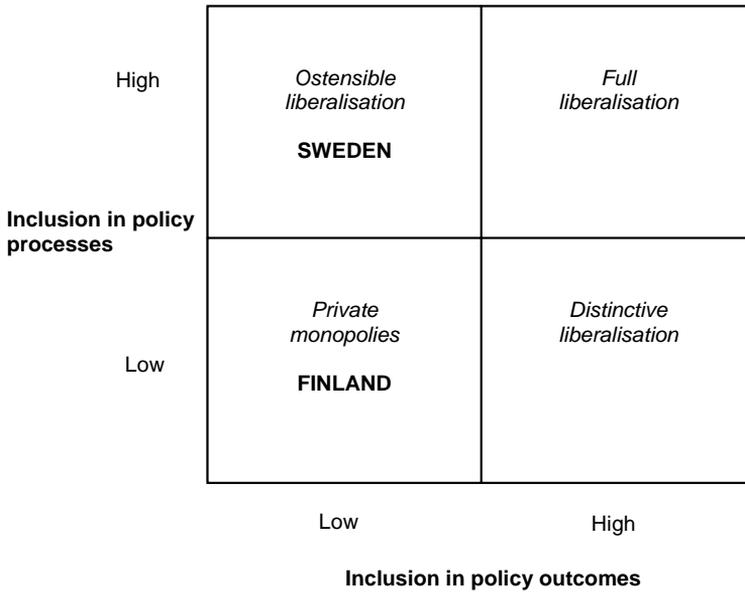
In Sweden, nuclear energy also remains as an energy policy and in 2006 the Conservative led coalition won the parliamentary elections. Though the party stated it does not support further construction of nuclear energy, according to a decision by the Swedish parliament in 2009 (Regeringen 2009) new nuclear power stations could be constructed after the old ones have been closed. At the same time, in the Swedish energy and climate policy, one of the targets for 2020 is that 50% of energy is to be generated from renewable resources with an annual wind power generation goal of 30 TWh (Government offices of Sweden 2009).

Comparison of similarities among the actors in Finland and in Sweden

This section summarises the main similarities amongst the actors in Finland and Sweden. There is a more detailed discussion of how that influences energy and innovation policies.

Based on the above, it can be argued that in Finland, the level of inclusion in energy and innovation policy processes and outcomes seems quite low. In Sweden, policies are voted upon in national elections, so the inclusion in energy and innovation policy processes is relatively high, however inclusion in outcomes is rather low. The following figure shows how these countries are located in the typology.

Inclusion in Finland and Sweden



Based on the above, Finland is located in the quadrant of Private monopolies and Sweden in that of Ostensible liberalisation, as apparent from the figure.

Finnish energy actors are a rather small, exclusive group. Though Finland has a multi-party system, Finnish governments have negotiated energy policies with the unions and industries (Vehmas 2002, Tirkkonen 2000, Mars, Ostermeier 2008). Citizens have been excluded from these processes; there have been no parliamentary elections or referendums of energy policies in Finland, nor are there mechanisms which would introduce new or different the actors into policy processes (as also noted by Mars & Ostermeier, 2008). Moreover, social pressure for conformity among energy actors is strong, which further increases similarities among actors (Varho, Tapio 2005). Consequently, inclusion in policy outcomes is low and there are few changes in technologies as development of nuclear energy continues.

In Sweden, alternative energy policies are contested in parliamentary elections, and there are more actors included in the policy processes than in Finland. The Social Democratic Party continues to develop plans and programmes to phase out nuclear reactors and the Conservative Party to refurbish the existing ones. Regardless of this, inclusion in policy outcomes is also rather low in Sweden. However, in Sweden there are more tools and methods to support the deployment of renewable electricity technologies (Swedish Energy Agency 2007), even if most of these favour the same actors, utilities and energy-intensive industries. Hence the energy-intensive industries have

been able to influence energy and innovations policies in Sweden too (Kåberger 2007, Jacobsson, Bergek 2004), though not quite to the same extent as in Finland.

Finally, regardless of the EU directives and efforts to increase liberalisation of the electricity markets the notion that free market competition should be increased in the electricity markets these aspects are not discussed in the policy processes or included in the Finnish or Swedish energy or innovation policies. Subsequently, few new businesses are created in Finland or Sweden. There is clearly need for more research into the processes and actors involved in them, as suggested by Wedell (2009).

Conclusions and discussion

The aim of this paper was to analyse why electricity markets are changing slowly by analysing the similarities of actors involved in the policy processes and outcomes. Similarities were chosen because they have been seen to reduce innovations and innovativeness. Similarities were analysed in terms of gender, men and women, and the research question addressed was “how does the gender of those included in the energy and innovation policies influence the liberalisation of electricity markets?”

The focus was on energy and innovation policies, which are two inherently inter-linked policies influencing the nature of new businesses developed. A typology was presented for evaluating similarities in terms of degree of inclusion in policy processes and policy outcomes.

A qualitative case study of Finland and Sweden was presented. In Finland only a few actors and even fewer women are included in the processes or outcomes. In Sweden the processes are parliamentary; hence female citizens are among those included. However, it seems that even in Sweden energy-intensive industries are able to influence the policies outside the parliamentary processes and few are included in the outcomes.

Based on the findings presented here it seems that a high degree of similarities between actors included in the policy processes is slowing down the liberalisation of electricity markets. This seems to be influenced by relatively strong actors who are able to influence the policy processes and outcomes in their favour and slow down liberalisation of electricity markets. Although such things as EU energy policies and directives on liberalisation of electricity markets have aimed to increase competition in the electricity markets, based on recent research the electricity markets in most EU countries remain rather exclusive and the domination of large utilities continues. Thus liberalisation policies often remain in the hands of the few, profiting them (European Commission 2007, Domanico 2007, Thomas 2009, Thomas 2003).

Nevertheless, knowledge of inclusion and exclusion must be increased in order to improve the quality of policy outcomes through inclusiveness in terms of the level of competition supported by them. In particular, analysing expertise as a gendered and socially constructed process would offer more insight into the mechanisms behind inclusion and exclusion in energy and innovation policy outcomes. Another interesting

area of research is the exploitation of different actors to maintain similarities. How values and norms are used to maintain similarities among apparently different actors, for example, and how different actors are used as tokens (cf Kanter, 1977).

Finally, an interesting area of research is the financial and ethical implications of inclusion and exclusion. For example, what are the costs and benefits for individuals of being included or excluded and what are the societal implications of maintaining similarities? An analysis of ethics of maintaining similarities and low degree of inclusion and its implications to innovations and new businesses development would also shed more light on the practices used to maintain similarities and the consequences of these practices. Further studies should include other countries with different traditions and actor groups. Denmark and Germany are nearby countries which maintain different priorities in many dimensions; these could be used to develop the method and concepts.

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Implementing “a Gender Perspective” in an Innovation Policy Programme

- More Innovation or ambivalence and uncertainty?

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Abstract

As claimed in this book the innovation research and policy field is highly male gendered. We therefore took the opportunity to study what happened when gender (i.e. women) was introduced as an issue in a particular Norwegian innovation programme, the Programme for Regional R&D and Innovation (VRI). VRI aims to promote innovation, knowledge development and value creation through regional co-operation, thereby supporting research and trade development efforts in the regions. We apply a critical, rhetorical and methodological approach to our study, examining the national, regional and project levels. The data we rely on for our analysis comprises interviews, documents and participant observation. Our findings suggest that gender is articulated as a non-issue with regard to innovation processes. At the national level, gender perspective demands are vague and lack an explicit rationale; at the regional level, there are struggles and competing ideas associated with articulations of gender. Several gender perspective rationales are in play, including a rationale of “political correctness.” At the project level, the “gender thing” was solved by supporting a women’s project of no relevance to innovation, thus ticking the gender box when reporting. We conclude that the externally oriented rationale can undermine lasting efforts to change gender inequalities, but it has also has the potential to become a first step towards a proper focus on gender.

Introduction

Innovation is increasingly seen as a central factor in ensuring regional and national development and growth (Blake and Hanson, 2005). National and regional innovation programmes have an important role in supporting innovative activities. Even though some innovation programmes stress the importance of having both men and women in the innovation arena, the programmes are generally involved with innovation in industries dominated by men, with women marginalised in the innovation discourse (Kvidal and Ljunggren, 2010). Despite the gender imbalance in terms of participation in innovation processes, there has been no gender focus in innovation research; this legitimises and perpetuates the status quo and allows gender bias and sexism to go unchallenged (Katila and Meriläinen, 1999; Martin, 2006). This is especially puzzling in a Scandinavian context, seen by many as representing the most gender-equal societies in

the world, with high levels of participation by women in the labour market and politics.

The purpose of this chapter is to investigate the implementation of a gender perspective in an innovation programme. We are interested in looking more closely at what happens when attention to gender is introduced “from above” with a demand to be recognised and addressed in the innovation context (a male-dominated arena, if innovation is understood according to the predominant conceptualisation).

We study a Norwegian case: VRI, the Research Council of Norway’s (RCN) main support mechanism for regional research and innovation. VRI’s primary goal is to encourage innovation, knowledge development and value-added through regional collaborations, strengthened research and development efforts within and for the regions. These overarching objectives are interpreted and implemented in regional VRI projects; that is, the main goals are “translated” and materialised in regional VRI projects. We examine this “translation” and the articulations of gender in relation to the dominant conceptualisations of innovation at three levels: national, regional and project.

After providing a brief introduction of the dominant conceptualisations of innovation and gender, we present the critical rhetorical theoretical and methodological framework which has guided our data production and analyses. We then discuss how gender became an issue at the national level, before addressing articulations of gender and innovation in a regional innovation project. We also discuss how a specific VRI-funded innovation project handled the “gender issue.”

Innovation and gender – dominating conceptualisations

It is not the purpose of this chapter to provide an extensive overview of innovation theory, but it is worth noting that most contemporary innovation studies apply a Schumpeterian (1934, 1942) understanding of innovation. This is also an understanding we find in the white paper on innovation in Norway (White Paper, 2008/09). This implies that innovation is seen as new combinations of production factors: production of new goods, introduction of new processes, opening of new markets, accessing new sources of raw materials and intermediates, and/or re-organisation of an industry. Hence, those working with national and regional innovation programmes relate to a dominant innovation discourse. A part of this dominant definition is that innovation depends on linking different resources and competencies; also, the value of an innovation has been defined in terms of its ability to provide a firm with a competitive advantage in global markets (Byravaran, 2008).

Innovation researchers have not focused on gender when seeking to understand innovation, and innovation processes have been considered gender-neutral (Fürst Hörte, 2009; Ljunggren and Alsos, 2010). Women and women’s perspectives have been marginalised in several ways (Danilda and Granath, 2011; Lindberg, 2010; Kvidal and Ljunggren, 2010). For instance, innovation research has excluded women by mainly

focusing on the private sector, specifically industries that men dominate. Traditional women's workplace tasks and activities have not been seen as relevant to innovation research; men's contributions, on the other hand, have been recognised as important (Blake and Hanson, 2005) and commonly used measures of innovation (new businesses establishing and patenting) indirectly accentuate men. Also an innovation *system* focus, in which businesses and clusters of businesses (rather than individuals) are considered the central components (see e.g. Lundvall, 1992), contributes to a down-playing of gender (differences) (Pettersson and Saarinen, cited in Lindberg, 2008). Despite a growing body of innovation literature recent decades (Fagerberg, 2005), studies of gender and innovation seem almost non-existent, other than in Sweden (Fürst Hörte, 2009; VINNOVA, 2011).

The lack of a gender perspective in innovation research is problematic in several ways. As gender is a powerful organisational aspect (Moore et al, 2008), an overall understanding of innovation processes and dynamics, in particular when it comes to networking and power relations, will also be undermined by a failure to address gender. Or, as Martin (2006) says, if “theories-in-use deny the presence and impact of gender dynamics [...], flawed conceptions of how organisations [and, we would add, other institutions,] work are promulgated” (p. 256). A lack of gender focus allows sexism and gender bias in subtle forms, constituted through non-reflexive practicing, to remain unquestioned (Martin, 2006).

Writings that *do* exist on gender issues in relation to innovation, have often focused on women, seeking to explain why they are not as successful as men when it comes to participating in innovation processes (Fenwick, 2004; Pettersson, 2007 Strohmeier and Tonoyan, 2005; Vabø and Ramberg, cited in Borlaug et al., 2009). Such approaches add to an understanding of gender imbalances as a problem which women (i.e. individuals) have and consequently undermines an understanding of a gender imbalance problem as something that could be addressed at the structural level. There is very little research focusing on the role of innovation programmes and other similar structures, when it comes to influencing the extent to which men and women participate in innovation processes.

That said, some scholars have criticised the traditional gender-blind approach to innovation and have called for a more contextual approach to innovation (Byravan, 2008). In such an approach, place-to-place variations in resources are seen to contribute to spatial variations in innovation rates (see e.g. Blake and Hanson, 2005). Gender is then implicated in the question of how and why certain geographic contexts encourage some kinds of innovations to emerge and develop, whilst discouraging or preventing others. With this demand for a more contextualised view of innovation, we emphasise that regionally available innovation programmes are part of the context which needs to be understood.

A critical, rhetorical, theoretical and methodological framework

Several scholars take a discursive approach in order to address gender inequality in ways that are relevant to a study like ours.¹⁹ In this study, however, we specifically address gender from a critical rhetoric standpoint as we are interested in innovation and gender-relevant articulations relative to a particular dominant framework of innovation. We are interested in *tensions and struggles* associated with gender and innovation articulations; critical rhetoric is a perspective which makes such rhetorical struggles and tensions a key consideration in the endeavour of criticism.

Why focus on gender? Different arguments

There are several key arguments frequently used when arguing for the relevance of a gender perspective.²⁰ It is important to be aware of these gender perspectives, as they are part of articulating gender and in many ways set the stage for how to address gender imbalances and other gender-related issues. It is also important to be aware of the logic behind a decision to focus on gender, as this has implications for the way one chooses to address the problem (Bacchi, 1999).

One such argument is the resource utilisation argument, sometimes referred to as the meritocratic perspective (Billing and Alvesson, 1989) or a neoliberal-marked paradigm (Wilson, Whittam and Deakinis, 2004). In short, this argument basically implies that failing to involve women is a waste of society's resources. In terms of innovation policies a gender perspective will be useful in ensuring that underutilised human resources (meaning women) are put to work, thus aiding the competitive advantage of businesses and nations.

A second argument is the democracy or gender equality argument, which refers to everyone's right to participate in society, including in economically gainful activities. This can also be seen as the equal opportunities perspective (Billing and Alvesson, 1989) or the feminist empowerment paradigm (Wilson, Whittam, Deakinis, 2004). This argument can come into play regarding innovation if one argues that the innovation arena is one of power and influence and thinks everyone should have equal opportunities to be in this arena, regardless of whether they happen to be men or women.

A third argument which can be used to argue for a gender perspective is the gender differences perspective. This argument implies that women's contributions are unique and represent something different from that of men (Ljunggren, 2002). Scholars do not necessarily agree on what this "difference" that women bring to the table is, or whether it is due to biology or culture. Hence, the gender difference argument can be used to refer to quite varied logics along a gender difference continuum. In terms of innova-

¹⁹ See for instance, Ahl (2004, 2007); Fenwick (2004); Halford (2003); Katila and Meriläinen (1999); Kelan, (2007); Lindberg (2008), Moore et al. (2008).

²⁰ See Billing and Alvesson (1989) for an overview.

tion, one can see the gender differences argument in play when women are encouraged to participate in innovation processes because they will bring something different to the innovation process as compared to the contributions of men.

We were interested in exploring what arguments were used when the regions had to implement a focus on gender in a policy programme as this would make up an important part of how gender is articulated. In line with this, we are interested in exploring reasons for focusing on gender and innovation potentially articulated in VRI.

Critical rhetoric is a perspective which welcomes the use of various critical tools to examine discourses of power and contestation.²¹ We produced data for this project through interviews, participant observations and textual analyses.

Firstly, in order to address the national level of the VRI innovation discourse, we conducted textual analyses of the national VRI programme's requirements regarding gender focus in VRI as well as other relevant policy documents related to the issue of gender and innovation. We also examined the overall industry emphasis in VRI, based on the focus areas chosen by VRI regions throughout Norway and conducted semi-structured interviews with two RCN representatives working at the national level with implementing the VRI programme (in the "VRI secretariat").

Secondly, in order to get at the regional level of the innovation discourse, we looked more closely at innovation-relevant articulations in a regional VRI partnership. We used participant observation and conducted semi-structured in-depth interviews with the representatives in a regional VRI partnership, that is, all the members in the steering and working groups. Ten interviews were conducted at this level.

Lastly, in order to address the project level of the innovation discourse, we examined a specific innovation project studying how project participants relate to the gender topic. Specifically, we used participant observation and conducted in-depth interviews with two representatives from a specific innovation project. All in all, seven women and eight men were interviewed in person or by phone.

What is VRI? A case description

VRI aims to promote innovation, knowledge development and value creation by regional co-operation and strengthened research and development efforts in and for the regions (VRI, 2008a). Today, VRI is implemented in 15 different Norwegian regions and thus the programme is represented throughout the country.

In order to establish a VRI project, a regional partnership must apply to RCN for funding. If approved, the project gets 50% funding from RCN and the rest has to be

²¹ A critical rhetorical perspective suggests the methods chosen for a particular project should be based on the questions the critic is interested in addressing; the critic is allowed to choose from a variety of analysis models designed for critiquing, perhaps by examining themes, characterisations, icons, myths, and narratives (see for example, Cloud, 1998; Condit and Lucaites, 1993; Lucaites and Condit, 1990; McGee, 1980). Also, inspired by cultural studies, critical rhetoricians can examine articulations reflected/employed in discourse (Kvidal, 2008). The critic must also make choices with regard to the discourses from which the analytical data is to be produced.

supplied by the region, chiefly the county authorities. To be eligible for funding from RCN, the VRI regions have to prioritise two or more industries. These priority areas subsequently provide the basis for evaluating which innovation projects are eligible for VRI funding in a specific region. Implicitly, the industries chosen are those regarded as having the largest innovation potential.

Even though VRI has regional variations and adaptations, most regional projects' stakeholders are the county administration, the regional Innovation Norway office,²² the regional office of the Norwegian Confederation of Trade Unions (LO), and the regional office for the Confederation of Norwegian Business and Industry (NHO), as well as R&D milieus, such as regional university colleges and research institutes. A regional RCN representative is also often an observer in the stakeholder group. VRI is co-financed by several stakeholders, with RCN and the county administrations contributing the most. Moreover, participating businesses contribute their time as well as money.

The national level: How gender became an issue in VRI

Gender equality in research has been promoted within the Norwegian research sector on the basis of "fairness, democracy, credibility, research relevance and research quality (increase in knowledge resources)" (Borlaug et al, 2009, p. 121). In 2007, the RCN adopted a strategy on gender equality. As a granting body, RCN expects "specific plans for the enhancement of gender equality to be developed within all research programmes" (Borlaug et al, 2009, p. 121). In spite of this, gender is neither mentioned in RCN's 2007 programme plan for VRI nor in the 2007 instruction book for regional applicants (VRI, 2007a). In addition, the VRI secretariat's 2007 annual report fails to mention gender and gender is not included as part of the performance indicators (VRI, 2007b). Such omissions in the programme's key documents reinforce the marginalisation of gender as an aspect of innovation. However, based on the interviews conducted with RCN representatives at this level in VRI, gender *was* an issue they had discussed at this point in time. In fact they say the government's gender action plan on entrepreneurship (The Norwegian ministry of trade and industry, 2008), to which we will return later, as well as RCN's gender strategy plan were welcomed by the VRI secretariat because such a strategy made it easier for the secretariat to demand "gender action" from the regions.

In 2008, the ministry of local government and regional development (KRD) granted an additional NOK 6.5 million to the national VRI project for allocation to the regional VRI projects.²³ In return, the regions had to show the gender balance status in their projects; they had to draw up an action plan for improving gender imbalances and state the present situation in terms of gender representation. According to the annual

²² Innovation Norway is the Norwegian government's instrument for promoting businesses in Norway.

²³ The total allocation of RCN funding used in VRI was NOK 80 million (VRI, 2008a).

report for 2008, gender had now become an issue in VRI (VRI, 2008b). This report states that, according to the governmental policy document Action Plan for Increased Entrepreneurship among Women (Norwegian Ministry of Trade and Industry, 2008), gender balance is one of the performance measures on which the regional VRI projects will be measured. This implied that VRI's overarching objectives regarding the need to address gender had to be "translated" in regional VRI projects. That said, the "measuring" of gender, demanded by RCN in the annual report, relied on counting the number of women and men in steering groups as well as in project working groups.

At this point in time, all VRI regions drew up gender action plans, something which could be said to indicate that the requirements and expectations from VRI nationally somehow had a regional impact. However, the central VRI secretariat, which organises national meetings and implements the policies stakeholders (the ministries i.e. the government) have decided upon, stated that the action plans had varying quality and that the plans needed to be revised in 2009. Specifically, the understanding of how to count men and women varied substantially, regarding both the level at which to count and who should actually be counted at each level. A common "operationalisation" of gender was missing and the numbers reported from the different VRI regions proved difficult to compare. Still, this first attempt at placing gender on the agenda showed that approximately 33% of board members were women, 33% of project management groups were women and 35% of researchers in the VRI project were women (VRI, 2008b).

The lack of integration of gender in the first key VRI documents (which the applicant regions had to consult) reinforces a dominant innovation discourse in which gender is articulated as something independent from innovation or something which could be "added on." The VRI secretariat did not provide the regions with arguments as to why gender should be an issue in VRI or in innovation. That is, none of the previously described arguments as to why a gender perspective is valuable were adduced when regions were instructed to incorporate a gender perspective in their work. Furthermore, the requirements for the gender action plans, which VRI regions later had to develop, encouraged the addressing of gender based on "head counts," thus supporting the idea of gender as a variable.

Industry emphasis in VRI

As mentioned above, in their applications all VRI regions had to prioritise industries which should be in focus for regional R&D and innovation. Notably, Norway has gender-divided education and labour markets, with women more likely to work in the public and service sectors, whilst men are more likely to work in the private and manufacturing sectors. Choosing to emphasise a specific sector thus indirectly implies choosing an area most likely to be dominated by either men or women.

The industries emphasised in the 15 VRI regions are shown in the table. The table organises the chosen VRI industries based on whether they are dominated by men or women or whether, according to Statistic Norway's employment statistics, men and

women are equally present. As the table shows, the majority of the regional VRI projects (65%) chose industries dominated by men. Women dominate in 10% of the chosen industries and there is an equal gender representation in 25% of the chosen industries. None of the regions chose to prioritise female-dominated industries and/or equal present industries at the expense of male-dominated industries (Kvidal and Ljunggren, 2010).

Industries in VRI projects, divided by male or female domination

Industry	Male-dominated industry	Female-dominated industry	Men and women equally present in industry
ICT <i>ICT security</i>	3		
Oil & gas <i>Petro/energy & environment Engineering</i>	3		
Process industry	1		
Art & experience industry		2	
Manufacturing industry	3		
Health		1	
Travel industry <i>Experienced based Attractions</i>			9
Energy industry <i>Bioenergy Environment Renewable</i>	8		
Food industry			5
Marine industry <i>Aquaculture Resources</i>	5		
Maritime industry	4		
Cold climate infrastructure	1		
New industries <i>Micro tech/electr. Biotechnology Life science</i>	4		
Water treatment	1		
Environment	2		
Food & packaging	1		
Art		2	
Total 55	36 / 65%	5 / 9%	14 / 25%

Source: Data found in *Fakta om VRI (VRI, 2008a)*

The table shows that women are symbolically marginalised, as the industries they generally work in only account for a small number of the prioritised areas in different regional VRI projects. Furthermore, the focus on male-dominated industries in all Norwegian VRI regions reinforces articulations of men and male-dominated industries

as more important and central to innovation. This is in line with research from Sweden, where Lindberg (2008) has shown that industries and sectors where many women have chosen to work and/or establish businesses are not prioritised in innovation policies.

The regional level: (Re)articulating gender and innovation?

The regional partnership representatives play an important role in the regional innovation system; not only as part of regional VRI project steering and working groups, but also through the innovation-related work done in the region by the organisations they represent.

We were interested in the gender and innovation articulations expressed by key actors in the regional innovation system. Specifically, we wanted to know how actors in a regional innovation partnership think about, and relate to, the issue of gender and what logics are used to address gender and innovation at this level. Such articulations reveal the reality created and re-created by these key supporting actors in the regional innovation arena. Revealing their articulations is important, since the regional VRI partnerships encourage participation in innovation processes. However, these people are also key to articulating what is or is not innovation-relevant in a region.

The tricky gender question

The interviews with the regional partnership members show that many of them find gender-associated questions difficult to answer. When asked about the relevance of gender to innovation, the immediate response from many participants is that this is a very difficult question. Some say they are not really sure how to respond.²⁴

In many ways, the perception of the relationship between gender and innovation is inconsistent among participants in the regional VRI partnership. Several say gender *is* important to innovation, but struggle to explain why or how. One participant says, “of course gender is important, I just don’t know how.” Another says “gender is *not* important to innovation.” She explains that; “it’s simply that some are more creative on an individual level and this has nothing to do with gender.” Similarly, a third respondent says that, *firstly* one has to “generate something useful [with VRI] and *then* one can get into this gender issue.” Gender is something this participant thinks should not “get in the way” of dealing with the *central* task of VRI, the *actual* innovation processes. Such articulations are part of reinforcing an understanding of innovation processes as independent of gender.

The participants say they want more knowledge and research on the topic. One says she thinks “it is very interesting” adding “this is something I know little about.” Similarly, another interviewee says that gender *is* important and *should* be taken into

²⁴ All quotes from participants have been translated from Norwegian to English by the authors.

consideration when working with innovation, but adds, “it is uncertain how this should be done and how it should be measured. We need more research on this topic.”

Several of the participants are inconsistent in their thinking about gender and innovation. For example, one respondent first states that when it comes to innovation “it doesn’t matter whether you are a man or a woman,” but later in the interview says, “the context matters in terms of access to help and so on,” indicating man and women have unequal access to innovation-relevant resources. This example shows how the position of individual respondents on the relationship between gender and innovation is shifting.

Participants want more research on this topic, but their view on whether or how gender and innovation is connected is shifting. In fact, they have different and sometimes conflicting thoughts on how gender and innovation are linked, or not. These respondents’ answers illustrate that the relationship between gender and innovation is not one the participants can easily explain. We interpret this as ambivalence on the gender issue in this particular context.

Addressing the problem

Most of the participants see the gender imbalance as a direct effect of the prioritised industries this region chose for its VRI project. One of the interviewees explains that it “is due to the industries emphasised. There are few women in these.” Furthermore another informant says, “some industries are just more innovative than others, and some industries are just more male-dominated than others. That’s just how things are.” A third respondent says that: “it is often more difficult to articulate a need for R&D funding in soft industries where women are.”

In line with the articulated reason for the gender imbalance as something associated with the industries emphasised, several explain that focusing on other industries would have given a different distribution of men and women in the projects. One respondent states, “if we are to get more women involved, we must turn to the industries where women are. We must spend some time figuring out the R&D demands of these industries.” Similarly, several other participants say that things would have looked different if the VRI region had focused on tourism and culture.

Some participants also think the gender imbalance reflects “business life in general.” As one participant says, “the situation is that most technology businesses are run by men.” He explains: “it is a problem getting hold of women business leaders in VRI, [because] there are so few businesses with women leaders [...]to begin with.” This participant implies that the definition of what *is* and what *is not* an innovation generates a gender gap, as men are more involved with “technology businesses.” Another participant says that even though there *are* women who lead companies, “it’s as if we just aren’t meeting them.” He continues, “it is mainly the same men who show up [at the innovation-relevant arenas] because that’s just how it usually is.”

Several of our participants say they have not reflected much on the gender imbalance. They have not considered it, and say that “it just ended up that way.” One says,

“I don’t have the impression this is anything to do with our guidelines and application procedures [in our VRI region].”

These quotes indicate that VRI’s potential gender imbalance problem is not something easily fixed since the focus industries were determined long ago. The attributions by the regional VRI partnership actors to explain the gender imbalance do not call for much action by the VRI partnership, other than perhaps choosing a women-dominated industry as a focus area.

This is similar to Kelan’s (2007) findings in terms of attributions for the scarcity of women in information communication technology (ICT) work. Kelan’s analysis shows that people working in ICT say they “don’t know” why few women work in the sector, but are sure it is not the company’s fault. Kelan highlights socialisation and culture and women’s own lack of interest as attributions articulated by people working in ICT.

One participant, however, challenges the view of gender imbalance as caused, and thus remediable, by emphasising different industries or sectors. He prefers to challenge the way we look at gender in the different industries and says, “in considering the industries we emphasise, we must think broadly.” He warns against adding sectors which provide a “quick fix” to the gender imbalance challenge and goes on:

We could solve this by including the small industries where women are more represented than men, but [...] it is important to include a gender perspective when dealing with the larger stuff as well [...] We can’t think that gender and innovation is something of relevance only to some mystical small companies.

He is concerned that the quick-fix industry selection might do more harm than good in terms of developing a more complex understanding of gender.

This quote shows that within one regional partnership there are several, sometimes significantly different, ways of thinking about gender and gender imbalances – and the role of gender in innovation (or vice versa). Even though this might indicate unclear parameters and objectives in regard to gender, it also suggests there might be room to re-articulate what gender means in relation to innovation.

Rationale for addressing the problem

Similar to the way in which the argument for a gender perspective is made more broadly in terms of gender policies, we find several different logics in play regionally to explain the importance of addressing gender imbalances in regional innovation processes.

Regional sustainability and use of human resource arguments

Several of the interviewees bring up how a gender balance objective is something that will eventually benefit the region. Several say that taking full advantage of the human resources in the region is a central part of developing the region. One says that, “if we

want to live and work in our region we need both men and women to live here.” He is concerned that “If we fail to think about gender, our region’s future will be at stake,” and explains that, “if women leave, the guys will also leave.” He is supported by another informant, who thinks the challenge in the region is tied to creating “attractive places to live [for both women and men].”

Many of the participants focus on jobs for both men and women in the region. One says: “if we do not have jobs for women requiring their competence, we will also fail to create innovations in more male-dominated areas.”

Democracy and power

The issue of democracy, equal rights and opportunities to participate in innovation processes is also key to some when it comes to why one should be working with gender equality. One participant says:

We must see both as equal. This does not mean putting one gender up against the other, but thinking about both at the same time. Today, we do not have equal pay, for example [...] Girls make less. The same goes for innovation; one should have equal opportunities here as well.

He explains that, “it is a fact that the society we have today has not come about on its own.” For this participant the question of gender equality, including when there is involvement in innovation processes, is something which needs to be seen in light of other struggles for equal rights. “Someone fought for the benefits we have and made them required by law, like maternity leave and so on,” he says, implying that gender equality in innovation processes will not come without a fight.

A part of the democracy argument also lies in a question of power, and one participant explicitly discusses the concept of power related to innovation. She says that “power is an aspect of innovation. [...]. It is obvious that whoever has power (in the form of networks, money), has the power to develop innovation as well as power to define it and this is linked up to gender.” This participant also says the discussion regarding gender issues generally leaves much to be desired. She says:

One often falls back to the Research Council’s requirement to [...] count the number of women here and there. Of course I think this is important, in that it gives a picture [...], but it fails to give an explanation and does not answer any questions. The purpose and the objective must be emphasised more.

Several of the region’s actors also discuss the gender imbalance as a question of power. In response to the question of whether she has reflected upon the gender imbalance in terms of involvement in projects funded by the region, one participant says that this “brings me back to an understanding of power.” She continues to explain that, “clearly, those that are involved with VRI [...] have chosen male-dominated areas. These are positions with great impact [in the region]. It reflects society.”

Another participant who touches on the issue of power, albeit implicitly, says, “there is also a difference in terms of how much and how good information women get about VRI and other support mechanisms compared to men.” This, according to this participant, “has to do with which forums they are involved in or not.”

Still another informant talks about power connected to the status of gender related themes. She says, “we have to increase the level of prestige of this area.” She continues, “the way it is today, it is just ‘added on’ [and] doesn’t get the same status as [...] other issues [...] Perhaps we have to start by setting aside specific recourses for research on this topic.” Furthermore she says, “I know there are some specific funds set aside for gender research in VRI, but it is so little that it does not afford any status and there is a limit to how much can be done within the constraints of these funds.”

Unlike some, who see the gender imbalance and the issue of gender in VRI as mainly associated with the industries chosen as emphasis areas, these participants are interested in other processes which might be gendered, and which might also influence participation in VRI. When talking about imbalances in light of a power perspective, participants also seem more eager to challenge the region to take more responsibility.

Addressing gender equals being politically correct

In addition to those presented above, our analyses also highlights a fourth type of logic of which it is important to be aware. This logic for addressing gender has less to do with resources or the right to access the innovation arena and more with political correctness and what is expected.

For instance, some of the interviewees say that external demands drive the focus on gender. One says:

VRI’s task is to get good projects, regardless of whether men or women are involved, but we must consider gender because of the Research Council’s demands, and general expectations in the society that this is something that must be considered.

Another says that he “does not intend increasing the share of women (or men),” but says he is aware of the issue and explains that “today, it would clearly be provocative to put together a steering committee [...] consisting only of men, or only women [...]. This would cause reactions.”

These quotes show that a call for a gender focus is less anchored in a concern with the right for equal participation in innovation, and more a matter of complying with what others expect. This fourth logic seems to relate to what Kelan (2007) discussed in the above mentioned study on attributions for a scarcity of women in ICT work, namely the importance of not being seen as sexist or as devaluing women. This shows that external demands are important, and that they may play an important role in ensuring a gender focus. Simultaneously, they also indicate that the mere fact that a programme or project express a focus on gender does not mean this is anchored amongst all programme actors and stakeholders.

The project level: Solving a problem

As previously mentioned, all VRI regions made choices with regard to industry areas they wanted to prioritise in their VRI work. In most VRI regions, the areas of emphasis become separate projects under the overall regional VRI umbrella. For the purposes of this project, we were interested in how gender was articulated at a local and concrete project level in the programme.

We thus examined how a concrete innovation project adjusted to the new and relatively sudden national – and then also regional – demands for gender equality. The innovation project we examined was presented as a cluster of firms in the construction industry with the local technology college and construction research institute as R&D partners. The project stood out as an innovation project within an industry dominated by men, both as employees, in management and in R&D.²⁵

When the demands to make more women visible – and countable – in regional VRI projects came about, these somehow had to be addressed at innovation project level. In order to address the VRI requirement of involving more women (in a countable way), the local project allocated financial support (NOK 100 000) to a different project – an existing, independent project, working to recruit women to technological education and support career-building for women Masters of Engineering in such things as becoming board members and applying for leadership positions. This project had been initiated by one employee at the technology college, which funded the project by utilising her network in business and in the county administration.

While the funding certainly was a positive contribution, this way of working with gender sidelined it to the margins of the actual innovation project and symbolically outsourcing the whole discussion on how to involve more women in innovation processes. When the local innovation project chose this approach to the gender perspective demand, we interpreted it as a consequence of a rational action when faced with the demand of having more women involved in their project. They did not see how they could possibly “dig up” more women and so, to fulfil some of the gender criteria, this existing, independent project became the solution. Another way of interpreting the outsourcing of the gender issue is that they ended up with a solution of paying “indulgence money” and thus canning the problem. The gender perspective is sidelined in the actual innovation project. Perhaps the organisers of the local project felt powerless when faced with a demand for more women in their project or perhaps the demand was not really taken seriously and thus prevented them from coming up with a more demanding and lasting solution. Either way, opting for such solutions prevents a more integrated, binding and lasting solution regarding gender involvement in innovation projects.

²⁵ The construction industry has approximately 94 percent male employees and this is also quite close to the rate of male business owners within the industry (at least for sole proprietorships according to SSB).

Discussion and future prospects

The VRI programme represents RCN's main support mechanism for research and innovation in Norway's regions. In this chapter, we have addressed how gender became an issue in this programme and analysed articulations of gender nationally, regionally and locally, specifically in relation to a dominant conceptualisation of innovation.

Gender - an afterthought

In terms of the national level of VRI, we find gender articulated as a non-issue when it comes to innovation. This is based on the lack of gender implemented in initial and central VRI documents, as well as the timing of choices regarding regional industry emphasis. Furthermore, when VRI nationally required regions to develop gender action plans, the demands made were vague and it was never communicated *why* it was important to include gender when working with innovation. In fact, the requirements for the plans encouraged regions to address the gender issue on a basis of "counting heads," thus supporting the idea of gender as a variable, indirectly encouraging an "add-women-and-stir" strategy for addressing gender. Such a strategy supports an understanding of the problem of gender imbalances in innovation as a problem women (i.e. individuals) have, and consequently undermines an understanding of the gender imbalance problem as something which needs to be addressed at the structural level and an issue for innovation processes. Failing to deal with the *why*-question also makes it challenging for regions to decide on the correct "remedy" to address gender imbalances in innovation processes.

At the regional level, few of the VRI partnership members think application procedures and efforts done by the partnership play a role in causing gender imbalances. This feeds into an articulation of innovation systems as gender-neutral, and as such supports an articulation of gender as a non-issue for innovation. At the project level, we point to how an innovation project tried to comply with the gender demand by allocating financial support to an existing independent project, side-lining the gender perspective to the margins of the actual innovation project. Again, this is something which enables a continuation of a dominating articulation of innovation processes as gender-neutral, and where addressing gender in innovation processes is seen as having little to do with improving the "actual" innovation process. All in all, then, the innovation discourse reinforced by VRI is very much in line with hegemonic articulations of innovation, with gender as a non-issue.

Tensions at the regional level

Despite this somewhat grim conclusion, we do find regional articulations of gender and innovation which challenge the dominant understanding of innovation systems as gender-neutral. In particular, when regional partnership members struggle to explain the relationship between gender and innovation, are ambivalent on the issue of gender

and innovation and call for more research on the topic, this creates “cracks” in the dominant view of gender as irrelevant.

There are several, sometimes competing understandings of gender within the partnership as well as conflicting logics for why gender imbalances should be addressed. Specifically, in play at the regional level we find the resource utilisation argument and the democracy or gender equality argument.

The variations reflect conflicting understandings of gender within the regional partnership as a whole, but also in terms of individual member’s positioning on the issue. Thus, there are tensions in play in terms of what gender means to innovation and how it should be dealt with. The need for more knowledge on the topic is clear but, perhaps more importantly, so is the need for innovation programmes like VRI to encourage thorough discussions on dealing with gender and innovation.

Politics (can) matter

In addition to the three well-known arguments mentioned above of resource utilisation and democracy, we also find a logic articulated at the regional level based on an argument of external expectations and political correctness. The fact that there is such a logic in play makes clear the importance of innovation programme funders and other stakeholders explicitly communicating their expectations regarding a gender perspective in an innovation programme like VRI.

Furthermore, we see that politics do matter (e.g. the long-lasting efforts in Sweden by VINNOVA). That is, requirements and expectations “from above” have an effect regionally and locally. With regard to VRI, the government action plan has led to demands, which in turn make *something* happen.

A headcount of men and women or an add-woman-and-stir approach might not bring about structural changes; the reason for counting heads may very well be that it is “expected.” Still, it represents one way to *begin* addressing gender imbalances in innovation processes. It *can* thus be seen as playing a part in a re-articulation of the innovation concept from one that is gender-neutral to one that is gender-inclusive. However, the re-articulation must not be taken for granted, and should the external demands and expectations regarding gender change, a continued focus on gender would rely on an internalisation of a gender perspective.

Future prospects and research

As indicated at the beginning of this chapter, there has been little research to date focusing on gender and innovation. A recent research project, however, may provide some insights into the gendering of innovation and women’s participation in innovation processes (Ljunggren, Alsos, Amble, Ervik, Kvidal and Wiik, 2010). Findings from this project underline that innovation does happen in sectors where women work, but that innovation studies in these sectors are rare and hence women are not regarded as innovative. Furthermore, the project claims the Norwegian understanding of gender

in innovation is lagging behind the gender mainstreaming policy in the EU, and especially Sweden.

The project points to several areas in need of future research, for instance a need for continued gender-oriented research on innovation programmes, as well as other programmes aiming to increase innovation and entrepreneurship. The project also suggests looking at and learning from other nations' innovation and gender equality efforts. It asks for research which takes a systemic approach to innovation, in particular looking at how gender affects innovation processes.

Lastly, we want to address some areas in need of future research. There is a need for more knowledge on master narratives which might drive gender focus, such as different reasons as to *why* it is important to address gender bringing about different ways of addressing gender. Similarly, the fact that a specific innovation project fulfils a gender requirement does not mean that gender is being addressed in ways which matter to the innovation process concerned. In the light of this, there is a need for in-depth knowledge on how gender is dealt with, both in innovation programmes and concrete innovation projects.

Also, we see a need for research on innovation programmes and innovation processes which explicitly address power relations, knowledge and organisational hierarchies. Competing articulations of gender have different impacts, depending on whether they challenge or reinforce the status quo and depending on the power and position of the person embodying these articulations.

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Part II: Practices for Innovation

Elisabeth Sundin

“Policies” was the theme of the previous section. As long as policies go unimplemented their importance remains unclear. Implementation is made using “procedures” (the theme of the next section) and through organisations. To understand policies and procedures, we must therefore understand organisations and organising. Practices are constructed and elaborated in and through organisations and organising. Thus, all the contributions in this book could be presented under the title Practices for Innovation. However, we have refrained from that alternative and assigned those contributions which use an organisational theory perspective to this section on practices.

The statement concerning the importance of organisations and organising in understanding implementation and change concerns all kinds of phenomena, including innovations. Innovation is defined as a change in one or more dimensions. Change and organisational change are constant topics in theory and practice. Change can be of many kinds, meanings and origins. There is a vast literature on organisational change and concepts of how to create and manage change²⁶. As mentioned in the introduction, change to create innovation, innovating culture and innovative individuals is now (in the early 2010s) on the political agenda.

Organisations are structured by gender and construct gender. Organising therefore always includes gender dimensions. Gender awareness is not always present, even in the Scandinavian countries where gender equality is the official norm. Gender mainstreaming is often presented as a matter of course and resistance towards changes in gender orders often comes as a surprise; examples of this will be presented in the following contributions. Methods for studying and changing gender orders will also be presented and discussed. Many of these are influenced by Joan Acker (1992). Her theoretical works have been developed by many Scandinavian researchers which will also be illustrated in the contributions.

The first chapters connect to the policies presented in the previous section. In the article *Economic Geography in Regional Planning: Homosocial Stories or Allowing Spaces?* (written by Gunnel Forsberg and Katarina Pettersson, researchers in economic geography and Gerd Lindgren, a sociologist), we encounter the regional programme Sustainable Growth in Värmland, 2004-2007, an example of the regional development policy that has been developed since the early 1990s in Sweden. The chapter builds on

²⁶ There are handbooks summarising this field, such as Mary Jo Hatch (2006) *Organisation theory: Modern, symbolic, and postmodern perspectives*. Oxford University Press.

a qualitative study in the Värmland region in the late 2000s. The authors find many similarities with the work being done in this county and the theoretical explanations developed in the “new economic geography”. This programme lends itself very well to an analysis of economic geography and gender mainstreaming in regional policy, which is carried out in this chapter. The study was conducted by a close reading of the growth programme documents and interactive research with thirty women appointed to senior positions in the region. The analysis indicates that the process of developing the growth programme was influenced by homotopical networks (place-specific, male, homosocial practices), as the large partnership that was formed was dominated by men and people from central areas, reconstructing past power relationships. The male-dominated clusters were prioritised in the regional growth programme, while potentially successful clusters and innovation systems which included large numbers of women were largely excluded. Consequently, the growth programme was not gender mainstreamed. The concept of “allowing spaces” is presented and applied in order to identify alternative development possibilities and for new initiatives to take place. For example, implying integration of the women-dominated clusters as potential clusters upon which to build regional development. Allowing spaces may have a potential to integrate gender into the regional development discussion.

The second contribution, *Gendered Partnerships and Networks in Swedish Innovation Policy – a Case Study of Multi-Level Governance*, has a regional perspective but other concept and theoretical framings since the authors (Gun Hedlund and Gun Hedfeldt) are political scientists. The aim of their chapter is to describe the relationship between formal ERDF (European Regional Development Fund) partnerships and informal gendered networking relative to the policy of women’s entrepreneurship. In choosing two cases (the counties of Jönköping and Jämtland), they wish to investigate similarities and differences related to the aims of the study. The process surrounding the Structural Fund projects is an illustration of multi-level governance. The formal institutions support the idea of gender-inclusive networks.

In their empirical studies, Hedlund and Hedfeldt found several different kinds of networks and networking. The relationship between the formal, institutionalised partnership and its elite network and women in business seems weak, whilst it is strong amongst male Triple Helix actors. The social dimension of networking seems to be more important than the researchers expected. Thus the local setting and geographical proximity to other agents is vital. This contrasts with the organisation of the large structural fund regions which includes several counties. It also contrasts with “created” networks and arenas where people with no prior connections are supposed to interact. The empirical studies indicate that sphere-bridging exists on different levels, sometimes on a target group level and sometimes on an operational level. However, those networks are embedded in a firm and bureaucratic structure when writing project applications or running projects.

The third contribution, *Entrepreneurship, Innovation and Gender* concerns public programmes for creating entrepreneurship and innovation. Its author, Elisabeth Sundin, presents two projects aimed at increasing the number of enterprises in the healthcare and care sectors in Sweden. The first project has a county council as provider whilst the second one has the Swedish Nurses Union. A number of stakeholders were recruited to each project as members. The aim of this article is to use these projects to clarify and elaborate the predominant understandings of entrepreneurship, innovation and gender and the connections granted between them. The straight line between decisions and outcomes predicted in the national programmes are challenged by the many contradictions which have to be negotiated in the projects. Even the oft-stated differences between top-down and bottom-up are not clear-cut but negotiated.

The context is the Swedish public sector constructed as a Scandinavian welfare regime with public organisations dominating both supply and demand. Both sectors are dominated by women as employees; this was one argument behind the focus on women as entrepreneurs. The projects and programmes are argued for and established in line with New Public Management aims of changing the public sector. The partners involved have different reasons for joining and different conclusions as to what is the main problem. The predominant understanding is that small and medium-sized firms are used as synonyms for entrepreneurship and that there is also a link to innovation. Gender is a non-question on the projects' agenda while women, as they are the predominant employees, are acknowledged as a key group.

The organisational perspective is really in focus in the fourth contribution; *Inward and Outward Learning Processes* as the object of study is in a constant organising process. Two of the authors are researchers (Christina Scholten and Agneta Hansson) and two (Kicki Stridh and Mia Swärdh) are consultants with long experience of working with gender projects and organisational development. The article discusses conditions of how to work with applied gender research as a means of producing sustainable gender equality in strong innovation environments and innovation systems. During a three-year period, the research team has worked with an innovation environment focusing the food innovation system in Skåne, south of Sweden. Their article describes the process and the development of how to address gender issues in a sector that is quite traditional when it comes to gender. The success factors and weaknesses of the project plan and its consequences are presented and discussed.

The following three contributions describe and analyse a single organisation, although the organisational identities and borders are often less straightforward than anticipated at first glance or from formal structures. In *Why So Little Resistance? - An Action Research Project at a Technological Research Institute (FOI)*, sociologist Martha Blomqvist and manager Hans Frennberg discuss experiences from an action research project aiming at increased gender equality at FOI. The objective of this project was to increase gender awareness in FOI and also change gender-related mindsets and

actions which may restrain creativity and innovation in the organisation. The project met few obstacles and the change initiated by it has, on the whole, been well received.

When change is implemented in workplaces, resistance to change is otherwise a recurring subject. Of necessity, changes in gender relationships do have some bearing on power relationships and can therefore be expected to meet more resistance than many other kinds of change. Some action researchers actually claim that a project has not achieved anything unless it meets resistance. In the light of this, the authors claim it is important to describe, analyse and understand the lack of resistance met by the project. Their contribution is based, not just on the empirical studies at FOI, but also an analysis of literature on the issue and experiences from other change projects.

One contribution written by Anne-Charlott Callerstig concerns VINNOVA, a key-organisation in the Swedish innovation system as stated in the Foreword and many of the contributions. The contribution, *Public Servants as Agents for Change in Gender Mainstreaming – the Complexity of Practice*, has gender mainstreaming as one of its key concepts.

Departing from an understanding of implementation processes as learning processes and gender mainstreaming as a long-term organisational change process, the questions in this article focuses on strategies developed by the change actors (in this case bureaucrats in public sectors) in order to establish the necessary conditions for sustainable change processes within their organisations. It seeks to discuss the strategies developed and of particular concern is the question of the potential role bureaucrats in public organisations having to act as “agents for change” in policy learning processes. Callerstig argues that the role of bureaucrats acting as change agents has been acknowledged to a lesser extent within traditional implementation research.

To sum up this introduction to the chapter on Practice, the position of innovations in overall policies is discussed and elaborated. There are examples from different policy arenas, different regional and organisational contexts and different individual actors and actor-groups. Organisations, organising processes and organisational theories are pervading perspectives throughout all the contributions. Gender dimensions are acclaimed since gender is an important and restrictive part of the culture of organisations and of organising. Gender must be taken into account if innovation is to be promoted.

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- Economic geography in regional planning

Economic Geography in Regional Planning - Homosocial Stories or Allowing Spaces?

Gunnel Forsberg, Katarina Pettersson & Gerd Lindgren

Abstract

The regional programme Sustainable Värmlandic Growth for the Period 2004-2007 (2003) is a textbook example of the regional development policy that has been developed since the early 1990s in Sweden. One can find many similarities with the work being done in this county and the theoretical explanations developed in the New Economic Geography. This programme lends itself very well to an analysis of economic geography and gender mainstreaming in regional policy, which we perform in this paper. We build the paper on a qualitative study in the Värmland region in the late 2000s. The study was carried out by making close readings of the growth programme documents and interactive research with thirty women appointed to senior positions in the region. Our analysis indicates that the process of developing the growth programme was influenced by *homotopical networks* (place-specific male homosocial practices), as the large partnership that was formed was dominated by men and people from central areas, reconstructing past power relationships. We can also conclude that the male-dominated clusters were prioritised in the regional growth programme, while potentially successful clusters and innovation systems, which included large numbers of women, were largely excluded. We also conclude that the growth programme was not gender mainstreamed. We suggest that the concept of *allowing spaces* can be applied in order to identify alternative development possibilities and for new initiatives to take place, e.g. integrating the women-dominated clusters as potential clusters upon which to build regional development. Allowing spaces, we suggest, could have potential for integrating gender into the discussion of regional development.

Keywords: New Economic Geography, cluster politics, allowing spaces, homosocial networks, homotopical networks, gender equality

Introduction

Since Sweden joined the EU (1995), Swedish regional policy has given greater scope on the regional level to interpret the objectives and design the implementation of development policy. There has, therefore, been a noticeable shift from a state-governed, regional, equity-orientated policy of allocation (a top-down policy) to an asymmetrical regional growth policy (a bottom-up policy).

One increasingly important part of this regional development policy has been the formation of a strategic document, a regional development programme as a five-year plan for each county. The process of formulating the document is stressed as an im-

portant part of the strategy, into which all important actors and stakeholders in the region are integrated and through which they are committed (economically as well) to the aims and objectives of the plan.

Hand in hand with the bottom-up strategy of the EU's regional policy grew a theoretical debate stressing the importance of the regional level in national development. This theory, under the name of New Economic Geography²⁷, went very well with the new policy. Not surprising, then, that the regional development programmes were highly influenced by the analysis, approaches and concepts of this theory.

Alongside the demand for a development strategy processed and decided in the regions, there was a requirement for gender mainstreaming in the programmes. The gender aspects were to be integrated into the whole programme. This idea was developed at EU level and emphasised by the Swedish government. Each political decision and plan should therefore be analysed from a gender perspective and formulated in a way that would improve the gender equality.

The regional programme Sustainable Värmlandic Growth for the Period 2004-2007 is a textbook example of regional development policy. There are many similarities with the work being done in this county and the theoretical explanations developed in the New Economic Geography. It thus lends itself very well to an analysis of economic geography and gender mainstreaming in regional policy. The growth programme put great emphasis on clusters and innovation initiatives, such as "The Paper Province" and "Steel & Engineering Industry". A third cluster was called Compare, a networking and marketing organisation for the ICT companies in the region.²⁸

During the same period, vibrant and growing activity was observed in old networks such as the Rotary Club, Oddfellows and above all, the exclusively male club of Freemasons. These groups added a somewhat seamy dimension to the new networks and partnerships developed in relation to the processing of the regional development policy. Hence, they also played a role in defining innovation and economic growth in the regional policy (Lindgren and Forsberg, 2010).

Aims and methods

In this article, we will discuss how the New Economic Geography influenced the development of the Värmland growth programme Sustainable Värmlandic Growth for the period 2004-2007 with a particular view on the objects of innovation systems and clusters. How the story of the regional programme was developed, who was involved in the process and who and what was excluded? To what extent was the regional

²⁷ The theory has developed as mainstream economic geography since its introduction in the mid-90s. Thus, the label "new" is not to be understood as "recent" but rather as an alternative to the established theory consisting of simplistic economic theory. The New Economic Geography takes actors and actions into the analysis of regional development.

²⁸ In a project financed by VINNOVA the process of regional formation and strategy for development in this specific county in Sweden was analysed from a gender perspective. (See Forsberg & Lindgren 2010) The research group comprised a group of sociologists and geographers with long experience in gender studies.

growth programme gender-mainstreamed? Was there an opportunity for *allowing spaces* to identify alternative development possibilities and for new initiatives to take place or was the process influenced by *homotopical networks* (place-specific male homosocial practices)?

Allowing spaces can occur in times of new technology, shifting power structures, changed infrastructure, transformations of public obligations, new networks etc. Changes in regional policy and economy can also lay the groundwork for developing allowing spaces where new resources can be released (Ahrne and Papakostas 2002). In this paper, we use the concept of allowing spaces according to the last definition, i.e. in relation to regional and economic changes.

The empirical basis for this article is a qualitative study conducted in the Värmland region in the late 2000s. The study was carried out by making close readings of the growth programme documents and interactive research with thirty women appointed to senior positions in the region with individual experience and knowledge about the development of the growth programme during that period. The interactivity in this project means that the knowledge building process was accomplished in a joint arrangement between researchers and the women as regional actors and stakeholders. We held dialogue-like interviews with each actor lasting a couple of hours each. The researchers wrote preliminary findings from these interviews that were discussed and further elaborated in regular workshops with all the researchers and participating women.

New economic geography - Scientific influence on regional policy

In order to understand the driving forces behind the programme developed in Värmland, we will present some explicit or implicit theoretical tracks from the principal actors responsible for development of the programme. Texts of the New Economic Geography were still largely prevalent in regional development programming at the beginning of the 2010s, but we have chosen to present the theory which was state-of-the-art at the time the Värmland programme was processed and written, at the beginning of the 2000s.²⁹

The New Economic Geography which was developed during this period challenged the neo-classical economic explanations of what creates economic competitiveness. The argument emphasised that competitiveness could not be explained by low cost production factors such as labour, capital and natural resources, but rather by the ability to utilise specialised skills and be creative and innovate.

²⁹ However even during this period, the term “new” economic geography may be inaccurate but as it is the concept used, we have kept it. The newness basically concerns the way that place matters in regional concentrations of certain economic activities and what interest there is amongst, say, business economists and economists in the way place matters.

In brief, innovations were seen as central to economic growth and development. Economic growth was thus understood to have been created when firms related to other firms and actors such as universities and authorities in systems or collaborations and when they developed new products or processes – innovations – that sold well. The structures of related actors were conceptualised in terms of, *innovation systems*, *national system of innovation* (Freeman et.al., 1995; Lundvall, 1992) *innovative processes* (SOU 2003:90), *economic clusters* (Porter, 1990, 2000) and *Triple Helix* (www.vinnova.se/06/02/07). The strategy of Triple Helix was launched; it viewed public organisations, private companies and the universities as the three most important pillars of the regional development complex. The Triple Helix model of governance also became a policy recommended by the Swedish national government.

Central to the idea of innovation-driven economic growth was the fact that collaboration and learning processes influence innovation capacities and, in turn, economic development. Firms were not (entirely) seen as rational economic actors working autonomously in the market, but rather as path-dependent, working in particular institutional settings through relationships and collaborations with other firms and actors. The importance of trust and geographic proximity were also stressed as factors supporting learning and the exchange of knowledge. In this view, innovations were not seen as the result of planned or predictable linear processes starting with (basic) research.

Another important requirement for new ventures and innovations was that people came together and felt that they had the same interests and capacity for action. Networks which cross many social positions (or have access to a “broker”) proved very important for new ventures or innovations (see Ahrne and Papakostas 2001, Näsman, 2003, Edquist, 2000). Innovations were thus seen to be created in the complex relationships between different actors. A perspective in theories of innovation was thus that innovations developed in companies which interacted with other companies (suppliers and competitors) and other organisations (such as universities, clients, schools, government agencies) in local and/or regional networks. This reasoning was similar to the ideas of the cluster approach and that of regional partnerships for programming processes.

Other researchers focused more clearly on alternatives to the traditional economic view of regional development and stressed the multiplicity of conditions. All innovations and products were thereby seen as emerging in specific contexts and understanding and explaining the origin of innovations meant understanding the particular situation and conditions. In this view, start-ups and innovations are rarely something totally new; rather, they are new businesses that build upon knowledge, skills and other assets already located in a region. Values, culture, ways of organising and social interaction etc. could set limits on what could be achieved. Christensen and Kempinsky (2004, 28ff) refers to studies which showed that the regions with the greatest opportunity for

development were characterised by diversity, openness and tolerance. Social innovation and social entrepreneurship was a prerequisite for technological innovation.

However, sometimes these analyses stressed that the existing context also implied that the existing resources, old structures and stabilities of organisations remain. Old organisations tend to change as little as possible and keep to existing practices with existing resources.

Other approaches tried to explain the uneven spatial development and tendency to cluster by focusing on the relational social and cultural factors, as opposed to the economists who sought to explain the uneven development through sophisticated models and theories of centrifugal and centripetal forces (See Perrons, 2001; 2004). Maskell and Malmberg (2007) use an actor's perspective and stress the concept of "myopia" in explaining the position of the actor. This spatial concept explains why potential entrepreneurs in a local environment make choices which enhance specialisation in the community, regardless of what started the process. Myopia is the lack of imagination, vision and intellectual capacity which limits the scale of development pathways and prevents the economy from taking new, unexpected turns. The benefits of specialisation outweighed the risk of lock-in effects, stagnation and even decline (Maskell & Malmberg, 2007:614).

The arguments developed within the New Economic Geography emphasised that competitiveness could not be explained by low production cost factors such as labour, capital and natural resources, but rather by the ability to utilise specialised skills and be creative and innovate. This view went very well with the EU's bottom-up regional strategy, which stressed the importance of the regional level in national development. The regional development programmes were then strongly influenced by the analysis, approaches and concepts in this theory. What this influence looks like in the Värmland context is dealt with in this paper.

Gender mainstreaming and specific gender issues

An important starting point for the process of developing the regional development plan for Värmland in the beginning of the 2000s was the New Economic Geography, with its focus on how economic growth, innovations and development are created in collaborations between actors such as firms and universities. Another aspect which had to be taken into consideration was the implementation of gender mainstreaming.

Rees (2005) defines gender mainstreaming as, "the promotion of gender equality through its systematic integration into all systems and structures, into all policies, processes and procedures, into the organisation and its culture, into ways of seeing and doing" (Rees, 2005, p. 560). This is a slightly more detailed definition than the one from the EU and stresses the different arenas and processes of gender mainstreaming. In her discussion, Rees places gender mainstreaming in relation to two other broad approaches to gender equality in the European community and roughly characterises three time periods: the 1970s, 1980s and 1990s onwards. The first period is characterised by equal treatment, which Rees describes as *tinkering*, focused on individual

rights and legal remedies. The second approach, used in the 1980s, is called *tailoring* and is characterised as a focus on group disadvantage and special projects and measures. Gender mainstreaming is the currently used approach and is summed up by Rees in the term *transforming*; it is marked by a focus on systems and structures which give rise to group disadvantage and which integrate gender equality into mainstream systems and structures. In Rees' view the first two approaches, tinkering and tailoring, build on a liberal feminist perspective, where male is still accepted as the norm. The focus is on measures helping women to better equip themselves in the competition with men, but does not question the fact that the rules of the game were not designed for women in the first place. Gender mainstreaming focuses instead on changing mainstream policies and builds on a relational perspective on gender, where differences among women and among men are recognised.

Gender mainstreaming also deconstructs power relationships and seeks to redistribute power: "Hence gender mainstreaming moves away from accepting the male, or rather dominant version of masculinity as the norm. It needs to challenge systems and structures that privilege this dominant version" (Rees, 2005, p. 559). The EU is pursuing all three approaches and all are still in use concurrently. Rees argues that, since it will take a considerable time to put gender mainstreaming into effect, it is still essential for equal treatment and positive action to be developed and used (cf. Forsberg, 2005). In Rees' view, all three in their own right can lead to gender equality, but equal treatment and positive action can also be tools of the gender mainstreaming approach.

However, gender mainstreaming was not commonly carried out in the context of regional development policies. Thus, although there was a requirement for gender analysis of each policy in the European Union, such as regional policies and regional growth programmes, it was most often not included in these policies in Sweden (Rees, 2000; Petterson, 2008; Forsberg, 2005). Gender mainstreaming was obviously difficult to achieve among the Swedish regions and those of other countries. In Sweden almost all proposals for regional growth in the country were heavily criticised when they were evaluated by ITPS (the Institute for Growth Policy Studies) due to a failure to integrate gender into the programmes. The counties were then asked to revise their plans to address the request for gender mainstreaming.

However, it was apparently still difficult to integrate this perspective into the overall programme. In most cases it was solved by placing gender issues into special section of the programmes. The result was that the programmes were very much designed along parallel tracks, one based on economic growth and one based on specific gender issues. Maybe this resulted from a lack of clarification about what was meant by gender equality in regional planning from the EU and from national government. It had been noted in many studies of the growth programmes that equality had become synonymous with "bodily arithmetic" or with gender projects with individual-orientated aspects (Forsberg, 2004). It was quite common for equality to be mainly aimed at providing support for women. Women were to be offered training, development and

jobs to the same extent as men. Insofar as support was given to women entrepreneurs, the idea was to help women to provide for themselves and not because their business was considered a dynamic force in the region.

Rees (2000) undertook a comprehensive analysis of European texts dealing with the issue; she emphasised the lack of gender dimension in the theoretical and applied texts dealing with innovation, learning regions and changes for regional operators. Rees highlighted some key issues regarding the integration of gender equality in regional development. She believed firstly that actors in gender equality should be part of the infrastructure surrounding the regional economies, secondly, that a gender perspective should be part of regional policy objectives and thirdly, that women should have opportunities to participate in the organisations shaping regional policy. According to Rees, if the regional development policy did not address these three key issues, there was a risk it would only have limited effect (cf. Braithwaite, 1999, Bull, 2002).

Furthermore, Pettersson and Saarinen (2004) noted that there was a gap between the requirement for an integrated gender perspective and the cluster policy, as formulated in regional development policy programmes. They pointed out that “cluster” appeared to be a male-connoted concept, demonstrated by the notion that clusters were based on traditional male sectors such as IT, biotechnology and the metals industry and that the skills considered essential for these clusters were often focused on technology taken from male-dominated industries (cf. Hallencreutz, Lundequist and Pettersson, 2003).

Blake and Hanson (2005) also argue that innovations have been formulated in an export-orientated economic perspective and that in the literature as well as in practice, innovation has been associated with some form of technological change. They suggest a rethinking of the concept of innovation, grounding it in the social and geographical context from which it comes. This contextualised innovation includes a gender perspective as women and men are socially located differently. Furthermore, they stress that innovators are embodied and therefore relate in distinctive ways to local innovation contexts.

Pettersson (2007), in similar vein, finds national innovation strategies in Denmark, Finland and Sweden to be focused on technical innovations and that men and “masculine” knowledge (natural science and technology) make up the norm in these policies. Gender is not mainstreamed into the innovation policies. Pettersson suggests that gender mainstreaming transforms the perspective on innovations through: being more inclusive and building on everybody as assets; seeing and taking into account many people; various kinds of knowledge; many kinds of sectors in the economy and various kinds of innovations. She concludes this line of reasoning with the saying “many a little makes a mickle” (see also Pettersson, 2008). Lindberg (2009), too, concludes that innovation and gender are co-constructed in Swedish national innovation policies and that a selection of economic sectors are prioritised in a way that follows the gendered labour market segregation patterns of Sweden, as innovation is connected to tradition-

ally male-dominated technical knowledge. Lindberg reveals that 80 per cent of the prioritised clusters and innovation systems belong to the male-dominated basic and manufacturing industries, while 20 per cent belong to the gender-equal and women-dominated service and experience industries. Furthermore, she suggests a perspective which goes beyond gendered constructions and prioritises the everyday, technical, organisational, productive and social aspects of all economic sectors.

Hanson (2009) emphasises the role of context, i.e. the social, formal and informal networking and the fact that grassroots efforts are needed to develop women's skills and sense of belonging in the regional financial industry. Other researchers, such as Gibson-Graham (1996, 2006) go further and discuss the need to challenge the traditional view of entrepreneurship and development as a whole, i.e. what economics is. They advocate – in contrast to Hanson who advocates integration of the economy – development of a diversified economy which also addresses alternative markets (cf. Pettersson, 2008).

Another interesting approach is developed by Ahrne and Papakostas (2001, 2002) who see that several conditions are required for start-ups and innovations to take place. One important condition is *open spaces* (see also Haraldsson, 2010). These spaces can arise from new technology, changed values, shifted power relationships, old areas used in new ways, new infrastructure, establishment support, deregulation etc. They argue that regional growth based on information, knowledge and human skills can lead to the creation of new open spaces. The strength of this determines the degree of opportunity for new development. By relating the open spaces to various aspects of the old organisation's inertia, it may be possible to see causal factors for innovation. Studies of start-ups show that all have encountered various forms of resistance; sometimes new organisations had to struggle with old ones in different areas.

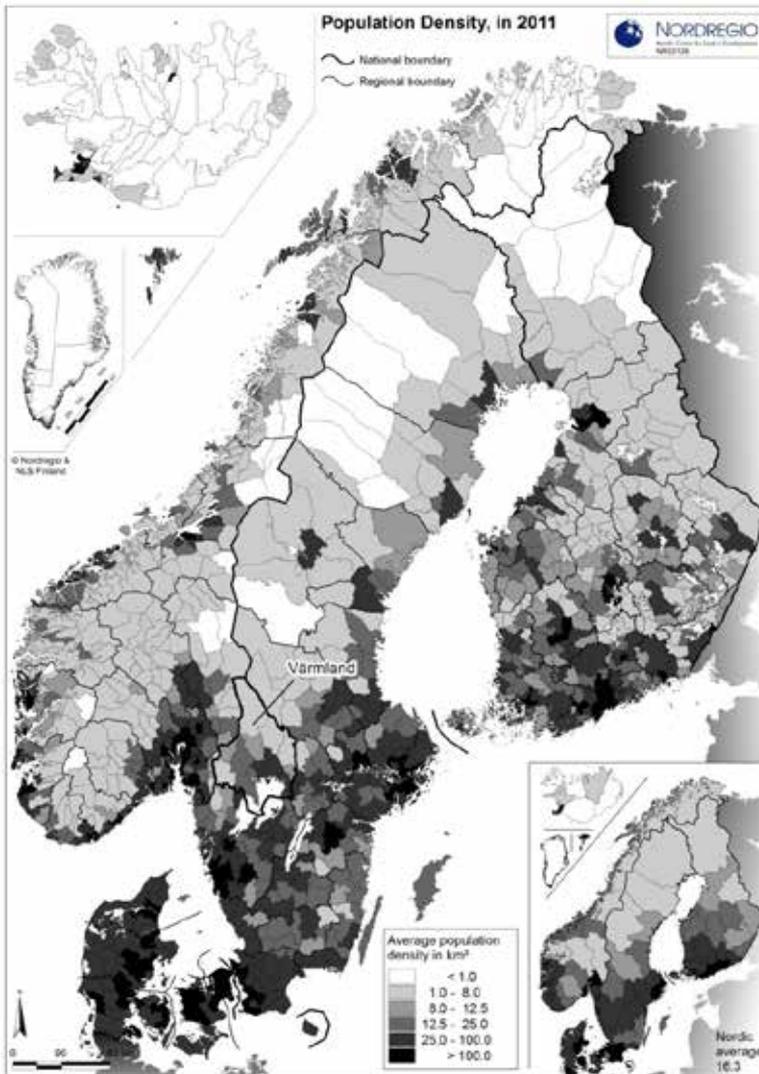
Our application of the concept of *allowing space* in this paper is inspired by Ahrne and Papakostas' (2001, 2002) and Haraldsson's (2010) development of the concept of open spaces; it implies the opposite of place-specific homosocial practices, which can be seen more in terms of closed space, excluding rather than including gender issues. An allowing space makes place for gender mainstreaming and transforms existing policies by questioning existing gendered norms (cf. Rees, 2005). We also perceive equal treatment and positive action as aspects of allowing space actions focused on gender issues. In this vein, the concept of allowing spaces can be taken as the application of a spatial metaphor seeking to critically examine geographical theoretical development (Rose, 1993). In this case, it is the perspective of New Economic Geography but also of policy practice processes.

The regional growth programme – a new story or an old one in disguise?

Värmland – a county of old industrial towns

Värmland is a county which includes a number of old industrial towns, so-called *bruksorter* (mill towns). The county population is about 273 000 people (2009), a figure which has decreased in recent years (Statistics Sweden, 2011:89).

Population density in the Nordic countries. Värmland is characterised by quite a low population density, but comprises municipalities with higher as well as lower population densities



Map: Nordregio

Värmland is a county of traditional industries. The majority are male-dominated. Although there is a difference in economic structure between eastern and western Värmland, between the mills and small companies, the male domination is a mutual arrangement. However the male dominance takes various forms in the county. The western part, which is characterised by a higher proportion of self-employed people and of small and medium-sized enterprises has a less unequal gender contract than the mill towns of eastern Värmland. That, at least, holds true for labour market indicators. There again, the ironworks owners of the eastern part of the county have played a key historical role in the emergence of Värmland's business traditions and business environment, with its particularly patriarchal local employee practices (Karlsson, Stensmar and Ednarsson 1999). There are also differences in organisational structures which can be explained by the spatial distribution of power within the county.

Värmland is sometimes said to be influenced by a certain "mill town spirit" (Sw. "bruksanda"). The gender structures of the Swedish mill towns are often defined by a traditional masculine working culture, men's team sports and patriarchal political dominance. It is part of a social and cultural capital, rooted in a once successful resource base and supply situation. Even though nowadays families in these places organise their lives by to a more equal gender contract (cf. Forsberg, 1997) challenging the gender ideals of the mill town spirit, it is still a persistent social, economic and cultural structure. Although the material basis of the industry has been lost and despite a different social order being needed to meet today's working life, the "mill town spirit" still influences daily life and networking practices.

The growth programme was intended to redefine the economic geography of the county. The least favourable business climate in eastern Värmland was defined by the heavily resource-based economy of the iron ore municipalities, whilst the business climate was defined as better in small enterprise municipalities, followed by those where manufacturing industries dominated. The multitude of sub-regions with their own gendered structure was replaced by a common story for the whole region; this gave a clear idea of where the region was heading and what growth model had been chosen. Despite the aim to write a new story, the large cluster initiatives and innovation structures (emanating from the traditional economy) laid out their ideas more convincingly than those from the emerging sectors.

A story based on a homosocial power structure

The process of formulating the growth programme effectively used the Triple Helix model with its ideas of collaboration and networking to foster economic development. The public and private sectors and the university were all very active in the partnership which produced the regional growth programme. All in all, almost 100 representatives of these partners took part in the "big partnership" for innovation and economic growth.

According to our interviews a lot of work was done in the partnership and in the thematic groups which were organised in the process. Their thoughts and ideas in the

discussions laid the basis of a new story. According to the interviewees, there was a huge amount of material produced which could have been used more creatively. However, the material was further processed by a secretariat for the partnership, consisting primarily of civil servants from the county administrative board and the local chamber of commerce. Aided by a consultancy firm the final regional growth programme was thus laid down. This meant that many ideas from the partnership's workshops were excluded from the final programme. Some interviewees also indicated that the ideas which made it to the final programme might have been there from the very beginning, leaving little room for the large partnership process to actually influence the programme design:

“We have very little influence on the intermediate work by the civil servants. They have their integrity and make their suggestions based on their knowledge”

The interpretation of the final programme can thus be characterised more as a close space than an allowing space despite the ambitious partnership gathering and in this “inner” group, the seamy side networks seemed to have had a significant influence, due to personal allegiances and representations.

The clusters that were prioritised in the regional growth programme were all male-dominated. But we found that the county also hosted a number of potentially successful clusters and innovation systems which engaged large numbers of women. However, these systems were *not* central to the regional growth programme. One of these was the Packaging Arena whose aim was to gather the world's best packaging expertise and offer it in a global arena. A number of important actors collaborated on achieving this goal, such as Karlstad University, the Paper Province, BrobyGrafiska Education, Design Värmland and public stakeholders such as county administrative boards, municipalities, etc. Worth noting is that these groups had a reasonably high number of women in various positions. We noted that many of these actors were also involved in the process of formulating the growth programme.

However, none of the players used the opportunity to present the Packaging Arena as an example of a gender equal cluster. Instead, this cluster merged into the more masculine connoted “Paper Province” and became represented by that cluster's male leaders, instead of the woman that was one of the most influential in the Packaging Arena. Later this woman changed focus and became the leading figure of another potential cluster, in which many women entrepreneurs were active, namely, the so called Wellness Cluster focused on the companies in the health and welfare sector. In the county there were also other innovative networking and collaboration initiatives with a predominance of women's activities and enterprises. There were for instance attempts to develop a Food Cluster, a Horse Cluster and an Event Cluster. The growth programme did not include any one of these as clusters worthy of support for the creation of regional growth and development.

Favouring male-connoted clusters?

The wellness sector did not receive the status as an economic cluster in the Värmland regional growth programme, 2004-2007, despite being the sector with one of the highest increases in employment in the county. In order to understand why this (potential cluster) was not interpreted and seen as a cluster, the first question is to understand what characterises a cluster according to New Economic Geography. Is there something in the organisation or content of the wellness network which prevented it from obtaining cluster status and/or innovation in the growth process? This seemed to be perceived as paradoxical in the sector, given the prevailing theoretical explanatory model.

The theory of regional growth and development (i.e. New Economic Geography) favoured clusters like Paper Province instead of wellness, because the Paper Province seemed to fulfil all criteria while the latter – wellness – deviated from most of them. Firstly, according to the theory, the activities must have a regional impact in the sense that their scale influences the regional level. The wellness sector was not yet of this size. Secondly, the cluster must be supported by an infrastructure, i.e. a political and financial system. This is another of the requirements that the wellness sector lacked. Indeed there was an opposite situation. Thirdly the wellness companies were also lacking the “heavy”, demanding customers that can challenge the enterprises to develop. Regarding demand, it is not primarily the size so much as the quality of the local market that is important. Customers with high levels of demand for products buy in help to create competitiveness. In that sense, the wellness sector only had potential local customers that could encourage the development of demand. Fourthly, a cluster must also have a unique, personalised specialisation to beat other clusters in other regions and this is one demand for which the gender aspect may have played a role. These characteristics seem to be one explanation why the wellness-based businesses did not live up to the criteria for the successful and creative activities of a cluster.

But these seemingly great differences were perhaps only illusions. Maybe it was only a difference in size and gender? What was identified as infrastructure, uniqueness, customer quality etc. was perhaps just as much an effect of gender construction as of actual conditions. What we found in our analysis was just as much potential in the wellness sector as in the Paper Province cluster. The wellness companies were not huge, and their organisation was not developed, but – as one of our interviewees said: *“Paper Province was also a small idea from the beginning”*.

The choice of clusters also shows a tendency to favour old and traditional economies. With other definitions of the criteria for regional growth and clusters, such as experimental, future-orientated, consumer value focused, post-modernistic lifestyle, demographic change awareness of gender balance etc., the conclusions might have been rather different. However, there was no allowing space for these ideas to develop.

No integration of the gender perspective

How can we further explain why certain sectors of the economy, male-dominated, clusters or innovation systems made it to the final version of the regional growth programme – and why the women dominated sectors of the economy did not?

Instead of integrating and mainstreaming gender into the regional growth programme, the gender issue became a track of its own and was not considered to have growth and innovation potential of importance for the region. The first draft of the programme was criticised for the missing gender aspect. Major efforts were made to improve the strategy and, in the revised programme, equal opportunities were awarded a relatively large space with the notion that increased demand for equality was an important aspect to consider in regional development. The programming document refers consistently to the fact that both women and men should be involved and their possible different needs should be met, but the gender issue was primarily presented in the discussion about diversity and social environment. Thus, unlike the sections on innovation and clusters, the theme of gender was not integrated into the central parts of the programme. Accordingly, gender equality was not formulated as a strategic means to achieve sustainable growth and formulate actions to change the gender structure in the county. Despite the following sentence appearing early in the programme, the integration failed:

“We should all have the same possibilities regardless of gender. Gender mainstreaming will be practised so as to reach the goals of equality. This means that an equality perspective will be integrated into all decision making, on all levels and in all stages in the process, by all the actors that normally take part in decision making.” (Värmland County Administrative Board, 2004: 9, our translation).

Instead of gender being mainstreamed throughout the programme, it was formulated in terms of helping women improve their living conditions, an individual goal rather than a structural one. Nothing was said about the problem that large parts of the county were characterised by a traditional economic culture and with a gender structure defined by a masculine work culture with a patriarchal domination. Thus, even if gender equality policy was part of the regional strategy, it did not reach into the “heart” of economic cluster discussions and strategies.

To integrate a gender perspective requires more than just bringing women into the programming. It also means challenging the power structures in the region and the work/family dilemma. The initial SWOT analysis in the Värmland planning process, which aimed to present a problem description of the region, should have included gender-relevant analyses because seemingly gender-neutral efforts can result in quite large gender differences (Lindgren, 1989). One such example of a seemingly gender-neutral proposal is the striving for regional enlargement through expanded regional transportation systems. Time-geographical restrictions are realities, and the solutions

for modern families are often dependent on the design of physical transport in commuting and working its market regions.

To conclude, the growth programme of Värmland did not reach any of the objectives defined by Rees (2000) as essential for sustainable, gender-equal regional development. The public gender experts in the county were not included as part of the infrastructure of the programming work and nor were the county administrative gender experts, the representatives of the Regional Resource Centres for Women (Sw. "Resurscentra för kvinnor"), the representative from the gender and equality research group at the university, or any other actor working on gender. Not even the growth programme objectives were guided by a gender perspective, in the sense that gender appeared to be a part of the aim of the work. Finally, one can also observe that the group that provided the basis for the policy was strikingly male-dominated. In other words, the Värmland programme was a very similar product to the corresponding records in other European countries in Rees' study.

Closed or allowing spaces for equal regional development?

One aspect of the "new" geography is the importance of the region. This is a case of building a common narrative on the region and the specific property which justifies this particular region's importance in the larger context. The region itself becomes an actor, an acting player, a "learning region". The story of the region should be simple and homogeneous.

The persistent, long-term structures identifiable at both regional and local levels in Värmland played a major role in forming and implementing the new story about the potential in the growth programme. It was done by the book, clearly using the model of collaboration and viewing networking as a requirement for fostering economic development. The public and private sectors and the university were all very active in the partnership but it was ultimately a homosocial story of Värmland that was developed.

At the same time as the regional growth programme, 2004-2007, old formal and informal networks were re-developed such as the previously mentioned Rotary Club, Oddfellows and Freemasons and these became very active and vibrant. These networks go far back in time and are testament to past and present power relationships.³⁰ There were neo-traditional forms of associations and networks directly and indirectly influencing the design of the growth programme through the partnership, discussion groups, workshops, etc. In all these groups, we noticed a deficit of women as well as people from peripheral parts of the county. Put another way, it was an expression of the surplus of men and centrally positioned actors. They were significantly (male) homosocial networks.³¹

³⁰ Lönnbring (2003) described entrepreneurship in the Värmland countryside from its social context and emphasised the importance of traditional livelihood strategies.

³¹ The character of the logic of homosocial networks is analysed by Lindgren (1989, 1996)

Hence, our understanding of (the lost) development of the wellness cluster and lack of gender mainstreaming is that networks and partnerships were not composed randomly but strategically, based on tradition and male networks and nourished by the emergence of meta-organisations such as the regional partnership. According to Ahrne and Papakostas (2002, p. 181) these meta-organisations' power and control are moving from the organisations of which the meta-organisation is composed. Meta-organisations can also admit or exclude organisations. Here, we find one more explanation as to why gender equality measures in the growth process in Värmland constituted a separate track, with its own structures, financial resources, network models, etc., as they were never included in the meta-structures and organisations where the power over the regional growth process was located.

We can thus see how new meta-organisations and the ancient, stubborn structures and networks came together in the process and development of the new regional story. The seamy structures which have historically built up and supported patriarchal production were thus transformed and preserved in and around the new economic clusters and innovation systems. These structures restricted the composition of actors in innovation systems and/or partnerships through blindness to alternative ideas arising from outside the established, well-known and secure information networks and meeting places.

The space was not allowing and was not open to the development of new configurations. Instead, we could confirm previous studies on Värmland which stated that women and women's businesses were largely rendered invisible in the new efforts and that the lack of equality thus automatically become implanted in the network which will promote the development and growth in the region (Jönson, 2005).

We can conclude that, despite its efforts to become a new story of Värmland, the regional growth programme was built on old ideas and traditions of economic development in the region. The process of formulating the programme within the realm of seamy structures in the growth programme constituted a *homotopical space*. Taken together, this homotopical space was made up of the homosocial (male-dominated) informal networks and monotopical regional strategy; a process striving for one coherent story, not allowing for plurality and excluding some actors and alternative story-lines. The homotopical space was built on a particular language defining what is considered to be an innovation or economic cluster and what contributes to regional economic growth. One of the interviewees reflects on the use of language:

“And many women are not familiar with it, they really aren't; not even with language being used. Talking in that way is totally unfamiliar”.

(One interviewee, our translation).

The allowing spaces as an opportunity

In this article we have discussed how the New Economic Geography and its focus on the concepts of innovation systems and clusters have influenced the development of

the Värmland growth programme for the period 2004-2007. We can conclude that the ideas of collaboration and networking in order to foster economic growth and development were effectively used in the process of developing the programme. But despite the large partnership, we can see that these networks reconstruct and made use of past power relationships and that they influenced the design of the growth programme through the partnership, discussion groups and workshops.

We can also conclude that the male-dominated clusters were prioritised in the regional growth programme and that clusters and innovation systems, which included large numbers of women, were largely excluded from the regional growth programme.

The regional growth programme was not gender mainstreamed. Rather, there were two separate tracks in the programme: economic growth and clusters versus gender issues. Gender equality policy did not make it to the “heart” of the discussions. Thus, the growth programme and process of developing it can be characterised as more of a close space, a *homotopical network* (place-specific male homosocial practices) rather than an allowing space.

Based on the findings in this article, we would like to suggest that there is much to gain by making and using allowing spaces when discussing regions’ future and development. These allowing spaces, which imply integrating women-dominated clusters (or any other potentially successful new economies) into the view of clusters and innovation systems upon which regional development is built, must be integrated in the work as a whole and not just be consulted when equality efforts are needed to legitimise a programme or action. This also goes for the gender perspective, which should not be a “sideline” in the programme but integrated into all parts of it, including the core economic discussions.

An allowing space for development of a region can incorporate an approach that involves recognising that political strategies can have gender-specific consequences. By asking new questions and challenge the traditional notions, one might discover new ways for the regional development and structural transformation. This is illustrated by such writers as Diane Perrons (2001, 2004); her opinion is that the so-called New Economic Geography does not analyse how economic restructuring affects humans and human welfare. She believes the organisation of work within a company is as important to its competitiveness as “learning”. The focus is also on the development of regions rather than between regions which means that the national context in the form of such macro-economic regulation will be understated and under-theoretised. Pettersson and Saarinen (2004) found that this criticism was also relevant for the Swedish policy on innovation, since companies were often described as single and coherent in each region.

Making and using allowing spaces implies that the wellness sector (or any other women-dominated sector) can break through a male gendered development perspective. This means overcoming the structural patterns and a change in everyday local and regional practice.

As noted above, the new (female-characterised) economic activities offer new connections and unexpected turns in the economy. The allowing space approach is linked to the theoretical development termed Evolutionary Economic Geography, which seeks to understand how the real economy develops in real time (Grabher, 2009; Boschma and Martin, 2007; MacKinnon 2009). We provide a contribution to this direction of economic geography, as well as stressing that an idea of innovation as a mainly technological and product-driven activity is prevalent in regional development programming (see Lindberg, 2009; Pettersson, 2007; Hanson 2005). Blake and Hanson (2005) believe, based on their American example, that the sectors in healthcare, retail, and other sectors where women are strongly represented, have been ignored in favour of male-dominated technology and traditional industries. They add that by taking a more contextual gender perspective on innovation, traditional beliefs can be challenged and this can have important consequences for regional development and for the economic geography research.

We can thus see the need for some allowing spaces in Värmland. There are already such arenas where clusters and innovation systems can meet and improve, but these arenas do not fit all types of networks. They have ancient roots and are more sluggish than allowing spaces. One obstacle to the development of allowing spaces is the existence of established routines and practices which follow path-dependent tracks.

In that sense, our analysis of the homotopical character of the regional growth programme for Värmland is important, both for theoretical development and for policy re-orientation. The allowing space could have the potential to integrate gender into the discussion of regional development and there is obviously a possibility for mainstreaming gender into regional development plans which still use economic geographical theory – at best one of a gender-sensitive kind.

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Gendered Partnerships and Networks in Swedish Innovation Policy

– A Case Study of Multi-level Governance

Mona Hedfeldt & Gun Hedlund

Abstract

The aim of this chapter is to describe the relationship between formal Swedish partnerships of the European Regional Development Fund and informal gendered networking related to the policy of women's entrepreneurship. In choosing two cases, the counties of Jönköping and Jämtland, we wish to investigate similarities and differences related to the aim of the study. The process surrounding the Structural Fund projects is an illustration of multi-level governance. The formal institutions support the idea of gender-inclusive networks. In our empirical data we find that there are several different kinds of networks and networking. On the one hand, the relationship between the formal, institutionalised partnership and its elite network and women in business seems weak, whilst on the other hand being strong amongst male Triple Helix actors. The social dimension of networking seems more important than we had expected; thus local setting and geographical proximity to other agents is vital. This contrasts with the organisation of the large Structural Fund regions which includes several counties. It also contrasts with "created" networks and arenas in which people with no prior connections are supposed to interact. Our empirical studies indicate that sphere-bridging exists on different levels, sometimes on the target group level and sometimes on the operational level. When writing project applications or running projects, however those networks are embedded in a firm and bureaucratic structure.

Keywords: gender, networks, partnerships, innovation, regional development

Introduction

Innovation is a key word in several policy areas aiming to solve different problems such as unemployment, uneven regional development or lack of advanced technological research. Innovation policy is an example of multi-level governance with many agents involved. OECD and the EU and in the Swedish case, the state, official bodies, regions, private business, NGOs and local municipalities are active in the development of innovation. Crossing different sector policy areas this is an example of something known as "the third generation's policy areas" (Montin 2007) where the state plays a coordinating role rather than governing from above. Partnerships and networks play an important role in this way of doing politics and are especially common in the area of innovation policy. This can be described as a result of both system changes, such as

the role of the EU and structural changes, such as the confusion of responsibility, power and accountability between politics, public administration, the labour market organisations, business interests and NGOs.

An oft-quoted phrase is “from government to governance” where hierarchal and authoritative governing is described as being substituted by a new, reduced and complex role of the state (Hedlund and Montin 2009). According to Hysing (2010) and Pierre (2009) however, the Anglo-Saxon dominance in governance literature does not capture the specifics of the Swedish case. The state has not withdrawn even if the steering is done in new ways through self-regulation, soft steering and private-public partnerships. Hysing, quoting Treib et al (2007) suggests that it is only on the level of specific policy areas that the alleged novelty and importance can be assessed. Innovation policy seems to be a case in which “old” and “new” forms of politics are intertwined; the government governing and coordinating at the same time. Old and new structures co-exist and the question arises as to whether this situation may create a space for women in innovation policy (Hedfeldt and Hedlund 2009). The gendering of Swedish innovation policy will be dealt with in the following section.

The national strategy of regional competition, entrepreneurship and employment 2007-2011 (N 7037) aims to integrate several policies on different levels regarding regional development, employment, innovation and the EU’s cohesion. As one of the most important instruments in the implementation of the overall goal in cohesion policy of the Lisbon Strategy, the steering documents of the EU’s Structural Funds stress gender equality as a horizontal objective. In the Swedish case, most of EUR 1.33 billion has been allocated to the European Regional Development Fund (ERDF) to finance measures within the Regional Competitiveness and Employment objective during 2007-2013.

Aim of this chapter

The aim of this chapter is to describe the relationship between formal ERDF partnerships and informal gendered networking related to the policy of women’s entrepreneurship. One question is whether these partnerships create a window of opportunity for women to establish new networks and enter arenas which have been exclusively male – the arena where business and politics meet. When is women’s entrepreneurship included as innovative and on what terms? The concepts *gender-inclusive networks* and *sphere-inclusive networks* are introduced as analytical tools.

Gendered innovation policies

A fragmented innovation policy reflects a gender dimension concerning the inclusion of women and men (Lindberg 2010). Men are included in areas defined as innovative such as bio-technology, forestry etc. Women seem to be included as potential start-up entrepreneurs in new activities which are expected to be dynamic (Blomberg, Wottle and Hedlund 2011). A strong belief in the importance of new forms of entrepreneur-

ship is thus a sign of the Swedish implementation of EU innovation policy (EG 1080/2006). The gender aspect of European and national innovation policy seem to aim at improving women's entrepreneurship, as integrated in a discourse of economic growth and regional development. The governance of women's entrepreneurship is thus a mixture of different policy goals such as self-employment, regional development and regional growth. It includes a complex map of state institutions as well as NGOs, different partnerships and municipalities. The masculine-orientated innovation discourse and its narrow definition of economic growth which favours male-dominated business creates a more complex picture (Blake and Hansson 2005; Lindberg 2008a, 2008b). We can define several partnerships as active where business and politics meet in this field. The focus in this chapter will be on a specific kind of partnership, the ERDFs (European Regional Development Fund) *regional Structural Fund partnerships*. Sweden has a total of eight such regional partnerships operating in large, politically "constructed" regions consisting of several counties. All eight have their own programmes which have been approved by the government and the EU. Besides other tasks they include plans on how to improve innovation and entrepreneurship. The role of the partnership is to prioritise between regional project applications to the fund, with the formal decision taken by a state authority.

We will refer to a case study of two counties taking part in two different ERDF partnerships during the Structural Fund period 2007-2013.

Partnerships

To avoid widespread overlapping and confusion of concepts defining networks and partnerships, we have chosen the following definition. Partnership is defined in this chapter as *institutional design* (Andersson 2011) or that *structure precedes action* (Lavén 2008), it being a structured system based on collaboration between organisations and aiming to create development (Wistus 2010). The system base is the EU and the Swedish legislation regulating the structure. The idea of this kind of partnership is related to both political and social changes in society and its legitimacy is closely connected to power. The gendering of partnerships investigated in Swedish research has covered other kinds of regional partnerships which are less regulated (Westberg 2008; Hudson and Rönnblom 2007). The policy dissemination of the partnership concept has been more successful in Sweden than Great Britain (Bache and Olsson 2001). One explanation is that the EU Structural Funds demand public/private partnerships as a qualification to receive funding for projects (Pierre 2009). The partnership idea is rooted in theories and empirical data on successful networking as a process of regional development (Gustavsen and Hofmeier 1997). Partnerships differ from informal networks as they often have a formal status based on the idea of a win-win situation among the participants who are supposed to share the risks and investments and strive for a common goal based on a mutually defined problem. Partnerships may be established on the basis of two different principles: either the partners are very similar,

sharing the same ideas or values and thus have a positive exchange of experiences, or they are different and these differences may result in new ideas and innovations (Wis-tus 2010). The government's authoritative steering of gender mainstreaming policy in the composition of the Structural Fund partnership boards and the supervision committees, as well as in regional Structural Fund programmes and projects, may create a window of opportunity for women to break the male dominance (Hedfeldt and Hedlund 2011; Forsberg and Hedfeldt 2010).

The government's national programmes based on the Lisbon Strategy emphasised male-dominated industries and were implemented in the partnerships responsible for the regional Structural Fund programmes.³² The process behind the drafts did not correspond to the ideal of an open process. Even if the rapid process did include open meetings, according to interviews it was a small elite of mostly male state civil servants who wrote the programmes (see also Hedlund 2008). The gender aspect was dealt with unevenly, with some programmes showing more awareness and knowledge (Forsberg and Hedfeldt 2010).

Due to state regulation the two partnerships investigated, Mid-North Sweden and Småland and the Islands, include several counties. To ensure a connection with the democratic system, a majority of the representatives are local and regional politicians. The principle of gender quotas applies and half the representatives in elite positions are women from politics, official bodies and organisations. These positions seem to create a legitimacy and trust within the partnerships. In 2009, Mid-North Sweden had 22 members; twelve local and regional politicians including two from the Sami Parliament, four from the labour market organisations, three from state administration and one from an NGO.³³ The budget from the EU is EUR 176.6 million and private or public co-financing is anticipated in different projects. Småland and the Islands had 15 members, eight local and regional politicians, three from the labour market organisations, three from official bodies and one NGO representative. Småland and the Islands handled EUR 67.44 million during the period.

According to the idea of collaboration between different spheres, the Structural Fund policy in Sweden suffers from two failures affecting the networking in our two cases: 1) A lack of institutionalisation as expressed in the refusal of the Confederation of Swedish Enterprise and the Swedish Federation of Business Owners to participate as representatives of the labour market alongside the unions. The refusal of the two Commercial non-governmental organisations (CNGOs) to participate in the partner-

³² En nationell strategi för regional konkurrenskraft och sysselsättning 2007-2013. N 7037. Ministry of Enterprise, Energy and Communications, Government Offices of Sweden. Regionalt struktur-fondsprogram för regional konkurrenskraft och sysselsättning i Småland och öarna. Action document, Swedish Agency for Economic and Regional Growth. Regionalt struktur-fondsprogram för regional konkurrenskraft och sysselsättning i Mellersta Norrland. Action document, Swedish Agency for Economic and Regional Growth, N 0-2008-00033.

³³ The members of the employers' organisations represent employers in the public sphere and the Swedish Association of Local Authorities and Regions.

ships is related to ideological conflicts with the former Social Democratic regime of the 1970s. This seems to create an obstacle to women entrepreneurs participating in the formal negotiations and decisions in the EU Structural Fund Partnerships boards (Hedfeldt and Hedlund 2009). In the two partnerships and related supervision committees, we find six women of a total of 124 people having a background in business or entrepreneurship. 2) Another failure is that women's organisations are not being considered and selected as legitimate NGOs in the partnerships.

Gendered networking

As a more informal process, networking is important in the phase of how ideas on innovative entrepreneurship may develop. This chapter focuses on the gendered process surrounding the development of project applications submitted to the Structural Fund partnership. The gendered networks we are looking for are between women in any kind of private business, women in politics, women in academia, women in NGOs and women in political administration. Our assumption is that *sphere*-inclusive networks among women could create alliances serving as door openers to the first phase of policy processes in the partnerships. Project ideas, identification of problems and solutions and view on innovation are crucial elements in this early phase. Thus our study focuses on whether women from different *spheres practice* inclusive networking as a door opener to *gender*-inclusive networks (where women and men are both included).

In politics we find that women have generally reached more power positions compared to other fields like academia and business (Göransson 2006). As of 2011 the three government ministries of Enterprise and Energy, IT and Regional Affairs and Communications are all held by women. Sweden is in world second place for women's political representation with 42 per cent in parliament, 50 per cent in government, 42 per cent in the city councils and 39 per cent of the chairs of municipal executive committees. In areas such as culture, state companies and state administration, women in top positions have increased as a result of political steering. The gender segregation in politics has decreased with more women involved in formerly male-dominated areas (SOU 2005:66). Thus we do find women politicians in the formal institutions even though there are geographical variations. A problem is that, in the regional and local arenas, innovation and regional growth policy are often considered a male task (Hedlund 2008; Johansson and Rystedt 2010).

Despite the fact that networks are often considered important for entrepreneurship, geographers Susan Hanson and Megan Blake (2009) conclude in an overview that far too little is known about entrepreneurial networks and gender and the spatial aspects of gendered networks. They encourage future research to

“look carefully at how networks are embedded in larger cultural discourses and structures and at how networks actually work within these structures” (Hanson and Blake 2009:146).

Referring to Hanson and Blake our study of gender-inclusive networks and sphere-inclusive networks concerning entrepreneurship and innovation in the local setting will focus on networking related to the discourse and structure of the Structural Fund partnerships.

“If entrepreneurship is to have a transformational impact on opportunities for women and gender relations in place, it must do so through altering power relations not only in people’s interactions within their personal networks but also in their interactions with institutions”. (Hanson 2009:252, with reference to Blake 2006, our emphasis).

Even if Hanson’s and Blake’s studies are made in a context other than the Swedish one, we find their results applicable in this case. Parallels include women and their entrepreneurship as a resource in regional and rural development. This is similar to what Molyneaux (2002:177) writes, that governments are often keen to mobilise women in their community-development programmes. In the above quote, the importance of networks for entrepreneurs is emphasised, not only in terms of personal networks but also interactions with institutions. The fact that entrepreneurship is part of a broader context with agents from different spheres may be regarded a general conclusion, but the exact conditions are also a question of geography and culture.

Trust and legitimacy

The question of trust and legitimacy is related to the gendering of networks. Trust is influenced by gender and contributes to the value of a network. Legitimacy increases the access to resources and the ability to mobilised resources (Hanson and Blake 2009:144). Gender, since it marks difference and inequality between men and women, is linked to power and legitimacy. Blake (2006) calls this *gendered legitimacy*. The subordination of women (as well as innovative entrepreneurship and innovation policy being male gendered) means that women presenting innovative ideas in interaction situations could be deemed to have less legitimacy. This may have an excluding mechanism, since being considered a less legitimate part of a network a person will not be valued and consequently, membership will be of little value to them. A lack of legitimacy thus seems self-reinforcing. Legitimacy for women in politics is closely related to power positions. Having a top position which permits negotiation as to resource allocation will create authority. Whether this authority is convertible to ERDF partnerships, in which all participants are supposed to be equal and decisions made in consensus, is an open question.

Legitimacy is related to social identity and generalised trust through a shared identity (such as the Rotary Club) (Hanson and Blake 2009; Forsberg and Lindgren 2010; Hamrén 2009). The “room for manoeuvre” (Prins 2003) for women in creating trust and being considered legitimate agents in networks in the perspective of gendered networks seems limited compared to men. Projects directed at women with the aim of creating new networks or interaction arenas seem uncertain as a strategy. Gender re-

search has shown that many effects of networks are serendipitous and result from everyday interactions rather than

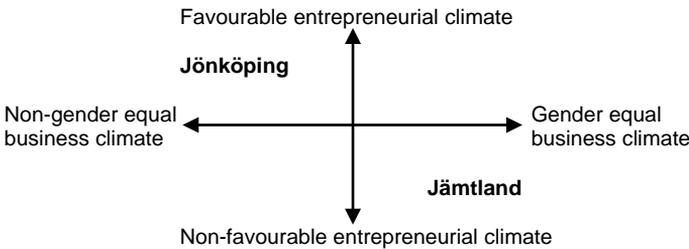
“instrumentally through purposive, directed contact with selected network members” (Hanson and Blake 2009:137).

However, since networks are dynamic there are possibilities for networks to change into more gender-inclusive ones and create change in the Structural Fund partnerships. There seem to be both challenges and possibilities. Once networks change to being more gender-inclusive, there is the possibility of the networks actually making a difference. Hanson and Blake (2009:145) refer to Sydow and Straber (2002) who note that, *“because of their recursive interactions with institutions, when networks change, institutions change”*.

Method section

In choosing two cases, we want to investigate similarities and differences related to the aim of the study. Combining two different indexes of entrepreneurial climate in Sweden gives us different categories within which we have selected two counties, as displayed in the figure. As the figure shows, the two counties are placed in two extreme opposite positions.

Dimensions of Entrepreneurial Climate



Source: Confederation of Swedish Enterprise 2007; The Swedish Federation of Business Owners 2008

The two regions are ranked differently in the two indexes. In the index *gender-equal business climate* Jämtland (2) is ranked among the top ten while Jönköping (12) is placed among the bottom ten. The index includes the following variables: the quotient of male/female entrepreneurs, age structure, women in male-dominated branches, and density of entrepreneurs in the female population (The Swedish Federation of Business Owners 2008.). In the other index, *entrepreneurial climate*, Jönköping keeps the two top positions while Jämtland is placed (19) in the bottom of the list of 21 counties. The variables are: attitudes to the local climate among entrepreneurs, local taxation, privatisation of public services, employment, share of entrepreneurs in the population, establishment of new entrepreneurs (Confederation of Swedish Enterprise 2007).

The methods used refer to a qualitative tradition related to critical inquiry where a “constant focus is given to the material and cultural practices that create structures of oppression” (Denzin 2000:332). We analyse notes from the responses in the long interviews and produce data on expressed opinions and experiences. We do this by using a “gender lens” as proposed by Lisa Brush (2003:15) through which structures and procedures are defined as results of gendered governance (p 20). We combine 31 interviews with document studies and those interviewed were directly selected based on the criteria of gender, position and sphere. In looking for women entrepreneurs, the snowball method was used. We selected: representatives of two central business organisations; officers in official bodies, county administration and regional development councils; local and regional politicians; project leaders and entrepreneurs. Five rather short, informal interviews with officials from business organisations and official bodies were made by telephone. 12 project leaders, four entrepreneurs and one politician were interviewed in longer interviews (30-45 minutes) by telephone and ten people were interviewed in personal meeting in the two counties. The long interviews were held as themed, semi-structured, personal interviews with the following topics of relevance to this chapter: 1. Knowledge and experience of the structure of the ERDF, its partnership, application process and projects. 2. Contacts with people and institutions, especially women, from different spheres. 3. Relevance of the existing European, national and regional policy related to ERDF for women entrepreneurs. Nine men and 22 women were selected.

The analysis of the documents is done by content analysis (Reinharz 1992:159) which gives the opportunity for systematic study of certain aspects of the text of specific relevance to the questions posed in the study. In this case, the aspects studied are: the existence of and/or kind of description of women entrepreneurs, gender equality, innovation, business area and frequent vocabulary. The documents investigated are government policy documents, two Structural Fund partnership programmes, membership lists of the two partnerships and their supervision committees, digital and paper information from the Swedish Agency for Economic and Regional Growth and 17 project applications for Structural Fund projects.

Networks and institutions – a case study in two counties

This section firstly gives a brief description of our chosen counties for the case study and then moves on to compare the two cases concerning the application process and design of projects and concerning sphere-bridging networks and network practices.

Introduction to the two cases

Two counties which were members of the Mid-North Sweden and Småland and the Islands partnerships were selected for this case study. Jönköping is one of four member counties in the more southerly Småland and the Islands whilst Jämtland is one of two northerly counties in Mid-North Sweden. The selected counties differ politically, geographically and socio-economically but share the similarity of not being part of any

dynamic, large, urban region. Jönköping, situated in the south of Sweden, is divided into the rural highlands, the economically dynamic GGVV-region and the residential city in the centre. This structural and identical dissimilarity means the county has problems finding a shared regional development policy and we conclude that this may affect how innovation is handled (Johansson and Rydstedt 2010). The dominant sectors are small industries. The county of Jönköping is ranked as having a positive entrepreneurial climate but not gender-equal.³⁴ In the national Gender Equality Index, the county is ranked as no. 18 of 23 (www.gis.scb.se). Socially and culturally it is described as religious and traditional in regard to gender relations (Forsberg 1997; Pettersson 2002). Among 11 municipalities, two women had the top position in local politics in 2009 and the Conservative or Liberal parties are in the majority. The county of Jönköping has not been a priority area in past periods of EU regional support; in the past, only a small area was included.

Jämtland is a sparsely-populated county in the north which suffers to a greater extent from migration and unemployment. The residential city and an expanding ski resort contrast with the smaller municipalities and rural areas. Forestry, limestone, paper production and tourism are dominant branches. The entrepreneurial climate is not considered very good in the national ranking but it is considered gender-equal.³⁵ Socially and culturally, the region is less religious and in the National Gender Equality Index, Jämtland is ranked no. 6 out of 23 counties (www.gis.scb.se). The indigenous Sami population strives for legitimacy and inclusion in regional development policy. Four of six top positions in local politics were held by women 2009 in the municipalities and in 2009 the Social Democratic party was in a strong or leading position. Seven women (including Sami women) with careers in politics, state administration and one NGO in Jämtland comprised the potential local and regional networking group in the partnership, as the other women had backgrounds in another county. Jämtland has also been a “support area” for the EU policy in earlier periods.

The new strategy of creating geographically large Structural Fund regions of several counties during 2007-2013 made it difficult to create innovative partnerships. The expected co-ordination between the regional and social fund has failed and the regional fund is still considered a male arena and the social fund a female one. Women entrepreneurs are more included in social fund projects dealing with education and workplace improvement. According to one interviewee, project applications do not receive equal treatment in the partnership.

“It is much easier to make big decisions in the regional fund than small decisions in the social fund. It’s strange; my theory is that the ERDF is more physical and has more male investments. It’s called innovation, renewal and business. The social fund is about human beings and they

³⁴ Source: Confederation of Swedish Enterprise, 2007; the Swedish Federation of Business Owners 2008.

³⁵ See note 34.

don't understand that human beings are also investments... They easily make a 3 million-Euro decision from ERDF without any question. But a [social fund] project which costs perhaps 20 000 Euro raises eternal discussions as to whether it's reasonable, whether it's renewal, whether it's innovative”.

Comparing the two cases: the application process and design of projects

Networking among the formal representatives was mainly directed towards their own counties and local settings. Comparing the two counties we find both differences and similarities. Similarities included the fact that setting up a project application is an extremely complicated procedure involving a lot of negotiation, EU bureaucracy, contacts and networking due to the involvement of several funders. The regional fund does not accept the cost of consultants to write the final application and this seems to create an obstacle when compared to the social fund. According to civil servants being interviewed, the process from idea to final application is often a task for innovative civil servants and experienced project leaders. Politically elected women holding top positions in the Structural Fund partnership board had roles which were mainly reactive; they took part in negotiations for co-financing and sometimes in defence of their territorial interests. Another similarity was that 15 years of projects implemented by the regional and national gender equality machinery of official bodies in regard to women, regional development and more recently entrepreneurship has resulted in “manufactured” women’s networks. Several women from public administration and politics tell stories of previous involvement in the establishment and support of Women’s Resource Centres. However there is an ambivalence in judging the role of the Resource Centres which seems to create a lack of trust and legitimacy in the networking process. Projects inspired by Triple Helix (Etzkowich and Klofsten 2005) where agents from business, the public sector and universities come together seem to be a masculine arena and activity in both counties. The same units and actors are active in different constellations and are found in several project applications.

Comparing the two cases: sphere-bridging networks and network practices

Looking at differences between the two cases concerning networking, we started with the elite positions and found that the women in Jönköping lacked a regional representative in the large Structural Fund partnership. The few municipal politicians holding top positions did not seem to play a prominent role in the creation of Structural Fund projects. They had access to informal sphere-bridging networks involving women in business and entrepreneurs, but had no experience of strategic alliances to initiate Structural Fund projects. The local and regional politicians seemed to play a reactive role in approving ideas and deciding the size of local contribution to the project. The networking by politicians seemed limited in regard to how it influenced the power of

the partnership. They had trust and legitimacy in the local setting, but the planning of Structural Fund projects took place somewhere else. Different local gatherings such as breakfast meetings and lunches created informal networks between women in local politics, entrepreneurship and public administration but did not result in project applications. The women in politics and public administration did have innovative ideas about collaborating with academia, but a hindrance to realising this was a lack of women who had time and legitimacy among the researchers. The political board of the Regional Development Council was dominated by men and was described as holding an extremely masculine culture practising gender-exclusive networking. In the county of Jönköping, the male dominance of power positions in local politics created legitimacy when contacts were established. The male gatherings, especially the Rotary Club, were pointed out by the female interviewees as a strong and sphere-bridging network of great strategic importance for creating trust and legitimacy. Several women with feminist perspectives had been encouraged to become members but refused to take part in this kind of networking. Their reason for *not* joining the Rotary Club was principally and socially based and they admitted that it excluded them from important information. The principle was described as the need to maintain integrity as a public official; socially, the Rotary Club was judged as hierarchal, boring and too masculine in style.

Looking from below we find that some Structural Fund projects did start during 2009 where Jönköping was involved. According to interviews the project ideas, the tasks of writing and networking were mainly done by civil servants. In 2009, two years had passed since the new period started (2007-2013) and there had been some time for the establishment of contacts. In seven project applications involving Jönköping we found a lack of participation from self-employed people. The discourse is very specific in the applications where certain keywords and codes are used. We found very little innovation in projects in the sense of being creative and thinking in new ways or in sectors where women entrepreneurs are active. The gender mainstreaming policy from the EU and the state does have an effect, even in traditional Jönköping. In the creation of a large multi-county project, the expertise on women's entrepreneurship was wanted and an innovative sub-project was designed. The project leader used the window of opportunity, took the initiative, used her legitimacy among both women and men and created trust by being pragmatic and not an outspoken feminist. She could use her role as an expert who had previously handled various state-initiated projects on equal entrepreneurship.

Turning to the other county, Jämtland, one difference compared to Jönköping is that far more women have power positions in politics and state administration. The county has a pool of (seven) representatives on the Structural Fund board from Swedish and Sami politics and state administration. Sphere-bridging networks and networks between different hierarchical levels are said to be rare and a lack of contact with women in elite positions and a narrow, masculine discourse on regional growth

and innovation are described as problems. The larger cultural masculine discourse combined with bureaucracy seem to have created a firmly established structure with little room for manoeuvre. As the County Administrative Board has a prominent role in handling the co-funding of Structural Fund projects at regional level, it is described as a masculine arena. Thus, formal participation in a partnership board or supervision committee does not necessarily create sphere-bridging networks. Among the women, legitimacy and trust is related to hierarchy and position, a woman in a leading position does not seem to network “downwards”. When difference in hierarchy is a non-problem, contacts are drawn from below, based on previous professional contacts between project leaders, local politicians and women in leading positions in state administration with Structural Fund partnership seats. These kinds of contacts have facilitated a dialogue on how the Structural Fund partnerships are working and how the actual project and its organisation are working. There was hesitation on the regional level, since project creation requires a lot of time in finding partners and skill and knowledge in facing EU bureaucracy. The tendency towards a growing group of professional women project entrepreneurs meets with scepticism as to the genuineness of some projects. In a few cases, “manufactured” women’s networks originally funded by state or EU grants have turned into voluntary associations. Some of them have exclusive memberships, a fact which may reflect an aim to create trust and legitimacy. This kind of network does not support the establishment of sphere-bridging networks among women since political leaders are not involved. In Jämtland, we also find sub-projects in a very large two-county project on tourism where the multi-level governance of mainstreaming seems beneficial to women entrepreneurs. In demanding gender equality in different groups, the project leader refers to the EU and actively encourages self-employed women to get involved. A difference compared to Jönköping is that local contacts between women in politics and entrepreneurship at the local level are described as almost non-existent. This may be a question of ideology as women’s entrepreneurship has not been a priority for the Social Democrats. We do find another kind of network in which a tacit knowledge of how to handle EU bureaucracy has developed in the small municipalities. Women having a leading position in local politics, public administration and experienced project leaders have managed to create several small Structural Fund projects. They have learnt how to work within the structures and some of their projects related to tourism are beneficial to women entrepreneurs. Thus a window of opportunity is being used at the local level, where women are very active.

In conclusion, we find similarities as well as differences between the two cases concerning the application process, design of projects, sphere-bridging networks and network practices. The complexity of the application process is evident in both cases. Other similarities include “manufactured” women’s networks and the fact that projects inspired by Triple Helix seem to be a masculine arena and activity. Some of the differences are that far more women have power positions in politics and state administra-

tion in Jämtland than in Jönköping, and that local contacts between women in politics and entrepreneurship are described as almost non-existent in Jämtland, but not in Jönköping.

Women entrepreneurs in real life or as an image

The previous section described networking between the different areas in the public sphere such as women in the partnerships concerned and in politics, public administration and some elite networks. Women with a background in business or entrepreneurship are very rare in these cases. The networking that does exist is mainly social; strategic networking is rare.

On the operational level of the projects, one conclusion according to officials managing projects in both counties is that entrepreneurs, not only women entrepreneurs, are included in some ways but not in others. The officials tend to speak of business contacts and cooperation with other agents in the regional setting. However, actual entrepreneurs are not involved as equal partners. "Trade and industry" refers instead to officials at local or regional level working with trade and industry. This implies that women entrepreneurs are involved as *objects* rather than acting as *subjects* in the different Structural Fund projects, especially in a number of start-up projects. Established entrepreneurs with long experience are not found in those projects; they appear in other fields such as infrastructure or tourism.

The initiative for projects is often taken by networks consisting of experienced project leaders who may be described as entrepreneurs in EU project management. Academia and different public officials are involved and it is stated on the applications that a business network exists. This seems partly fictional as entrepreneurs on a steering level are quite rare in our experience and this affects the opportunities for women entrepreneurs to participate. However, when recruited to projects, the entrepreneurs are strategically chosen. One women entrepreneur in Jämtland explains it in terms of being someone people know about; she is well aware why she was selected. She is an established entrepreneur in a sector where she is highly visible and stands out, not just locally and regionally but also, to some degree, nationally. Like other entrepreneurs involved in steering groups, she is not always fully aware of how the project is financed whether part-financed by ERDF or by some other means. The important part and motivation for participating is the project objectives; in particular, what is actually being accomplished. In general, the few entrepreneurs we interviewed have a fairly positive approach to their involvement, although it can be time-consuming. The networking can be viewed as an investment for them as entrepreneurs, but they may also have more altruistic motives such as a generally positive development locally or regionally and from which their businesses can only benefit in a wider sense. However, steering groups are often composed after a project has been granted funding and their work is tied to the application. Creating steering groups is partly about winning legitimacy for the project. Thus, making connections with powerful agents in the partner-

ship and the approval officials of the Swedish Agency for Economic and Regional Growth makes this need for legitimacy a gender issue. The governance of gender mainstreaming may be implemented by top-down steering in the partnerships' handling of project applications. On the operational level the gendered legitimacy is unquestionable in a traditional county like Jönköping: "*We have chosen representatives from trade and industry with authority and power and they are men*".

In conclusion, when there are very few women entrepreneurs involved in projects, the sphere-bridging network in which entrepreneurs and public sector meet is considered beneficial and important as a strategic network for future development. However, the bridging between spheres can also be challenging when different cultures collide. What differentiates entrepreneurs from the officials acting on the orders of politicians is that, for the entrepreneurs, administrative geographical boundaries do not exist.

Conclusions

The process surrounding the Structural Fund projects is an illustration of multi-level governance. It is obvious that there is authoritative top-down steering from the EU and the state regulatory procedures of the partnerships. As state feminism has kept its institutions (Bergqvist et al 2007) gender mainstreaming is integrated as a principle into governmental steering of the regional Structural Funds. To some extent this is implemented in the programmes where the gender aspect of innovation policy is mainly defined as starting up projects for would-be women entrepreneurs. Also the composition of the representatives in the partnerships and the supervisory committees is strictly regulated, gender-equal and in accordance with Swedish political culture (SFS 2007:459; case no. N 2007/3312/RT Ministry of Enterprise, Energy and Communications)³⁶. Thus the formal institutions support the idea of gender-inclusive networks. Representatives of local, regional and (in the north) Sami politics, labour market organisations, one NGO and official bodies all meet in the partnerships. The members represent the elite and are an illustration of the "old" Swedish corporate system – thus the Women's Resource Centres, immigrant organisations or youth organisations are not invited as NGOs. In practice, as the partnerships are supposed to take decisions in consensus and strive for a common goal, the work of the partnership is embedded into a larger cultural discourse on economic growth and existing business structures. A dilemma is that the business organisations in Sweden refuse to participate in the partnerships and so a channel of nomination is closed to businesswomen.

The partnership's role is mainly reactive, advising officials from the Swedish Agency for Economic and Regional Growth, which makes the formal, legal decision on approving project applications. Complicating factors are the highly bureaucratic

³⁶ The boards show some variations depending on size and regional structure. 8-10 people represent the municipalities, 3-4 people represent the labour market (business and unions), one person represents civil society and 2-3 people represent state administration on a regional level.

procedures of the application process and the need for co-funding; these make it important to have women in the right power positions so as to be able to negotiate in the networking process when project ideas come up. A tacit knowledge of how to write and report applications by professional project-entrepreneurs is needed. We find this to be the case on the local level in Jämtland, where a window of opportunity is used.

However, the implementation of gender mainstreaming in the programmes differs in the Swedish regions and has improved differently compared to earlier periods (Forsberg and Hedfeldt 2010). The gender mainstream policy may thus create a gate-opening function for women entrepreneurs' networks in some regions. Institutions supporting such networks are the gender experts at the County Administrative Board and Swedish Agency for Economic and Regional Growth. However these authorities, as well as local and regional politicians, have no top-down steering role in the Structural Fund partnerships, where consensus and common goals should be the main principles (Rydstedt 2006). The ideas behind the very large projects in both counties seem surprisingly similar; the structure of the projects, language and methods refer to a special discourse with specific phrases and vocabulary which seem weakly connected to the local situation, or the expressed needs of "real", active self-employed men and women. The so-called innovative ideas in projects handled by ERDF partnerships seem to have been manufactured by a small group of public officials and professional project leaders. Women entrepreneurs were often objects of different activities rather than subjects in creating useful projects.

In our empirical data, we find there are several different kinds of networks and networking. The relationship between the formal, institutionalised partnership and its elite network on the one hand and women in business seems weak, whilst being strong amongst male Triple Helix actors. The social dimension of networking seems more important than we had expected. Thus the local setting and geographical proximity to other agents is vital. This contrasts with the organisation of the large Structural Fund regions which includes several counties. It also contrasts with "manufactured" networks and arenas in which people with no earlier connections are supposed to interact. When social networking is combined with operational or strategic networking and is successful, it includes both pleasure and usefulness. However, in some cases the social dimension was a hindrance when some women did not like each other. In other cases, male networks were not seen as attractive to enter because of their social structure. This makes networking a fragile strategy. We found a few cases where the European Regional Development Fund projects seemed to improve sphere-bridging networks. Our empirical studies indicate that the sphere-bridging exists on different levels, sometimes on a target group level and sometimes on an operational one. However, those networks are embedded in a firm and bureaucratic structure when writing project applications or running projects.

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Entrepreneurship, Innovation and Gender - The Construction of Projects for Entrepreneurship and Innovation in the Healthcare and Care Sectors

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Abstract

This paper presents two projects aimed at increasing the number of enterprises in the healthcare and care sectors in Sweden. The first project has a county administration (länsstyrelse) as provider and the second the Swedish Association of Health Professionals. A number of stakeholders were recruited to each project as members. The aim of this article is to use these projects to clarify and elaborate the predominant understandings of entrepreneurship, innovation and gender and the connections granted between them. The straight line between decisions and outcomes predicted in the national programmes are challenged by the many contradictions which have to be negotiated in the projects. Even the oft-stated differences between top-down and bottom-up are not clear-cut but negotiated.

The context is the Swedish public sector constructed as a Scandinavian welfare regime with public organisations dominating both supply and demand. Both sectors are dominated by women as employees; this was one argument behind the focus on women as entrepreneurs. Both the projects and programmes are argued for and established in line with New Public Management ambitions of changing the public sector.

The organisation and activities of the projects are presented and analysed with an elaboration of the Bacchi (1999) discussions on politics and problems. The involved partners have different reasons for joining and different conclusions as to what is the main problem. The predominant understanding is that small and medium-sized firms are used as synonyms for entrepreneurship and that there is also a link to innovation. Gender is a non-question on the projects' agenda while women, as they are the predominant employees, are acknowledged as a key group. However, according to the dominant understanding these women lack important qualities and competencies, although they have professional knowledge. Women therefore need special interventions aiming at increasing their self-confidence etc.

Keywords: Entrepreneurship, innovation, care and healthcare, women.

Introduction

In April 2008, the Swedish Agency for Economic and Regional Growth (NUTEK)³⁷ published an invitation to apply for money to create and develop programmes for “More Enterprises in the healthcare and care sector”. The Agency had been commissioned to stimulate a “diversity of suppliers”. In this context “diversity” meant different kinds of organisations such as private enterprises (large and small), consultants, professional associations, unions etc. Thus the Agency was to “support innovative projects which will work with advice and education to individuals or groups interested in operating publicly funded healthcare privately”. The programme was presented as a part of the government’s strategy to create high quality care. The activities in the programmes were to “mainly target employees in publicly funded healthcare and care organisations and business advisers”. As the absolute majority of the employees in the focus sectors are women, the programme can also be recognised as a part of the strategy to increase the number and share of women as entrepreneurs and small firm owners. This has taken the form of an ongoing programme, Promoting Women’s Entrepreneurship, which has been handled by the same agency for almost twenty years.

The programme “More Enterprises in the health and care sector” was (and is) not the only one with those stated aims. Another was presented almost simultaneously by the Ministry of Social Affairs. In a decision of December 2007, funds were given to the Swedish Association of Health Professionals (shortly The Nurses Union), a trade union and professional organisation for registered nurses, midwives, biomedical scientists and radiographers, to work with its members through education and counselling in a project aimed at “supporting a diversity of suppliers in healthcare and care”.

This paper presents two projects responding to the mentioned calls and taken as a starting point for a discussion on the predominant discourses and practices on entrepreneurship, innovation and gender. The programmes mentioned are examples of the implementation of New Public Management (NPM) in Swedish welfare sectors. Sweden is a welfare state and maintains a Scandinavian-type regime (Esping Andersen 1996) in which care and healthcare is financed through taxation and mainly provided by public sector organisations and their employees. The relevant organisations for the healthcare are the country councils (Landsting - around 20) and for care (both children and elderly), the municipalities (around 280). There are and always have been a small number of private care and healthcare providers; these, too, are financed by taxation. However, the predominance of public sector organisations is manifest. These sectors and organisations are big. As a rule, the municipality as an organisation is the biggest employer in the municipality and care assistant is the biggest occupation on the labour market. This occupation like most of the others in care and healthcare is dominated by women, especially on low hierarchical levels. Medical doctors, a classical profession,

³⁷ NUTEK no longer exists. Tillväxtverket, the Swedish Agency for Economic and Regional Growth is the current agency handling these questions.

dominate healthcare and its organisations. However, care is not professionalised in the same way. Despite this, healthcare and care are often discussed as if they were the same thing. New Public Management is an opening for private providers in care and healthcare which have so far, informally if not formally, been monopolised by the public sector. However the move is also accompanied by new rules and regulations aimed at protect customers and guaranteeing quality and control. The decrease in the public sector is one of the main points in the national political argument. Since the needs served by the public sector not are expected to vanish, an increase of services from private providers is expected and wanted. Some aspects of the changes are shown as a simplified model below.

This model is an elaboration of one presented by Christensen et al.(2005) and later used and elaborated by the author Sundin (2011) and Sundin and Tillmar (2010)

Dimensions Model	Swedish Traditional Model	New Public Management Model
Principal / Owner	Public sector organisations	Private organisations – big and small Public sector organisations
Financing	Taxation	Taxation
Regulations and rules	Politicians	Politicians
Actors	Employed by public organisations	Employed by public and private organisations. Self-employed and owner-managers

More Enterprises in Healthcare and Care refers to the first, or principal, dimension and leaves the second and third dimensions aside. This article will do the same. If the first dimension is changed then this also means changes for those implementing it; they get new employers or work as owner managers. The changes mean action but they could also mean new ways of thinking, new attitudes and even new identities. The introduction of NPM has been under discussion on the political agenda. In the political debate, NPM is presented as neo-liberal and an unethical way of “profiteering from the elderly and the sick” as well as a way of solving many problems and revitalising the organisations producing welfare (Tollin 2011, chapter 5). These lines of argument can be found in the projects presented, although the second mode of argument is predominant in the cases.

Key concepts: Entrepreneurship, Enterprises, Innovation and Gender

In the programmes entrepreneurship, enterprises and innovation are introduced as key concepts. They are also used in other contexts, both in research and politics. This will be illustrated below as background to the cases which are presented and analysed. Gender is another added concept as the programmes have preconceptions concerning

both who the new entrepreneurs and enterprise owners are and their qualifications and deficiencies.

Innovation, Entrepreneurship and Enterprises

Nowadays, entrepreneurship is often presented as a *fac totum* in the political debate and of great interest also among researchers (Landström, 2005). Innovation has the same status and sometimes the two concepts are discussed as synonyms. Entrepreneurs are also used as a synonym for small firm owners, for example in the programmes aiming at promoting women as owner-managers. Thus the establishment of new firms is seen as a synonym for entrepreneurship. These practices can also be found in research although there is awareness of the differences. Researchers are “forced” to use these simplifications for practical reasons, as are politicians and the support and promotion system (Bosma 2009).

Innovation is seen as the key phenomenon in both research and politics for creating economic growth (Lundvall 2002; NUTEK 2008). Innovations are something new – new products, new processes etc. In practical politics, innovation is closely connected to technology and products and the innovator often refers to an individual. This latter connection is used by Schumpeter (1934) who writes about individuals, but does not restrict the newness to products. In the Schumpeterian perspective, innovations could mean new combinations of ideas of many kinds, as well as ways of organising. These might take place in many kinds of organisations, including public ones such as agencies or departments. The new combinations could be found in new processes, an oft-used distinction in modern innovation studies and research too (e.g. Edquist et al 2001). Even so, the connection to products and industry seems to remain (Nählinder 2008; Berglund & Granat Thorslund 2012, Lindberg, 2012).

The economic potential of innovations is realised by entrepreneurs (Schumpeter 1934). This has also been stated “the other way around” meaning that entrepreneurial processes require some form of innovation. This firm connection between entrepreneurship and innovation disappears when entrepreneurship is used as a synonym for establishing any new firms, as is often the case in politics (Lundström et. al 2008) and research. The Norwegian Researcher Olav Spilling, as cited by Amble 2010, reaches this conclusion when stating that the overlap between entrepreneurship and innovation is relatively small since a minority of innovations take place inside entrepreneurial businesses. Many new firms are also started without newness in any dimension except as a way of earning a living for the person starting it. (Bosma 2009)

Non-entrepreneurial organisations are also of interest in the context of this chapter, as well as for research and politics. We know from national and international statistics that individuals starting new enterprises predominantly cite two arguments: to earn a living or to realise ideas (Kvinnors och mäns företagande 2009; Bosma 2009). The first type is sometimes called “necessity entrepreneurship” ‘whilst the second type connects to “opportunity entrepreneurship”’. These distinctions are supported by research findings, as are the similarities and differences in the statistics between men

and women. The differences follow sex-stereotypical notions as an example concerning responsibility for children and family (Holmquist & Sundin 2002). Other differences between men and women in businesses are related to the gender segregation of the labour market which, consequently also includes self-employment and owner-management. Swedish women are less involved in entrepreneurial activities (the expression used by GEM) than men. In the public debate and politics, this is often explained by the majority of women being occupied in sectors and organisations dominated by the public sector in line with the Scandinavian welfare model (Esping-Andersen 1996). This line of argument also appears in the programmes presented.

Even if many small and medium-sized firms are not entrepreneurial and innovative they can be positive for individuals, organisations and society. These positive effects were observed and discussed in the early studies of SMEs, in different parts of the world. The Bolton Report, presented in UK in 1971, put the importance of the small and medium-sized firms on both the political and research agendas. With some delay, the same thing happened in Sweden and is still on the political agenda, as highlighted in the Berglund and Thorslund (2010) paper describing documents on how to promote women's entrepreneurship. The main conclusion of these policy documents can be summarised by the expression "small is beautiful".³⁸

Entrepreneurship, Innovation and Gender

For over ten years researchers have emphasised the gendering of the entrepreneurial as well as the innovation concept. In the Swedish context, Helene Ahl (2004 and 2006) and Karin Berglund (2006 and 2007) have conducted studies of entrepreneurship and published in international journals (cf also Sundin 2002). Their findings and arguments are supported internationally (e.g. Calas et al 2009; Bruni et al 2004). The same gender bias or gender labels are found in innovations. Moreover, this seems to be an international phenomenon (Blake & Hansson 2005) with its national applications (Nyberg 2009, Lindberg 20xx). This bias has consequences for individuals, organisations and society as a whole.

Despite the convincing and unequivocal findings, the conclusions have not impacted upon public programmes and politics. Men's activities and sectors dominated by men are constantly favoured over women's activities and sectors dominated by women (Sundin & Rapp 2011 and contributions written by Kvidal and Ljunggren and Lindberg in this volume). The biases are sometimes arguments for implementing programmes, projects and rules with the express intention of supporting women. However these are not without problems and shortcomings (Tillmar 2006, Sundin and Rapp 2011). Berglund and Granat Thorslund (2010) conduct a discourse analysis of the programmes aiming to support women's entrepreneurship in Sweden. At times, they

³⁸ "Small is beautiful" was the title of a book published in 1973 and written by E.F Schumacher. It was a highly influential work and sold all over the world.

find the documents presenting the programmes to be highly contradictory, giving individual answers to structural problems and questions. They also conclude that the programmes “construct the female entrepreneur as less competent and in need of education and counselling”. The programmes also construct a “correct femininity” which does not challenge existing power systems as it leaves “an arena for starting business which is heavily regulated and with little potential for economic growth” (page 19). The same conclusions concerning resistance to acknowledging structural barriers in public programmes are drawn by Hansson et al (2010).

Key methods: Projects and the Problem Approach

Since the national initiatives and programmes are implemented through projects, it is relevant to offer some reflections on projects. This serves as a background to the way in which case-projects are constructed and operate. Projects are an established and integrated part of the Swedish public sector. Projects are a common way of working with equality, or rather inequality, between men and women (Sundin 2011). According to the predominant project researchers (Söderlund 2008) project have some characteristics: their tasks are well defined with clear, solid objectives, governing plans, clear time frames and earmarked resources. Projects might be established to create *change*, to *try something new*, to establish *cooperation* or to *fulfil a mission*. The first two types are often used inside organisations (intraorganisational projects) while the other two mainly concern more than one organisations (interorganisational projects). Projects are often constructed to manage uncertainty. Horizontal uncertainty deals with managing the close environment to create and preserve discretion and vertical uncertainty, as well as how to find a proper position in relation to the principal(s).

The projects emanating from the programmes presented in the introduction will be compared with each other, with project characteristics and in relation to political aims with the aid of the “problem approach” elaborated upon by Carol Lee Bacchi (1999). Bacchi states on the very first page of her book *Women, Policy and Politics* that “every policy proposal contains within it an explicit or implicit diagnosis of the ‘problem’”. This problem representation is what must be examined in order to understand what is going on. Every description and formulation is an interpretation and judgment of presuppositions and of choices made. Every inclusion also means exclusions. Of course the hardest thing to find is what goes unsaid or unaddressed due to being taken for granted or considered unimportant. Thus, this way of thinking focuses on problematisation rather than problems. The position of Bacchi can be summarised under the following points:

- What is the problem presented as, either in a specific policy debate or a specific policy proposal?
- What presuppositions or assumptions underlie this representation?

- What effects are produced by this representation? How are subjects constituted within it? What is likely to change? What is likely to stay the same? Who is likely to benefit from the representation?
- What is left unproblematic in this representation?
- How would ‘responses’ differ if the ‘problems’ were thought about or represented differently?

Bacchi has women and the gender question in focus for her discussion and shows how women and gender as arenas for politics have “inbuilt policy representations”. Politics often uses “monocausal formulation” which inevitably gives simple solutions. Political strategies concentrating on attitudes tend to exclude unequal structures and concentrate on individuals. According to Bacchi, this is a dead end since power-relations and strategies are denied (page 104).

Aims and Method

The two case projects express political intentions concerning the core issues of the welfare state. The aim of this paper concentrates on how entrepreneurship is conceptualised, the stated connections between entrepreneurship and innovation, the way gender is conceptualised and how the projects are constructed to reach the stated aims. The two projects represent what is going on in the current reorganisation of the public sector but also how predominant concepts are negotiated and, if not completely changed, perhaps given a modified meaning in a new economic and political situation.

When the money was given to the projects it was on the condition that researchers should actively monitor the work. The author of this report was asked to be such a researcher. As agreed, the researchers held a number of interviews. Each member of the steering committees (organisation described below) was interviewed at least twice; firstly by a senior researcher and subsequently by the research leader. The researchers were present at formal meetings as well as at activities organised by the projects.

The projects themselves produced written material of different kinds; the project leaders produced information for the steering committees, material for distribution to others such as potential entrepreneurs and meeting minutes etc. The programmes and projects have been presented in local papers as well as in a journal owned by the Nurses Union. The written material was valuable both for its descriptions and analyses and as a starting point for discussions.

Force for Change – the Nurses Union Project

When the government announced it wanted to encourage private providers in healthcare and care the Nurses Union contacted the Ministry of Social Affairs to request funds to organise a project on that theme. The Union had for many years been involved in discussions and activities on: a) how to guarantee high quality care and healthcare in the future in general and b) the position of the occupational groups belonging to the union in particular. The ministry responded positively and allocated

SEK 5 million (approx. EUR 500,000) to the project. In the application, the project is labelled “Force for Change” and this will be used interchangeably with the Nurses Union Project from now on. As an outcome of the project, the quality of services produced will increase, as will the number of women-owned enterprises stated in the project presentation. The main target group for the project is Nurses Union members. They should have adequate knowledge about the specificity of the sectors to make them well-suited to handling the healthcare and care system. Through them, methods could be developed to go from information to realisation. The other steps described in the programme are: inspiration, education, advice and follow-ups. The concept of Force for Change is used as a label for this process and the changes required.

Organisation of the project

As the responsibility of the project was handled by the Nurses Union they selected the project leader, a consultant who was a trained nurse and had been working at the national office of the Nurses Union. One of the union officials supported the consultant, both in the actual work and in the planning and strategic discussions.

One decision had to be taken very early on: which other partners should be included in the project? The Swedish Association of Local Authorities and Regions (SKL) was mentioned in the allocation decision. Its members, the municipalities and country councils, have responsibility for providing adequate care and healthcare to citizens. Other members of the project were the Jobs and Society Foundation and Swedbank. The Jobs and Society Foundation has been a principle actor for many years in the start-up-business field in Sweden. It is mainly funded by private actors but also work with and for the public sector. Its image is “private” in contrast to the public actors in the start-up-business field and it has a network of offices all over the country. Swedbank is one of the big banks in Sweden and has a wide-ranging network of offices.

Project group and steering committee:

Actors:	The Nurses Union managing the project
Principals:	The Swedish Association of Local Authorities and Regions (SKL) a meta-organisation for the Swedish municipalities and country councils responsible for care and healthcare.
Others:	Swedbank representing capital needed for private enterprises Jobs and Society, representing the supporters of private industry and commerce
Project manager:	Consultant, a former nurse, recruited by the Nurses Union

The project was designed along rather simple lines. The main actors were the Union and SKL. The Union itself represented the actors; employed, self-employed and potential owner-managers. The Swedish Association of Local Authorities and Regions

(SKL) represented the organisations wanting to change the way they met the obligations given to them by politicians. For SKL's members, some 300 municipalities and 21 country councils, this meant changed attitudes, ways of thinking and practices – working more with private providers than with employees of their own. If the Union and SKL did a good job the services of Swedbank should be asked for and so should the advice and support given by Jobs and Society. Consequently the project was constructed as a cooperation between a number of organisations which do not normally work closely together, to fulfil the mission to create change.

Force for Change can be considered a bottom-up perspective, motivated by the position of the Nurses Union as project owners. The Union members are the ones who will put the intentions into practice. The Union saw the call and the money as a chance to lead the changes that were needed. However from an intra-organisational perspective, Force for Change was a top-down-project, as illustrated by the fact that regions chosen for Force for Change were selected according to their attitude towards private care providers. The union leaders in Stockholm could not determine their members. The same is even more the case for SKL. The members of the project group were not in a position to implement the changes; they were dependent upon the activities and initiatives handled by those organisations and individuals which actually worked in, or with, municipalities and country councils. A problem immediately noticed was that these organisations and the individuals working for them in Stockholm were far from the daily work of healthcare and care all over the country.

Aims of the project - Entrepreneurship and innovation

The concept “entrepreneurship” is used once in the government's decision. The concept of enterprise (företagande) is used both concerning the taking on of responsibility for outsourced units and concerning the establishment of new enterprises to produce healthcare and care. The Force for Change project focuses on the latter of these missions. Its aim is to increase the number of private providers as that involves “the development of healthcare and of new knowledge”. “Diversity” is the concept dominating the steering committee - not entrepreneurship or innovation. The following statement by the member from Jobs and Society is representative of the standpoints taken:

“It is important for the Swedish economy that something happens in this sector... It is important for everyone: for the employees, so they can realise their ambitions and working conditions; for the patients, so they can choose among suppliers; for the responsible municipalities and country councils, so they can give a higher quality in healthcare and care to the citizens. The whole of society wins if we get more providers.”

In this quote, Jobs and Society speaks for all members of the project.

The concept of innovation is more often used in a very obvious fashion as innovations will follow from the increasing number of new providers, especially innovations in how to work and organise according to the ambitions. Increasing quality will also

follow from these innovations. This understanding is shared by the organisations involved and by the individuals managing the project, as illustrated by the quote above. This effect is also anticipated in established organisations, not just the new ones, as practices in old public organisations will be challenged. The established system which prevents innovations and entrepreneurial ways of working will vanish. One delegate for the union states that

“the power of our members would be put into practice if they could decide their working practices. Many members I meet tell me they’re convinced that if they were allowed to make the decisions, things would be better for them and the patients”.

However, the planned and anticipated changes are often rather mundane and ordinary in character. *“To give them (the patients) that little bit extra”.* However, even small changes would mean a lot to individual patients and would satisfy the providers.

The steering committee members are all experienced individuals and all aware that organisational realities are not always clear-cut and rational. One suspicion is that politicians and managers will go on thinking big - giving big contracts to big companies and excluding small providers. For an individual leaving a job and establishing herself as a provider such attitudes and practice could be disastrous. New ways of thinking in all groups is required in order to avoid this. It is not enough to convince employees, i.e. the actors. The principals, i.e. the municipalities and country councils must also be convinced to really “think private and think small”.

The Gender Question in the Union Project

The Union Project is a project for women which, according to the steering committee members, came about because 97% of their members are women. So the project is to benefit women even if the project leader expresses the hope of that the minority of men will also take the opportunity to get in touch with the project and establish themselves on the market.

The women, or gender, question is never raised by the bank. For the bank, the emphasis of the discussion is on the characteristics of the health sector, as it largely is with Jobs & Society. It is mainly the representatives of the Union and the women representing Jobs & Society at regional level who state that men and women do not think in the same way about entrepreneurship and being an owner-manager. A severe problem for women is a lack of role models. A particular kind of caution regarding women finds expression in different ways.

“Security is needed when it comes to women. They don’t want to take chances in the way men do. We must accept that and help women feel secure. Starting an enterprise always involves risk, but we should try and find out what women need in order to dare to take that step”.

Consequently programmes aiming at reaching women must be arranged in a special way. Presenting role models is one part; another is creating space for talks and

reflection. It is important to develop learning and training methods. The message should be presented by women, preferably by members of the Union. This is an issue of trust and credibility.

“The informants should speak the language of those they are informing. You can’t send a gang of retired men from the banking sector to meet young women in the care sector.”(Project Leader).

The other steering committee members seemed to appreciate the description and analyses made by the Union and the business advisors for women. However they were less understanding when it came to the experiences of resistance related by the Union members. These experiences often involved, in one way or another, the exclusion strategies used by the medical profession.

The committee members are also convinced that nurses are well prepared to be owner-managers of new provider enterprises.

“Knowledge means possibilities. We have a university education. We think holistically, not just in terms of small parts of the body but the whole human being, her body and her soul”.

One of the Union representatives emphasises that nurses carry out tasks which means that the step from employment to self-employment or owner-management is a small one.

“There are small differences between working as a district nurse at a medical care centre and owning and managing a district nurse surgery”.

Despite that, the nurses have experiences and tell stories about how nurses meet with suspicion when it comes to management and economics. Some nurses have internalised these as

“... the members of our union are not in the top of the hierarchy in the system. Although we have a high level of competence we live in the shadow of the medical profession. When medical care centres are discussed doctors are, without it being verbalised, seen as the owners and/or managers”.

Due to such misapprehensions, many nurses lack the self-confidence to leave their employer and the public sector and start up a firm of their own. According to the Nurses Union delegates, being employed is the “*established way of thinking*” among the majority of nurses.

What problem – whose problem?

A diversity of providers is presented as a goal for the Force for Change project. But to what problem or shortcoming is this goal a solution? Although the construction of the project seemed “simple” and was designed using the obvious partners, the assignment to introduce a diversity of providers in healthcare and care were not interpreted in the

same way by the members of the project. The mission was not the solution to the same problem for the project members.

- The *bank* seemed to have the most unambiguous standpoint. The sector was a problem as it produced mostly services and had one big buyer. Discussions on entrepreneurship, innovation and gender did not involve the bank; it saw an increase in the number of new enterprises as the goal of the project
- For *Jobs and Society*, the public sector is seen as a big problem. The mission of Jobs and Society was to decrease the public sector and open things up to private providers. Consequently an increase in the number of new enterprises was an important goal of the project but there were also qualitative goals concerning the reorganisation of the public sector along the NPM lines presented. According to Jobs and Society, the problem was defined by old-fashioned attitudes amongst politicians and managers in municipalities and country councils as well as amongst the employees. All were in need of new attitudes and new knowledge. The gender system in society and organisations were not acknowledged as a problem. However, such standpoints might be taken by individuals who had been working with programmes for women.
- For the *Swedish Association of Local Authorities and Regions (SKL)* the size, costs and inefficiency of the healthcare and care sectors were considered the main problem. New providers were expected to vitalise all organisations, even the ones which remained public. NPM was a way to do that and projects such as the one presented here were a step in that direction. The SKL representatives in the project made no analyses concerning gender or women – the focus on women followed from the gendered occupations. Nor did the SKL representatives comment on the professional system as the Nurses Union did.
- The *Nurses Union* saw the position of their members in the organisational hierarchies as the main problem. The reorganisation of the public sector could be a tool to change that and establish new providers. The gender dimensions of the professional hierarchies were not in focus, although many saw them as intertwined.

The regional project – New Efforts

The second case presented is a project financed by the More Enterprises in the Health and Care Sector programme. The label New Efforts was motivated by other projects prior to this one and with similar aims to increase the number of women establishing enterprises in the region. The new dimensions in New Efforts are the focus on healthcare and care.

The region is the county of Västernorrland which although situated in central Sweden is considered part of northern Sweden. The county is heavily dominated by the basic industries of forestry and energy. The regional gender regime (Forsberg 2010) is traditional and consequently the labour market is strictly gender-segregated. These

facts are highlighted in the project goals. Understanding this situation will provide women with ideas of starting firms of their own, especially women working with healthcare and care. The result will be achievement of a higher level of equality between women and men in the region. This is also stated as an aim in the project application.

Organisation of the project

When the call for project applications came, the project leader took the initiative to create a project. At this time she was employed by the County Administration (Länsstyrelsen CA). As no one else responded to the call the County Administration was obliged to, she says, as the CA is an “arm of government”. For New Efforts she assembled a project/steering committee which she found suitable. Both principals and owners, i.e. the country council and municipalities, had to be involved. To keep the number of members in the steering committee down, the project manager selected three out of the eight municipalities in the region. She made her choice based on political preferences and location. This latter aspect meant a location at the periphery, in other words inland, or along the coastline. The political aspect refers to attitudes towards NPM and the construction of the public sector. In short, the Social Democrats from the inland municipality were reluctant about NPM and supporting the traditional construction of healthcare and care whilst the Conservatives from the coast took the opposite position.

The local delegate of the Nurses Union represented those employees in the project which were the potential actors. A number of other organisations were invited to join the project: The Swedish Federation of Business Owners and Swedish Chambers of Commerce were invited as speaking partners to new firm owners. Two expert organisations, the Swedish Social Insurance Agency and Swedish Companies Registration Office, were included in the committee to cover anticipated needs of the new owners. As the project leader knew all the recruits, she also knew that gender competence was lacking. She therefore also recruited two consultants, living in the region, who had that competence as well as competence in starting firms and the support system for small- and medium-sized firms. The individuals in the group belonged to the regional establishment and knew each other personally although they act in different arenas. The only new-comer was the delegate from the Nurses Union.

In summary, the project group and steering committee consisted of:

- | | |
|-------------|---|
| Actors: | The Nurses Union |
| Principals: | The Country Council and three municipalities |
| Others: | The Swedish Federation of Business Owners and Swedish Chambers of Commerce as speaking partners to new firm owners. |
| | The Swedish Social Insurance Agency to give information and advice |

The Swedish Companies Registration Office to give information and advice

Experts on gender relations and gender and entrepreneurship

Project Manager

A civil servant at the County Administration

As anticipated, the construction of the project included both principal organisations and potential actors. However the political positions concerning the future of the public sector were complex and challenging. The project manager chose to include the different positions within the project, the idea being to use the project for discussion and hopefully create mutual understanding and change within the project group for further diffusion to others in the region. The project was designed for cooperation in order to make change possible. The project leader expressed her view of the project as a mission formulated by the government. Just as in the first case, Force for Change, the project can be described as both a top-down and bottom up construction. Top-down because the County Administration (through the project manager) represents the State and bottom-up because all the organisations and individuals on the steering committee were established and working in the county.

Aims of the project - Entrepreneurship and innovation

Change and diversity are concepts often heard in the New Efforts projects. Entrepreneurship is also used but not to the same extent. Let us start with “change” as discussed by everyone.

The need for change often relates to the way healthcare and care are provided. As the Swedish Federation of Business Owners puts it:

“The way it works now is not good. Too much administration, too inefficient... Alternatives would be good”.

Even politicians representing the inland municipality sees alternative ways of organising healthcare and care as necessary

“we cannot go on in the way we have done before. In this part of the country the demographic situation is scaring – the young ones are leaving and just elderly people needing care are left. We have to change the way we think and work. We need both more alternative providers and more entrepreneurship inside the public sector organisations”.

As seen from this quote, these representatives also mentioned the importance of keeping the public sector alert. This is an ongoing discussion point in this steering committee.

Preferences for intrapreneurship are also explained by concerns for sustainable solutions. The politicians from inland areas refer to old experiences of how newcomers to the region just want to take advantage of the support system and then leave. They have also heard of big international companies establishing themselves in southern

Sweden and leaving nothing to small entrepreneurs. That makes intrapreneurship a positive alternative for the municipalities at the periphery.

“I’m afraid of these huge organisations. They’re like country councils although private... We should not move from one big monopoly to another. There must be small units!”

“Alternative providers” are also mentioned in one of the quotes demonstrating an awareness of the need for change, often concluding with a need for diversity. The importance of diversity is discussed from both a societal, regional and sector perspective. In New Efforts, diversity means private enterprises, mainly small ones. The societal and social benefits of diversity could be expressed as good for the citizens both as patients in need of care, and as taxpayers.

“It’s good for the patients. They’ll have real choice if they can see different ways of running a unit producing care” (Nurses Union).

For the region diversity (i.e. new enterprises as actors) is good as,

“diversity creates competition and competition is good because it gives everyone the possibility of comparing themselves to others. Everyone wants to be best ... Now is the time to implement these possibilities in the health and care sector too.” (Project Leader).

The alternative providers will be good also for employees because, *“in a small organisation they will be listened to and thereby empowered.”* The small units are also expected to be more efficient.

“If you can decide for yourself the way you work, you can do it cheaper. High quality for the patient may not be expensive at all. Being treated nicely and with respect costs nothing” (Swedish Chambers of Commerce).

The special conditions of the healthcare and care sector are often discussed in the steering committee as its members have great knowledge of the rules and regulations and how to handle them and cope with them. The fact that private providers must have good contacts and trusting relations with politicians and officials is emphasised over and over again. From that perspective, the employees are a primary group as alternative providers because they have adequate knowledge concerning both the tasks and on how the system works.

The project leader is convinced that many of the employees have innovative ideas. To establish themselves as owner-managers will release innovations and creativity, benefitting not just individuals but also regions and country. Age and experience is often seen as an advantage but could equally be a hindrance as,

“after many years in public sector organisations, the entrepreneurial spirit which may have been there at the beginning is killed off. That may

be a problem for projects concentrating on public sector employees.”(Consultant).

The fact that the contracts given to providers are only for a finite time may also be a hindrance. If you leave the public sector you leave a secure position behind you. According to those interviewed, in this particular part of the country there is also a “public sector spirit”, as illustrated by a statement from the person representing the Chambers of Commerce. *“It’s the tradition, the culture. The old system creates suspicion. Profiting from the delivery of care and healthcare is depicted as wrong”*. However changes are afoot. It may just be a matter of time, according to one steering committee member, representing the conservatives.

In New Efforts entrepreneurship means new small enterprises. The anticipated positive impact will come from competition rather than from innovations relating to products or processes. However the project leader is convinced of that women working in care and healthcare are entrepreneurial and even innovative. Up to now they have too often had to leave the sector to realise their ideas but now “the time has come”. These entrepreneurial individuals can stay in the sector in their own enterprises; something which is also of great importance to the responsible organisations, the country council and the municipalities.

“When it comes to the production of welfare it’s important that there are individuals who want to work there, not just as employees. That is what it’s all about”. (Municipality, representing the Social Democrats).

This line of argument also means that the employees who stay in public sector organisations will become more innovative and entrepreneurial when they see what is being accomplished by the leavers and when they are managed in a new way by intrapreneurs.

The Gender question in the New Efforts projects

The regional project, New Efforts, aimed to increase the share of women as owner-managers. The focus on women was therefore created in order to reach this aim. However, some members of the steering committee were reluctant about the gender-separation strategy used. The secondary position of women in Swedish society could create problems for the women-only projects. Nevertheless, the manager of the project has an optimistic vision – more women as entrepreneurs will really change the position of women in society and make the county a better region to live in, for both women and men.

As mentioned when describing the project organisation, the project leader has been working for many years on projects aiming for equality between women and men as well as with projects concerning women as entrepreneurs and owners of small firms. I have no hesitation in labelling her a ‘femocrat’ (Savage & Witz 1992, Hagberg et al. 1997). She is always aware of the importance of equal numbers of men and women in arrangements and is aware of the importance of using women as role models. Success-

ful women are speakers at the public meetings organised by New Efforts. The role models are needed as women are said to lack self-confidence and sometimes even knowledge on how to run an enterprise. That is why training sessions to increase self-confidence for women are organised by the project.

The importance of the gender question made the manager of the project recruit two experienced gender consultants to support her and as assurance that the gender dimension had not been hidden or forgotten. Aims concerning equality in the region are also presented in the project plan. Despite this, the gender structure seldom appears on the agenda, either for steering committee meetings or outreach activities. Women are present, as mentioned above, but in an ambiguous way which does not provoke resistance.

What problem – whose problem?

Changes to the public sector organisations, both as principals and actors, are presented as goals of the New Efforts project. The project was constructed around “more enterprises in the healthcare and care sector” many of which were expected to be owned and managed by women. To what problems were these enterprises a solution? As we did with the Union project, let us analyse this from the various stakeholders’ perspectives.

- The *project leader* talks about self-employment as a way to liberate women and make them fulfil their innovative visions. She expects more women to become owners of enterprises in healthcare and care as a means of establishing equality between women and men and a way of vitalising the economy and the region.
- The *principals*, i.e. the municipalities and country council must, in this case, be divided into two groups according to their politically influenced standpoints. The ones supporting the changes along NPM lines engage in the project to support the initiative and show that they are serious about it. They want to use the project and its activities to highlight private alternatives. Those opposing the changes join the programme trying to give entrepreneurship a meaning other than private providers and as an arena for discussion on building the future public sector.
- The *Swedish Social Insurance Agency and Swedish Companies Registration Office* join because they believe it is their duty when asked.
- The *experts on gender relations* join because they have been invited and paid but also to try and actually introduce the gender dimensions into the activities.
- The delegates of the *Nurses Union* represented the *actors* albeit reticently. They were seldom addressed although healthcare and care employees were often discussed.

Discussion

Comparison between the cases

The two cases presented are similar in that they had the same main aim of creating “more enterprises in the healthcare and care sector”. Both projects included relevant provider organisations, municipalities and country councils, plus the organisation for the potential actors – the Nurses Union. However, there were also differences in many dimensions. Top-down as well as bottom-up can be applied in both cases but from different perspectives. The Union Project was constructed in a “top-down-way” with representatives from the headquarters of the involved organisations trying to implement the project in some regions and in a “bottom-up” way as nurses are the expected providers. The Region Project was constructed from the bottom with the region, serving as space for the common arena but in a top-down way with the county council, the regionalised state, taking the lead. Anticipated differences of opinion were handled through involvement in the New Efforts project and by avoiding resistance in the Union Project. The “gender question in entrepreneurship” was a non-issue in the Union Project, but women were on the agenda in New Efforts.

The case presentation ended with comparisons from within the two projects inspired by the problems approach and comprised diverse standpoints. The projects as well as the programmes had many aims, some of them contradictory. The multiple aims is probably one of the reasons behind the design of the projects, with partners from different parts of society working together in a fashion inspired by the Triple Helix concept (although it can also be described in terms of an old Swedish tradition of cooperation and negotiation). Since there are so many aims, some of them are considered more important than others. A demand for entrepreneurship is a “lowest common denominator” but the argued concretisations are not the same. The advocates for increasing the number of SMEs, often with neo-liberal arguments, dominate the projects and are strengthened by both government and the *zeitgeist*. However, there are alternative voices. The understanding varies regarding which problems should be solved with entrepreneurship and more small firms. There are a number of answers to the question in the projects presented. All of them, explicitly or implicitly, begin with the shortcomings of public sector organisations or feared future shortcomings. This paper will not repeat all the problems mentioned. However it will concentrate on some that are of relevance to this particular case regarding public sector, entrepreneurship, innovation and gender.

- The predominant understandings of the public sector are that it is too big, too bureaucratic, too hierarchical etc.
- The understanding of entrepreneurship and innovation is that they are missing in both public sector and society, regions etc.

- Women are part of the public sector problems indicated, as well as the lack of entrepreneurship and innovations since women in numbers dominate the public sector and are underrepresented as entrepreneurs and innovators.

However there are differences and nuances found in the projects presented and these will be discussed. The first way of defining the problem of public sector shortcomings is mainly expressed by the representatives of the organisations close to the industrial and commercial organisations and by politicians from the conservative political parties. Their views are consistent with New Public Management arguments and are, for some proponents, an ideological position. The bureaucracy and hierarchisation problems are widely acknowledged and expressed by ‘everyone’ in different terms. The Nurses Union is the only body which transforms this perspective into a critique of the position of the medical profession. They state this as a serious practical problem; even more so than the others mentioned.

The lack of entrepreneurship is expressed as a problem by all members of the projects but elaborated on in very different ways. The potential clash between neo-liberal enthusiasm and resistance towards a decreasing public sector in the regional programme is handled through involvement and by frontlining care for the region as well as by emphasising of the importance of entrepreneurship rather than private enterprises. Best practices are presented, from both intrapreneurship and private providers. In the Nurses Project, there is no such distinction regarding the main aim of the “more enterprises” in the steering committee. The politicians from the inland municipality in the regional project represent one extreme, demanding intrapreneurship in the public sector organisations. Meanwhile, the representative of the project Jobs & Society in the Union Project argue for a future total takeover of private providers.

So, what can “more enterprises in the health and care sector” do about these problems? Opening up the sectors to private providers is seen by everyone as a way of increasing the number of small firms. The concepts “new starters of small enterprises” and “entrepreneurs” are used synonymously. The only ones really reflecting upon a difference between the two are the actors from the peripheral municipalities, who advocate intrapreneurship. They see the need for new ways of thinking as a solution, but not new enterprises. They want to keep the public sector intact.

New ways of thinking come close to innovation. Just like entrepreneurship, innovation is often considered part of the reality in SMEs and the reason why new enterprises are established. However, the statements given by the steering committee members are highly contradictory on this point. When the members reflect on what they are anticipating, they often emphasise small changes to caring dimensions and use concepts like “responsiveness” and “close to the customer”. This is not innovativeness in its conventional sense (see Berglund & Granat Thorslund and Lindberg in this volume).

Even the most eager advocates demanding change to the health and care sector do not want to change everything. They want to keep the majority of rules and regulations

aimed at protecting patients and do not want to change the way care and healthcare are financed. Thus what they are asking for is entrepreneurship within a given framework. That is of course always the case. Entrepreneurship as well as innovations and the establishment of new enterprises are always processes in given contexts which must be managed by individuals as well as organisations. On the whole, the two projects illustrate the mixed picture found by Pettersson (2007) in the Swedish organisations working with women's entrepreneurship.

How entrepreneurship is organised and conceptualised

How entrepreneurship is organised and conceptualised is the first aim of this article. The political ambitions with the initiated programmes were to stimulate "more enterprises in the healthcare and care sector". One of them was a continuation of the "promoting women's entrepreneurship" programme and "innovative projects" were anticipated. The connection between more enterprises, entrepreneurship and innovations were taken for granted and not discussed in the call. The projects which illustrate the political programmes here applied for funding translated the stated aims in different ways. The Force for Change project, with the Nurses Union taking the lead, draws the same parallel between entrepreneurship and enterprises; they are seen as synonymous. This standpoint also dominates the other case-programme. The emphasis is on small firms as new providers of healthcare and care, financed by taxation. The positive aspects of these new small firms are mainly discussed on the societal level. In the Regional Project, society equates chiefly to the region whilst in the Union Project it is the economy. There will also be positive impacts for the public sector as the leading actors in the projects have expressed a belief in the indirect effects of competition. The arguments are presented in a rather abstract, economic way. Individuals are almost invisible, even if some of those interviewed did say that it was positive for individuals to work in small organisations. All the classic advantages of small firms are used, whilst the entrepreneurship and innovation concepts are omitted.

In short entrepreneurship is equated with small firms, with one exception – the representatives of the inland municipality in the Regional Project. The projects are organised to stimulate and support new small enterprises. Organisations responsible for the small firm policy and actions are recruited (especially in the Regional Project) to be ready to service demands from potential enterprises and small firm owners. Also organisations responsible for care and health care, i.e. the municipalities and country councils, are project members but they are treated like experts rather than actors which must change through the project activities.

Stated connections between entrepreneurship and innovation

In the projects, small firms are used as a synonym for entrepreneurship. More small enterprises mean diversity. Diversity is the keyword not innovation, although this is also discussed and there are arguments for widening the innovation concept. It is particularly important to acknowledge the inclusion of new combinations of services,

especially as the Union represents those working “in the field”. Thus, new enterprises as providers of healthcare and care entail new ways of meeting greater demand for care. The inclusion of these new ways of meeting demand indicates a widening of the innovation concept as small things are acknowledged, both as innovations and as changes which could be of importance.

The way gender is conceptualised

Because the projects target employees in healthcare, they are targeting women even when this not is an expressed aim. The classic disadvantages and shortcomings of women, especially those in the traditionally women-labelled occupations are omitted in the projects. One of the conclusions is that women must change their attitudes towards entrepreneurship. Women and employees as a group have some features which influence the way projects are constructed and activities planned. Employees’ experiences are seen as both positive and negative. On the positive side, there is knowledge of care and in the way the care system works; on the negative side is the fact that employees are socialised into a public sector culture. The common description of the women is therefore that they are risk-averse and need help in being released. They also lack adequate knowledge on how to run a business and are therefore supposed to need experts in business creation and how to run a business to help them. This might lead to empowerment but the starting point is undoubtedly a neo-liberal critique of both the women and the public sector.

The predominance of women amongst the employees in these sectors means that projects working in and with these sectors are gender-projects according to the official rhetoric. However the gender dimensions cannot be qualified as relevant perspectives by the individuals, not even by the consultants in the Regional Project, who understand gendered structures and concepts. They considered the gender-question was too sensitive and provocative (cf Wahl 1996). The conclusion which can be drawn for the projects and programmes support the conclusions found in other areas and other national contexts – that the outcomes of NPM are gendered (Thomas & Davies 2002, Sundin 2011). The emphasis on entrepreneurship and stimulation of women to go into business does not change that conclusion.

The employees (i.e. women) are the ones expected to make the necessary changes, mostly for start-up enterprises. This might mean empowering individuals but not changes of gender regimes, assuming the gendered dimensions of structures, concepts and activities go unacknowledged. This “blind eye” is a fact when the position of nurses in the professional hierarchy of healthcare is pointed at by the Nurses Union. This understanding is not in keeping with the other partners and the nurses are not insisting on this point. As to the question of why this is so, the informants refer to an internalised subordination among nurses. However with the medical profession, the problems articulated are seldom connected to gender dimensions or seen as part of the gendered structures. Some individuals are aware of the connection but such understanding is not really part of the projects on any level. Consequently women are con-

structured as needing support to handle the system or to avoid it but not to be empowered to change it.

The most attention is given to potential actors who are women. The demand side – politicians and civil servants in municipalities and country councils, plus other actors like banks – are prompted to open their eyes and broaden their attitudes. This way of presenting and discussing the needs and ideas put forward, has strong gender dimensions. As a rule, innovations as a means of organising or of discerning and interpreting demand are not classed as innovation. The gendering of this concept is not acknowledged in the projects, nor is the concepts of entrepreneurship or enterprise owner.

Conclusions

The findings and conclusions in the above cases also have implications for other projects and for policies and practices concerning entrepreneurship, innovation and gender. The projects varied from the ideal as, in the main task, enterprises were given many conflicting interpretations and reasons for setting them up or joining. The different understandings which were presented bring to mind the garbage-can model presented in the early 1970s (Cohen et al. 1971) and subsequently used and elaborated upon for forty years. More women as entrepreneurs and owners of enterprises seems a common solution, the garbage-can, to a variety of contradictory ways of describing the problem. This conclusion has relevance to the predominant debate in contemporary society where class dimensions are often neglected. This is illustrated in the projects presented by the fact that the Union of Municipality Workers, organising a great majority of the individuals working in municipal care, was never considered for inclusion in the project committees. An additional interpretation is that the neo-liberal ways of thinking and arguing are completely predominant. The findings and analyses indicate that the “Bacci-approach” has to be sensitive to the empirical organisational context as the outcomes of politics are “muddled through” in the organisations.

The projects presented were imposed on care and healthcare. These sectors have some characteristics not usually connected with entrepreneurship or innovation. This compulsion had advantages for the actors who were convinced of the competence and entrepreneurial spirit of the women active in the relevant organisations. They were able to highlight innovations and entrepreneurship which are normally hidden. The predominant ways of defining and labelling were therefore challenged. These projects, with others of the same aims, could be the first steps towards a reorientation of rhetoric, politics and practices in innovation and entrepreneurship.

The same positive expectations cannot be declared of gender. Gender perspectives cannot be argued for in the projects and it seems as if gender, or rather the position of women, is still the excluded question. When gender, or rather women were put on the agenda in these projects it was from a “lack-perspective” and activities were proposed in order to handle the lack. The women were to blame, not the structure. This way of understanding problems and shortcomings is also relevant in regard to the structure of

the healthcare sector. The position of the medical profession is not acknowledged as a great problem, although the public sector is criticised. The neo-liberal project seems to have turned a blind eye to gender. This blind eye also applies to the position of the small enterprises within the sectors, even after the expansion of private alternatives. Major national and international companies are rapidly expanding onto the created markets for healthcare and care, leaving little for the small enterprises.

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Inward and Outward Learning Processes - Reflections on Research Methodology and Learning whilst working with a strong Innovation Network Organisation in an Innovation System

Christina Scholten, Agneta Hansson, Kicki Stridh & Mia Swärdh

Abstract

This article discusses conditions of how to work with applied gender research as a mean to produce sustainable gender equality in strong innovation environments and innovation systems. During a three-year period, the research team of two gender researchers and two consultants in organisational development worked with an innovation environment focusing on the food innovation system in Skåne, southern Sweden. In this article we describe the process and development of how to address gender issues in a segment which is quite traditional when it comes to gender. We analyse the success factors as well as the weaknesses of the project layout and its consequences.

Keywords: innovation system, inward and outward learning processes, gender.

Introduction

This article deals with the triggering question of how to implement gender equality in a value network (Vanhavebake 2006) focused on innovation and the innovation system of which it is a part. Trying to integrate gender equality in organisations sometimes creates uneasy feelings of threat, (Gunnarsson, Westberg, Andersson and Balkmar, 2007).³⁹ This can be dealt with through appropriate methods and models, supporting dialogue and sharing values aiming for a common starting ground. However, even the best intentions sometimes fail and careful preparations turn into dead ends. The text below describes an action-orientated gender research and development project, the measures taken and lastly, the problems this project faced. During the process the project was forcibly marginalised. Starting with the initial research application and its focus and based on action research methodology, we want to contribute to the scientific discourse on the relationship between aim and outcome in applied gender research.

Action research has a history of producing knowledge where scholars and practitioners work together in order to build “robust knowledge” (Freire 1973, Gunnarsson 2008). Dialogue and learning are key activities built on mutual respect (Hanson and Blake 2008) and acknowledges different competences in order to become successful.

³⁹ Personal experience from working with gender equality in academia.

In this respect, researchers are facilitators and collaborators aiming to enhance the process and, with the organisation, analyse the findings.

Skånes Livsmedelsakademi (SFIN) (defined as a strong innovation environment in southern Sweden focusing on the food industry) invited us, as gender researchers, to work on a gender research project and assist them in implementing a gender equality perspective in their everyday activities. The gender research project was funded by an extra grant from VINNOVA. SFIN is using “open innovation” and “foresights” as methods to add value to the individual company and organisation, as well as to the innovation system as a whole. When starting the project on applied gender research, we found the model of open innovation (Chesborough 2006) used by SFIN worked well with the epistemology of action research. In using this model the aim was to reach the innovation system as well as the network organisation itself.

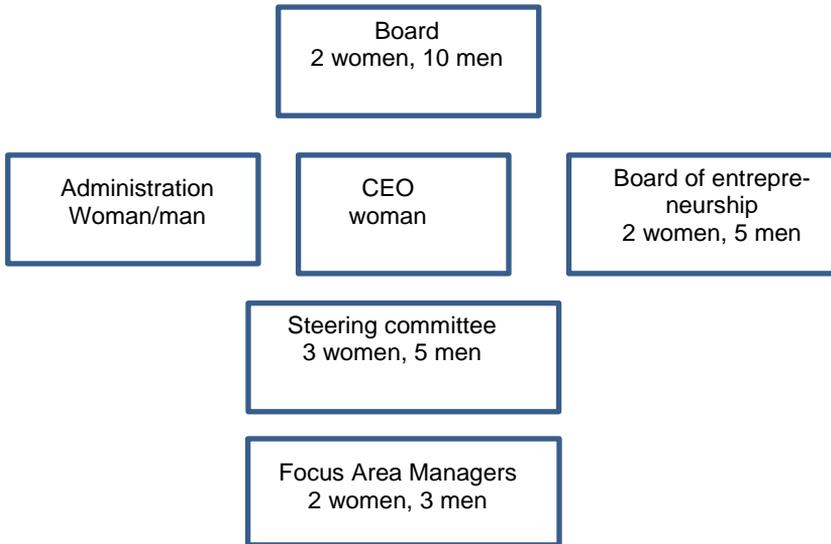
The ambition of implementing gender equality in strong research and innovation environments is based on the gender equality legislation and the objectives of Swedish gender equality policy, in which men and women are equally responsible for equal opportunities in all areas of life (Swedish Governmental report SOU 2005:66). This also includes the innovation policy and governmental resources distributed to Triple Helix environments like SFIN. When innovation environments are targeted and analysed, we can see that women are in a minority. However, during the project we became aware of the domination of women in graduate university courses in life science and food process. By organising the research project, SFIN posed the crucial question of “where are the women?” SFIN wanted us to answer it so they could find ways of improving women’s integration in the innovation system, especially in regard to their carrier options. During the project, this question has become an integral part of more general reflections on gender-discriminatory practices in industry, research and innovation.

In this paper we present and reflect on what we term *inward* and *outward learning processes* of identifying and creating infrastructure for sustainable gender equality in a network organisation. We also reflect on the prerequisites for this work. The aim of this treatise is to analyse and reflect on strategies and methods used in the project to support and develop a gender-sensitive innovation network. We address why gender equality has been seen as an issue to the innovation network; we describe the model we tried to follow and develop in creating gender-sensitive procedures and decision-making; finally, we reflect on what lessons can be drawn from our experiences.

Skåne Food Innovation Network⁴⁰ and the gender research team

SFIN was formed as a network organisation within the food industry cluster of the southern Swedish province of Skåne. It was initiated by the industry in 1994⁴¹, in response to the Sweden’s upcoming membership of the European Union. The network is formed according to the Triple Helix model (Etzkowitz 2000) with representatives from university, businesses and public bodies. The board of SFIN consists of twelve members and is chaired by the county governor; its representatives consist of two women and ten men. The strategic profile of SFIN is determined by a steering committee representing public bodies, businesses, the CEO, the focus area managers and administrators. The focus area managers are responsible for five focus areas: careers; meal improvement; innovative market places; ideas and innovation; foresight and communication.⁴²

Organisational principle of SFIN



The activities organised by SFIN are led by the focus area managers and people representing stakeholders or members of the network organisation. Industry and other organisations may choose to become partners or associates. Funded by the national VINNVÄXT programme in 2003, SFIN describes itself as an important hub in the

⁴⁰ These facts can be found on the Skåne Food Innovation Networks homepage: www.livsmedelsakademin.se

⁴¹ The following is based on the Skåne Food Innovation Networks homepage: www.livsmedelsakademin.se

⁴² The organisation is constantly in flux and these were the focus areas 20/10/10.

food business innovation system, built on strong networks⁴³ and to which new contacts are constantly being added, regionally, nationally and internationally.

SFIN hosts a variety of activities in which innovations and development are key instruments of growth: business-to-business activities; connecting business and research; establishing an interest in the food industry among young people; disseminating research and information on food businesses and innovations within the network and its stakeholder; regional food culture. SFIN has chosen an all-inclusive perspective on the innovation system, “from soil to fork”. Other activities organised by SFIN are a student advisory board, different kinds of networks and a trainee programme.

The research team design

The setup of the research team is based on VINNOVA’s preferred model for working with applied gender research in strong innovation environments (Fürst-Hörte 2009). This model is based on the idea of a project manager, in this case a senior male researcher, who is an insider of the innovation environment and thereby a guarantor for project acceptance. However, this person does not have to be involved in the research activities – the case in this project. The team consists of four women; two trained researchers and two process developers or intermediates with long experience of process and organisational development. Early in the project process it became evident that it would not benefit the project to have specific areas of responsibility according to the profession of the members in the gender team. Instead, we⁴⁴ have worked in close collaboration at every step of the research process.

Getting into the innovation system⁴⁵

Important issues were how to access the innovation system and how to create sustainable interventions on gender equality which supported SFIN as a forerunner of gender equality in the innovation system.⁴⁶ We needed to discover strategic channels to reach the innovation system without dealing with every single organisation. We believed that SFIN was the natural arena for building knowledge and planning interventions in the innovation system. SFIN’s focus area managers served as strategic gatekeepers whom we had to address in order to make any worthwhile change. The idea was to make gender awareness “leak” (Pettersson 2007) throughout the innovation system by working through the focus area managers and their activities and relationships with

⁴³ Skåne’s innovation capacity 2009.

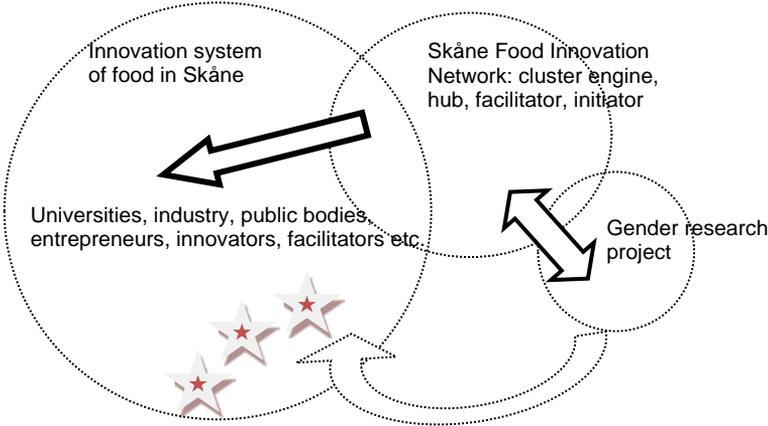
⁴⁴ When the pronouns “we” and “our” are used below, they refer exclusively to the four women in the gender team.

⁴⁵ By “innovation system” we refer to the common interest between industry, universities and public bodies, first and foremost on a regional level to support food industry and its development.

⁴⁶ A crucial methodological condition – which we don’t elaborate upon here – is that gender mainstreaming methods are developed and designed for organisations and companies. We soon found that adapting these practical methods to an innovation system or cluster is quite complicated. Suffice to say that identifying relevant nodes in a moving, open innovation process is one of the key problems.

stakeholders. The ambition was not to focus solely on SFIN or single companies, but many aspects of the innovation system and the food industry cluster engaged in activities supported by SFIN. By implementing gender equality practices and standards used in the everyday work by SFIN, we believed the innovation system would become more gender-sensitive. The model below is a conceptual sketch of the relationship of the gender research project to SFIN and the innovation system.

Conceptual model of how impact should be accomplished in the innovation system of food in Skåne by supporting activities for the innovation network and targeting actions within the innovation system



By supporting the focus area managers in addressing gender issues, the idea was to “feed” the innovation system with gender awareness. We assumed that the focus area managers were considered trustworthy discussion partners by organisations in the innovation system and had a mandate to start activities. Our intention was to transfer the skill to promote gender issues to the focus area managers in their organisation of work and in their contacts with stakeholders and members of SFIN. This work demanded close collaboration and participation between the gender research group and SFIN. However, somewhere during this initial phase of the project, these key actors became uneasy by the layout of the project. We were told by the project leader and focus area managers to focus on the innovation system and the partners and stakeholders of SFIN, not the network organisation itself. As representatives of SFIN, they were all sympathetic to gender equality, but needed research results on how to attract women to participate in innovation activities.

In our attempt to integrate the gender research project into the innovation network organisation, we invited the CEO and steering committee to workshops which combined learning activities with explorative discussions on gender equality. We wanted SFIN to take action, expressing their ambitions on where to start and where to go. However, when we got too close to the management of the network organisation, they withdrew and, referring to the innovation system, directed us to focus on that. Our idea of an interactive research plan, of action research methodology and dialogue and

knowledge-sharing activities in which the network organisation and gender research team could collaborate to develop gender-sensitive infrastructures, was thrown out. We were told instead to investigate outside SFIN.

The key SFIN actors declared that it was the absent women which the organisation wanted to attract and recruit to their activities. Gender equality thus became identified as a women issue (Pettersson and Saarinen 2004). While we (in the gender research team) were preoccupied trying to investigate and analyse the tense situation between us and the network organisation and to determine the gender constructions relevant to an understanding of the innovation system, the steering committee and CEO withdraw from the collaboration. Communication between the gender research team and the network organisation was delegated to the project manager of the gender research project. He declared that our focus on the managing network of SFIN was a waste of effort; instead sharp research results were demanded and our research efforts were to be directed at the lack of women in the food industry.

We started questioning what kind of symbols the innovation system comprised and to what extent the question of missing women in the innovation system, raised by the network organisation, was relevant according to strongly symbolic, gendered images of “innovation system”, “entrepreneur” and “development” as masculine areas of interest (Gunnarsson *et al* 2007, Lindberg 2010). However, the project leader declared the necessity of making some progress according to results on gender in the innovation system. To meet this demand for research findings, a minor investigation was designed and implemented in one organisation. Another minor project was organised as in interview investigation of women’s experiences and career ambitions.

Gender equality and gendered positions

Sweden is internationally regarded as progressive when it comes to gender equality. This does not necessarily correspond to everyday experiences, practices or distribution of resources. The gender equality policy’s overall goal “...is to ensure that women and men have the same power to shape society and their own lives.”⁴⁷ This indicates that women and men should have the same opportunities. According to government-funded projects such as the VINNVÄXT award, a principal financial contributor to SFIN, gender equality was a parameter for taking part in the competition. Our intention in collaborating with SFIN was to start learning processes on what gender equality is and how normative and cultural interpretations of gender position women and men differently, in society and in innovation systems. From these discussions, the aim was to rework policies and create organisational infrastructure for gender awareness and a gender-sensitive business.

⁴⁷ SOU 2005:66 *Makt att forma samhället och sitt eget liv. Slutbetänkande av jämställdhetspolitiska utredningen*. Stockholm. Fritzes offentliga publikationer.

Fluid and socially constructed gendered positions

To address gender issues, there has to be an understanding of how gender is constructed as social positions based on cultural and normative standpoints. We have positioned the project in the tradition of social constructivism, where gender is something done in everyday interactions (West and Zimmerman 1987). This implies that gender is a fluid category, dependent on time, place, sex, class and ethnicity, amongst other aspects (Connell 2002, Hirdman 2003). Innovation as a field of research and practice is related to technology as a masculine project (Cockburn 1993, Wajcman 2010, Hanson and Blake 2008, Lindberg 2007, Pettersson and Saarinen 2004). National programmes on innovation and development make women innovators invisible and non-present (Nyberg 2009), a connection further strengthened by government support for traditional, basic industries and new technological industries which particularly attract men (Lindberg 2010). According to Lindberg, gender becomes significant in constructing understandings of innovation environments. Gender researchers argue that the concept of innovation and people connected to innovations (such as entrepreneurs and innovators) needs to be challenged (Blake and Hanson 2005: 686). Pettersson (2007) compared the innovation policies of the Nordic countries and reached similar conclusions. She noted that gender is somewhat included in policy documents, but in analysing gendered representations in innovation policies, the non-appearance of the “other” results in a white, middle class, well-educated male as a norm:

“These representations of people as lacking can be interpreted as producing an image of who is seen as an asset and as able in the innovative society – well-resourced men” (Pettersson, p.61).

Research into entrepreneurship is similarly connected to masculinity (Pettersson 2002, Lindberg 2010, Holmquist and Sundin 2002, Nyberg 2009) where the cultural construct of gender positions women and men differently. Women have become subordinate or invisible in technological and innovation environments and as inventors, developers and entrepreneurs.

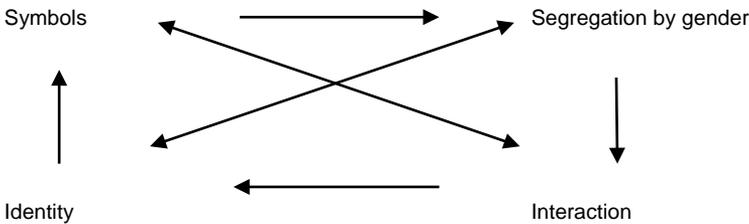
Doing gender in SFIN

Our interpretation of gender is a fluid and non-static concept, based on the varying contexts which position women and men differently according to power and influence (Acker 1990, West and Zimmerman 1987, Young 2000). Basic knowledge in gender research and training in how to depict gender inequality is needed in order to address gender structuring processes and thus initiate necessary questions on unequal opportunities within the innovation system. In this respect, Joan Acker’s model (Acker, 1990) of gendered processes in organisations (see Andersson and Amundsdotter in this volume for an in-depth analysis), became a useful tool for us.⁴⁸ The usefulness to us of

⁴⁸ We also used another practical tool for the analyses: the 4R method, investigating Representation, Resources, Realia and Results. <http://www.jamstall.nu>

Acker’s model was that it illustrates how gender is an ongoing and fluid construction process between individuals and how these relations are imbued with power and normative and discursive understandings of what is considered as appropriate and desired behaviours and appearances for the sex categories. This opens up an understanding of different expressions (Butler, 1999) of femininity and masculinity in various contexts and how presence and absence in innovation network organisations and/or innovation system might be interpreted. To understand innovation in the food industry, we used Acker’s model which jointly create gender: segregation by gender; spatial interaction between men and women; identity processes; symbols of the organisation.

Acker’s model, from Gunnarsson et al, 2007



The research field are all male gendered: innovation and leadership in the food industry and academia. Innovation is defined as a masculine area of interest and high-tech developments from biomedicine and biotechnology are used as examples are. Food industry is a traditional branch, with horizontal and vertical segregation of women and men (women on the production line, men on the board). Research is also gendered. Food process technologies and nutrition are gendered as female areas.

Business in the food stores and shops is also divided into different gender-coded spheres, with large units run by men and women found in small ones. Even small firms are stratified into male and female areas of interest, where men are using more high-tech and research-driven approaches compared to women, who are described as more lifestyle orientated and low-tech users. The effect is that large companies are superior to small ones and high-tech entrepreneurs are of more interest than low-tech. Thus the basis on which to attract participants for innovation and development becomes reduced and gendered. The innovation network organisations’ experience of failing to attract women to participate in innovation activities may be explained based on the conditions when “doing” an adequate participant. Parts of the food industry are also gender-coded as female.

System-preserving or system-changing gender equality?

One question we had to deal with was implementation. How could we help establish lasting gender equality changes in the everyday practice of SFIN? We have viewed this issue as a question of qualitative changes, which address norms and values. Much gender equality work focuses on numbers and the gender distribution in horizontal and vertical aspects of organisations. Wittbom (2009) pinpoints the risk of measuring gen-

dered outcomes only, ending up in a “counting trap”. A qualitative understanding of gender equality has to be adopted in order to develop and reshape businesses, organisations and policy. Working with a qualitative perspective forces the analysis towards a system changing approach (Mark 2007). Mark differs between *system-preserving* and *system-changing* gender equality processes. The former accepts the organisation and addresses formal gender equality issues which are usually handled by the management of Human Resources (Fürst-Hörte 2009). A qualitative understanding of how to formulate gender equality goals in production processes or R&D has not been formulated in this approach.

A system-changing gender equality process strives to elaborate on the cultural norms and values of the gendered organisation. This, claims Mark, is a necessary approach if the goal is sustainable change. The kind of “cultural revolution” of which Mark speaks becomes threatening to both men and women in the workplace, as the basis of the organisation is questioned. Still, norms and values have to be contested in order to promote change within a business sector whose opinions on gender are described as traditional by its proponents. Acker’s model, where symbols integrate with identity based on work segregation and interaction may provide important input into a discussion of the food sector’s future.

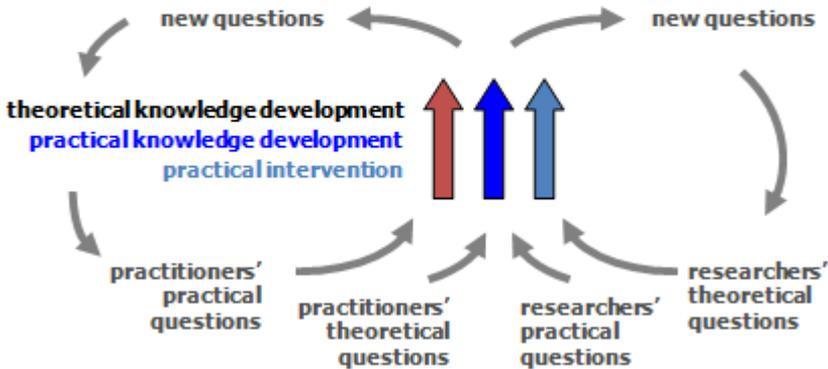
Doing and sharing knowledge for gender-sensitive innovation

Learning was a key issue in our research design. However, learning is a contextualised activity in which gendered subject positions create webs of power relationships. Action research, on the other hand, creates “sustainable knowledge”, acknowledging processes at different organisational levels where everyday working situations provide input to understanding the problem-formulating process. Thus, establishing arenas for sharing knowledge is necessary (Johannisson, Gunnarsson and Stjernberg 2008, Swärdh and Stridh 2008). Hansson (2003) identifies three different approaches from the respective positions of the researchers and practitioner in action research projects. The model below summarises the action research process, whilst considering each of the actors’ special interests and needs for results:

- Results which contribute to the production of theories and to accumulated academic knowledge (*general knowledge*).
- Development of theoretical knowledge and practical competence related to the organisation as an impact of the dialogue-based interaction between researcher and practitioner (*local knowledge*).
- Concrete, practical results from the development process in form of interventions addressed to the referred organisation (*practical intervention*).

The action research model, based on Hansson 2003

The action research process



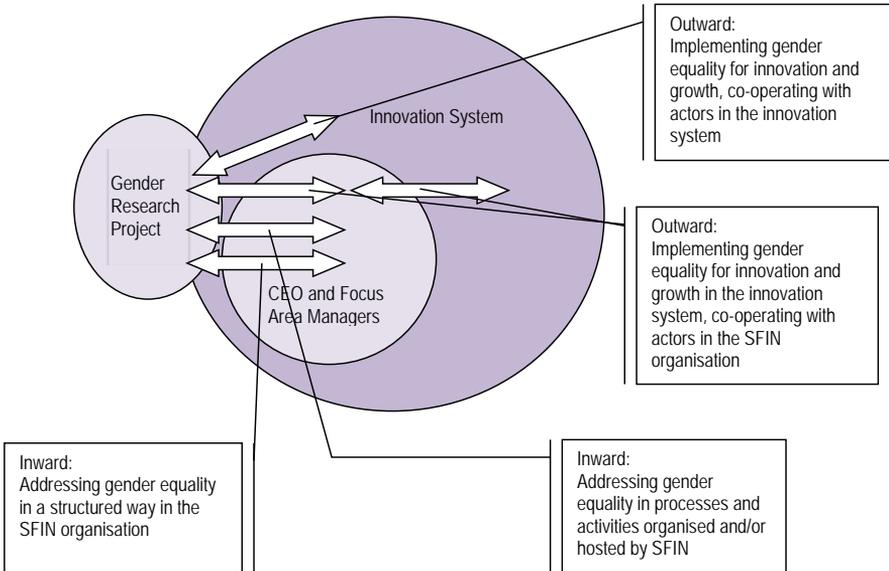
In the gender research project, the following conclusions can be drawn from Hansson's identified approaches:

- *Theoretical knowledge development* is about the construction of gender in the innovation system and distinguishing gendered selection processes and the impact of these outcomes.
- *Practical knowledge development* deals with knowledge transfer between the research project and the focus area managers as to how gender equality issues might be addressed and how gender equality would contribute to innovation and development.
- The *practical intervention* is about selected gender equality interventions and their outcomes.

Learning platforms

Early we identified the need to gather representatives from different parts of the innovation system in order to strengthen innovation potential by introducing gender awareness as an important aspect of development processes (Hansson, Stridh and Swärdh 2003). Södergren (2005). Inspired by the open innovation approach used by SFIN we termed these gatherings "learning platforms".

Indicating nodes for learning platforms, inward and outward processes and outcomes



The starting point for these platforms has been the current state of businesses and organisations, according to gender equality and gender awareness. The basic assumption was that organisations learn from each other by sharing knowledge and develop common interests in specific gender-related issues. In this respect, SFIN was an important element in promoting stakeholders to participate in these platforms.

Inward and outward activities favouring gender equality

The research project had two essentially different organisational structures to relate to at the same time: the specific network organisation and the general innovation system. As a result of the change in the project layout, we came to work simultaneously with both. In the research team, we have come to use the concepts, “inwarded and outwarded learning processes” in descriptions and reflections on the strategies and actions used in SFIN. The main argument for the inwarded processes was that dialogues needed to be arranged on what gender issues might bring forward if SFIN was to become aware of how to address the “what” and “how” questions regarding new activities with a gender perspective. The outward processes were about finding relevant issues on gender aspects for stakeholders in the innovation system.

The concepts of inward and outward learning processes are descriptions of how SFIN works in relation to the innovation system. The focus area managers are both receivers of and contributors to innovation initiatives.

The initiatives taken by stakeholders in the innovation system has been labelled as inward activities. These initiatives have been directed towards SFIN. Inward activities

have been aimed at the processes and development of SFINs internal structure. Outward activities are those initiated by the focus area managers and addressed to partners and associates in the innovation system. The outward activities have been characterized as; seminars, investigations and meetings are termed outward activities.

The template below shows activities the gender research team carried out. The gender research project has also become involved in what we term semi-spatial activities. These include: activities to which we have been invited as representatives of the gender equality research project; in liaison with SFIN or activities; invitations which were not core activities but related to SFIN and the gender research project.

Inward, outward and semi-spatial activities carried out in the gender equality project

Activities	Inward	Outward	“Semi-spatial”
Organisational	Workshop with the steering committee Establishing platforms for learning dialogues	Meetings with the stakeholders, collaborators and members of the SFIN network	Preparing trainings and education in gender studies and innovation
Seminars	Development dialogues with the steering committee members	Organising open seminars	Participating in seminars arranged by stakeholder organisations Participating in cross-disciplinary research proposals
Information	Reporting to the steering committee	Building a homepage with relevant material on gender mainstreaming in theory and practice Producing a catalogue of gender equality in the food business from the “soil to fork” perspective by using the 4R methodology Producing handouts and information brochures Providing manuals and checklists	

Besides the activities aiming at SFIN’s organisation, the gender research team fulfilled a set of sub-projects and also suggested a set of projects which never became realized. Our analysis as to why these activities were met with hesitation and finally set aside was that it required collaboration with the focus area managers, a too time-consuming way of working. Some of these activities also needed knowledge in gender studies and theoretical understanding in discriminatory practices. No agreement was reached between the gender research team and SFIN to organise and conduct a specific

course on gender and innovation, which could have benefitted the organisational learning.

Accomplished and non-accomplished activities in the gender research project

Sub-projects conducted	Proposed but not supported sub-projects
Interviewing members of the SFIN Board about food business, innovation and gender equality – access to the board by CEO and the project manager	Mapping and analysing grocery store’s network from a gender perspective – initiative from SFIN. No support
Analysing the SFIN newsletter from a gender perspective – access to data, public information	Mentorship programme focusing women middle managers in food industry – no backup
Analysing the SFIN homepage from a gender perspective – access to data, online and public	Gender and gender equality network for stakeholders of SFIN
Survey of the partner businesses need for gender equality development from a manager supply perspective – access to member companies by the project leader	Gender equality module in the trainee programme directed at young leaders in the food industry – open resistance, cancelled meetings, no access to the trainees
Investigating innovation procedures in business, research and working life – access to member businesses by the project manager and contacts through previous research contacts and networking	Analysing eye-tracking consumer behaviour with a gender perspective – no backup, no ownership of the research question at SFIN
Investigating women’s experiences of working life, food innovation and development – access to individuals through networking	Initiating innovative networks with participatory methods and gender perspective – no backup

The sub-projects carried through have three characteristics:

- the research group had independent control over the empirical field;
- the methods used were not action research-orientated;
- the collaboration with the focus area managers was not necessary, but appreciated.

As the overview-of sub-projects demonstrates, the more long-term projects which could have been integral parts of the strategic development of SFIN were not accomplished. The main argument for this is that the network organisation was not fully aware of its driving role in supporting the gender research project as a legitimate partner in the innovation system. The reason for this misunderstanding may lie in the fact that the gender research team underestimated the time needed for SFIN to formulate its own needs and thoughts about what a gender perspective really would contribute to and our assumption that the network organisation was more fully prepared to participate in an action research project than turned out to be the case. The anticipated interaction between us, the project leader and the network organisation failed, thereby forcing the project in a different direction.

Inward activities – the workshops as learning platforms

The inward learning platform was initially organised as workshops and two were carried out. The lay out of the workshops were to mix knowledge-based discussions on

gender research and gender equality perspectives with dialogue, enabling a common platform for further development of the gender research project. The first half-day workshop, in which all the key actors at SFIN participated, was considered important to create a trusting environment for further collaboration (Forsberg and Lindgren 2010, Hanson and Blake 2008).

The workshop was divided into two parts, the first of which was a discussion on the gender research team as a resource to SFIN and as a tool and facilitator to promote gender equality in the innovation system. The gender research team's contribution to innovation and development was formed by knowing how to start undertaking gender equality processes and working with gender theories. However, the focus area managers and the CEO had to be active partners in defining relevant issues, identifying important stakeholders, promoting the project, sharing experiences with the gender research team, describing everyday practices and formulating objectives SFIN wanted to achieve. When asked what the gender equality project was expected to bring to SFIN, the focus area managers stated that they were interested in international research comparisons. The SFIN representatives declared that the main focus had to be on the system, as they did not consider themselves important to the gender equality outcomes. We challenged this perspective and claimed that, as an initiator and facilitator of innovation within the innovation system, SFIN had the legitimacy to 'set the rule of the game'. Examples from interviews with the board and a preliminary analysis of the newsletter were given as examples of how a gender perspective might support internal processes as well as specific projects carried out in stakeholders' organisations.

The second workshop focused on the different methods available for mapping and investigating internal processes at SFIN and those with the external stakeholders. The Swedish Government Official Reports (2007:15) Handbook on Gender Mainstreaming Techniques was distributed and the participants were all given the book *Skeletons in the Closet* which described the results and reflections from a gender research project carried out in an innovation environment.⁴⁹ The intention of this workshop was to discuss the findings of the book and different gender equality methods relevant to SFIN. However, the discussions started on the subject of how to implement gender equality practice in member companies, and again the message from SFIN was that the internal processes was of no relevance to the gender research project. The focus on internal processes was declared by SFIN to be "misdirected" and "battering on open doors". The SFIN staff described themselves to be quite aware of the importance of gender equality and supporters of the initiative.

Development dialogues

After the second workshop, the gender research team used *development dialogues*, individual meetings where the focus area manager or the steering committee member

⁴⁹ Skelett i garderoben, Arbetslivsinstitutet 2006.

described their everyday activities in order to discover relevant gender issues or practices suitable for other focus areas of SFIN. Appointments were made with each member of the steering committee, focus area managers, CEO and the administration. One by one during a half day, they were asked to describe inward and outward activities. By asking questions on everyday practices and posing questions on alternative practices, several conversations ended up in ideas on how gender could be highlighted. During these dialogues the daily work contexts the members of the steering committee were in, emerged. By discussing the processes of each focus area, ideas on how to promote gender equality started to develop.

Outward activities

The SFIN slogan is that they are “*realising the unexpected*”. Spectacular events are deemed to promote the innovation network by creating visibility. However, there are also other activities taking place focusing on knowledge, innovation and development. During the project, we were involved in both these kinds of public settings. The first might be described as an event. By initiating events, intermediaries and researchers become deeply involved in the practice of making change (Johannisson, 2008) based on knowledge and research. SFIN described itself as successful at organising foresight symposia to attract the participation of important stakeholders. We also believed this might be a strategic model, since SFIN was used to organising these kinds of events. By combining different competencies and different networks and organising times and places for these, we believed synergy would happen. The gender research team identified what do to, how to do it and who to become involved with.

In our aim to create these foresight symposia on gender perspectives on innovation in the food business, the allocation of roles between us and SFIN was specific. It was our responsibility to create attractive events, but we needed support and legitimacy from SFIN. We controlled the first two options, including knowing what to do and how, by time-consuming lobbying. However, the latter one, persuading and motivating stakeholders in the innovation system to join these activities (crucial in establishing the intended learning platform) was out of our control. To promote and launch these kinds of events needs a thorough understanding of the “why”, “how” and “what” perspectives of working with gender equality. We regarded ourselves as explicit that SFIN, as owner of the project, was the legitimate and speaking partner in relationships with the members and stakeholders of the innovation system.

The other strand (outward activities) has focused on disseminating research on gender and innovation in open seminars. Topics for these seminars included Women and Innovation and Gender Perspectives on the Food Chain. The purpose of these seminars was to engage a broad range of actors in the field: entrepreneurs, business developers and regional planners. These activities have attracted different actors within related businesses which have not previously been identified by SFIN as stakeholders in the food innovation environment.

Alongside these kinds of knowledge-sharing activities, a list of suggested activities was presented to SFIN on how to address gender equality initiatives. However, the gender research team was encouraged to initiate research within the innovation system, which has deliberately positioned the project even closer to the margins of the initially proposed action research tradition. In the delimited research investigations conducted women working in food-related businesses and students participating in an advisory board representing different graduate programmes of interest to SFIN. We mapped the processes of innovation in order to identify how and why women tend to be absent from innovation environments and what needs to be addressed in order to support gender-aware processes in working life and products in the food process industry. Important lessons can be drawn from these research initiatives. This redirection has taken its focus from important issues such as analyses of the way government funding is spent on innovation and development in a sector where a lot of women are actually present.

Results from the project and some reflections on the chosen strategies

The project ended on some positive as well as some less successful results. Despite careful planning, the workshops did not work out as was planned. Instead, it created a situation where the project had to take a new direction and in which suspicions started to rise between the gender research team and the innovation network organisation. The project manager's double bind, to us in the research team and the network organisation, put him in a tense situation between piloting the project in a favoured direction and arguing for the benefits of it in relation to SFIN.

However, this tense situation gave results we could not have foreseen. These results are (to use Hansson's action research theory) examples of theoretical and practical knowledge developments and of practical intervention results.

Meeting all the members of SFIN in development dialogues brought new insights to us on how the work at SFIN was planned. In the dialogues, we have been able to discuss the importance of and need for gender equality in everyday practice, and have come to understand different aspects of influence and successful management. The difficulty of how to address gender equality has been brought to the fore. There is genuine interest in discussing the need for competence in the food business and related service production and how to develop this competence. The entrepreneurial council was redesigned from a competence perspective; PR-materials have gradually become more gender-equal; women's situation as middle managers in food industry has been acknowledged; a compulsory syllabus on gender mainstreaming and gender equality has been brought onto the agenda when evaluating the trainee programme organised by SFIN. Gender equality is also going to be a measurable quality indicator in the annual review of SFIN's performance. These are examples of *practical knowledge development*.

We have also reached agreements on the need to word invitations and questions of innovation and development in more gender-sensitive language and on how to word gender-sensitive innovation and development areas for R&D investments. New stakeholders have been identified and acknowledged in innovation seminars arranged by SFIN. We have been asked to contribute to developing gender equality in new research projects. Some of these upcoming discussions can be described as *examples of practical intervention*.

We have not, however, been able to discuss norms and values of the innovation system and what that might come up when identifying “interesting” projects and partners.⁵⁰ The project has given us insights on tenacious structures according to gender within academia, business and public bodies (Husu, 2001), which can be described as an *example of theoretical intervention*.

It can be concluded that the gender equality project has moved away from SFIN’s core activities towards a less clearly defined innovation system. In this process, the project leader’s role has also become less visible. The system preserving gender equality (Mark 2007), focusing on numbers and with its pitfalls of counting heads (Wittbom 2009) becomes the possible way of producing gender equality. The qualitative dimension, questioning norms and values aiming at system-changing gender equality is opposed by discrete methods of resistance such as silence (Pincus 2008).

Lessons from this project is that the ownership and responsibility of the project has to be made explicit when working in complex network environments. Once the honeymoon is over and hard work is needed and learning activities put strength into a slimmed network organisation, it becomes very hard to elicit the gendered relations that have been imbued with power, where gender equality and gender research face paradigmatic norms of normal science. Situations occurred in which misunderstandings, lack of confidence and entrenched positions forced the gender equality research project into a different direction, albeit one supported and accepted by the project leader.

Gender mainstreaming a network organisation and an innovation system – some concluding remarks

The aim of this article has been to describe the process we have been through when we tried to implement a gender equality infrastructure into a network organisation in order to promote gender sensitivity in the innovation system of the food business. The goal was to get the focus area managers and CEO of the strong innovation environment working with us in implementing gender in the innovation system. The main incentive

⁵⁰ There is one exception in discussing consequences of the gender-segregated labour market. In discussions with partners of SFIN, we have learned that women middle managers sometimes have a difficult work/life experience and need role models and networks. In dialogue with people working close to the network organisation we have also learned of discriminatory and exclusive practices, issues which must be brought up in order to create a more gender-sensitive and inclusive structure.

was the strong innovation environment as a major recipient of substantial public funding from a governmental agency which had asked for more gender-equal procedures in funded innovation environments. Our intention was to give SFIN's key actors insights and tools for analysing daily activities from a gender perspective and to develop practical tools together to address gender issues in proposals from external stakeholders and when planning innovation developments. We were convinced that the net impact of such a design would benefit more long-lasting changes than entering a single company or institution in the innovation system.

The project was planned with the network organisation and designed as an action research project (Amundsdotter 2010, Hansson 2003, Johannisson, Gunnarsson and Stjernberg 2008), where the intended work process would be carried out in collaboration with the people working at SFIN. The gender research team was therefore completely unprepared for the hardships and resistance brought forward. The project leader played a significant role as he represented both the innovation environment and the research group, bridging the two arenas. The gender research team was bewildered as the adversity became more and more evident, since the layout of the project had initially been accepted. Regardless of what we knew of qualitative action research in the first place and given that gender equality issues was on the agenda, the resistance toward the organisational changes struck hard, just as reported by Amundsdotter (2010) and Mark (2007). Amundsdotter (2009:28) referencing Herr and Andersson (2005), says that action researchers are unprepared for strikeback from the social system they are about to change. Changes are met with the very same resistance as the changes imply. The chasm between activities focusing on changes to the social setting of SFIN and activities' focusing the empirical field "out there" is striking in the sub-projects and actions that were accomplished and rejected. Counter-strategies from SFIN, such as cancelling meetings with the steering committee, the claimed lack of results from the project, arguing about the layout of the project at open seminars etc. are, in Pincus' terms, active and passive aspects of resistance. However, it would be unfair of us to emphasise only the resistance we experienced. With SFIN, we have started a process on what a gender perspective might contribute to. New areas of importance for supporting development and innovations have started to appear.

In a discussion with a focus area manager, he complained at having to become a gender equality 'expert' The analysis is that the action research design was not fully grasped by the members of SFIN. Self-critically, we can summarise that the gender research team was both naive and not sufficiently vocal about what an action research agenda meant for the network organisation itself. SFIN was not given enough time to understand the aims, focus and methods required. Instead of working with the focus area managers and the steering committee, the gender research team was encouraged to initiate learning activities and platforms for gender equality development, based on the voluntariness of companies, industries and organisations. This happens to be both a strategic and an important decision. According to the layout of the project, the objec-

tive was to have an impact on the innovation system level and establish contexts in which the project could have developed. With the push from SFIN towards a more marginalised position in relation to the network organisation, the gender research project came to identify stakeholders with an interest in the overall questions the gender research project addressed; questions which had not formerly been identified by SFIN. However, there is little comfort in the ongoing situation. Despite the overwhelming dominance of women in food industry and graduate programmes at universities, women as a social category are described as absent and not taking part in the innovation processes. To figure out how gender, technology and context are collaborating in the creation of networks of exclusion, changes towards a more gender-aware innovation system have to become reality. The decision to place the gender research project under the heading of Career Development and Human Resources instead of Innovation and Foresight on SFIN's website is an important indicator that more have to be done in the area of gender. In this project, we have started to pinpoint some of these components. Hanson and Blake (2005) sum it up: "Because gender is a marker not only of difference but also of inequality and because gender saturates male-female interactions, the majority of such interactions take place in settings where men have higher status and greater power." (p. 138).

Gender equality and gender research are areas which need proper skill and training (Woodward 2003). Woodward also describes the kind of radical transformation which, due to the need for learning and evaluation, should be led by external experts. This is why the layout of the project contained both inward learning activities, meant to support the network organisation and outward learning activities, where the gender issues was brought to the agenda in terms of sustainable and innovative business. This called for different methodologies because of the difference between working with a single unit or a diffuse system. The necessity of learning processes within the organisation when researchers and intermediates collaborate with business (Amundsdotter 2010, Gunnarson 2008, Hansson 2003) is that "otherwise, the departure of the expert will mean the departure of awareness." (Woodward 2003;73). Our ambition was to establish self-regulating procedures in order to implement and sustain gender equality after the end of the project. This task is a challenging one, because it questions traditional norms and values of the most "suited" and competent ones'. After participating in the conference 'Focus Innovation' Haraldson made the following reflection:

" When solving problems of global concern, the question to be asked is who is considered capable of doing it just as who are going to be participating of significant importance. These are direct questions about gender. The entrepreneurs participating at the conference were conventionally presented – real entrepreneurs who dares. Examples given of these entrepreneurs were all men. In between the streams, there were good discussions on these aspects of entrepreneurship and innovation as potential for success. The understanding of the entrepreneur and the inno-

vator was considered as rigid and stereotyped, but at the same time there were arguments for that the system demands delivery and forwarding of those with potentials. The question, then, is: what is the difference between businesses as usual and innovative processes?” (Haraldson 2011:12)⁵¹

Our conclusion from this project is that there is a need to develop working models of how to address and why to implement gender equality. The specific network we have been working with also describes itself as an important hub of the innovation system. This means the organisation is also an important contributor in the Triple Helix constellation for food business, as it is concerned with internal infrastructure on how gender is produced in everyday activities hosted by this innovation network organisation. We believe that two approaches are necessary to make an impact and some changes: The inward activities, which focus on inclusive and exclusive practices, are necessary in order to create sustainable change towards a modern, non-discriminatory business. The outward learning activities are needed in order to place gender issues on the innovation system agenda. One of the most important players in this game is the innovation network organisations, since these organisations collaborate with the universities, businesses and entrepreneurs, as well as disseminating research and information and having access to the media. Broadcasting this message however, demands the understanding of the business potentials in working *for* inclusiveness and *against* out-of-date, traditional norms according to gender. We believe we have started this process with SFIN but hope that others will follow and continue the work. The rough and bumpy road we have ridden has probably provided the gender research team (and SFIN) with more learning on gender and innovation than a smoother path might have done. By the end of this project we believe and sincerely hope that the seeds which have been sown for more inclusive and gender-equal processes administrated by this strong innovation environment will start to grow.⁵²

⁵¹ Our translation from the Swedish original. Om man ska lösa problem av globala mått så är frågan *vem* man avser att göra detta liksom *vilka* som ska få vara med, viktiga. Detta är direkt genusrelaterat. Speciellt med tanke på att de entreprenörer, innovatörer som belystes under konferensen var konventionella. *Riktiga* *entreprenörer som vågar*. De exempel som gavs var män. Mellan föredragen var diskussionerna mycket givande och dessa aspekter vad gäller entreprenören, entreprenörskap generellt liksom innovation blev mer självklara som viktiga för framgång. Man ansåg att bilden av entreprenören liksom innovatören är stel och stereotyp samtidigt som man i det befintliga systemet måste *”leverera”* och *”ta fram de som kan”*. Frågan är då vilken skillnaden är mellan *”business as usual”* och innovativa processer?

⁵² We would like to extend our compliments to the editors and the “organisation and methodology” subgroup and its participants for constructive comments on earlier drafts and encouraging support during the writing process.

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Why so little Resistance?

- An Action Research Project at a Technological Research Institute

Martha Blomqvist & Hans Frennberg

Abstract

This chapter discusses experiences from an action research project aiming at increased gender equality at a technological research institute. The project was funded by the Swedish Governmental Agency for Innovation Systems (VINNOVA) as part of a research programme on applied gender research for strong research and innovation milieus. The objective of this action research project was to increase gender awareness in FOI and change gender-related mindsets and actions which may restrain creativity and innovation in the organisation. The project met few obstacles and the change initiated by it was, on the whole, well received.

When change is implemented in work-places, resistance to change is a recurring subject. Changes in gender relations do, of necessity, have some bearing on power relations and can therefore be expected to meet more resistance than many other kinds of change. This has also been confirmed by many projects similar to ours. Some action researchers actually claim that unless a project meets resistance, it has not achieved anything. In the light of this and since we see no reason to downplay the actual achievements, it seems important for us to understand the lack of resistance met by our project. This chapter examines possible explanations for the absence of resistance, based on an analysis of literature on the issue and on experiences from our own and other change projects.

Keywords: action research, gender, organisation, resistance to change

The FGF project

In 2008, VINNOVA – the Swedish Governmental Agency for Innovation Systems – launched its programme Applied Gender Research for Strong Research and Innovation Milieus (TIGER), the purpose of which was to integrate knowledge gained from calls for proposals in R&D projects in areas supported by VINNOVA under other programmes. The FGF (Change and gender in FOCUS) project at FOI, the Swedish Defence Research Agency, was one of the projects funded by TIGER.

The research environment participating in the project is concentrated on the Swedish Institute Excellence Centre FOCUS, co-funded by VINNOVA, the Knowledge Foundation (KK-stiftelsen) and participating industry. FOCUS is hosted by the Information Systems Division of FOI, and the FGF project works mainly within this structure. Most of the employees in this project-based research organisation have university

degrees in engineering or natural sciences; hence most of them are of course men. The initiative of planning and launching the FGF project was taken by the Information Systems Division. A gender researcher and a consultant were attached to the project after the decision was made to apply for funding for the project. The Information Systems Division employs approximately 300 people, of whom 13.5% are women.

According to the call, the Tiger programme's longer-term aims are to promote sustainable growth in Sweden. The call is based on the logic that strengthened competitiveness and sustainable growth will be achieved while the numeric gender equality increases as innovation capability is no longer restrained by current normative thinking about sex/gender (Pettersson 2010:4). Not surprisingly, the Tiger programme-funded FGF project is concerned with organisational interests like enhanced organisational competence and the development of new applications. It aims to increase awareness and knowledge of gender-related patterns and initiate processes in an attempt to change gender-related mindsets, as well as actions which may restrain creativity and innovation within an organisation. Its objectives are thus twofold: the advancement of gender equality *and* the development of productivity and competitiveness of an organisation.

As stated in the initial project plan, expected outcomes of the FGF project are:

- Enhanced organisational competence, through increased gender awareness in thoughts and actions.
- Integration of new gender perspectives.
- To attract more female researchers and increase the numbers of women employed.
- Development of new application areas and research projects in the civilian sector.

The project was organised using a core group of employees, selected and invited to participate based on personal interest and commitment. They, the co-researchers, represent different parts of the organisation and also different functions, competence, experience and age. In the selection of co-researchers it was considered important to include persons who would facilitate dialogue and internal dissemination, such as management staff representing department managers as well as business managers and staff working with the official gender equality plan. The project was initiated by the *FOCUS Centre of Excellence Director*, who is also *Business Area Manager - Research Grants*, and part of the division's management team. The ratio of male and female co-researchers in the project was approximately equal. The co-researchers were trained in theoretical understandings of gender in an organisational context and were involved in the definition and implementation of the tasks in the project.

The work plan was organised into three major areas; *Organisational culture*, *Internal processes* and *Dissemination* representing different areas where the project studies gender and equality related processes and practices within the organisation and also initialise actions for change. To study the *Organisational culture*, several steps were

taken; the co-researchers of the project team were trained through seminars, suggested literature and discussions. This work was led by the gender researcher from Uppsala University. Through workshops and seminars, knowledge on gender issues and gender theory has increased; this is especially so amongst the members of the project team, but also among other managers and employees. Early in this process, the co-researchers were assigned the task of observing their environment and encouraged to reflect on this and discuss their observations within the project team. The gender researcher also conducted interviews with employees to further investigate the culture. At later stages in the project, the knowledge gained was used by the project team to work with questions such as *creative research environment* and *career opportunities*. Factors which influence career prospects were scrutinised and career paths were made more transparent. A number of metrics were also collected and discussed to visualise ratios of female and male employees in different perspectives such as formal positions and titles, wage structure, project management, publications etc. These metrics were used to discuss the present state and underlying causes, as well as suggestions to change the present situation.

Regarding the *Internal processes*, the metrics were also an important input. However, the actions taken in this context were more oriented towards discussions on how to increase knowledge and adapt procedures to achieve change. Early in the project, the Information Systems division launched a rather extensive recruitment campaign. The project team discussed how ads might ideally be formulated so as to also attract female researchers. These results were then communicated by the department managers in the project team when ads were discussed in the division management group. Changes in advertising and interviewing practises were implemented in order to avoid gender-biased recruitment. During the course of the project, the proportion of female employees increased from 11% to 13.5%.

Project management was identified as an important platform, and project managers often gain high visibility and appreciation both within the organisation and with customers. Metrics showed female researchers to be under-represented, especially amongst project managers leading large projects. While there may be several valid reasons for the current situation, the daily training of new project managers and redundancy of customer contacts would benefit from a change in how project managers are viewed and appointed. Accordingly, it was made compulsory for all larger projects to have an assistant project manager. The implementation makes it possible for more employees to develop skills needed for project management. Furthermore, the wage structure was surveyed and the project had a dialogue with the managers responsible for wage-setting.

The project team gave input to the gender equality plan, making the plan more far-reaching and the responsibility of its goals explicit. The possibility of allowing knowledge and results acquired during the project to influence the equality plan was important in reaching a long-term implementation of the results.

Internal and external communication is of course a vital, integral part of all research projects. Results have continuously been disseminated in seminars for management and all employees. The co-researchers have regularly presented the project at department meetings.

The resistance to change concept

What is resistance to organisational change? This concept is certainly not easily defined and the meaning of it is rarely discussed. Ford and Ford (2009:102) write;

Managers have many terms to describe resistance: pushback, not buying in, criticism, foot-dragging, and so on. And they may perceive as resistance a broad spectrum of behaviors they don't like – from an innocent question to a roll of the eyes to overt sabotage.

Moreover, whether something constitutes resistance is a subjective matter, on both sides.

For Kurt Lewin (1952), the father of action research and credited with the notion of resistance to organisational change, resistance was an interactive systemic phenomenon. He defined it by using a metaphor from physics (Piderit, 2000: 785). The first known publication using “resistance to change” in its title and referring to change in organisations was “Overcoming Resistance to Change”, by Coch and French (1948). The research reported on in their article is about employee participation and the unsurprisingly the conclusion is that groups which were allowed to participate in the design of the changes gave less resistance than those which were not (Dent and Goldberg, 1999: 31). In the decades to come, ‘overcoming’, ‘dealing with’ or ‘preventing’ was as a standard connected to the phrase resistance to change. Resistance was understood as a psychological phenomena, and the manager’s or supervisor’s task was somehow to overcome it (ibid: 34).

The concept of resistance to change has also become a standard part of management vocabulary. Many authors of management textbooks view resistance to change as a given and do not define it (ibid: 27). Dent and Goldberg’s review of five of these books published 1989 – 1993 shows that resistance to change is treated as a psychological concept, sited within the individual. The most commonly mentioned causes of resistance to change, each mentioned in four of the textbooks, are Misunderstanding, Emotional side effects, Personality conflicts, Threat to job status/security and Work group breakup (ibid: 28). The most often mentioned strategies for overcoming resistance in the same textbooks are: Participation, Negotiation and Manipulation, each mentioned in all five books, and Education, Facilitation and Coercion, mentioned in four of the books.

Though current research on resistance to change more often understands it as a systemic concept, the contents of the textbooks will most probably delay a shift in understandings of the phenomenon. Also, research still contributes to the understanding of resistance to change as an individual feature. More recently, Shaul Oreg (2003) devel-

oped the Resistance to Change Scale to measure individuals' dispositional inclination to resist changes. A four-facet structure to the disposition was validated: a) routine seeking, b) emotional reaction to change, c) short-term focus, and d) cognitive rigidity (ibid: 690). In a similar fashion, employees in Sweden who don't want to be part of change in their workplace are often called 'stop-blocks', which gives the impression that these employees are prone to oppose any change. Though individuals may find it more or less easy to adjust to new circumstances, we do not believe this kind of categorisation of employees to be very helpful in a change process. Taking an interest in what the opposition is about seems more worthwhile than defining those voicing it as inflexible and resistant.

Taking resistance seriously

The idea that all change is met with resistance seems to be growing outdated amongst organisational researchers. Even so, many change initiatives fail. According to Strebelt (1996), the success rates of change management in Fortune 1000 companies is less than 50 percent; according to Beer and Nohria (2000) as many as 70 percent of all change initiatives are unsuccessful. Since a good deal of these failures are most probably due to resistance – a study by Hammer reported by Charlotte Shelton (2000) estimates 60 percent to be directly attributable to resistance to change – there is reason to take it seriously. However, taking resistance seriously does not mean refining our methods in order to defeat it. Whereas ways of overcoming resistance to change was on the agenda some decades ago, many researchers now understand it as a resource; so taking it seriously means trying to understand it and learn from it;

Resistance should be taken seriously, by being listened to, understood and acted on; it is an occasion for the change agents to look again at the change project and review omission or errors and modify it in the light of feedback (Coghlan, 1993: 11)

Resistance can be understood as a threat or as a form of feedback. Traditionally, it has often been understood as a threat;

This [...] led to supervisors appropriating the pejorative term resistance and tagging subordinates with it. The implicit assumption is that subordinate resistance is always inappropriate (Dent and Goldberg, 1999:37).

There again, treating it as feedback can bring perspective to the change process and the proposed change. This may be a critical success factor for change (Ford and Ford, 2009: 368). Rather than developing strategies for overcoming resistance, change agents should develop their listening abilities. Sandy Kristin Piderit suggests that potentially positive intentions which may motivate negative responses to change are often overlooked in studies of resistance to change;

It is worth entertaining efforts to take those good intentions more seriously by downplaying the invalidating aspect of labeling responses to change “resistant” (Piderit, 2000: 783).

What is called resistance can thus be used to inform the change process and to better it. If we are to take seriously the phenomenon which is often called resistance to change, the best thing might even be to bury the concept altogether. This is what some researchers suggest (Dent and Goldberg, 1999; Piderit, 2000; Merron, 1993). The terms response, reaction, opinion, or feedback are all preferable to the label of resistance, if we want to use the information to improve the change process.

Holding up a mirror

Ford, Ford and D’Amelio outline a “change agent-centric view”, portraying change agents as “undeserving victims of the irrational and dysfunctional responses of change recipients” (2008: 362).

Resistance is viewed generally from the perspective of those promoting change and there is need to understand resistance from the defenders’ position (Coghlan 1993:11).

The predominant perspective on resistance is decidedly one sided, in favour of change agents and their sponsors (Ford & Ford, 2009: 362).

When looking for causes of resistance, change agents tend to assume that resistance exists independent of them and they focus only on change recipients (Ford, Ford and D’Amelio, 2008: 362f). However, the most obvious source of change is the change agents. Without them and the changes they intend implementing, there would be nothing to resist and no resisters to identify. Mostly however, change agents focus entirely on those resisting change, without taking themselves or the changes they are proposing into account. It seems important to hold up a mirror and ask what characterises change and change agents who cause resistance. Charlotte Shelton (2000:1) suggests;

Resistance is typically caused by the how, not by the what. In other words, people resist the way change is introduced, not the targeted outcomes.

Examples of less successful behaviour on the part of change agents are:

- Lack of communication
- Failing to legitimise change or misinterpreting its chances of success.
- Overselling the positive and underselling the negative expected outcomes.

(Ford, Ford and D’Amelio, 2008: 366f)

Employees expressing different views of the truth are not always resistant to change. When change agents (by focusing on what is not working) label them as resistant, this creates a gap between two groups in the workplace. Those in favour of the change see themselves as opposed to those who initially had reservations (Merron,

1993: 83). Change agents thereby provoke resistance which was not there in the first place.

Change agents, in assuming that resistance to change will occur may also create it. Planning for resistance and taking action to overcome it may lead to the very appearance of it and “change efforts that automatically expect resistance to change will likely be planned and implemented less than effectively” (Dent and Goldberg 1999:26). The expectations of the change agents are thus important. Going into a process of change expecting resistance means change agents will look for it and find it, thereby confirming its existence (Ford, Ford and D’Amelio, 2008: 364). Taking resistance for granted may thus function as a self-fulfilling prophecy.

It may also be tempting for change agents to use resistance as a scapegoat when their actions have failed; attributing the failure to employees and their behavior and blaming them for the failure of change efforts (Ford and Ford, 2009: 364; Piderit, 2000: 784).

Having reviewed understandings of resistance in the broader field of organisation theory, we now turn to the way it is considered in action research aimed at improving gender equality.

Action research to improve gender equality

None of the above-referenced research on resistance is concerned with gender issues. Should it not be obvious that change which challenges the gender order will meet more and differing kinds of resistance? Is not such change bound to meet resistance, no matter how the change is planned and implemented? Judging by the literature in the field, it is.

In a review of studies on equal opportunity and management, Pia Höök (2003) finds a recurring theme to be that of resistance. The same seems to apply to equal opportunity implementations in general.

Ingrid Pincus, in investigating the implementation of gender equality policy in Swedish municipalities, writes that “[p]ractically all existing research in the field of gender equality policy implementation points to men as actively or passively contributing to the meagre outcomes in realizing the ambitions and directives found in gender equality policy” (Pincus, 2002: 179). Her study shows that men in leadership posts are using both indirect methods (passivity, neglect and redistribution of resources from the gender equality workers) and direct ones (questioning the competence and work of the gender equality workers, and harassing them) to maintain the status quo. However, two men in her study, both municipal directors, stand out as exceptions. They supported the gender equality work, with the result that the gender equality policy took significant strides forward.

The fact that the actions of men in leadership have an impact on the prospects of implementing change in gender relations has been verified in several studies (Andersson, Amundsdotter and Svensson 2009; Larsson 2008; Sjöberg 2011; Wahl et al

2001). The importance of finding men high up in the organisational hierarchy who are prepared to join ranks with change agents or, better still, to become change agents, cannot be overemphasised.

Eva Amundsdotter (2009; 2010) identifies five expressions of resistance met by employees involved in change projects:

- Responses such as pronounced disinterest, lack of time and indifference were all very common. Some men also expressed aggression and even threats. Women involved in the change initiatives were made invisible and were ridiculed.
- Women also feared they would be called hysterical or even mad, which limited their freedom of action.
- Fear of losing one's position.
- Fear of meeting resistance if too many norms and ideas in the organisation were challenged.
- The habit and convenience of subordination.

Eva Amundsdotter (2009: 28) declares that the system (the organisation) may be expected to resist with energy roughly proportional to the radicalism of the planned change. One implication of this is that unless a change project meets resistance it has not achieved very much. This kind of understanding encourages looking for resistance, as finding it proves that the project is about to accomplish significant change.

In a report on gender and innovation VINNOVA stresses that a "strategy for dealing with resistance is important for any change process" (Danilda and Thorslund 2011: 82). Developing a strategy for as-yet non-existent resistance, is to expect it and to plan for it. This is exactly what Den and Goldberg (1999:26) Ford, Ford and D'Amelio (2008:364) believe will bring about resistance.

Studies into teaching on feminism or gender issues in academic settings have identified several expressions of resistance from students and other academic audiences (Wahl et al 2008). An oft-used typology of student resistance claims that "students who resist feminism reflect four postures concerning women's inequality in a patriarchal society: deny, discount, distance, and dismay" (Titus 2000:22 cited in Bondestam 2011). In an action research project on feminist pedagogy, Fredrik Bondestam analyses different teaching styles practised by university teachers – teaching students *what* to learn – and pre-school teachers –to engage in learning *with* the children (2011: 146). He sees a need for university teachers to start "resisting the discourse of resistance" by problematizing the learning conditions and the performance of teaching. A shift of focus from *what* is being taught to *how* it is taught seems to be a good start. This suggestion parallels research on resistance reviewed above under the heading Holding up a mirror.

Thus, Bondestam questions resistance to feminist teaching as inescapable. Still, the dominant discourse in the field of academic teaching on feminism, as in implementa-

tion of gender equality in organisations, (still) seems to be that of resistance being a constant companion.

Nevertheless, in an ongoing evaluation of the Tiger programme, the instances of resistance reported from the projects are less prominent. A majority of the change agents interviewed by the evaluator state that their project has so far met no resistance (Pettersson, 2010: 10)⁵³. Thus, not all action research projects dealing with gender issues identify resistance.

Understanding the lack of resistance in the FGF project

How can the lack of resistance to the FGF project be explained? The FGF project was very privileged in a number of respects and we believe this largely accounts for the lack of resistance.

We have earlier identified some advantages of the FGF project as compared to a similar, but not very successful, action research project reported on in the *Beyond Armchair Feminism* issue of *Organization*, 2000, Vol. 7(4) (Blomqvist and Frennberg, 2010). The researchers involved in this project offer a detailed and self-critical analysis of the problems their project faced and of their (sometimes failed) attempts to handle them (Meyerson and Kolb 2000; Coleman and Rippin 2000; Ely and Meyerson 2000). As stories of success are so much more common than those of failure, the generosity of these researchers in sharing their experiences is all the more important and their analysis is of great interest to any change-oriented project. The project in question, hereinafter referred to as the *BAF project*⁵⁴, was initiated by feminist researchers. One of them had developed a relationship with the founder and CEO of a large global retail and manufacturing company, who shared their goal of creating a gender-equal workplace and was willing to open her company to the researchers. The Ford Foundation funded the project jointly with the company. One of the company's manufacturing sites – an old-fashioned and highly regulated production facility, run along very traditional lines – was selected for concrete changes in work practices. This division employed some 300 people and was highly sex-segregated hierarchically. It is very likely that the average educational level at this factory was low.

We believe the very same advantages we earlier identified when comparing the two projects contribute to the lack of resistance in the FGF project. These are summarised in the table.

Initiation – ownership

The BAF project was initiated by outsiders, feminist researchers entering the organisation, whereas the FGF project was insider-initiated. The initiative for the latter was taken by the Information Systems Division, and a consultant and gender researcher

⁵³ However, the interviews were conducted at an early stage of the projects.

⁵⁴ As the articles discussing the project do not give it a name, we named it after the *Beyond Armchair Feminism* issue of *Organization* (2000:7) in which they are published.

were attached to the project only after the decision was made to apply for project funding. We believe this is crucial for the legitimacy of a change project. It is also obvious to an external observer (MB, who has conducted interviews at the workplace) that the FGF project enjoys a high degree of legitimacy at the workplace, not only among those actively involved in it.

Internal collaborators – co-researchers

In the BAF project, the internal collaborators for the researchers were assigned by the CEO. Participation of the team members, or co-researchers, in the FGF project was entirely voluntary; they were hand-picked on the basis of expected interest in the issue and were *invited* by the project management to work in the action research project. The group consisted of 13 people, about as many women as men, middle managers as well as researchers, project managers and administrators, representing different parts and functions of the organisation. The educational level of the co-researchers (and of the organisation in general) was very high. The Head of Department was part of the project's reference group and was thus involved, though not very actively. The group of co-researchers was very stable over the years the project lasted. Most of the co-researchers were highly committed to the project and felt a responsibility for its outcomes. We believe this was a consequence of them being assigned, not by top management, but because they were interested in the issue.

As Joan Acker writes when commenting on the BAF project;

Collaboration implies voluntary participation, but, when collaborators are assigned to participate by their superiors [...] such participation is somewhat less than voluntary (Acker, 2000:626).

In the FGF project, the participation of co-researchers was genuinely voluntary.

Introduction of collaborators

Researchers in the BAF project immediately faced the problem of translating gender theory into practice (Meyerson and Kolb, 2000). The introduction of the team members to gender issues in the FGF project was very easy. At an early stage, the gender researcher⁵⁵ in the FGF project gave talks to the co-researchers on gender theory (e.g. on women versus gender) and led the discussions afterwards. We thereby avoided a focus on women, which made it easy to follow up with seminars and discussions on men and masculinities and thereby develop the understanding of gender. Most of the co-researchers were researchers, albeit in physics and the natural sciences, and used to reading scientific texts. This fact also made it possible to draw in texts from a very different field like gender research and such articles were read and discussed during the project. Though there are definitely differences between these disciplines, there are also important similarities. What the disciplines have in common is a critical and prob-

⁵⁵ Kristina Eriksson was the gender researcher when the project took off and worked with it the first year.

lematizing approach, to the effect that questions about why and how are frequently asked. Such an explorative attitude has a host of benefits in the context of a change project. One such benefit was a willingness to carefully map the organisation and the processes taking place within it, in order to gain an understanding of the current situation before taking action. Another was a readiness to challenge established truths and scrutinise fundamental aspects of the organisation such as its values, language, practices, and norms. Based on the theoretical knowledge thus obtained, the co-researchers function as gender researchers, making observations on gendered practices and masculinity performances in their own workplace and identifying and investigating points and processes deemed to be of relevance to the gendering of the work organisation and therefore calling for change.

Time for research

Early on, the internal collaborators of the BAF researchers kept asking for outcomes and deliverables, but the researchers could not furnish them with anything concrete (Meyerson and Kolb, 2000). The very same problems in regard to requests for outcomes are also reported from a Swedish interaction research project (Gunnarsson and Westberg, 2008). In the FGF project the co-researchers working in a research organisation are well aware that research is time-consuming, that many answers are not known beforehand and that researchers and research seldom deliver quick fixes. The co-researchers took responsibility for an ongoing identification of goals and targets for change and gave the change process the time it needs.

The table summarises those differences between the BAF project and the FGF project which we deem relevant to the different outcomes of the projects.

Comparison of the BAF project and FGF project

	BAF	FGF
Initiation – Ownership	Outsiders, feminist researchers	Insiders. Gender researcher and consultant attached later
Internal collaborators – Co-researchers	Assigned by the CEO	Invited by the project management
Introduction of collaborators into gender theory	Problems translating theory into practice	No problems. Seminars on gender theory. Reading and discussing research articles
Time for research	Quick outcomes expected	Change given the time it needs

We will now turn to other factors, which we believe explain the lack of resistance met by the FGF project.

Equality

In action research, the participants aim to achieve equality in relationships. Hence, this kind of research often requires a gap to be bridged between the action researcher and the employees, and a raising of the status of participating employees (Berge and Ve,

2000). This was not the case in the FGF project. If a status gap existed, it was definitely not one that favoured the gender researcher. In this organisational setting, as in many other societal contexts, natural and technological sciences enjoy a higher status than does gender research.

Powering the core group

Equal opportunity work is often managed by employees who are not in positions of power in the organisation. This was not the case in the FGF project. Its core group comprised two out of five department managers, one out of three business managers, and the divisional director was part of the project reference group. The FGF project thus enjoyed support by people in power positions. This also has consequences for the organisational skills and insights of the group. Several of the change agents knew how to manage change and (perhaps above all) how not to proceed if they wanted to avoid running into a brick wall.

Not revolutionary

Naturally, change that is ground breaking or revolutionary is more challenging than change that is not. In some senses, all change affecting gender relations is revolutionary, but more or less so. Admittedly, the change proposed by the FGF project was more of evolutionary in nature; for example, we were not proposing quotas and we knew very well that if we had, this would have raised serious resistance in a research organisation which honoured the idea of meritocracy.

However, the changes implemented were definitely significant; they meant that a gender perspective was integrated into the policies, procedures, and practises of the organisation. The FGF project did not target a specific group, but the whole organisation and the perspective was a long-term and continuous one. According to an analytical model designed by Etta Olgiati and Gillian Shapiro (2002), these characteristics of a change project increase the chance that the outcomes will be sustainable.

Not being too sensitive

Being ready to define certain behaviour as resistance is not uncommon when change agents are interpreting employees' reactions. In retrospect, when we started to question the absence of resistance to the change we were advocating, we managed to identify some events which could have been defined as resistance had we been more sensitive to the responses to the project. For example, it took some time before the HR function handed over salary data to us and there was also a delay before the gender equality plan was signed by the management. Furthermore, at a seminar on *gender and organisational change* open to all employees, questions were raised regarding evidence for the links between gender equality and productivity. At the time, we never thought of these incidences as resistance and are glad now that we did not. The salary data was eventually delivered and the equal opportunity plan was signed. The reason for the postponement of the latter was that the manager signing the plan had realised it was

quite far-reaching and therefore needed time to think through the consequences. This means that the approval was well-informed and hopefully showed more commitment to the contents of the plan than a quick but less well thought-out acceptance would have done. When the link between productivity and gender equality was questioned at the seminar, none of the gender experts present could give satisfactory answers to the employees raising the question. We therefore eventually reviewed oft-cited articles and studies which claim to show a correlation between equality and productivity. In general, the issue of finding usable metrics for these parameters is a difficult problem that is approached in different ways in different studies and the conclusion was that the evidence for a causal correlation between gender equality and productivity is weak in the studies examined (Blomqvist and Frennberg, 2010). This encouraged the FGF co-researcher group to stress the ethical aspects of equality more strongly in communicating the project; something which also was generally appreciated and accepted by the employees.

The ethical dimension

Most implementations of change at workplaces are aimed at improving organisational goals. So does the FGF project, but it also aims to improve gender equality and thus has a twofold agenda.

Since it is considered as highly politically incorrect in Sweden to resist gender equality, it is also politically incorrect to voice objections to change efforts aiming at gender equality. So, what happens in the case of possible resistance? Some of it may be silenced and some of it may be disguised or redirected into other forms of opposition. If this is the case, it makes sense for change agents to work to make resistance visible and bring it onto the agenda.

The ethical dimension of the change efforts also offers possibilities which are not present when taking, say, a perspective of organisational efficiency on change. Fair treatment is a valued organisational outcome and fairness can therefore be seen as a competitive advantage (Folger and Skarlicki 1999:43). According to Ford, Ford and D'Amelio (2008:365);

Research on organizational justice has shown that when people see themselves as being or having been treated fairly, they develop attitudes and behaviors associated with successful change.

Organisational justice thus seems to create a positive attitude towards change.

A Catalyst report (Prime and Moss-Racusin, 2009) shows a clear link between men's sense of fair play and their awareness of gender bias; "Men with a strong sense of fair play were more likely than those without this mindset to be aware of gender bias" (ibid: 8). These men identified the significant costs of gender bias to women, men and organisations. They were more likely to recognise that women were excluded in the workplace and to see this as a competitive disadvantage for the workplace (ibid: 9). Out of a number of characteristics (such as awareness of gender bias, sense of fair

play, defiance of masculine norms, job level, age functional background), a strong sense of fair play turned out to be the most significant predictor of whether or not men were actively supporting gender equality (ibid: 11). Prime and Moss-Racusin conclude;

Our analyses revealed that it was men's sense of fair play, not their awareness of gender bias that ultimately predicted whether they were visible to others as champions of gender equity in the workplace (ibid: 12).

The positive impact of solidarity on resistance was obvious in a change programme aiming at introduction of job enlargement, job rotation or team work. (Blomqvist, 1994; 2009). When men's work became integrated with women's more low status work which was definitely less attractive than the work the men were doing, men mostly resisted the change. However, in some workplaces men did not seriously oppose the change, but gave reasons of solidarity for their acceptance to enter women's jobs. Prior to the change in these latter workplaces, there was communication and contact between women and men and this seems to have developed sufficiently strong feelings of solidarity to make men accept poorer working conditions for the sake of their women colleagues.

Joan Acker writes;

Gender equity of necessity redistributes power and rewards. Thus it may undermine the efficiency and job satisfaction of those whose relative power and rewards decline. And those so affected will oppose changes that challenge their advantage, unless they are unusually altruistic (Acker 2000: 628).

We are not sure that unusual altruism is a necessary element if men are to accept change which is not primarily to their own advantage. Fair treatment, organisational justice, a sense of fair play and solidarity are all features and qualities which have positive connotations for most people; bringing them into play may facilitate efforts to change the gender relations.

Interviews in the workplace, conducted by the gender researcher (MB) as part of the FGF project show that far from all interviewees think that their organisation is characterised by fair treatment of employees. Most of the examples of organisational injustice refer to a previous reorganisation in which staff were made redundant; it was the managers' choice as to who was dismissed that was considered highly unfair. When talking about these events, the interviewees themselves expressed strong senses of fair play and feelings of solidarity with some of their colleagues who lost their jobs. Most probably change efforts aiming at gender equality are more easily accepted at a workplace where individual employees have strong feelings of justice. In workplaces where employees oppose change in gender relations, it may be pertinent to stress the aspects of fair play in the proposed change. As long as the ethical dimension is not

used to overpower the resistance by silencing it, we believe this may present a way forward for some change initiatives facing difficulties.

Concluding

Our literature review on resistance to change in an organisational context shows there to be a shift in understanding of the concept. Understood for many years as a psychological phenomenon, an inappropriate threat which managers and supervisors need to overcome or prevent when implementing change, resistance is now more commonly (at least among researchers) understood as a resource which can be acted upon and which should be taken seriously.

Taking resistance seriously means using it to inform the change process, not to overcome it at any price and regardless of means. In using what is often called resistance to change in order to better the change process, the best thing may be to bury the concept all together; the terms “response”, “reaction”, “opinion”, or “feedback” all seem preferable to the label “resistance” as they give clear associations with an input that might be useful.

Rather than looking for scapegoats when the change proposed develops in a less than satisfactory way, change agents need to look into their own behaviour and reactions. They themselves may be part of the reason for the failure; by taking resistance for granted and thereby creating it, by seeing themselves as opposed to those who have reservations and by communicating poorly, not legitimising the change they are proposing or overselling its positive outcomes.

We have identified a number of interconnected factors which favour our change project and which we believe largely explain why the project experienced little resistance. Some of them are attributable to the *characteristics of the organisation*. Most of the team members were high-educated researchers, albeit in physics and the natural sciences. This facilitated the introduction of them into gender issues and they have been able to take in and discuss texts from a very different field like gender research. As researchers, the team members and their colleagues also knew that research is time consuming and they did not expect quick fixes and outcomes known in advance. Instead, they took responsibility for an ongoing identification of goals and targets for change. Also, in contrast to many other action research projects there was no status gap which needed bridging between the gender researcher and the participants at the work place. Furthermore, many employees at the workplace seemed to have developed strong feelings of fairness. Although they did not always think that fairness and justice are what characterise the managerial levels of the organisation, we believe that the ethical aspect of gender equality facilitated the implementation of change in this workplace.

Some of the factors are based on *decisions taken at a very early stage* of the project. The project was initiated at the management level of the Information Systems Division, i.e. the workplace participating in the change. This gave legitimacy to the

project, even amongst employees not actively involved in it. Team members in the project – the co-researchers – were invited to take part by the project management. Their involvement was thus voluntary and ensured a high level of commitment to the project. The core group of the project included several employees who were in positions of power in the organisation. This contributed to high level of organisational knowledge in the group. These aspects of a project design, the way team members were recruited and the composition of the core group, are, once determined, irrevocable. We would therefore encourage anyone setting up an action research project to think these first steps through carefully. We deem them to have significant consequences for the outcome of a project.

Two of the factors identified are attributable to later stages of the change process, to content of action and to the attitudes of the change agents. The changes suggested and implemented by the FGF project were *evolutionary rather than revolutionary*. Had they been more radical they would most probably have met more resistance. The project team members were not over-sensitive and did not find it threatening when employees voiced opinions not in line with the change project; rather we took an interest in all kinds of responses and sought a *dialogue*. The analysis thus shows that the FGF project was very privileged, due to organisational characteristics beyond our control, but also due to careful planning and design of the project at an early stage and to the general approach of the project team.

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Public Servants as Agents for Change in Gender Mainstreaming – The Complexity of Practice

Anne-Charlott Callerstig

Abstract

This chapter describes and discusses actions taken to integrate a gender perspective (gender mainstreaming) within the Swedish government agency of VINNOVA. Despite the popularity of gender mainstreaming, its rapid spread and adoption both in Sweden and internationally, it is a largely contested concept. Theorists on gender mainstreaming suggest that the strategy may lead to co-optation with the dominant discourse in an organisation and thus no transformation of the current agenda taking place. Others have argued that it provides a possibility to change by addressing root causes. Previous studies of the implementation of the gender mainstreaming strategy have often been built on analyses on a theoretical or policy level. This chapter takes a different approach by examining the micro-practices developed by actors in public organisations when implementing gender mainstreaming strategies. This is done by examining the roles of both actors and agency. The chapter is based on the results of a case study of the work at VINNOVA; these results are initially described in the article based on the actors' own accounts of their work. The intriguing "story" of developments in the organisation is followed by a discussion of the micro-practices and strategies in use, based on notions of tempered radicalism (Meyerson and Scully 1995, Meyerson, 2001ab) and small-wins strategies (Weick 1984). The questions of co-optation and subversiveness are problematised through an examination of different strategies of resistance and negotiation (Swan and Fox 2010) used in and around the work. In this context, notions of actors and agency are seen as interlinked, bringing together political intervention and professional and personal positioning (Parsons and Priola 2012) in the practical equality work.

Keywords: gender mainstreaming, implementation, organisational change and learning, change agents

Introduction

This chapter describes and discusses actions taken to integrate a gender perspective within VINNOVA, a Swedish government agency with approximately 200 employees established in 2001. VINNOVA's main task is to promote knowledge-based or innovation-based economic growth which is also socially and ecologically sustainable. VINNOVA's particular area of responsibility is innovation linked to research and

development and its main task is funding needs-driven research, for which it has SEK 2 billion at its disposal annually. The main strategy for working with gender equality in VINNOVA is built on the notion of gender mainstreaming. Gender mainstreaming has been the core strategy for implementing the overarching political objectives for gender equality in Sweden since the mid-1990s and all government agencies are responsible for efforts to gender mainstream their work. The main components of the gender mainstreaming strategy are based on the idea that a gender perspective must be applied to all policy areas. This is because gender inequality and its roots are understood to be complex, multi-causal problems cutting across (all) policy areas and thus demanding cross-sector, multi-level attention to policymaking and implementation (Verloo 2005).

A gender perspective should, according to the gender mainstreaming strategy, be integrated into all steps of the policymaking process and become the responsibility of the actors normally involved in decision making. In order to meet the general requirements of gender mainstreaming, it is widely believed that knowledge and skills have to be distributed to both managers and staff. In addition to this, organisational processes guiding the “mainstream” work performed by the organisation have to be evaluated and new mechanisms for steering, monitoring and evaluation have often been introduced to meet the new gender requirements. Gender mainstreaming as such can be understood as an organisational change process. Expertise and resources are required in order to facilitate this change process. Despite the popularity of gender mainstreaming, its rapid spread and adoption both in Sweden and internationally, it is a largely contested concept. Theorists on gender mainstreaming suggest that the strategy may lead to co-optation with the dominant discourse in an organisation and thus no transformation of the current agenda; others have argued that it provides a possibility to change existing inequalities by addressing their root causes (Swan and Fox 2011). Still, a recent thesis shows that few studies have focused on the actual implementation of gender mainstreaming and little is yet known about the process (Mergaert 2012).

Departing from an understanding of policy implementation processes as organisational learning processes (Schofield 2004) and gender mainstreaming as an implementation process that entails organisational change (Callerstig et al 2011), the questions explored in this chapter relate to the overall question of how organisational processes and practices in public organisations which rely on, sustain and produce gendered outcomes can be changed. The preconditions and causes of change such as the impact of actions, change agents and institutional features (which may limit or enable change) are an important but as yet under-studied area (Hearn 2000, Linstead, Brewis and Linstead 2005, Benschop et al 2012). In the case study upon which the chapter draws, a central aim has been to better understand the change strategies developed by the organisational actors in order to implement the gender mainstreaming strategy of the Agency. Of special concern is the potential role of bureaucrats in public organisations to act as “agents for change” in organisational change processes; will they act in a way

that leads to co-option, or can they be agents of transformational change? This chapter describes and analyses the gender mainstreaming work in VINNOVA, departing from the question of what kind of strategies were developed by the actors involved and why, alongside a discussion of the potential outcomes.

Implementation of gender equality objectives in mainstream policy fields (such as, in the case studied, innovation and growth policy) is a complex process. In order to implement often ambiguous gender equality objectives, actors need to *learn* how to enact them in relation to specific and contextual tasks and in solutions to concrete problems in their everyday work (Callerstig 2011). This is not a once-for-all technical matter. Gender equality goals are often vague, rendering gender mainstreaming into open-ended processes where the outcome will be affected by the ongoing translation of gender equality into mainstream policy processes (Walby 2005, Eveline and Bacchi 2005, Bacchi and Eveline 2009). Strategies for implementing gender mainstreaming thus include an understanding of is the problem at hand (gender inequality) and what its solution consists of (gender equality and the path towards it) in a continuous process where new experiences must feed into the processes of policy re-design (Callerstig and Lindholm 2011). Strategies can be formal or informal and include personal vision and learning (Mintzberg 2000). Part of the general strategies for implementation include the way that actors responsible for implementation ensure general change prerequisites are put into place. For example: adequate resources, support from management, time and also the capability to relate to contextual factors such as the area of implementation (Schofield 2004). Part of the strategies also concerns change agents' attempts to "sell" new policy goals to other members of the organisation and, in so doing, create necessary support and engagement (Rouleau 2005).

Previous studies of implementing gender mainstreaming strategy have often been built on analyses on a theoretical or policy level. This chapter takes a different approach by examining the micro-practices developed by actors in public organisations when implementing gender mainstreaming strategies. This approach can provide new understandings of some of the difficulties related to the implementation of gender mainstreaming and the more general question of whether it can deliver the anticipated results. In other words, problematising the processes and outcomes the gender mainstreaming strategy from a close-to-practice perspective.

The chapter both addresses and problematises the role of actors and agency. The notions of actors and agency are seen as interlinked in the way that Parsons and Priola indicated. They pointed out that equality practitioners' agency or activism at an institutional level often serves as a "bridge between political intervention and professional and personal positioning" (Parsons and Priola 2012 p.2). The chapter problematises the role of equality practitioners as agents for change based on the study of work at VINNOVA, which is described initially in the article departing from the actors' own accounts of the work. The intriguing "story" of the developments in the organisation is followed by a discussion of the micro-practices and strategies in use, based on the

notions of tempered radicalism (Meyerson and Scully 1995, Meyerson, 2001) and small-wins strategies (Weick 1984). The questions of co-optation and subversiveness are also problematised through an examination of different strategies of resistance and negotiation (Swan and Fox 2010) used in and around the work.

Gender equality work in VINNOVA

Like a number of Swedish governmental agencies, one of VINNOVA's specific tasks is to work to strengthen gender equality within the Agency's field of competence. Since its establishment in 2001, VINNOVA has initiated calls to support applied and needs-driven gender research and support for the integration of a gender perspective (gender mainstreaming) into innovation system and processes. The aim of these activities has been to strengthen and develop the full potential of innovations systems and processes and contribute to the fulfilment of the national gender equality objectives set by the government. Parallel to this, the Agency has worked to integrate a gender perspective internally in the organisation. Both the internal and external initiatives are part of VINNOVA's activities to implement the government's gender mainstreaming strategy.

The chapter draws on the results from an interactive research study of VINNOVA's equality work carried out in 2009-2010. This was conducted with the overall aim of studying strategies for sustainable gender mainstreaming processes (Lindholm et al 2011) in public sector organisations. Its specific focus was how VINNOVA's work could be developed in relation to policy development on a European level (mainly regarding the work on gender and innovation by the European Commission). The interactive research approach represents a more distanced relationship than traditional action research (Nielsen and Svensson ed. 2006). The researcher can be described as an "*outsider(s) in collaboration with insider(s)*" (Herr and Anderson 2005 p.31). One aim of the study was to create a common learning process built on an agreed problem or issue which needed more attention. For the case study, individual interviews were held with officers whose specific task it was to develop VINNOVA's work with a gender perspective in the organisation and with other officers involved in the Agency's European activities. The research followed a methodology using ideological dilemmas (Billig et al 1988) as a starting point for joint learning processes (Callerstig and Lindholm 2011). One recurring theme in the case study was the dilemma of creating change using either the "business case" or the social justice argument for the integration of a gender perspective into the Agency's activities.⁵⁶

Based on the interviews and working materials, three phases were identified for the work of integrating a gender perspective into the work of VINNOVA. These phases

⁵⁶ Thanks to Kristina Lindholm for valuable help in the interview process and reflections on the interactive research approach. Thanks also to my thoughtful and patient supervisors, Jeff Hearn and Susanne Andersson.

were later discussed with VINNOVA officers in a joint analysis seminar in the spring of 2011 and are described below. The descriptions of the work largely stem from interviews with two key actors, called “Agneta” and “Karin” in the chapter. Agneta was employed in the Agency from the start and had been working on gender mainstreaming at VINNOVA in parallel with her main duties at the Agency, up until the time of the case study. Karin started working with gender issues at the Agency a few years later and was also seconded from another agency for a few years.

Agneta’s formal position was that of a case officer in the Manufacturing and Working Life Division. Amongst many other things, her duties included working with various research calls, contact with the projects, arranging conferences and publications, directing the evaluation work, writing reports, planning future initiatives and collaborating with external stakeholders.

Karin’s position was as a case officer with the main task of conducting analyses in the Analysis and Evaluation Department (formerly the Department for Innovation Systems). After the reorganisation, she worked in the Manufacturing and Working Life Division. Part of her work as an analyst was to produce studies, often in collaboration with international partners.

Agneta had previous experience working with gender issues dating back to the 1970s. For example, she was involved in starting up a network for women scientists in Sweden. She also had previous experience of gender equality objectives in public research policy at other government agencies.

Karin was new to working with gender issues when she started to work with Agneta but developed skills and knowledge over time and briefly left the Agency to work as a gender expert in a regional county council. For Agneta the work at VINNOVA was the last step in a long public sector career in research-related policy, whilst Karin, at the time of the case study, was in the middle of her professional development and professional and academic advancement processes. Agneta was a trained scientist herself with personal experience of conducting research and working within academia. Karin had no such experience but was developing an interest in research involvement for the future.

The results of the case study have also been discussed with one of the researchers involved in developing the work at VINNOVA (later employed by the Agency) and a subsequently employed officer engaged to develop the gender perspective work in funds-driven research.

Agneta and Karin's story – *strategies for gender mainstreaming at VINNOVA* ⁵⁷

The phases in the strategic work for integrating gender into VINNOVA's core processes will be described and discussed in the following section. It consists of three chronologically divided phases: "Startup and building the fundamentals (2001-2005)", "Consolidation and expansion (2005-2009)" and "Re-orientation (2009-?)". However, in the analysis seminar, these phases were understood by the participants not as a rational implementing process in the traditional sense. Rather, they were considered to reflect an iterative, pragmatic, fluent and incremental process. This process was understood as being possible to construct in retrospect when the different actions, occurrences and outcomes were considered an interlinked pattern, but not in advance as a pre-constructed strategic plan and not as a rational and linear process.

The phases are summarised in the following table and will then be described in more detail.

Gender mainstreaming strategy at VINNOVA, summary of phases

Startup and building the fundamentals (2001-2005)	Naming the "problem with no name" Building on previous research Gendering the inside Creating legitimacy for the work A three-step plan; i.e. engage gender <i>and</i> mainstream researchers in new perspectives; use results from new research to develop the internal work and in so doing; increase pressure for change internally and externally
Consolidation and expansion (2005-2009)	Incrementalism and new alliances From a gender perspective <i>on</i> innovation to gender <i>and</i> innovation Increasing professionalisation of the work internally Increasing visibility and legitimacy Placing responsibility with the management
Re-orientation (2009 - ?)	New organisation, new co-workers Diversity on the agenda Europeanisation and increasing cooperation across boarders The next step in supporting gender and innovation? Old alliances dissolved and new ones take shape

Startup and building the fundamentals (2001-2005)

Naming the "problem with no name"

The gender equality work at the newly established VINNOVA agency started in 2001 when one of the newly recruited officers (called "Agneta" in this chapter) in the Manufacturing and Working Life Division and who had previous experience working with a gender equality perspective suggested developing the work of gender mainstreaming (GM) as two separate parts. The first would consist of a strategy for implementing

⁵⁷ Examples from the gender mainstreaming work are given in the chapter to exemplify the strategies used. These examples only represent a handful of all the activities carried out; for practical reasons, it was not possible to include them all.

gender mainstreaming in relation to the core objectives of the Agency, e. g. as specific measures for integrating a gender perspective into future research calls. The second was to develop the capacity to work with gender issues within the Agency itself. Agneta was given the mission to develop the strategy and started to investigate methods which could be used to integrate a gender perspective into the everyday activities of the Agency. One example was the search for gender disaggregated statistics concerning the present work and also previous research in relevant areas. It soon became clear that a gender perspective was not something which could easily be integrated and monitored – since a gender perspective, including operational goals for the work, was missing in the existing systems of the Agency and also in the related research areas. One example Agneta pointed out was the lack of gender-sensitive indicators; this made it hard to point out any direction for the gender mainstreaming work. Another was the lack of sex-disaggregated data which made analysis difficult. At the same time it was clear that a gender perspective was important, both in terms of a social justice perspective (e.g. the current situation for women and men in research) and in terms of the reaching general growth objectives (e.g. the existence of a gender perspective in relevant research areas). In consequence, the first actions taken meant establishing a basis for the work in the organisation. This included formulating how a gender perspective was relevant to the existing objectives and initiatives in the Agency, since a gender perspective was largely absent and currently not discussed. The responsibility for gender mainstreaming was placed with the Manufacturing and Working Life Division; this affected what kind of organisational resources could be drawn upon and what kind of objectives for the gender equality work could be established. According to Agneta, this was an advantage since a gender perspective could be linked to issues of working life and placed within her field of responsibility. However, it also meant that the gender work was not placed at one of the more influential departments in the Agency and had no specific budget to refer to. Consequently, the task of drafting a plan for the gender mainstreaming work was not accompanied by a mandate for Agneta to establish an organisation for the work. These decisions had to be taken and executed by the managers.

Building on previous research

A decision was made by Agneta early in the process to develop gender mainstreaming based on previous research on gender equality work, work-place organisations and more generally on gender research in relation to the main areas of the Agency's policy field. According to Agneta, this was because research evidence showing the relevance of gender and how it could be applied would assist in the adoption of a gender perspective in the various areas and activities of VINNOVA (e.g. in research grant programmes). In order to gather useful evidence, a smaller seminar was organised and researchers from the field of gender research within entrepreneurship, innovation and regional development were invited. Collecting evidence and good examples from the researchers turned out to be more difficult than anticipated. As Agneta put it,

“The gender researchers did not want to discuss either the gender equality work or economic growth issues”.

One reason might have been that many gender scholars in Sweden had previously avoided getting involved in gender equality politics because of the mistrust which might be created by mixing research with politics. The disinterest shown in economic growth issues might be explained by several factors such as lack of gender researchers within this particular area and also the feminist critique of neo-liberal politics. These have created a general scepticism towards engaging with the field. The somewhat disappointing results from the seminar led to the idea that the necessary knowledge had to be supported and developed within VINNOVA itself.

Gendering the inside

One of the conclusions after the seminar was that the particular knowledge needed in order to gender mainstream the Agency’s work could not easily be collected from outside the organisation. The strategy instead was to initiate a process from within. An action-orientated research project was initiated with gender researchers; its specific aim was to uncover gendered processes in the internal work of various areas (Gunnarsson et al 2007). Agneta recalls the developments:

“A major call with the main focus on models and methods for gender mainstreaming was planned to open in 2004. In the meantime it was important to create legitimacy for gender mainstreaming and raise competence about gender and equal opportunities within VINNOVA. My main idea was that R&D for gender mainstreaming financed by VINNOVA should also be used for VINNOVA’s internal work with gender mainstreaming.”

Aided by the research project, the mission was also to build capacity among the actors normally involved in the Agency’s work; they would be trained to integrate a gender perspective into their ordinary duties in the Agency. As part of their training, these employees would analyse their own organisation, assisted by members of the gender research team brought into the organisation. This was also considered by Agneta as a way to strengthen contacts with gender researchers and create interest in the Agency’s areas of work from a gender research perspective.

Agneta explains:

“In 2002 I contacted a researcher and asked her to draw up a competence-raising R&D project for VINNOVA’s staff. The plan was accepted by management but I ran into problems when it came into financing it. As an R&D project money should come from VINNOVA’s research budget but as a staff development project it had to be financed by the HR Department which, in turn, could not finance research. The problem was finally solved by calling the project a “pilot”. Pilots were started in order to test an idea about a call on a small scale and were freer when it

came to financing. The planned project was in fact a pilot because knowledge from this project was intended for use in drawing up the coming call. “

The project lasted for three years and resulted in internal reports and scientific publications, often showing the conflict between the mainstream values of the organisation and a gender perspective. One of the officers involved in the action research project (known as Karin in the chapter and one of the employee group being trained) became an important collaboration partner for Agneta in the work that followed. Karin had a position in another department where she could take measures to support the gender mainstreaming linked to gender and innovation research in ways that Agneta had not so far been able to do. Karin was also a highly respected person in the Agency who knew innovation policy thoroughly. According to the two officers, with Agneta's knowledge on gender issues, the collaboration turned out to be successful.

Creating legitimacy for the work

From the work so far it was clearly necessary to get more commitment from the managers of the Agency. Agneta explains how the pilot project clearly highlighted the problem:

“The next problem occurred when I tried to make the project VINNOVA's responsibility and get management engaged. As we could not agree on what “results” it would lead to, the responsibility for the project landed on my unit. On the other hand, management supported the fact that the project started with half a day of compulsory training in gender and equal opportunities for all of VINNOVA's staff. The importance of an active ownership within management became very clear in this project and this knowledge affected the formulation of future calls. It also led to a request for someone to have gender mainstreaming as a specific responsibility within management. This decision turned out to be very important for the call that was opened in 2008. “

Parallel to the strategy of building an organisation of gender-trained officers was the aim of increasing the legitimacy of mainstreaming gender into the Agency's work of funding needs-driven research. According to Agneta and Karin, VINNOVA as an agency was dominated by a scientific discourse originating in the natural sciences tradition and with a strong belief in traditional scientific methods. This was recognised early on as a potential problem but also a possible opportunity for change. The relevance of gender could be argued from a scientific standpoint by presenting solid evidence from research. At the same time, the traditional notion of objectivity and neutrality of science was raised as problematic from a gender perspective. One of the arguments was that earlier and more traditional research results often lacked validity because of their gender blindness. This turned out to be a balancing act between two different research traditions. Moreover, as Agneta put it, in order to succeed, “you

must be able to speak both languages". One aspect of this balancing act was the demand from a natural science perspective to present predictable results, preferably in figures which did not make much sense for qualitative projects, for example dealing with values. However, convincing evidence was important to find according to Agneta and Karin. One of the first research results from the internal pilot project was an analysis of the organisation's magazine, VINNOVA News, which was convincingly shown to demonstrate a clear gender bias. According to Agneta and Karin, this result was very important and thereafter used strategically to create legitimacy for the work with gender in the organisation. It became one of the first examples of an important strategy in the gender mainstreaming work; to produce clear and convincing evidence on how gender was relevant in relation to the Agency's activities. As Karin put it:

"Visible products create credibility in the organisation".

A three-step plan

According to Agneta and Karin, in order to achieve the aims of the gender mainstreaming work, a new and more integrated perspective on gender and innovation issues was necessary. To do this the strategy for integrating a gender perspective into the core activities of the Agency, i.e. gender mainstreaming, had grown over its initial years and now consisted of three parts: increasing knowledge among gender researchers and mainstream researchers respectively; feeding back the new knowledge into the organisation and developing the internal work based on the results; finally, in so doing, simultaneously increasing the pressure for change from both inside and outside.

The first period of the gender mainstreaming work was characterised by efforts to bring gender onto the Agency's agenda, highlight the gender gaps in the core activities and build the capacity to implement the gender mainstreaming strategy. An emerging research field of gender and innovation was slowly taking shape, based on the first steps to integrate a gender perspective into established fields.

Consolidation and expansion (2005-2009)

Incrementalism and new alliances

Marking the turn into the second phase of gender mainstreaming in VINNOVA are the actions taken to build strategically on experiences from the internal work to put gender onto the Agency's agenda, based on the results of the research initiatives. According to Agneta and Karin, the efforts for strategic use of earlier wins were made in order to gain new alliances in the organisations and, in so doing, creating new opportunities for change. One example was using results from gender analyses of internal processes in the Agency; another was using examples from external research to build arguments for new initiatives. An important part of the gender mainstreaming strategy at this point was, according to Agneta, "using the possibilities that are created in the organisation". With new allies came new possibilities which were used by the two officers in order to develop the gender mainstreaming work. The importance of the new alliances was exemplified in the support given by a senior manager who subsequently assisted by

proposing development of a strategy to launch specific gender-related research calls. Finding and connecting with those who were influential in the organisation was seen as necessary in the gender equality work by Agneta and Karin. Consequently, the results of the work become more visible and gained legitimacy in the organisation. The strategic work involved access to internal resources which could be used to support external research projects as described above. These were then used to develop the internal work, especially when it came to the continuing development of future research calls launched in direct response to the findings of previous initiatives. An important opportunity developed that Agneta and Karin were quick to use

Agneta explains:

“There was no second call planned for the gender mainstreaming area but in 2008 an opportunity suddenly arose. The budget at my unit had a surplus of several million kronor which could be spent during 2008 but the 2009 budget was already fully allocated. I suggested a two-step call with pilot studies during 2008 and full financing from 2009.”

An external researcher was also contracted to write an evaluation report based on the experiences of the first calls and entitled *The importance of a gender perspective. Innovation, sustainable growth and gender equality. An evaluation* [my translation] (Fürst Hörte 2009). Another publication (Lorentzi 2009) was produced showing concrete examples of how the results of needs-driven gender research could draw on experiences from a programme launched under the name “Gender Perspective on Innovation Systems and Gender Equality”.

From a gender perspective on innovation to gender and innovation

The innovation theme had become increasingly important in general national growth politics as well as in the Agency. According to Agneta and Karin, the reason it was important to keep up with general developments in the organisation was that the areas currently being prioritised were also those which garnered the most support from management and, consequently, economic resources. However, the area of gender and innovation was a research area with little previous national or international research. Agneta and Karin took the initiative upon themselves to write a joint paper which they then presented at a conference aimed at mapping the research terrain. The idea of launching a specific call on gender and innovation was also developed. According to Agneta, who argued on the basis of the previously conducted study *What Happened Next?* (Sundin and Göranson, 2006) [my translation], successful gender equality initiatives were those in which a gender perspective could be established as a prerequisite and argued for as an important means of reaching other objectives. At the same time, Agneta was arguing that “numbers count”; one example being statistics showing the lack of female researchers in many important innovation research areas coupled with explicit gender discrimination and making a fraud out of many innovation systems. Experience from the results of the first research calls which were now being summa-

rised led to the idea of developing, expanding and connecting the notions of gender and innovation in research. This idea was summarised by Karin in the discussion in the analysis seminar as a strategy of “*stretching innovation to include gender and gender to include innovation*”.

Agneta explains the developments:

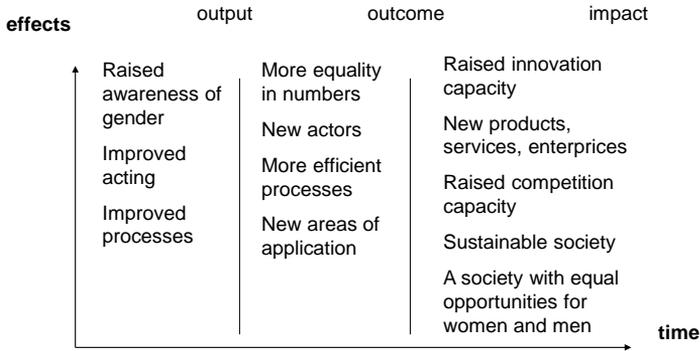
“At this time, VINNOVA put a lot of its efforts into further strengthening the so-called strong research and innovation (R&I) milieus that had long-term financing from VINNOVA. As the focus of the call I suggested was to strengthen these milieus by adding a gender perspective, the idea got very strong support from management. A Focus of Impact was compulsory for all calls and by creating a Focus of Impact for this call, following the same model as other calls, it was easier to show what “results” could be expected from this call. The theme of the call was still gender mainstreaming but for projects to get support they had to take place in one of these milieus. Also, the owner of the project had to be the head of the milieu and not the researcher, in accordance with findings of the project described above. By steering projects towards the R&I milieus, the focus of VINNOVA’s gender mainstreaming work came closer to the innovation concept and researchers within innovation. The aim was to make gender researchers better understand innovation and innovation researchers more familiar with a gender perspective.”

Increasing professionalisation of the work internally

An important development in this phase was the efforts to increase the professionalisation of VINNOVA’s internal work on gender mainstreaming. According to Agneta and Karin, the strategy at this point consisted of trying to mainstream the work with gender in the organisation by integrating a gender perspective into ordinary organisational activities such as monitoring, evaluations and specifications and into quality management. The evaluation described earlier can be seen as an example of this development. Another example is the use of the impact logic model (McLaughlin and Jordan 1999) to visualise the gender mainstreaming logic and its links with the core objectives of the organisation proposed by the officers (fig. 1). The use of Impact logic models was at this point a popular method in the Agency and launched as an effective management tool for use in the development of various initiatives. The trend towards using impact logic models was used by Agneta, who decided to develop an impact logic scheme for the gender calls. In so doing, she was able to show how gender mainstreaming could be applied in the same way as implementing other objectives in the organisation. An impact model explains the logic links or steps in a strategy or initiative, e.g. *what* measures (output) are believed to generate *what* outcomes and how this, in turn, is envisioned to be linked to the overall objectives (impact). The model developed is outlined below.

Gender mainstreaming impact logic model in VINNOVA

Focus on impact



Increasing visibility and legitimacy

Part of the gender mainstreaming strategy also included actions aimed at creating legitimacy internally in the organisation by disseminating the good results of the external work. This was thought to strengthen the internal importance afforded to the work. An example of this particular strategy was creating visibility outside the organisation through book publications, articles, conferences etc. According to Agneta and Karin, external collaboration was another way of applying external pressure to the work.

Placing responsibility with the management

In order to create sustainable gender mainstreaming work in the organisation, one deliberate strategy was to try involving the top-level management of the organisation more, eventually placing full responsibility for gender mainstreaming with them. One example was the initiative for creating a Gender Action Plan early on in the work. According to Agneta and Karin, placing responsibility with senior managers in the organisation was one of the most important factors in creating real change. This was because the rest of the organisation was very sensitive to the actions taken by the management, both formally and informally. By constantly trying to engage managers and be visible in the Agency, the hope was to create real engagement and accountability so that the progress made would depend less on Agneta and Karin’s personal involvement and have a sustainable platform in the future. It became possible to solve a lot of issues once senior managers got involved.

Agneta explains:

“As a member of management now had the responsibility for gender mainstreaming at VINNOVA, financing of the second part of the call

could be solved. R&I milieus were handled by officers at different units of the department where the one responsible for gender mainstreaming was head. Therefore it could be decided that approved projects should be handled by the officers handling the milieu and financed by those officers' units. More officers were thus involved in the GM work at VINNOVA. The programme (TIGER) encompassing the call, including seminars for all projects once or twice a year, ongoing research and other initiatives to strengthen the programme and its projects was still run by me and after my retirement by [Karin] “

The second phase of the gender mainstreaming work, described above, was characterised by consolidation and expansion strategies. Previous achievements were deliberately used to strengthen the legitimacy of the gender mainstreaming work, both internally and externally. New alliances were built inside the organisation and the internal work of gender mainstreaming in the organisation was increasingly professionalised; one example being the impact logic model developed.

Re-orientation (2009 - ?)

New organisation, new co-workers

The startup of the case study in 2009 was done during a turbulent time for the organisation. A newly created organisational structure for the whole Agency was being developed and put into place which meant that many of the old initiatives were placed under new organisational headings and new managers. A part from this, a new head of mission was appointed by the government and Agneta was leaving for retirement. A new officer was recruited, with responsibility for the work with a gender perspective in innovation research and for developing specific calls. Karin became responsible for the work of developing gender mainstreaming in the Agency after Agneta.

Diversity on the agenda

Another important shift occurred with impact on the future gender mainstreaming work. The new head of mission declared early on that the work on gender should be expanded to more broadly include diversity targets. According to Swedish law discrimination is illegal on the grounds of sex, ethnicity, sexual orientation, age, religious beliefs, disability and transgender identity. Active measures are obligatory on the grounds of gender, ethnicity and religious beliefs. There are also other regulations on the work on gender equality and diversity for public sector organisations; these affect the core processes of the public sector. The trend in Sweden is similar to many other European countries where there has been an increased move towards merging different forms of equality work (Krizsan, Skjeiee and Squires 2012). In VINNOVA this led to plans for development of a new equality strategy. In the interviews, the new importance placed on diversity was seen as both an opportunity to expand the work (so that it could involve an intersectional gender perspective) and a potential risk (if the gender work was going to lose resources and legitimacy due to the new direction).

Europeanisation and increasing cross-border cooperation

The impact of the increasing trend for Europeanising of VINNOVA's work was also considered an important aspect of Agneta and Karin's development of the future gender mainstreaming strategy in the Agency. Two studies were conducted, in line with the previous strategy of developing the gender mainstreaming work according to major developments in priority issues within the organisation. One was the case study which this chapter draws upon and the other was a publication in English which showed the developments in relation to gender and innovation published in the autumn of 2010 (Danilda and Granath Thorslund 2010) entitled *Innovation and Gender* with gender deliberately placed after innovation in order to emphasise the importance of mainstreaming gender into innovation policies and not treating it as something separate. Agneta and Karin were now also trying to find new collaboration partners in other European countries and were also increasingly interested in relevant developments in European politics, such as the work of the European Commission. The expanding European field of Gender in Science was seen as an important political area worthy of attention and a possible future means of increasing collaboration with external actors on a European level.

The next step in supporting gender and innovation?

One of the clearest results and a common thread in the gender mainstreaming work in VINNOVA was the development of the research field of gender and innovation. One important question raised in the interviews and discussions in the analysis seminar concerned what should happen after the latest gender call (TIGER). How much could the now internationally recognised Swedish field of gender and innovation research be expected to develop on its own? Or, should there be new and perhaps alternative calls to support new directions? Was there sufficient critical mass to uphold the research within the research community? What kind of future support was needed?

The discussions pointed to the fact that the time had come to assess the developments made and draw up new strategies for the future which might involve trying to reach beyond the gender research community to support the development within traditional innovation research. One conclusion from the interview respondents was that the actions taken by the Agency had led to many new "friends" among the gender research collective but still not enough among the mainstream innovation researchers, where additional efforts were needed.

Old alliances dissolve and new ones take shape

Many of the old alliances made with external collaboration partners are currently undergoing change, according to the interviews and discussions with the actors involved in VINNOVA's gender mainstreaming work. New ones might take shape in as yet unexplored areas, including increased involvement in Nordic and European collaborations. Other collaboration partners may also surface in the national arena. There was the recent development in which VINNOVA's gender work attracted attention on the

political level. For example, following the launch of the evaluation report entitled *His Excellence* (which showed a clear gender bias in Swedish research funding) former cabinet minister Maud Olofsson questioned the management about the work of VINNOVA. VINNOVA was put forward as “a good case” and this has created new visibility for the work and may prove an opportunity to move it forward. This interest was prompted by the national report *His Excellence* (Sandström et al 2010) [my translation] which was highly critical of the distribution of research funding from a gender perspective, but named VINNOVA as an exception.

The third phase in the gender mainstreaming work at VINNOVA is harder to analyse, partly due to the fact that future developments will show the impact of the latest ones and the kind of new strategies devised by the officers who continue VINNOVA’s gender mainstreaming work. It is clear from the interviews that developments so far have pushed the gender mainstreaming work into a situation where a rethink and a drafting of new strategies are necessary in order to continue developing the work. Otherwise, according to the interviews, there is a risk of the gender mainstreaming work being marginalised in the Agency.

The impact of actors on gender mainstreaming processes

How, then, can efforts to develop the gender mainstreaming work in VINNOVA be understood from an organisational change perspective? It is time to return to the questions asked in the introduction, regarding the potential role of civil servants in public organisations acting as “agents for change”, supporting organisational change processes necessary to implement gender mainstreaming. Will they act in a way that will lead to co-option or can they be agents of transformational change? These questions will be discussed in the next part of this chapter. Firstly though, some contextual and theoretical starting points will be outlined.

The role of *public servants* acting as change agents has been problematised to a lesser extent within traditional implementation research in general (Schofield 2004). The same applies to change agency in studies of equality initiatives (Tati and Özbilgin 2009), even though some studies do exist.

The impact of change agents on changing gendered and discriminatory processes and practices has been discussed in regard to the role of *employees in private companies*. There are change agents who operate alone with an agenda for change built on personal motives and experiences of unjust conditions and practices. For example, Colgan and Ledwitch’s “movers and shakers” (1996) who were women who acted on their own to create more equal working conditions, or Meyersons and Scully’s (1995) “tempered radicals” as described below. Change agency has also been discussed in relation to *bureaucrats*, i.e. the “femocrat” implementing change (Fransway et al 1989) and also bureaucrats inhibiting change (Ferguson 1984). Another type of change agent being discussed is the *equality worker*, a strategic change agent with a sanc-

tioned change agenda and a specific mission to change existing conditions to reach pre-set goals. Equality workers have often been categorized as either *equal opportunities officers* focusing on legal and democratic aspects or *diversity officers*, focusing more on the business argument for change (Tatli and Özbiligin 2009). The third type of change agent is the *participant*. These can be participants in a change initiative or employees affected by the proposed change; often portrayed as either “passive implementers or grim resisters” (Howard 2002). Still, they have been shown to be important in their role as executors of decisions such as the participating street-level bureaucrats in Callerstig’s (2011) study; their personal beliefs greatly affected the outcomes of the gender equality change initiative studied. Participants are also important in order to receive the necessary support for change and also the knowledge to translate gender equality goals into action (Callerstig and Lindholm 2011). A fourth group of change agents studied are the *managers*, whose actions or non-actions are crucial to gender equality change initiatives (as shown in numerous studies), including not only top management but the role of middle managers (Andersson et al 2009).

The work for gender equality described above is built on the strategy of gender mainstreaming. Recent years have seen a growing political interest in efforts by public sector organisations to implement the gender mainstreaming strategy in Sweden, one example being the two programmes financed by the Swedish government to support public authorities at national and local levels, JÄMI (2009-2010) and Hållbar Jämställdhet [Sustainable Equality] (2009-2013). Studies launched in relation to these programmes have shown the practical work to be complex, with many difficult-to-solve dilemmas in the everyday work of the public servants involved (Callerstig and Lindholm 2011). In many organisations there has only been formal adoption of gender equality objectives into equality policies, plans and appointments of responsibility. However, the actual larger scale transition into everyday core practices and processes has turned out much more difficult (Lindholm ed 2011). The influence of typically prevailing modern (and often gender-blind) management techniques may also serve to keep gender aspects invisible in an organisation, even in gender mainstreaming work. One of the central criticisms is that the strategy fails to deliver the anticipated results (Walby 2005, Squires 2005, 2007); this is explainable in some measure by the failure to change the gender biases that are common in many organisations (Benschop and Verloo 2006). Other explanations that have been proposed include what has been termed “discursive politics” in implementation processes (Lombardo et al 2009). One example is when the original meaning of gender equality shrinks or gets bent into new understandings and where the gender equality aims are lost or replaced by new ones, such as economic growth (Rönblom 2009).

Research has also indicated that gender mainstreaming has had an easier transit into policy areas where a gender equality perspective has had a previous history (areas such as employment and social policies). On the other hand, traditional “hard” policy areas (such as VINNOVA), which are often understood as unrelated to people and thus

gender-neutral, have had a harder time adopting the strategy (Hafner-Burton and Pollock 2009).

Previous studies have also shown that problems implementing gender mainstreaming can lead to a situation where gender advocates “sell” the gender mainstreaming strategy in new areas using the “business case” to support their arguments and hoping they can bring social justice perspectives on board as well. However, keeping a dual agenda of gender equality and business goals in the practical work might turn out to be difficult (Meyerson and Kolb 2000).

Another discussion in relation to the larger question of possible transformation of existing discourses and practices in organisations, is what happens when equality activism becomes professionalised and takes on board the popular, contemporary management rhetoric and tools of NPM (New Public Management). There is no common definition of the trends in public administration often summarised in the wider concept of NPM. In short, it refers to the shift in governance from rules and regulations to outcome performance, entrepreneurialism, market orientation and scientific management (Swan and Fox 2010). It has brought with it a culture of auditing (Swan and Fox 2010, Jary 2002) with monitoring, measuring and evaluation of equality such as gender impact assessments; a development in which new skills and competences are required from equality workers. These new equality work practices have sometimes been referred to as “the technicalisation of equality work” (Kothari 2005, Rönnblom 2011), in which the main focus of the work becomes the quest for “tools” such as; new models, guides, webpages, tools, checklists and good examples.

Discussions have also focused on potential outcomes of equality workers’ own engagement with professionalisation and managerialism processes. One commonly expressed concern is that equality work risks being co-opted into the dominant, “mainstream” organisational and professional discourses. It therefore loses its critical edge through engagement with these ongoing, de-politicising processes. Elaine Swan and Steve Fox (2010) describe how the discussion on diversity work can be divided into two main and interrelated areas: the first stemming from an ideological point of view and entailing discussions about the different understandings which the term diversity may contain; the second being the “politics of practice debate” (p. 571), which refers to discussions of resistance and co-option towards dominant discourses when engaging with professionalised diversity work. They argue that these debates have largely been built on understandings of diversity work as either social activism or HR practices, i. e. the notion of the “good” social justice versus the “bad” business case argument, or as critical social activism from the outside versus instrumental and uncritical HR practice from the inside. Furthermore, they argue that this binary division may not be very helpful in understanding the micro-practices which diversity workers use. One of the arguments being that there is no simple, generally applicable description of what counts as “political” or “critical” and that social activism may draw on many different arguments and ideologies, which may stem from completely different political stand-

points such as socialist or liberal accounts of the world. According to Swan and Fox, apart from the fact that activism may draw on different types of ideologies, it is also in reality often hard to tell when resistance ends and where co-option starts (or vice versa) in the strategies employed by equality practitioners. Another connected discussion with relevance for the examination of equality strategies is the tendency to understand organisational practitioners as either passive implementers or grim resisters in relation to equality policies. Strategies have thus often been devised to meet with these two “groups”, leaving little space for practitioners as change agents (Howard 2002).

Mainstream theories of the change agent’s role in organisational change have been criticised for assuming change actors to be rational, apolitical, disembodied, decontextualised and autonomous. Tatli and Özbilgin have suggested that an equality officer’s agency should instead be studied, with combined attention to individual, structural, and relational dynamics including the resource and constraint implications of situatedness, relationality, and practices of change agency (Tatli and Özbilgin 2009). Taking into account the broader context as suggested by Tatli and Özbilgin, a possible and perhaps more dynamic understanding of equality practitioners in forming equality strategies for change is the theory of tempered radicals.

Tempered radicals and strategies for change

The binary division between social and political activism from *outsiders* and the co-opted and instrumental methods of the *insiders* leaves little room for change agency. A different and more complex understanding of change from within is the theory of *tempered radicals* described by Meyerson and Scully (1995), and Meyerson (2001a, 2001b). Tempered radicals are employees who acknowledge unfair or unjust practices or conditions in their organisations and who want to change them but who at the same time are loyal and support the overall objectives of the organisation. Tempered radicals use small-win strategies; they seek out small opportunities for change, build alliances and secure support as they go along. They work to create change from the inside. They can be progressive forces at the same time as being constrained by the boundaries set by the organisation and by themselves (Meyerson 2001b). They want to change what they view as unjust and unequal conditions, but work with organisations and not against them (*ibid.*).

Drawing on three larger empirical studies of diversity work, Swan and Fox (2010) give examples of how equality workers use different strategies to resist current inequality regimes (Acker 2006) in an organisation and how they strive to develop new conditions. They discuss three different types of strategies or micro-practices; the first being what they have termed “discursive resistance” (Swan and Fox 2010 p. 577). This concerns equality workers’ reflexive use of language, where they deliberately chose how to frame an issue with this framing change according to situation. The equality workers studied were aware of the difficulties and risks of using different types of arguments, but at the same time they used the fears and risks as well as the positive connotations associated with different understandings of the concepts used. One ex-

ample was to use various understanding of concepts so that they would sometimes serve as carrots and sometimes as sticks.

The second type of strategy was when equality workers used their own status as “outsiders” in what Swan and Fox call “strategies of embodiment” (p.579). This entails drawing on identities as minority representatives and the tendency to count bodies in diversity work. The term strategies of embodiment means that diversity workers themselves embody the discourse of difference, often as part of diversity ideologies and use this as a mean of changing their organisations. By being different, they challenge the status quo of the organisation (ibid.).

The third type of strategy which Swan and Fox found was when the equality workers deliberately used technologies of organisational management and professionalisation to gain support for their work. This strategy includes using culturally masculinised NPM knowledge and techniques to gain status in the organisation. The equality workers also used the opportunities for new means of presenting, problematising, examining and solving issues at the same time, as they claimed they were aware of the limitations and risks associated with using these techniques. This has also been put forward in another study on equality work in research institutions, where “the rhetoric and practices of new managerialist equal opportunities has helped make visible the problem of ‘equality’” (Walsh 2002, p. 40, also Garforth and Kerr 2009). In certain circumstances, facts and figures can serve as stepping stones and open up sites of resistance (Swan and Fox 2010).

Agneta and Karin were not equality workers in the meaning that they had as their sole mission to work with equality objectives, nor were they “passive implementers” or tempered radicals operating in their organisation without specific objectives for gender and equality related tasks to rely on. The specific strategies in use will in the following sections be discussed from a perspective where elements from different positions as change agents have been influential. In order to explain the outcomes and strategies chosen by the officers in VINNOVA, it is also useful to reconsider the way strategies are usually thought of; often as an orderly and rational decision-making process where the prerequisites and objectives are considered and a strategic plan mapped out in advance. This did not appear to have been the case at VINNOVA. Instead the strategies developed in the work of integrating gender into VINNOVA’s activities display many features of what have been called a small-wins strategy (Weick 1984).

Incremental or small-wins strategies

Incremental change or small-wins strategies have been argued as a possible strategy towards (de)gendering organisations and a way of obtaining gender equality objectives (Charlesworth and Baird 2007, Meyerson 2001a, 2001b, Meyerson and Scully 1995, Weick 1984). One of the considered advantages of the strategy is the fact that changing organisations in a small-step fashion lowers resistance to change. Debra Meyerson suggests that the small-wins strategy is “a powerful way of chipping away the barriers

which hold women back, but without sparking off the kind of commotion that scares people into resistance” (Meyerson 2001a p.126). Small wins is a strategy built on incremental change, meaning small, concrete changes aimed at altering small and largely unnoticed biases deeply embedded in an organisation and whose importance or impact are hardly noticed until they are gone (ibid.). According to Meyerson, a small-wins strategy is useful when the more obvious and clearly discriminatory practices have been dealt with in an organisation and when “the problem with no name” remains, meaning work practices and cultural norms which often initially appear unbiased but which together form a “subtle pattern of systematic disadvantage” (Meyerson 2001a p.128). Other features of the small-win strategy are linked to psychological factors where small wins are believed to make large scale social problems easier to handle in terms of individual stress and anxiety levels. The theory also rests on the idea that the complexity of many social problems makes more radical solutions difficult since the causes of a problem and the consequences of its proposed solutions are both difficult to comprehend and control. The theory of small wins originated with the American psychologist Karl Weick after discussions on the role of social science in relation to how to understand and solve current, pressing social problems (1984). Weick argues that redefining the scale of social problems is important in order to create the capability and necessary psychological prerequisites at both individual and organisational levels. Small wins is “a concrete, complete, implemented outcome of moderate importance. By itself, one small win may seem unimportant. However, a series of wins in small but significant tasks, reveals a pattern which may attract allies, deter opponents, and lower resistance to subsequent proposals.” (Weick 1984 p. 43). According to Weick, the visibility of results are an important part of a small-win strategy, since it attracts new allies and this in turn makes new possibilities and actions possible. Small wins are not a strategy in the classical, logical implementation chain sense. Small wins can be gathered into a retrospective summary but are possessed of a fragmentary character driven by opportunism and dynamically changing situations. They “stir up settings” which makes them impossible to predict since “each subsequent attempt at another win occurs in a different context” (p.44). Much of the strategic actions taken consist of identifying, gathering, and labelling several small changes which are present but unnoticed and which could be labelled under a variety of different names. Weick also suggests that working in a small-win fashion fosters the reflection and learning necessary to solve complex social problems. Meyerson’s (2001b) studies of equality advocates in organisations who put their belief into action in order to change organisations from within (i.e. tempered radicals), often use small win strategies.

Discussion: Gender work in VINNOVA - co-optation or a subversive strategy?

The gender mainstreaming work at VINNOVA was characterised by different types of strategies with different aims and actions jointly forming a specific pattern in the chapter described as three different phases. One conclusion of the discussions in the analysis seminar (when the result from the case study was presented) was that the phases identified and their description appeared correct, however at the same time, they were the result of a retrospective reconstruction. Even though the results might initially appear like a neat and orderly rational strategy, the specific paths taken and the actions chosen were never part of an orderly envisioned or pre-planned strategy. Instead the strategy had grown out of the results of the preceding actions and depended on the support gained from different actors in the organisation. The actions taken were understood as building on each other, the former showing what the next step might be, guided to some extent by an overall objective or vision for the future but primarily by what were regarded as undesirable or current negative conditions in need of change. Another conclusion of the analysis seminar was that the process was iterative in that it was not a linear or chronological process, but rather that the themes of the different phases were seen as circular and recurring. The interviews also showed that the choices made were very much guided by pragmatism, whereas a specific wording used could be changed if, for example, it was deemed to strengthen support for the work in the organisation. In VINNOVA's case, many of the characteristics of small wins were visible. Another characteristic of the work is the strategies of tempered radicals (Scully and Meyerson 1995, Meyerson, 2001) and the specific strategies and actions of practitioners of equality relative to discursive and technicalised forms of resistance (Swan and Fox 2010). Some of findings in this regard will be discussed below.

A strategy of small but visible wins

The small-win strategy was visible in many ways in the gender mainstreaming work in VINNOVA. One example was what was called the visibility strategy; especially what was emphasised by the participants in the joint analysis seminar to produce “*solid products*”, with the analyses of VINNOVA-NYTT, an internally produced news magazine, was seen as an example. Building initiatives on the results of the previous work to create a sense of continuity was also considered important. Moreover, the aim of finding new alliances within the organisation often used connections made possible by other newly gained allies. Another finding which indicated the strategy was built on small wins was the fact that there was no previous envisioned strategy; no plan that had foreseen the paths taken, even though it was possible to summarise the different steps retrospectively. The lack of a “master plan” for the work did not however mean that there was a lack of strategies rather it meant that the plan itself was an emerging process in which adopting to the changing circumstances was part of the strategy.

Discursive resistance, or speaking two languages

It became clear from the interviews and analysis seminar that the vagueness of the terms “gender”, “gender equality”, “gender mainstreaming” and of the concepts of “innovation” and “growth” was recognised by the actors involved in gender mainstreaming work at VINNOVA. Moreover, this vagueness opened up for space for negotiation and was used deliberately. The notion of being “able to speak two languages”, e.g. in terms of both gender and economic growth, social and natural sciences etc., was also considered important in gaining legitimacy, relative to the organisation internally and towards outside gender researchers and collaboration partners. Another situation discussed by the interviewees was whether to refer to “gender equality” in policy documents (which might in some cases be seen as too political) or the more neutral and scientific term “gender” which appealed to the cultural norms of an organisation which mainly had academics as staff and research as its core objective. In other circumstances, for instance when addressing the poor representation of women in science or regarding prospects of research funding, “social justice” was seen as a more justifiable argument and used accordingly.

Using the technologies of NPM to negotiate spaces of resistance

Also clearly visible was the deliberate use of the management techniques of the organisation by the actors involved, such as the everyday planning, monitoring and evaluations techniques used in the organisation at large. For example, the use of the logic impact model and the quest for gender disaggregated data. These techniques were used as platforms for negotiations and resistance by the actors involved. Another aspect believed by Agneta and Karin to be very important was the legitimacy gained by research results backing up the proposed actions, much in line with scientific management ideals. These types of arguments could also be used to question initiatives believed to be gender-blind or where the gender aspects had not been investigated. In the discussion the actors involved argued that they understood the potential risks of applying NPM techniques. For example, the Agency’s general reliance on seemingly gender-neutral statistics and how statistics could sometimes hide gender disparities.

Impact of the political dimension of public organisations

One difference shown in the results from the VINNOVA study compared to private sector equality actors is that those working to develop gender mainstreaming in VINNOVA deliberately used the political implications of working in a public authority to strengthen their work. This was considered very important since direct directives from the government (regardless of policy area) would lead to actions in the Agency and the more precise the directive was, the greater the likelihood of concrete actions and visible results. Agneta and Karin believed that when gender equality was emphasised in the directives to the Agency, the likelihood of active gender equality work was greatly enhanced. The political implications of the work in VINNOVA were also clear in the strategies on how to be visible and engage with outside operations. The actors

involved believed that external visibility strengthened the internal legitimacy in the organisation by increasing external pressure for compliance. Other examples were actions believed to be important from a symbolic perspective, such as being visible at high profile events or taking part in organising high profile events. One example of such high profile event was the decision to participate in the politically important week in Almedalen (on the Swedish island of Gotland). Another was how to collaborate with others outside the organisation, connecting to various public authorities, employers' organisations, universities etc. The impact of public evaluations and peer pressure was also used deliberately by the actors at VINNOVA to increase internal pressure for action. It was agreed in the analysis seminar that when working in a public authority, political objectives, statements and missions in relation to gender equality are very important.

What then can we learn from the Agneta and Karin's strategic impact and their choice of strategies? According to Agneta and Karin and the other actors interviewed in the case study, many of the measures taken for advancing gender mainstreaming work in the Agency were successful. The fact that the strategic choices were guided by pragmatism was in itself considered an important and necessary factor. But various obstacles and complications in the work have also been discussed in the interviews and seminar and sometimes, the work was more difficult. A recurring problem was a common phenomenon in gender equality work and can be understood as the tendency to non-implementation of gender equality objectives in public organisations (Pincus 2002). According to Agneta and Karin this was characterised by reoccurring incidents in the organisation such as plans drawn up but never implemented, policies with no actions drawn up to realise them and specific tasks discussed but never outlined or made someone's specific duty. According to the interviews, another example was work being planned but never given any funds. However, given the large sum available to spend on developing the work this was not a major problem, according to Agneta. She also pointed out that one factor of great importance was the tendency to informal decision-making in the Agency. This could be an opportunity as well as an obstacle because it needed a sense of what to what to do and who to approach, and made an organisational blueprint hard to rely on. As Agneta put it "*Organisations are much more than systems and this makes general models useless*".

Another problem was raised in the interviews with the actor, in relation to the gender mainstreaming work. There was a tendency amongst other co-workers and senior officers to question the work, using arguments of gender neutrality. Examples from the interviews could be very direct statements from others such as "*We don't work with gender equality at VINNOVA*", or sometimes more indirect criticism. In the interview with Karin, one example was when one of her senior officers remarked to her that,

"You've put a lot of time into this". Also, according to the actors involved the goal of economic growth was always more of a priority than gender equality objectives in the Agency. This made it necessary to al-

ways use economic growth arguments to support the equality objectives and gender mainstreaming strategy.

The gender mainstreaming work in VINNOVA was an initiative which came about from the “middle” of the organisation; it was neither a bottom-up nor a top-down initiative. This meant that it lacked both the support of top management and commitment and engagement from co-workers in other parts of the organisation. Moreover the gender mainstreaming work was developed, at least in the beginning, outside the regular “chain of command”. This gave it a less powerful position in terms of making decisions and locating resources. On the other hand, it was developed in a strategically important position in that it was able to avoid some of the problems often encountered by more top-down or bottom-up-driven change initiatives and it was possible to develop the work relatively independent.

In the work to integrate a gender perspective, it turned out to be easier to support the development of the specific field of gender and innovation than to move into the mainstream of other areas in the Agency. Some departments had their own specific equality objectives, one example being the specific mission to support women in science. Another was the infrastructure department, which worked to support gendered aspects in accordance with the Swedish 6th Gender Equality Goal. However, according to Agneta the internal organisation for gender work in the mainstream activities was always “hanging loose”. One example of this, according to the interviews, was that the constructed intra-organisational group (JÄMSTRA) never became operative. One explanation for this by the actors involved was the lack of active support from top management. There was also never any real connection or exchange established between the internal work for equal opportunities in the human resources department and the gender mainstreaming work.

The dilemmas of change

The question of co-optation and subversiveness was linked to the overarching question of the “business case” versus the “social justice” perspective; this was recognised and dealt with by the actors involved in different ways. This problem can be understood as an ideological dilemma (Billig et al 1988) The term is derived from discourse theory and based on the notion that knowledge viewed as “common sense” is composed of many contradictory elements which people use to understand themselves and their environment. Dilemmas are ideological in that they provide structure for argumentation and speech by maintaining, legitimising or challenging power relationships. The nature of a dilemma makes it into a type of problem which is impossible to “solve” in reality. Gender equality practitioners encounter many different forms of ideological dilemmas in their practical work (Callerstig and Lindholm 2011). In VINNOVA, the business case was fruitful in that it proposed a gender perspective as central to the achievement of mainstream objectives. The main argument for this was that a gender perspective was a strong requirement, or means, of achieving the objectives of innova-

tion-based growth strategies which were central to the Agency. On the other hand, the social justice argument was the idea that gender equality was an objective in itself. This was strongly grounded in the government's gender equality policies which aimed to make public bodies contribute to equal representation, non-discrimination, economical independence, equally shared family responsibilities etc. The business case was important in creating strong support for the gender mainstreaming work and also proposed that the lack of a gender perspective in, say, research was important to the Agency, rather than the more political aim of obtaining a gender equality perspective. The social justice perspective was important in that gender disparities, e.g. women researcher or women's share of research grants, were easy to highlight and gave another source for legitimacy for the work. Agneta and Karin used both arguments to support their work and often tried to combine them (as in the impact logic model) rather than argue solely for one perspective. Using only the business case risked obscuring existing gendered power relations and inequalities and could thus lead to co-optation with the mainstream, largely gender-blind perspective of innovation, research and growth policies. Using only the social justice argument risked being seen instead as too far from the core activities of the Agency; a pointless body count which would not lead to actual transformation of the Agency's mainstream work.

Previous research has shown that gender equality practitioners often use different strategies and methods in parallel (Squires 2005, Nentwich 2006, Booth and Bennett 2002). The study of VINNOVA's work confirms that the actors involved used a variety of different strategies to resist and change the current inequality regime where the deliberate use of dilemmas, such as those described above, can be seen as a practice of discursive resistance. Both the risks and the advantages of the strategies above are self-evident but the long-term outcomes in terms of change are more unclear, with the results obtained so far being unstable, unpredictable and demanding of continuing attention. Swan and Fox conclude by noting that it is very hard to judge whether strategies like this can be seen as either co-optation or resistance and that a more nuanced understanding is necessary.

Co-optation and resistance can thus be seen as a dilemma in itself. While some co-optation is necessary to enter into the mainstream of policy processes, co-optation also needs to include resistance; this entails subverting underlying and gender blind assumptions from within. The aim of integrating a gender perspective into all activities of the Agency by actors normally involved in the process (the common description of the strategy of gender mainstreaming) has not so far been fully achieved at VINNOVA. The objectives were also adjusted and made more modest in the course of the work, but was this an example of co-optation? The expansion of VINNOVA's fields of activities into needs-driven gender research and establishment of gender and innovation as a new research field was in line with the overall objectives of the Agency. However, at the same time it has opened the way to new knowledge and a potential rethinking and gendering of the traditional knowledge of the fields involved. This

might involve transformation of the field of gender research itself; engaging with the mainstream might very well be a two-way street.

In the case of VINNOVA, it is clear that the efforts to integrate a gender perspective have had a substantial impact on the agencies work in many different ways. As of 2012, ten officers at VINNOVA have gender as part of their expert areas in handling research programmes and a large budget has been allocated to the gender work of the Agency. The case study has raised many questions on how the outcomes of gender mainstreaming can be evaluated. Should hard outcomes be judged, such as budget allocations and new competence areas, or perhaps the establishment of a new field of knowledge integrating gender with prevailing mainstream objectives, as in VINNOVA? Or is it when a gender perspective has been integrated into the formal operating systems of an organisation or perhaps a shift in people's awareness, beliefs and attitudes. Perhaps it is the myriad small wins - gender biases so minor that they remain largely unnoticed until changed? These questions need further discussion.

The case study has also underlined the necessity of studying the implementation of gender mainstreaming and that fact that public servants' impact on the change process needs more attention when analysing gender mainstreaming. The open-endedness of implementation and learning processes such as gender mainstreaming, where ambiguous policy goals are being translated into action by actors of public organisations, is largely unpredictable. In consequence, unintended effects are inevitable, but they are not inherently good or bad so much as part of the risk of unpredictable change processes. By studying the micro-practices and strategies developed by the actors involved and the outcomes they lead to, we can learn more about the preconditions for change. However, predicting or prescribing recipes for change will remain a hazardous business.

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PART III: Procedures for Innovation

Ewa Gunnarsson

This third part, Procedures for Innovation, presents five contributions focusing primarily on gender mainstreaming and on strategies and methodology/methods which can be used when organising innovation systems in different milieus. The contributions aim is to increase innovativeness through procedures and methods which promote innovativeness by increasing participants' gender awareness. The different chapters take different approaches to unfolding the potential and problems involved in successful gender mainstreaming processes; they articulate more specifically the potentials and innovativeness when combining the action/interactive research and development methodology and techniques with an integrated, doing-gender perspective (Gunnarsson, 2006 and 2007).

A couple of the contributions in this part are inspired by action/interactive research. The potential of the action/interactive research and development traditions lies in their emphasis on the necessity to involve participants and researchers in a joint reflective learning process. Ideally this goes from formulation of the problem and onward throughout the process, exploring the system, then to the research process (and analysis of it) and distribution of the results (cf. Aagaard Nielsen and Svensson 2006, and Johannisson, Gunnarsson and Stjernberg, 2008). This has proven to promote more sustainable change processes owned by the innovation system itself, i.e. processes which continue when the researchers have left the arena. It is a creative way of going beyond the traditional project procedure. Creating the arenas for "common practice" in which researchers and participants (seen as experts in different fields) exchange experiences on equal terms as a means of achieving greater "robustness" in knowledge production (Novotny, Scott and Gibbons 2001). This approach and idea of achieving social robustness through different participants and stakeholders has become a cornerstone in organising for Mode II and III, research such as Triple Helix formations (see the introduction).

The doing-gender perspective, on the other hand, serves as a "mindfulness-consciousness raising and awareness tool" (Gunnarsson, 2007), making different forms of power relations more visible. It can act as an eye-opener for making other powerful social dimensions more explicit such as class, ethnicity and sexuality. These social power relations are embedded and active, not only in the research field and interactive research processes, but also normatively within researchers and participants

themselves and in the relationships between them. Another common but unarticulated practice (i.e. not highlighting or incorporating power relationships) has been heavily criticised from a feminist standpoint for neglecting and marginalising the impact of gender (Maguire, 2002). Integrating the gender dimension can also be seen as a means of achieving greater robustness in social science and innovation systems.

In the first chapter, *Gender Mainstreaming as a Driving Force of Innovation – Process and Outcome in a School Setting*, Anna Fogelberg Eriksson explores in what way the efforts to increase gender awareness and initiate gender mainstreaming in an upper secondary school have resulted in what the author calls “gender-sensitive innovations”. In the analysis, the author uses Schumpeter’s (1934) typology and finds that the gender mainstreaming efforts at the school have led to three main types of gender-sensitive innovations: new methods of production, new products and institutional reorganisation.

The author takes a critical stance on the relevance of seeing the gender perspective as an automatic leverage for innovation. Simply increasing gender awareness is not enough. The new understanding of gender needs to be turned into new practices which are integrated into and lead to a change of the core processes in order to contribute to innovations.

In the second chapter, *‘Doing Gender in a Local and Regional Context: an Innovative Process of Mainstreaming Equality*, Hans Lundkvist and Hanna Westberg present an R&D project conducted in a regional innovation system called Triple Stelix. The authors see gender mainstreaming as an innovative driving force and a crucial issue in meeting a region’s or company’s need to retain and attract the most suitable labour for the future. The process methodology is described, combining a doing-gender perspective with an action research methodology for increased gender awareness in an engineering enterprise. The gate-opener for the collaboration process between researchers and the company was when the researchers presented gender mainstreaming as an innovative part of the company’s employer branding. During the long-term process, the employer and employees became more conscious of the importance of gender-equal issues, a factor they believe to be an important prerequisite for sustainable growth.

An approach called Action-orientated Gender Research is presented in the next chapter, *Developing Innovative Organisations Using Action-orientated Gender Research*. The approach developed by the authors, Susanne Andersson and Eva Amundsdotter, merges two theoretical perspectives. One is the doing-gender perspective, with its understanding of gender as formed in ongoing relational activities. The other is learning theory within the action research tradition, which focuses on reflection, learning and especially reflective learning for transformation. The approach has been used when working with middle managers in joint learning processes. These involved networks of participants from different organisations within an innovation system with the aim of developing gender-aware and innovative organisations. The

approach makes it possible to uncover taken-for-granted assumptions and gendered power relations which constrain the development of innovative new opportunities in organisations. The empirical materials from two different meetings are presented as an example of how to organise a transformative learning process. In the article, a gender perspective is integrated into a classic model for single and double-loop learning, originally developed by Argyris & Schön (1974).

In the fourth chapter, *Gendered Innovative Design – Critical Reflections Stimulated by Personas*, Eva Källhammar and Åsa Wikberg Nilsson present the “Persona Method”. This method has been developed into a tool for critical reflection on gender issues in entrepreneurship and innovation systems. The specific aim is to explore the development of the Persona Method for action-based design in gender equality interventions; gender mainstreaming processes for example. A persona is an innovative, fictional character used to communicate an understanding of doing gender which can engage people in dialogues. It is also fruitful when used for groups which are unfamiliar with gender theories and issues. The method illustrates a way of discussing gender inequality by unsettling and challenging the participants’ own conventional beliefs on gender. The method has also been developed and used in relation to other powerful social dimensions, such as ethnicity and sexuality.

In the last contribution, *Are Female and Male Entrepreneurs Equally Innovative? Reducing the Gender Bias of Operationalisations and Industries Studied*, Johanna Nählinder, Malin Tillmar and Caroline Wigren-Kristoferson show in a challenging way how the consequences of gender bias on the conceptual, methodological and empirical levels of innovation, lead to gender biased conclusions on innovation and innovativeness. By using a distinction between gender-dominated and gender-labelled the authors show (with a quantitative study on innovativeness among male and female entrepreneurs in the health and care industries) that this distinction is important for understanding the gender bias of innovation and innovativeness. Gender-labelled (marked) stands for gender connotations linked to a certain profession, sector or phenomenon and has only a loose connection with actual women and men. Through this new way of operationalising gender, they found that female and male entrepreneurs were equally innovative. They thus highlight the increased potential of innovation and innovativeness when a more adequate gender neutral operationalisation is used.

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Gender Mainstreaming as a Driving Force of Innovation

- Process and Outcome in a School Setting

Anna Fogelberg Eriksson

Abstract

The topic of gender and innovation has been addressed in various ways in research and practice, e.g. gender diversity as a business case, or critical feminist analyses of innovation strategies and policies (cf. Herring, 2009; Turner, 2009; Simard, 2007, Lindberg, 2010). The issue under discussion in this chapter is in what way a gender perspective may contribute to, or even function as a driving force for, innovations in organisations. The discussion departs from an empirical example, where efforts to increase the gender awareness and initiate gender mainstreaming in an upper secondary school have resulted in gender-sensitive innovations. Hence in this paper, the connection between a gender perspective and innovation is discussed in relation to a local organisational context. The following questions will be addressed: how can a gender perspective generate innovations and what are the conditions that favour innovations driven by a gender perspective? This case could be described as a learning example when it comes to using a gender perspective as a driving force for innovations in organisations. However, the paper also addresses the fact that the gender perspective cannot, in and of itself, generate innovations in organisations. The perspective must be actively used and integrated into the core processes if it is to work properly.

Keywords: gender and innovation, public sector innovations

Introduction

“A gender perspective opens the way to a wider definition of innovation and sheds new light on how growth and other forms of development are created in society. Gender research may even be seen as an innovation per se and innovation and growth may become an effect of research results.” (Editorial, *Genus*, no 1/11, p 2, my translation).

The Swedish Secretariat for Gender Research highlights the topic of innovation in the first 2011 issue of its magazine *Genus* (Gender). One of the headings in the special issue states that *“A gender perspective offers increased innovation power”*. This statement will be elaborated in this chapter; it addresses the ways in which a gender perspective may contribute to, or even function as a driving force for, innovation. The discussion begins with an empirical example, where efforts to increase the gender

awareness and initiate gender mainstreaming in an upper secondary school have resulted in gender-sensitive innovations.

Accordingly, in this chapter, the connection between gender research and innovation will be discussed in context of local organisation. The following questions will be addressed: how can a gender perspective generate innovations? What are the conditions that favour innovations driven by a gender perspective? In dealing with these questions, the chapter firstly presents the key concepts and analytical tools needed. The methodology and research context are then described and a third section presents the findings: descriptions of what innovations were developed and how in relation to a gender perspective, in the organisational context in question. The fourth and last section brings together some concluding remarks.

Concepts and analytical tools

Several concepts and research fields would potentially have to be defined and surveyed in order to frame the topic of the paper. The presentation here is limited to those concepts relating to a gender perspective; gender, gender equality, gender mainstreaming and innovation.

Defined in general terms, a gender perspective means that social phenomena, relationships and processes in politics, economics, education, science, culture and so on are analysed from a perspective which observes that relationships between women and men can also have an effect on seemingly gender-neutral contexts. The perspective also implies recognition of ascribed collective gender characteristics which create systematic inequalities between women and men (cf. Hirdman 1988; 2001).

Gender conceptualises the social and cultural construction of the relationship between women and men, behaviour and tasks of women and men, as well as what is considered to be “female” and “male” (Acker, 1992; Broadbridge and Hearn, 2008; Korvajärvi, 1998). Gender is continually produced and reproduced through actions and interactions over time in practices (Gherardi and Poggio, 2002; Martin, 2003) and is thus something that people do in everyday activities in which they participate and interact with others (West and Zimmerman, 1987). In an organisational context, gender is then understood as integrated in current organisational processes, i.e. gender is a part of organisational practice, current organisational life (Acker, 1992; 1999). A central argument of the theorisation on “doing gender in organisations” is that gender is integrated into the ongoing processes of an organisation, in what we do at work. Not only individuals but also organisations, professions, careers, and positions are gendered. Acker (1992) proposes four analytical entries, or four interacting processes, to analyse the social construction of gender in organisations. The first concerns the production of gender divisions. Professions, wages, hierarchies and power are distributed in a way that produces divisions between men and women, masculinity and femininity. Secondly, the symbols and images that are created and used in organisations are also part of the gendering processes. Corporate values and metaphors for describing, say, leadership may be used to explain, confirm and sometimes contest gender divisions.

Thirdly, we do gender in interactions. The interactions between individuals and groups, men and women, display inclusion and exclusion as well as horizontal and vertical gender divisions. Finally, there is the process of internal mental work, which relates to the individual sense-making and identity work concerning gender divisions. (Acker, 1992; 1999).

The gender concept that has been presented thus far can be linked to research and theoretical perspectives, while gender equality can be associated with policy and practical change. This is something of an oversimplification, however, since the interfaces between gender research and gender equality policy are numerous. The view of Swedish gender equality policy has developed in relation to gender concepts and gender theories (Eduards, 2002). Knowledge about a gender perspective, gender awareness, is often put forward as a prerequisite for gender equality (Mark, 2007). With the help of a gender perspective, problems may be identified and measures and action alternatives suggested. The gender perspective may offer new angles, revealing structures and assumptions (cf. Hedlund, 2008; Westberg, 2008).

The official Swedish definition of gender equality implies that men and women enjoy the same power and opportunities to shape their own lives (Government Offices of Sweden, 2009). Since the mid-1990s, official Swedish gender equality policy has been directed towards gender equality integration or gender mainstreaming (www.regeringen.se). The official definition of gender mainstreaming follows that of the Council of Europe (1998):

“the (re)organisation, improvement, development and evaluation of policy processes, so that a gender equality perspective is incorporated at all levels and at all stages, by the actors normally involved in policy-making”. i.e. that all political areas should be characterised by a gender equality perspective, likewise all decision-making and all processes in an organisation.”

The political strategy of gender mainstreaming in policy-making have been adopted in different organisational contexts, e.g. as a tool to achieve gender equality via a gender equality perspective in decision-making and organisational processes. If fully implemented, i.e. if a gender perspective forms the basis for decision-making, planning, implementation, monitoring and development activities; gender mainstreaming is a system-changing and transformative development (Squires, 2005; Walby, 2005). By analogy, when adopting a doing-gender approach, where gender is understood as being done whilst integrated into the everyday activities of organisations (Acker, 1992), gender mainstreaming efforts will simultaneously bring organisational changes to the fore. Gender mainstreaming can in fact be understood as an innovation in itself.

Several theoretical gender studies discuss and problematise which premises gender equality work is based on, and what the consequences of gender equality work might be for women and men. For example, gender equality work can be carried out on the basis of apprehensions that, basically, men and women are both similar and different.

The starting point of similarity or difference between women and men can bring very different consequences for women and men in organisations (Billing and Alvesson, 1989) – or girls and boys in schools (Karlson, 2003). The complementary view of women and men in gender equality work can contribute to the recreation of existing power relationships. When women and men are expected to be very different and hence complement each other, the power dimension disappears. By analogy with these arguments some critics claim that gender equality work can contribute to the recreation of gender-stereotyped perceptions of women and men. Others maintain that gender equality work can contribute to women having to adapt to a male norm, e.g. being able to participate in working life on conditions based on a traditional man's role (Marshall, 1984; Meyerson & Kolb, 2000; Sundin 1992). Opposition to gender equality work has also been described (see e.g. Cockburn, 1991; Pincus, 2002).

The notion of innovation in everyday language interfaces renewal and improvement, even invention. The word in itself derives from the Latin words *innovation* and *innovo*; to renew or change. Scholarly writers on innovation have presented typologies and various distinctions relating to innovation (cf. Crossan & Apaydin, 2010). These range from innovation as product, service, process, position, strategic, governance or rhetorical, to whether innovations are revolutionary, radical, emergent or incremental. However writers agree that in order to categorise something as an innovation, it must be put into practice. (Hartley, 2005). As pointed out by Nählinder et al (xx), definitions of innovation and entrepreneurship also resemble each other, as they both comprise (new) change and implementation. Schumpeter (1934), a classic and often starting point for writers on entrepreneurs and entrepreneurship, discussed innovations in terms of different categories: 1) the introduction of new products; 2) the introduction of improved or new methods of production, 3) the opening of new markets, 4) the conquest of new sources of materials, and 5) the institutional reorganisation of a business institution.

Innovation has many positive connotations since it is often expected to bring positive change in terms of, say, improvement, competitive advantage or growth. Innovation policies relate not only to the private sector, as might be expected, but also to public sector organisations. However, these settings have been less explored as arenas for innovation in comparison to the private sector. One of the characteristics of public sector innovation is that it is “...usually not a physical artefact at all, but a change in the relationships between service providers and their users.” (Hartly, 2005, p 27). Furthermore, the mechanisms of innovation in the public sector may be very different compared to the private sector. This relates to such things as conditions of competitive advantage and sharing of ideas. When it comes to innovations within a school context it has been pointed out that innovations may become “invisible” since there is not necessarily a single entrepreneur who innovates. Rather, innovations within schools are the result of collective processes. The strong focus on creativity can also make the innovations within the school context hard to see; these can even be interpreted as

collective imitation (Johansson and Berglund, 2008; Mühlenbock, 2008). The (in)ability to identify how collective processes can give rise to innovation seems to be a general problem within innovation research, Lundvall (1992) claims. Collective processes, the “interactive learning” that exists as part of collective entrepreneurship, are of vital importance to the development of innovations (op.cit).

The topic of gender and innovation has been addressed in various ways in research and practice, e.g. gender diversity as a business case, or critical feminist analyses of innovation strategies and policies (cf. Herring, 2009; Turner, 2009; Simard, 2007; Lindberg, 2010). As mentioned at the beginning of the paper, some proponents of gender equality and/or gender perspectives suggest that gender equality or gender perspectives may contribute to increased innovation capability (cf. Danilda and Granath Thorslund, Eds., 2011).

In this chapter I use the concept of innovation as a lens through which I interpret specific public sector efforts to improve and develop an upper secondary school. It is important to note that the analytical lens of innovation has been adopted by me in the text, whilst innovation was not a part of the rhetoric I encountered in the studied context.

Methodology

This paper presents a qualitative case study, describing the local organisational context of an upper secondary school (hereinafter called “the school”). Case studies have the advantage of allowing in-depth knowledge to be gained about situations and the particular interpretations which people make in a specific context (Merriam, 1994). One of the critical comments about case studies relates to how results of a specific case may be interesting in a broader, more general, context. Accordingly, an argument for using case studies would be to claim that they can contribute to an understanding of phenomena which are not entirely specific. The results of case studies may also be interesting in other situations and contexts via analytical generalisations:

“...to imagine possibilities, to broaden and enrich the repertoire of social constructions that are available to practitioners and others. We can also add the interest that ethnographic studies show for cases which demonstrate the rich variations in human behaviour, pointing to the possibilities for our own society.” (Kvale, 1997, p. 212, my translation)

By focusing on the specific case, even the generalities of the case can become visible, for example the dynamics of organisational change, the problems relating to the introduction of a gender perspective and the gains to be made. My argument is that there may be reason to assume the case represents something more general. The case may serve as a “good example” from which to learn, whilst bringing opportunities to highlight and problematise the innovative potential of a gender perspective in important ways. Hence, the case can form an interesting example of how innovation and a gender perspective may be linked to each other.

I came across the school while conducting an evaluation of a project on gender mainstreaming in a medium-sized Swedish municipality. The gender mainstreaming project was financially supported by the Swedish Association of Local Authorities and Regions. It focused on educational activities for the central municipal administration, and local developmental work aiming for gender mainstreaming in seven workplaces within the municipal organisation (Fogelberg Eriksson, 2011), one of which was the school.

The reason for choosing this particular case as a starting point for discussion here is that the school was mentioned and showcased as an “example to be proud of” concerning gender awareness and gender mainstreaming within the municipality. The school was mentioned by teachers who worked in other schools within the gender mainstreaming project in the municipality, by representatives of the other workplaces in the gender mainstreaming project and by representatives of the central administration in the municipality. The school and its involvement in gender mainstreaming have also been highlighted in the local newspaper and the information magazine which is regularly distributed to all citizens of the municipality.

The case study is qualitative, consisting of semi structured interviews with two representatives of the high school and an analysis of documents. One of the informants, a female teacher and part-time school head, was interviewed twice during 2010. The other informant, a male school head, was interviewed once in early 2011. The interviews comprised questions regarding personal background, formal gender training, how to use a gender perspective in practice/how to gender mainstream, what and how has been innovated.

Interviews were also conducted with four informants representing the central administration of the municipality as well as six informants representing different operations that took part of the gender mainstreaming project within the municipality. These informants were all asked to compare and comment on the various gender mainstreaming efforts going on within the municipality during 2010. It was during those interviews that actors outside the school commented positively on the development work conducted by the school.

The documents analysed were a project plan, monthly audits and internal evaluation of the gender mainstreaming project within the school.

Nevertheless, it should be mentioned that the majority of the findings are based on the two informants’ perspectives as formal representatives of the school. In their professional roles, it was probably expected that they should present positive images and the success part of the story. If other employees or students had been interviewed, the picture might very well have turned out differently. Likewise, if some of the other six work places in the gender mainstreaming project had been chosen as cases, the outcome would have been different.

The contents of the interviews have been organised in themes which are presented in the findings section together with illustrating quotes.

Research context

The upper secondary school was a municipal school with “larger responsibility and larger freedom” than other municipal schools. The high school had a board to support its qualitative development and consisting of parents and staff representatives, plus representatives of the university and business. The number of pupils reached nearly 700. Approximately 60 teachers worked at the school.

The school offered three study programmes: a social sciences programme, a music programme, and a special programme on sustainable development.

Findings

The use of the gender perspective in the gender mainstreaming efforts of the school will be focused upon here. When referring to the interviews, the female teacher and part-time school head will be called “Andrea”. The other informant, a male school head, will be called “David”.

Getting acquainted with a gender perspective

Approximately four years before the gender mainstreaming project, Andrea took a 7.5 credit university course on gender and education. She has since had formal responsibility for gender equality in the school. She has, in turn, trained all staff of the school in “gender and education”. Andrea’s definition of a gender perspective was being able to see and be aware of the structural differences and conditions for girls and boys, women and men. In the school, a gender perspective was implemented in terms of gender equality. Andrea pointed to a couple of aspects which were crucial to the knowledge development concerning a gender perspective. When using or transforming the gender perspective into gender equality work, it was important to the staff that it was not a case of “helping the girls”, “holding back the boys” or standardising girls and boys into the same format. A focus on goals and grades put boys onto the gender mainstreaming agenda, whilst a focus on stress highlighted the school situation for girls. To speak both of girls and boys was a door opener to the use of a gender perspective at the school, Andrea claimed. What also led the development work forward was gender equality rhetoric – and actions – relating to notions of quality, individualisation and equal opportunities:

“When we work for gender equality, we end up realising that we are working to improve the quality of the school, for everybody. Where we have shortcomings in gender equality that is where we have shortcomings in quality. /.../ When we use a gender perspective, the result is of better quality.”

However, Andrea pointed out:

“But it’s crucial that we don’t end up in obscuring gender equality, but rather connect quality and gender equality. It’s a quality problem if

girls feel bad and boys have lower grades. We must be able to see the general structures, to think in terms of girls and boys.”

The fact that the school has had a number of years to develop knowledge of what a gender perspective is and why it is a relevant perspective for the school was a great advantage, Andrea stated. She thought that the majority of staff were now sympathetic to a gender perspective and that they have reached a critical mass among the staff in order to speak and act constructively concerning gender. The sometimes disinterested or even at times resistant attitude has vanished. Andrea also pointed out that the opportunity to get acquainted with the gender perspective has also led to an increased awareness and readiness among the colleagues in regard to heteronormativity and sexualities.

Identifying needs

The gender perspective helped the school staff identify necessary improvements to the situation for the girls and boys there. In local surveys, three problem areas were identified among the students: a) stress, b) the process of setting learning goals and interacting with a mentor and c) grades. These problem areas all had gendered implications. Girls in particular reported high levels of stress in relation to their schoolwork. Both girls and boys found that goal-setting and the interaction with their mentors needed improvement, but in slightly different ways. Boys had lower overall grades than girls. Starting with the local surveys, the school drew up an overarching aim for the gender mainstreaming project, stating that girls and boys would get equal education and equal opportunities to profit by their education.

Organising developmental work

As mentioned earlier, Andrea who was in charge of the gender mainstreaming project worked as a teacher but also part time school head. She said:

“It was a conscious decision for us to make gender equality work a part of the management function of the school. Gender equality work should not be separated from, but integrated in, our work.”

During 2010 the school received some financial support. This created additional space for concentrating on the gender mainstreaming project and helped legitimise it.

David explained that the gender mainstreaming project strategy was to reach out to the whole staff. Andrea was given formal responsibility for informing all staff members at common meetings. As a school head, David identified that his task was to openly support the gender mainstreaming initiative and ensure that as many people as possible were actively involved.

“Everything that concerns development must be a concern for everybody. We actively use a team organisation in order to anchor the development processes in the everyday activities. Each team meets every week.”

Andrea estimated that approximately 30 people at the school were actively taking part in the process of developing gender-aware solutions to the identified problems. The rest of the staff were informed about the project during joint information meetings and discussed the project continuously during their weekly team meetings.

Gender mainstreaming innovations

Starting with the problems and needs which the school identified with the aid of a gender perspective, a number of “gender-sensitive innovations” were developed and put into practice. They were gender-sensitive in the sense that they paid attention to the conditions of both girls and boys and did not assume gender neutrality. The innovations were related to the development and implementation of new methods and organisation of certain aspects of the school. They comprised a combination of offers to the individual students as well as new methods and ways of organising the examination procedures. When put together, this innovative package aimed to assure both girls and boys equal opportunities, wellbeing and the fulfilment of learning goals. The first three innovations related to goals, grades and interaction with a mentor.

Mentorship

A review at the school indicated that students wanted to get out more of their contacts with their mentors. The general impression was that the form and content of regular contact with mentors varied quite a lot within the school. Another impression was that contact with mentors worked differently for girls and boys leading, amongst other things, to them achieving differently. A team at the school therefore developed a mentorship plan, comprising a systematised “kit” for mentors to follow. This ensured that all students received equal support and that more emphasis was laid on learning goals. The kit also contained exercises dealing specifically with issues such as who speaks most frequently in the classroom, gender equality, sexual harassment etc.

Student book

As a means of increasing the possibility of formulating adequate goals, making reasonable plans for each student and systematising and developing the contact between students and mentors, a Student Book was developed under the gender mainstreaming project. Students received this book at the beginning of their first year and were responsible for keeping and filling it in each year until graduation. The book contained general information on what each development review contained over the three years of study; there were also empty spaces where students could fill in their goals, achievements and developmental areas. The book also contained some general information on stress management, equal opportunities etc. Hence the book could be interpreted as a kind of portfolio, allowing the mentor to offer precise individual feedback to each student and motivate them according to equal opportunity principles. The Student Book was designed to become a relevant and useful tool for all students but was

also specifically aimed to get boys to set adequate goals and get more feedback on their achievements; a tool to “help boys get better grades”.

Learning Studies

Learning Studies was not a locally developed innovation, but a pedagogical method of work development and evaluation. It showed students what to learn in order to fulfil the syllabus. However, in relation to the gender mainstreaming project, Learning Studies was used to reach both girls and boys since they may have different learning strategies. Accordingly, in the school, Learning Studies proposed as a method of improving equal opportunities for girls and boys.

Stress management course

Stress management was another part of the innovative measures. A survey of first-graders at the school showed stress symptoms to be widespread amongst students, particularly the girls.

“It seems that girls often want to do well in all areas; many of them in our school are high achievers and they report high levels of stress”, David stated.

In order not to single out girls as “the problem”, the school welfare officer, school nurse and Andrea developed a general course on stress management. Topics included in the course were identifying sources of stress and individual strategies for managing stress. The course was voluntary but teachers/mentors could also recommend students to attend. The course was open to both girls and boys, but only girls attended the first one.

According to Andrea, student surveys conducted before and after the course showed improvement in terms of lower reported stress levels:

“As a temporary measure, it is important to offer this opportunity, especially for girls, in order to create an educational milieu that works for both girls and boys.”

There are plans to offer the course each term over a number of years since the results seem to be very positive. During the first year of trial period, some 30 students, mainly girls, have attended the course.

Exam schedules

In addition to the stress management courses targeting the individual level, the school has tried to find new structural or organisational forms of course examination. In order to reduce the stress for students, the school re-organised its exam system and the way teachers of different courses used and scheduled their exams. Instead of just letting each individual student deal with their own stress, the staff developed a structure for

planning exams and project assignments so as to avoid peaks or clashes. As a result of this collegial work, an online exam schedule is distributed at the beginning of the term.

In respect of the exam schedules and Learning Studies, an increased variety of examination forms has been introduced so as to suit the different learning styles of both girls and boys.

Summary of innovations

Returning to the forms of innovation as presented by Schumpeter (1934), a categorisation of the gender mainstreaming efforts of the school results in predominantly “new methods of production”, followed by “new products” and “institutional reorganisation” (see Table 1 below). The concept of Learning Studies was not developed in the school, but was implemented and used to develop new and gender-sensitive ways of teaching, i.e. new methods of production. Notably, the rest of the innovations do not easily fit into only one category. The innovations are more complex and multi-faceted than an easily identifiable product. The development of the mentorship process within the school is an innovation in the sense that it comprised a kit (new product) for the teachers and new methods of production, including new ways of student/teacher interaction. The innovation of the Student Book is a product, in the sense that it is an artefact and also a new method, as the teachers and students became involved in new ways of interacting and conducting the studies (a new method of production). The stress management course was new (a new product) in this particular school context and the internal course evaluations indicate it has led to new student behaviours (new methods of production). The exam schedule is a product (something which everybody can access the school homepage), a new method of production (as the courses are conducted with alternative chronology) and an institutional reorganisation of the examination processes within the entire school.

Gender mainstreaming innovations in the school in relation to categories of innovation

	New products	New methods of production	Opening of new markets	Conquest of new sources of materials	Institutional reorganisation
Mentorship	x	x			
Student Book	x	x			
Learning Studies		x			
Stress management course	x	x			
Exam schedules	x	x			x

Discussion: a gender perspective as a driver of innovation?

We now turn on the critical searchlight and play the doubting game. Isn't the case description in the previous section an overly optimistic and naïve account of the innovative leverage to which a gender perspective may contribute? And isn't it a questionable implication or outcome that a gender perspective should always contribute to useful innovations; is this not ultimately just a manipulative, top-down tool of efficient improvement or growth? Is the gender awareness (i.e. increased knowledge of gender perspectives) actually a smokescreen to blur the fact that we all tend to reproduce and re-enact unequal practices; we just want to think that practice has really changed? These three questions are highly relevant and have been convincingly addressed by various researchers (cf. Abrahamsson, 2000; Sundin, 1992; 2002; Søndergaard, 1996). To continue to take a critical stance, one might want to question what kind of gender perspective has come to the fore in the case, especially considering the last thirty years of internal, scholarly, feminist debate on what a gender perspective might actually mean. Was it really the gender perspective which generated the innovative solutions in the school, or was it something else?

Well aware of the risky business of assuming intrinsic, unproblematic and consensual value in "gender perspective" or "innovation", I have chosen to play the believing game in this chapter. The case presented could be described as a good example, a learning example, or perhaps "best practice" when it comes to using a gender perspective as a driving force for innovation. But the gender perspective cannot, in and of itself, generate innovations in organisations. Reasonably, the perspective has to be actively used and integrated into the core processes in order to operate actively. So what were the key factors in achieving gender-sensitive innovations in this particular case?

- 1 Building a body of knowledge. The school had been learning about, discussing and creating local knowledge of gender, gender perspectives and how these relate to the school context.
- 2 Time. The school had been generating knowledge and getting started with the innovative processes for several years.
- 3 Conscious organisation of the developmental work. Several people were involved in the hands-on-development, all teams were somehow involved and resource staff (Andrea) were allocated time and competency for using a gender perspective as a part of innovative work.
- 4 Management support. David and Andrea both openly stated importance and quality as reasons for using a gender perspective to consider and develop the school.
- 5 Resources. Additional financial resources were distributed across a year, which boosted the possibilities of actually developing and innovating.

These factors are not unique to successful, gender-aware innovation work; they are key factors in achieving conscious change in organisations (Ekberg, et al, 2006; Ellström, 2009; Kanter et al, 1992). The unique part here is that the gender perspective offered an opportunity to meticulously define problems and specify needs for improvement in the school. Also, the gender perspective opened the way to for new solutions. For example an unreflected measure to reduce stress among girls would have been to only offer courses for girls. However, the gender perspective also highlighted structural solutions to gender mainstreaming the core process of planning the exams in the entire school. Thus, the gender perspective has contributed to innovations, without stopping at or ending up in essentialist solutions. New ways of performing core processes of the school were developed with the innovative leverage of the gender perspective. These processes were designed to deal with the fact that girls and boys meet and experience different conditions, whilst aiming to eliminate these differences. Thus the empirical example described can serve as a case enabling us to learn more about how a gender perspective might actually work as a method of innovation. In addition, gender-sensitive innovations of the kind presented here have the potential to contribute to new ways of doing gender, in non-stereotypical, non-oppressive and innovative ways.

Finally, the innovations developed in the school via gender mainstreaming were complex and multifaceted, as shown in the summary of innovations presented in the table. The findings presented serve as a contribution to the mainstream literature on innovation since they help us understand and identify innovations which we were previously unable to see. Seeing these innovations enables us to value them and add them to what is highly esteemed in our society today, namely innovation and innovation power.

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Doing Gender in a Local and Regional Context

- An Innovative Process of Mainstreaming Gender Equality

Hans Lundkvist & Hanna Westberg

Abstract

Sustainable regional and business development depends on access to people motivated to invest their lives in a region and its enterprise. However in a time of demographical changes, urbanisation and new values on life and work among the next generation, the issue of attractiveness is crucial for both a region and its workplaces. The purpose of this chapter is to describe a process methodology for increased gender awareness in an enterprise and to emphasise the relationship between organisational and regional development. In this context, we use the innovative combination of the two scientific fields, gender and action-research in a collaborative project between researchers and an engineering enterprise in a semi-rural area of Sweden. This collaboration aims for a more gender mainstreamed organisation so as to retain and attract the most suitable labour for the future. During the long-term process, the employer and employees became more conscious of the importance of gender-equal issues; a factor we believe to be an important prerequisite of sustainable growth.

Keywords: attractive work, employer brand, gender, innovation, sustainable growth

Introduction

In this chapter we describe the development of an innovative process for increased gender awareness. We hope this description will inspire to a more innovative use of different theories and methods. We also want to highlight conceptual similarities between social capital in a societal context with the trust that forms the basis for a sustainable change process within an organisation.

The steel and engineering industries and related services are important Swedish exports⁵⁸. A significant portion of these products are produced in the Bergslagen region,⁵⁹ where the Swedish Steel Producers' Association, Jernkontoret, runs the Triple

⁵⁸ From the total value of exported goods 2011, the share of workshop products' was 46.4 percent (SCB Statistic Sweden. SITC (Standard International Trade Classification) http://www.scb.se/Pages/TableAndChart____26625.aspx)

⁵⁹ Bergslagen is a major ore-producing region in central Sweden, lying northwest of Stockholm and extending from Lake Vänern (Sweden's largest lake) to the Gulf of Bothnia. It falls predominantly within the

Steelix innovation system,⁶⁰ a cluster consisting of about 700 SMEs⁶¹, seven steel producing companies, manufacturers of mechanical equipment for metal forming and industrial IT, 13 municipalities, universities and research centres, regional actors and regional authorities. The aim is to create new knowledge and competence through connections and interaction between smaller and larger enterprises, universities, research institutes and the community.

However, since all regions, innovation systems and enterprises are dependent on access to people, the current demographical changes, urbanisation and new values concerning life and work present employers with challenges regarding the supply of employees for the next generation. The ageing population in EU countries indicates that the struggle for talent and competence has only just begun. Thus, demographic development, migration and a strongly gender-segregated labour market are expected to be obstacles to industrial as well as sustainable regional growth. Gender equality issues have been on the political agenda in Sweden for a long time. Although much progress has been made, many obstructive structures remain. The statistics show Sweden to be one of the European countries with the highest participation rate for women in the labour force. At the same time, Sweden has the most gender-segregated labour market. In a practical sense, there is one labour market for women and one for men. The labour market is also vertically gender-segregated, with a majority of women in lower-level positions and men in higher positions (Gonäs et al. 2005; SOU 1997:137; SOU 2004:43). In addition to these challenges, the traditional structure of the economic life in many industrial regions is based on traditions with a male norm. As a result, women relocate to larger cities for further education or employment in other industries (Region Bergslagen, 2002; Forsberg et al. 2006; Hedlund 2008; Westberg 2008).

Development trends in regional economic policy are largely influenced by interests in various forms of interaction and systems, such as innovation systems. Governments and researchers of different disciplines have pointed out that innovations of different kinds occur in interactions between actors, which are important for regional development (Brulin and Westberg 2000; Westberg ed 2005; Reflection Note on Integrating partnerships in ESF programmes 2007-2013; Svensson and Nilsson, eds. 2008; Innovation & Gender 2011; Brulin and Svensson, 2011). Collaboration can take place between different types of organisations which have both complementary and similar orientations. The researchers also see collaboration between different actors in the development of strong coalitions as a basis for learning and to meet future changes (Gustavsen and Hofmeier, 1997; Etkowitz and Leyersdorf 1997; Svensson, Jakobsson and Åberg 2001). Over time, various theories form the understanding of innovation and new ideas, trying to incorporate the processes and relationships as keys to innova-

counties of Dalarna, Örebro, Värmland, and Västmanland. (Encyclopaedia Britannica).
www.britannica.com/EBchecked/topic/61854/Bergslagen

⁶⁰ An initiative started by the Swedish Steel Producers' Association.

⁶¹ Small and Medium-sized Enterprises.

tion and learning. These ideas are a reaction to the innovation theories which reduce everything to structure, actor and system and which do not include the processes, procedures and relationships that exist within the system. Incorporating a gender perspective into an innovative environment does not necessarily lead to gender equality, but it can reveal injustice and how gender is done⁶² in this environment; this will create gender awareness and knowledge of action. In this case, the gender perspective can be an important contributor to innovative and sustainable growth. Action for increased gender awareness can also be seen as one important parameter in making the engineering industry more attractive to women, as a strategy for attracting available talent (best suited to the work task) regardless of sex. The benefits of gender equality are further enhanced through a more gender-balanced family and work life, which in addition to economic growth, increases the quality of life and wellbeing for both men and women. Thus, gender mainstreaming⁶³ in innovative environments can contribute to gender equality and sustainable growth (Westberg eds. 2005; Innovation & Gender 2011).

When in 2008 VINNOVA (the Swedish Governmental Agency for Innovation Systems) opened its call for ‘applied gender research within strong research and innovation milieus’ (TIGER), Triple Steelix, with the mission to support regional development based on prosperous enterprises, found an opportunity to finance collaboration with regional enterprises. Based on discussions with enterprises and inspired by successful projects/processes such as ‘Learning by Fighting’⁶⁴ (Gunnarsson, Westberg, Andersson, and Balkmar 2007) and the action-oriented gender research project ‘Gender network’⁶⁵ (Andersson, Amundsdotter, Svensson 2008), the project ‘Gender Perspective for Attractive Work’ (GATT) was created. Unlike some other projects, the purpose of GATT was to do collaborative research with private companies willing to generate gender awareness, not only for selected groups of staff but for all of them.

Later in the same year, the Swedish Steel Producers’ Association received the encouraging message that Triple Steelix had been granted funding by VINNOVA for the GATT project. With funding secured and highly motivated for participatory gender

⁶² When West and Zimmerman published their article ‘Doing Gender’ (1987) they put their finger on a theme which, has appeared in different guises in feminist theory on sex/gender during the second half of the 1900s.

⁶³ European Commission: Gender mainstreaming is the integration of the gender perspective into every stage of policy processes – design, implementation, monitoring and evaluation – with a view to promoting equality between women and men. http://ec.europa.eu/justice/gender-equality/tools/index_en.htm. The International Labour Organization (ILO): The concept of bringing gender issues into the mainstream of society was clearly established as a global strategy for promoting gender equality in the Platform for Action adopted at the United Nations Fourth World Conference on Women, held in Beijing (China) in 1995. It highlighted the necessity of ensuring that gender equality is a primary goal in all area(s) of social and economic development. <http://www.ilo.org/public/english/bureau/gender/newsite2002/about/defin.htm>

⁶⁴ Learning by Fighting was a project within VINNOVA during the period 2003-2005. Its aims were to develop gender mainstreaming in the organisation and strengthen the gender competence when launching programmes and evaluating applications.

⁶⁵ For more information see the chapter, Developing Innovative Organisations Using Action-orientated Gender Research, by Andersson and Amundsdotter.

research, Hanna Westberg, an associate professor with long experience in gender research and fieldwork in collaboration with engineering enterprises and Hans Lundkvist, a doctoral student with extensive experience in business and project development, reconnected with the companies that had expressed an interest in collaborating earlier in the year. However, due to the global finance crisis, motivation to participate was significantly reduced. We met with polite but firm rejection regarding cooperative knowledge production. One company even replied that its focus was on continuing to exist for another three months. This reaction indicates that the motivation for private businesses to participate in regional initiatives for sustainable change processes is influenced by the state of the market. Thus, finding an enterprise willing to invest time in an applied gender equality research project became even more difficult. It was not until we listened to the companies' actual needs and thoughts on future developments that collaboration could be initiated. The breakthrough came one evening when Hans Lundkvist participated in a meeting with volunteers representing different regional organisations which had gathered to discuss the meaning of the concept of employer brand⁶⁶ (Sullivan 2004; Backhouse and Tikoo, 2004; Parment and Dyhre, 2009). After the meeting, the HR manager at Dellner Couplers AB (presented later) expressed great interest in collaborating with the GATT project. Both the HR manager and Hans saw the notion of employer brand as a door-opener for a collaborative process generating increased gender awareness. The project had finally found a partner with which to collaborate.

This chapter aims to describe a process methodology for increased gender awareness in an enterprise and to emphasise the relationship between organisational and regional development. It also shows how gender mainstreaming⁶⁷ became an important notion, a development parameter, for an expanding enterprise in a semi-rural region.

Interactive research as an innovative collaborative process

Kurt Lewin introduced the concept of action research in the 1940 and the meaning of the concept has developed over the years. A large number of international articles are found in the anthology *The Handbook of Action Research* (Reason and Bradbury 2001). Articles from the Nordic context can be found in the anthology *Action and Interactive Research: Beyond practice and theory* (Aagaard Nielsen, K. & Svensson, L. (eds.) 2006) and another anthology *Gemensamt kunskapande – den interaktiva forskningens praktik* (Johannisson, Gunnarsson and Stjernberg (eds.) 2008).

⁶⁶ The concept of employer brand with a gender perspective will be elaborated upon in forthcoming articles.

⁶⁷ In this contribution, we address the concept of gender mainstreaming as an ongoing process for a change of norm and discourse and a strategy for gaining increased gender equality within the enterprise.

Docherty et.al (2008) stress that there is a difference between action and interactive research. They emphasise a difference in involvement and how active the researcher is in the process; in interactive research the researchers are not supposed to be as active in the process as in action research. The interactive research perspective aims for an equal exchange of experience, learning and knowledge between researcher and participant. The ‘ideal’ interactive research process involves the researcher and practitioner on the basis of their experiences and knowledge. Together they formulate the research plan and then work throughout the entire change process of research, analysis, recording and dissemination of the results achieved (Aagaard Nielsen and Svensson, 2006; Svensson, 2002; Gunnarsson, Westberg, Andersson and Balkmar 2007). Reason explains the purpose of action research in a broader sense as:

The essential purpose of action research is to address issues of concern to individuals and communities in the everyday conduct of their lives. A wider purpose is to contribute to the increased well-being— economic, political, psychological, spiritual—of humanity and to a more equitable and sustainable relationship with the wider ecology of the planet of which we are an intrinsic part (Reason & Bradbury, 2001a) pp.191

In practice, the degree and level of interactivity varies not only due to the degree of action research but also by different phases of the research process. The role played by the researcher in the interactive approach underlines the supportive part played by the researcher. This role constitutes an important procedure in the interactive research process. Hence, a distinction is made in relation to the more traditional role of researcher as observer. Also emphasised is the difference between the supportive role of researcher and the more advisory role of consultant and therapist (McGill and Brockbank, 2004; Gunnarsson et al. 2007).

The interactive researcher has no ambition to run development forward exclusively or take responsibility for a programme or project. Leading the development work is seen as a task for all involved and the desire for local commitment is perceived as a necessity for development work to be sustainable (Lindholm et.al, 2011). Lindholm et.al. also stress that:

Development also requires continuous analysis and reflection, in which different strategies and approaches are balanced against each other in everyday situations of power and conflicts of interests, traditions and practices, on both the societal and organisational levels (Lindholm et.al 2011) pp.15 (translated by the authors).

Trust is essential in order to fulfil this mission.

Our project strategy was to take steps towards a vision of gender equality in the enterprises, by raising awareness of gender equality issues and gender structures. These structures are often hidden and we are all more or less influenced by them, implying that the project could face both conscious and unconscious resistance. For this reason

it is important to use basic examples to raise the general understanding of gender as a construction and how it is reproduced in everyday life. Inspiration for this action can be found from the four different “points of entry” or perspectives defined by Acker (1999, p 180-185): Procedures, activities, divisions which people do that leads to gender/segregation patterns – Images, symbols, forms of consciousness which justify and recognise existing gender power relations as natural– Interaction between individuals such as interplay between individuals and groups – Internalization of and adaptation to gender-marked expectations and opportunities . This strategy (for increased gender awareness) of combining the concept of ‘doing gender’ and action research in collaboration with practitioners, can be seen as an innovation-driven process (VINNOVA Report VR 2011:14).

Women wishing to enter the male-dominated fields, must often break through resistance from men who are defending a male-marked workplace, with power relationships relating to fields and positions. It is important to find a balance so that the awareness-raising process is initiated with as little resistance as possible. Other projects have described their experiences of being forced to consider how progressively the issue of gender can be approached in a change process without causing strong resistance (Coleman and Rippin 2000; Gonäs ed. 2005). In other words, most change processes will at some point meet resistance and hesitation in particular processes that challenge norms and traditions. In the field of engineering for example, men’s interpretative prerogative is used in defining qualifications, which keeps women from technical work (Gunnarsson, 1994; Abrahamsson and Gunnarsson, 2002). Amundsdotter (2009) describes different kinds of resistance and refutation as power strategies. She highlights three dimensions: the fear of being declared hysterical or crazy, the fear of losing position and the fear of facing opposition.

Trust, an essential feature

Approaching an engineering enterprise stemmed from a natural science (positivistic) paradigm and was formed by a technical-economical rationality, with issues regarding gender equality and social construction; we tried to understand their mission, aims, problems and solutions in order to establish trust and participatory confidence. This trust is an important parameter when performing interactive research. We advocate that the trust established between the participants, as well as between the “blue collars” and a managing team is as important as the social capital in a region or nation. Social capital is built up through ongoing discussion regarding the citizens’ trust in public institutions, the citizens themselves and the present social and cultural climate. Social capital is understood in different ways by different researchers, but in short, trust in civil society is a very important part of social capital (Putnam 1996; Holmberg and Weibull 2000; Uslaner, 2000). Similar to social capital in civil society we believe that social capital is needed in a collaboration project between researchers and the enterprise. Gustavsen (2003) suggests that one can see action research as a process of building social capital.

Whether or not social capital in a society is a positive resource depends heavily on the rationality on which it is based, that is, on technical-economical rationality or responsible rationality. Technical-economic rationality views people as a means to an end. Responsible rationality, on the other hand, sees people as an end in themselves. (Westberg 2006; Westberg and Eklund 2008). How social capital is generated and functions depends on the dominant type of rationality in society. In many contexts, the concept of technical-economical rationality is perceived as superordinate to responsible rationality. The apparent gender-neutral orientation of a prevailing technical-economical rationality does not identify gender equality as a resource except when a win-win situation is demonstrably possible. The profitability of the market-economy approach, which is based on the values of technical-economic rationality, sometimes conflicts with the intention of the national strategy of a sustainable society, which is based on the values associated with responsible rationality. We believe that bringing up gender issues in a collaborative change process within a culture of technical-economical rationality requires innovative methods.

An example of regional collaboration

Dellner Couplers AB (DCAB) is an expanding company which manufactures, sells and maintains couplers for trains in a global market. The headquarters, comprising corporate management, the development department and some production, is located in Vika, a semi-rural area 250 km northeast of Stockholm. Production facilities are also located in Poland, the US, India and China; sales and service organisations are located in several other countries. The total annual turnover for the entire enterprise is close to USD 100 million and there are 500 employees worldwide. In the enterprise's expansion plans the headquarters will remain in Vika, a geographical location owing to the company's history from 1941. However, this location can be seen as an obstacle. To counter this drawback, the company expressed the need to build a better reputation on the labour market, strengthen their employer brand and become more attractive as an employer. When the collaboration between Dellner Couplers and the project was launched in 2009, the plant in Sweden had 180 staff members, 75% men and 25% women (45 people in total). The average age was 40 and amongst the women employed, two-thirds (30) were office workers with administrative duties and one-third worked with production. The business management comprised one woman and six men. Of the total of 25 people in middle management, 21 were men and four were women. The proportion of women in managing positions was thus 19%.

The collaborative process

As researchers in the GATT project, we do not want to do research on, for, or about the company. Instead, we seek a participatory approach with the aim of developing new knowledge alongside the company. Based upon long experience in feminist action research, Hanna Westberg's role is to support and guide Hans Lundkvist in action planning and in his role as a facilitator during the change process and the workshops.

With a degree in mechanical engineering and several years in the engineering field he is familiar with the activities, including design, production and commercial requirements, of engineering companies. Moreover, as a man, father, and part of the male norm in Swedish society, he also has an understanding of the tension that exists around the gender equality debate. His experiences contribute to a wider understanding of the complexity and resistance which might exist when sex and gender equality is discussed. In order to establish a sustainable relationship (likened to social capital) with mutual trust between the parties, the collaboration started with an open discussion between Hans and the HR manager. Using the concept of employer brand was both an innovative and important strategy for the HR manager, who was to present the plan to the board, comprised mostly of men. The discussion was summarised in an outline/picture, logical framework, which described the causality among different activities contributing to a more attractive work for both women and men. After informing the company management of the planned activities, the logic, methods and expected results of the change process, the HR manager was mandated to begin the intervention. The intervention plan included two major activities involving the whole company during the year of collaboration:

- Invitation to all employees to answer a questionnaire regarding attractive work.
- Requesting all employees to meet for a mutual exchange regarding the results from the questionnaire and the concept of ‘doing gender’.

Supported by us, the HR manager was responsible for informing both the managing team and the personnel during the process. She accomplished this at a general assembly using different media, such as a special bulletin board, intranet and oral presentations. By inviting all personnel to participate in the change process, the enterprise expected to accomplish a genuinely solid platform for a long-term process without support from the researchers. The internal work was to be continued through reflective learning by a group of volunteers who deepened their understanding of doing gender in workplaces and in life generally.

Starting with questions about attractive work

The interaction started with an employee questionnaire (known as the *att questionnaire*) developed by the Theme Working Life research team at Dalarna University. The questions were based on a model (Åteg, Hedlund and Pontén 2004) which describes the qualities of an attractive job. The questionnaire was distributed in order to find out the employees’ opinions on the qualities which contribute to attractive work and how they perceive their current jobs. It was developed with a ‘gender-neutral’ approach and did not address the dimension of gender. The major reason for choosing this questionnaire was its local competence and proven results as a good starter for a process of discussing work conditions. This strategy was used in order to respond to the culture we perceived to be prevalent at DCAB. However, since the questionnaire

was not developed to cover gender, we decided to raise gender issues in the subsequent workshops, which were woven into the questionnaire feedback process. The aim was to increase awareness of gender issues as a component of future success and appreciative new knowledge.

All employees were given the option of answering the questionnaire. In order to obtain an acceptable number of answers, the employees were given a choice of two different methods of completing the questionnaire, a web-based version or a paper form. The questions in both formats were identical and all responses were entered into the same database. To obtain enough responses to the *att questionnaire*, two response periods were held.

Between the two response periods, the anchoring process continued with an internal leadership conference, at which Hans Lundkvist described the project, process steps, aims and desired results to a group of 20 of the 25 middle managers. This gave them an opportunity to discuss specific questions with us and was an opportunity for us to stress the importance of inspiring the rest of the staff to respond to the questionnaire. An extra questionnaire with general questions about gender equality was handed out. This extra questionnaire was extracted from a gender-sensitive checklist and the reason for using it was to get some information on opinions regarding gender from inside the enterprise before other actions were commenced aimed at developing a method of mainstreaming gender for sustainable development and growth⁶⁸.

Workshops

During the autumn of 2009, 13 workshops were held with the participation of approximately 130 employees divided into groups of between four and 22. The composition of the groups was based on the company's organisational structure. A majority (11 of the 13 workshops) took place outside the company in an assembly room in a separate building. This was an advantage since in the field of action/participatory research it is important to create arenas for interaction which allow participants and researchers to share knowledge and experiences (Aagaard Nielsen and Nielsen 2006, p. 79). The assembly room was a neutral area for all involved and a traditional meeting place for thought and reflection. The duration of each workshop was three hours.

The purpose of the workshops was to present and discuss the results from the *att questionnaire* and raise awareness regarding gender issues. After the two first workshops we (the researchers) did not feel satisfied with the process that had been implemented because we did not feel we had accomplished the aim of creating a reflective dialogue with the participants. Our strategy for interweaving the concept of 'doing gender' in the interactive process based on the results from the questionnaire had not worked out satisfactorily. This was also recognised by one of the managers who complained after attending the third workshop and criticised the approach regarding the

⁶⁸ A total of 19 staff members (management and middle management) answered the questionnaire.

issue of gender as being overly modest and cowardly. An explanation for this inadequacy is that our awareness of the reaction which gender discussions can cause made us approach the subject very cautiously at the beginning of the workshop series. Due to the unsatisfactory result, the design of the workshops was dramatically rearranged and became more focused, challenging and innovation-driven. This flexibility was both facilitated and required by the chosen action research strategy. In brief, the new agenda for the workshop sessions was divided into three phases: an introduction phase, a gender perspective phase ('doing gender') and a phase in which the results of the survey were presented, discussed and an action list jointly drawn up.

Aiming for an open atmosphere based on mutual trust, the workshops began with some information about the project, project owner, the Swedish Steel Producers' Association/Triple Steelix and the financier, VINNOVA. The participants were also given a brief description of the project's objectives for the enterprise and what benefits each actor (company/researcher) was expected to gain through the collaboration. Since time for the workshop was limited, this opening phase was crucial in establishing a foundation of trust (social capital) between the participants and the researchers.

The purpose of the second phase, the gender perspective ('doing gender'), was to raise awareness of how gender is created in our daily lives and how it may affect the perceived attractiveness of the workplace. To support the process, we started to use pictures, anecdotes, and provocative arguments to contribute to a more lively interaction. The new innovative approach using pictures contributed to a more open atmosphere and we were encouraged to use anecdotes to 'open up' the discussions.

Pictures from the design field showing forms and functions challenging daily opinions were chosen. In this way, the issue of equality did not come too close to an individual's private sphere. Everybody saw the same pictures, everyone was on a common footing, and no one was singled out or accused. However, on one occasion, a man commented loudly, 'Is this some stupid feminist initiative?' By the end of the workshop, however, he was more relaxed. Hee Pedersen (2008) advocated the usefulness of pictures and concluded that the inclusion of pictorial material is a useful way of developing 'poststructuralist thinking technologies' to further expand our understanding of the complexities of communication in both individual and collective sense-making. She stated that images have a broader and more open content than single words and that picture and transform abstract and complex feelings, opinions, experiences, concerns, attitudes, and worries into tangible objects which the practitioners can actually talk about, explain and expand.

Anecdotes or storytelling can be seen as knowledge-sharing stories which, if well designed and well told, can help others learn from past situations and respond in future ones (Sole 2002). This can contribute to a more open atmosphere encouraging the exchange of thoughts if handled with care, nourishing the social relationship in that moment. The use of analogies is a method recommended by Ullmark (2007) when striving for understanding in a dialogue between, say, a designer and client about

planned target images. It can function as an eye opener to explain complex matters. Analogies to the past, to other firms or industries, and to other competitive settings like sports or war are useful in strategic discussions (Gavetti, Levinthal and Rivkin, 2005). Coro and Taylor (2007) promoted the use of analogy when a complex technology is explained as a strategy to get prospects to comprehend a unique offer. In this context, the concept of 'doing gender' is the complex issue to explain.

In addition to the pictures and depending on the group's level of openness, Hans very often used anecdotes, analogies and provocations to start discussions. In order to de-dramatise the discussion and to create an open and permissive climate, he used his own personal experiences as a husband, father and professional in different types of businesses. He explained that he always considered himself as a caring father and an understanding husband, but that he could remember arguments about parental leave and domestic work versus work in the house or in the garden. The examples he used were based on his life as a gender-blind, non-reflective man, and the participants were asked to give feedback and comments from their own experiences. An example of an analogy was when we asked the participants if anyone knew why the car-insurance premium is higher for a young male compared with a female of the same age. Usually, often after a joke, someone explained it was due to the higher risk of young males getting involved in accidents. The analogy would then be connected to the question, 'Who will most often use new technical investments, for example an advanced numerical controlled machine?' Most of the time, this provocative analogy started a short discussion and gave the workshop participants an opportunity to reflect upon how males are more often taken for granted as operators when new technology is introduced. A man from the maintenance department commented that he '...considered women to be more cautious with the machinery than the men', a comment another man questioned by saying, 'Why just go 80 when you can do 120?' The dispute was followed by a short discussion about gender, productivity, and risks. At another workshop, a female worker said, '... it seemed like the guys get cordless telephones, mobile phones and PowerBooks, whether they need them or not...'

The final phase of the workshop, the presentation of the results from the employee questionnaire, was divided into three steps. In the first step, an overhead slide was both shown on a screen and copies distributed to the participants. The slide showed a graph showing the 15 most important qualities, according to measurements, for work to be perceived as attractive. The chart also showed the value of how the group estimated their current job. After a brief explanation, the participants were divided in 'beehives' to discuss and write down suggested activities to maintain or achieve those prioritised qualities. The discussion was combined with a coffee break. In the second step, the qualities with the greatest discrepancy between desired and experienced work were presented. The groups were again asked to discuss the results and write down suggestions as to what measures they could take in order to reduce the gap. The final part of the workshop was used for a discussion on five questions about differing views of

work and working conditions between men and women. These questions were taken from the employee questionnaire and were those in which the researchers had found differences between the answers of men and women.

Before ending the workshop, we always asked the participants, ‘How has it been?’ for spontaneous feedback on the content and methodology. Many participants expressed their appreciation for taking part in the process.

Effects for the enterprise in the region

During the collaboration period, the enterprise invested a vast amount of the employees’ productive time in the change process, an investment which in the long term is expected to pay off with a more attractive and gender equal workplace. More than two thirds of the employees at Dellner Coplers participated in the workshops. They all received feedback from the results of the *att-questionnaire* and most were introduced to the importance of gender equality, ‘doing gender’ and reflection about their work conditions. Their new awareness can be beneficial not only as employees but also as citizens of local and regional society. Lindgren and Forsberg (2010) describe gender contracts ‘as the informal regulations which govern the everyday relations between men and women’. According to them, gender patterns exist in general, but there are local and regional variations in these patterns. From a historical perspective, various economic systems as well as local economies form contracts, which are repeated through practice when challenged in the context of economic and social transformations. This is an important consideration and will continue to be so as DCAB has a long history in a small village located in a semi-rural area; one in which it has also decided to remain.

During the three-hour workshop, all participants had the opportunity to express their thoughts, opinions and suggestions about how the enterprise could become a more attractive place to work. After the final workshop, the enterprise received more than 140 written suggestions on how to develop the company. A majority of these related to the same issues, such as physical work conditions, leadership, acknowledgement (feedback) and relations.

The managing team was aware of the shortcomings concerning the physical conditions and that many of the premises were inadequate. Therefore, an architect was commissioned to develop a proposed extension to the building. When the architect submitted the first design of the extension, the management noticed that the locker room for female employees was much smaller than that room for men. Inspired by the gender process, the management did not want to get caught in old structures and asked for a fresh proposal. The revision had a movable wall between the two sections. Thus, knowledge and awareness of management regarding gender equality had been increased. Another sign of this new awareness was that in the process of developing a new homepage with a subdirectory for careers, the subcontractor was ordered by the HR manager to be aware of the gender equality aspect when designing the page. They now understood that the layout must be appealing regardless of sex. This awareness is

important since the page for job advertisements communicates the first impression of the company to the applicant (Parment and Dyhre, 2009). Furthermore as a result of the increased awareness of the importance of gender issues, a number of employees at Dellner Couplers got the opportunity to participate in a series of seminars which gave them more inspiration and knowledge for the ongoing internal process. The aim was to secure sustainability for the new knowledge and pay attention to gender as a positive component in building a stronger employer brand.

Findings from the collaborative process

The questionnaire was an effective 'door opener' for gathering employees for a discussion of the construction of gender. Similarly, the concept of employer brand was crucial in getting the technical-economical rationale-driven management to listen to the suggestion of including gender issues in the collaboration to develop more attractive work in the organisation.

A clear scepticism was noticeable when the gender-related discussions began. However, when the pictures were shown, everybody focused on the images and the subject suddenly became less uncomfortable; reactions were positive, often with spontaneous comments. Furthermore, the anecdotes which Hans shared from his life started discussions which included arguments both for and against. Sometimes the discussions were very amusing, such as the one about whether razors for male and females in the same price range had different qualities of blades (Mach 3 versus Ladyshave) and if so, why? One man insisted there was a difference and knew this from his own experience because he had used a Ladyshave. On another occasion, one man presented the opposite view, also based on personal experience.

Once a trusting atmosphere had been created, the participants opened up more and gave positive as well as negative examples from the workplace. However, only in few occasions were these stories related to gender issues or how gender is constructed. Many participants expressed great appreciation for being shown the results of the questionnaire and involved in the process because they had not expected to participate. As a sign of participation, after one of the workshops one man told the story of his first summer job back in the 1960s: the women he worked with had received lower wages despite the fact that their duties were the same, a situation that the man considered unfair.

When the HR manager, a year after the last workshop, was asked what the company management had learned from the collaboration, she claimed that employers need to be courageous and dare to ask co-workers about what they consider important when choosing a place of work. Due to past problems, the management had been nervous about the results of the questionnaire. She stated, 'I was most afraid that we would be unable to take care of the result afterwards...' The collaboration gave the enterprise new experiences and knowledge for their journey towards becoming a more gender-aware and attractive employer. When asked if she was satisfied with the innovative process, the HR manager's prompt answer was, 'Yes, I think it was very good'. She

felt very confident since the process model was scientific and had been developed in collaboration. As an example of the advantages, she stressed how the idea of integrating gender equality into the discussion about employer brand would not have been possible without the inspiration and support of the project:

I think like this: it's still a sensitive subject and especially for me as the only woman in the management team..... for me to take the frontline role and argue for letting more women getting a chance, that's tough, so I think we really benefitted from the project, but we have still a long way to go.

The HR manager was later promoted to Sales and Marketing Director for the company, something she believes was a normative breakthrough thanks to the gender awareness project.

Concluding remarks

In an industrial environment driven by a technical-economical rationality which prioritises market demand, gender issues often become a “sidecar”, not integrated into the organisation and not seen as an important parameter for sustainable corporate as well as regional development. The lack of concern for openly discussing gender equality issues may perhaps be explained by the belief that society and most workplaces are gender equal. It has been documented, both in Sweden and abroad, that a high level of employment does not automatically result in an integrated workforce in which women and men are equally spread throughout the professions and management (Emerek et al., 2002; Rubery, Smith and Fagan; 1999). The pattern of technical-economical rationality is found within the innovation system, in Triple Steelix and amongst many companies in the industrial region. The main objective of enterprises has to be profitability, but for a more long-term sustainable development on both company and regional levels, organisations have to consider the importance of increased gender awareness and awareness of individual conditions in the workplace.

The collaboration with the enterprise revealed a lack of awareness regarding the concept of gender equality, irrespective of sex. Both women and men gave examples of resistance and ignorance at the beginning of the workshops. Gender was not seen as an issue before it was presented from the perspective of equality, and gender differences were not considered a major problem. This is probably representative of opinions of gender equality in contemporary society in general.

We found that physical work conditions, relations (power structures), management, internal organisation and communication between the different departments were more frequently debated. Women and men in the same structural position behave similarly, but women may be more likely to be discriminated against since they are positioned on lower levels in the power hierarchy. For example, responses to the *att-questionnaire* indicated that women in general found commuting back and forth to work more of a problem than men. This is not a company-related problem so much as

an example of how regional planning in general is still based on a male norm. If such discrepancies were seen as general and not gender-related problems, their solutions would benefit both women and men.

Social sustainability includes gender equality, which is also to be seen as a driving force for development and achievement of regional sustainable growth (Westberg 2008). Experiences within European social funding programmes and regional growth programmes show that, while the various project owners have an interest in gender equality, knowledge is lacking as to how this might be achieved in practice (Gunnarsson and Westberg, 2003; Westberg, 2005; Balkmar, 2006). Regions, enterprises and individuals often believe that they are compliant with the expected level of gender equality. This belief is also true of the innovation system, Triple Steelix and the company with which we collaborated.

Gender equality is a matter of awareness on the structural level among all stakeholders that are dependent on sustainable regional development. Due to the interdependency of private individuals, enterprises and regional authorities, processes for gender awareness and questioning the norm will contribute not only to more democratic but also more innovative growth. However, we think it is important to start a process of increased awareness adjusted to the context of the addressee. "Getting under the skin" of an organisation to find its gender equality needs will be a part of the solution. Since employees are part of other associations in society, the discussion about "doing gender" will not only benefit the development of the employer brand but also contribute to deeper understanding of gender on a societal level. Whether we strive for development on regional, business or individual levels, we have to think in new ways and abandon traditional norms. The collaboration between the project and the enterprise is an example of an innovative process created to make gender visible within the Triple Steelix innovation system.

To sum up: despite regional gender contracts and different terms of ignorance and resistance, we believe it is possible to increase gender awareness in enterprises and organisations but we must be perceptive and innovative. In order to establish collaboration we believe it is crucial for the researchers to meet the organisation at their actual point of need and knowledge and find an opening for a collaborative journey based on mutual respect. In our case, we achieved this through the notion of employer brand as a point of departure and got past inherent resistance in a historically masculine dominated environment.

Defining an innovation as being something new and useful (often seen in relation to a commercial market), we believe that a gender perspective will most often increase the innovative process and enlarge the success options. Consequently, we argue that the described process model, combining gender and interactive research in collaboration with practitioners, is an innovative process for generating awareness within an organisation. We also believe there to be an interdependence between individuals, enterprises and community and that, if awareness is raised among employees at an

enterprise, this can affect not only the enterprise but also the society. With this perspective we consider that knowledge of the concept of social capital (in the sense of trust) might be relevant to achieving long-term change in an organisation and contributing to more sustainable development in the region.

From the above we, as researchers, have found great interest in further investigating the combination of employer brand and gender awareness for sustainable change processes in organisations and enterprises. An article is therefore planned.

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Developing Innovative Organisations - Using Action-orientated Gender Research

Susanne Andersson & Eva Amundsdotter

Abstract

Lack of gender awareness affects not only the conditions under which people work, it is also an obstacle to organisations' ability to produce, develop and organise for innovation. This article presents an approach called *action-orientated gender research*, a merger of two theoretical perspectives: a) the doing-gender perspective, with its understanding of gender as formed in on-going relational activities and b) learning theory within the action research tradition, which focuses on reflection, learning and especially reflective learning for transformation. Gender theory and learning theory are combined into joint learning processes in networks of participants from different organisations within innovation systems. This makes it possible to uncover taken-for-granted assumptions and gendered power relations which constrain the development of new innovative possibilities in organisations.

This article will present basic theoretical characteristic of the action-orientated gender research approach, plus examples of how we have worked with this approach in a network of middle managers. Moreover, we will elaborate on the important considerations we have discovered for organising transformative learning aimed at developing gender-aware, innovative organisations. The empirical material in the article comes from two meetings. One in which co-research was conducted with two managers working in the same organisation. The other meeting took place one month later when all the managers in the Gender network were present. During this second meeting, observations from the earlier co-research were presented and discussed using the concentric circle method.

Keywords: Gender research, learning theory, gender-aware organisations, action research, gender & innovation.

Introduction

The action-orientated gender research approach presented in this article is a merger of two theoretical perspectives: a) the doing-gender perspective, with the first references from West and Zimmerman (1987) and an understanding of gender as formed in relational activities and b) learning theory within the action research tradition, focusing on reflection, learning and especially reflective learning for transformation (Argyris & Schön 1974, Brockbank, McGill & Beech 2002). The combination of gender research and action research has helped establish a fruitful theoretical framework and methodological basis for working with development processes at the group and organisational

levels aimed at critically examining organisational limitations and opportunities (Brockbank, McGill & Beech 2004, Aagard Nielsen & Steen Nielsen 2006). The aim of the approach is to create gender-aware organisations and produce interesting knowledge on how gender is constructed in organisations and how these patterns can be changed. This approach has also proven useful in developing innovative organisations, i.e. ones capable of reflecting on their own culture, its constraints and their ability to work to change existing limitations.

From gender studies we know that the social construct of gender is a constraining structure in all organisational practices, and therefore also an important perspective to consider in studies of what promotes or inhibits development processes. To integrate a gender perspective into the everyday organisation of an innovation system means giving critical consideration to what already exists and what is taken for granted. It also means being open, through reflection with others, to the development of new possibilities; this is essential in the development of innovations (Danilda & Granath Thorslund 2011).

Unfortunately, the knowledge from gender research showing how gender is a constraining structure has not been used in development work in organisational contexts (Meyerson & Colb 2000). The action-orientated gender research approach rests firmly in gender research and uses knowledge about gender to anchor and systematise the learning and development processes. However, theories on gender do not automatically motivate people in organisations to work with processes of change. We therefore believe it is imperative to supplement gender theory with theories and methodologies from action research, i.e., learning theories which focus on how learning, and especially transformative learning, can occur and how these processes can be organised.

Below is a description of a network of middle managers, the Gender Network, plus the empirical environment in which action-orientated gender research has evolved, in the regional innovation system of Fibre Optic Valley. After a brief review of the characteristics of these two, there will be a presentation of the theoretical perspectives which jointly form our approach to our methodology. Subsequently, there are examples of how we have worked within the network of middle managers. The empirical material in the article comes from two separate meetings. In one, co-research was conducted at one of the workplaces where two of the middle managers worked. In the second meeting (a month later) the observations from the co-research were presented and it then became the subject of reflection processes which drew their inspiration from the Concentric Circles method (McGill & Brockbank 2004). A central part of this method is reflecting in on different steps on concrete examples from organisational contexts. The article ends with a discussion of what we consider imperative when using action-orientated gender research to develop gender-aware, innovative organisations.

The Gender Network

The action-orientated gender research approach was developed within an R&D project called the Gender Network. This project was conducted within the regional innovation system Fiber Optic Valley and was tasked with improving the region's competitiveness and creating the conditions for sustainable growth. Fiber Optic Valley was funded by VINNOVA (the Swedish Governmental Agency for Innovation Systems) in a special programme called VINNVÄXT. Fiber Optic Valley was also working to position Sweden as a world leader in the development of products and services based on fibre optics.

Fiber Optic Valley is located in central Sweden, in a region characterised by one of the most gender-segregated labour markets in the country. In planning the innovation system, a strong link was detected between gender and sustainable growth and that integrating the gender perspective would be an important driver and prerequisite in reaching long-term growth objectives.

A gender strategy was formulated, aiming at the development of gender research applicable to growth and innovation. The strategy focused on practical, needs-based change work at the organisational level. Fiber Optic Valley was to be its engine and promoter, getting stakeholders to work consciously on gender issues. At the time the main stakeholders in the innovation system were some twenty co-financers with fibre optics operations in central Sweden. In combination, the constituent organisations constituted a Triple Helix constellation, i.e. cooperation between business, research/universities and the public sector. Fiber Optic Valley applied for a special project aimed at developing gender-aware organisations and research funding was received from VINNOVA. This project will hereinafter be referred to as the Gender Network. The management met with the CEOs of participating organisations to discuss the project and they decided to participate in the project (Andersson, Amundsdotter & Svensson 2009). The middle managers who subsequently formed the network were asked if they wanted to join the project by their CEOs.

As its name suggests the Gender Network, which lasted from 2006 to 2008, was organised in a network consisting of 13 middle managers. These were women and men from twelve of the regional innovation systems' organisations. The aim of the project was to analyse (or rather uncover) how middle managers, from their positions of power, "do" gender and how it can be changed from that position. Of special interest was an examination of how middle managers act on a daily basis, on what grounds, the conditions that their actions created for co-workers' career development opportunities and the gender implications of managers' actions.

The Gender Network met on 13 occasions. The meetings were initially organised as two-day gatherings held every six weeks. The number of meetings was then gradually reduced to two every six months, alternating between one and two days. All meetings were led by the process leader, Eva Amundsdotter. The whole process evolved

around three phases: uncovering the “doing” of gender, mobilisation strategies for change and working with change (Amundsdotter 2009b).

Researcher Susanne Andersson documented the processes during these meetings but would sometimes intervene in them, following an analysis of the processes and what restricted them. Between the network meetings, Andersson conducted co-research for three days at the middle managers’ workplaces. Often if there was time, Andersson and the middle manager would sit down immediately after the meeting and discuss it. Thus, the organisational context was highlighted from different perspectives which created joint learning. When the Gender Network met, some of these observed meetings were the subject of reflection and learning processes, primarily aimed at uncovering how gender was done in that context. This article will present a reflective discussion of the kind organised under inspiration from the concentric circle method. First however, there will be a description of the two theoretical perspectives which form the merger of action-orientated research: the doing gender and action research perspectives.

Doing gender perspective

The doing gender perspective is a central theoretical tradition in the research field of Gender and Organisation; it is also the theoretical perspective which constitutes one of the legs of the action-orientated gender research approach. The “doing gender” perspective has been developed and used by many scholars to study the social construction of gender in organisations. The axiomatic article in this tradition was written by West and Zimmerman (1987). Within this tradition, gender is seen as continuous activity in progress and an interactive act performed between women and men, men and other men and amongst women. Every day, in a myriad of settings, we do gender in relation to each other. However, in each of these situations, there is a historically pre-done understanding of gender which structures how gender is supposed to be done (Andersson 2003, Connell 1987; Gherardi 1994). These pre-done understandings are both a result of previous doings and a rationale for each new interactional situation that forms limitations on what is understood as appropriate (West & Zimmerman 1987; Connell 1987). Women and men in organisations are expected to manage situations in gender-appropriate ways and we are always accountable in terms of gender, even when acting in gender-inappropriate ways (Kvande 2007).

Gender is done in the everyday interaction in which symbols and discourses play a central part. Symbols and discourses are used by people interacting with each other to explain, legitimate and sometimes even contradict existing understandings of gender (Acker 1992; Gherardi 1994). Gender is also constructed in relation to machines, positions, units, activities, tasks, etc. in such a manner as to receive either a masculine or a feminine gender coding (Abrahamsson 2000, Lindgren 1992; Mellström 2003; Sundin 1998; Westberg- Wohlgemuth 1996; Westberg 2001; Vänje 2005). Those with a masculine gender coding have a higher status than those with a feminine gender coding

(Andersson 2003). For a man, being in charge of a unit that is masculine gender-coded strengthens his masculine identity (Acker 2000). The same reinforcing conditions do not occur for a woman in charge of a unit that is feminine gender-coded.

An ordinary meeting is one of the contexts in which social constructions take place through similar and reoccurring ways of acting. To understand the interaction during meetings, the analysis needs to be related to power and power relations. Those with formal or informal power can decide when and how gender is made relevant (Andersson 2003). Also influencing and reproduced in the interaction are the pre-done gendered assumptions that prescribe how one is supposed to think and act and therefore constrains the development of new innovative possibilities in organisations (Andersson, Amundsdotter & Svensson 2009).

Thus, the doing of gender takes place simultaneously as the organisation itself finds its form (Acker 1992; Connell 1987). Thus, constructions of gender become integral parts of the organisation. Even though the social constructions of gender permeate everyday organisational life, it is not conceptualised in that manner. The paradoxical part of doing gender in organisations is that people do gender with precision. However, this is not something of which they are usually aware and upon which they reflect (Martin 2003; 2006). They tacitly know how they are supposed to act during, say, meetings and what gender coding different units or occupations have. According to such an understanding, gender is reproduced in everyday organisational life. From a feminist point of view, with the ambition of creating gender-aware and innovative organisations, uncovering how gender is done in organisations is an important first task of research.

Uncovering how gender is constructed can be systematised in different ways. Counting how women and men are positioned in the organisation can be a way of uncovering the gender order. This provides a quantitative measure but is not enough; when working with development processes to achieve gender-aware and innovative organisations, we believe it is important to focus both on the quantitative and the qualitative aspects of organisational life in order to get more sustainable development processes. A special model has therefore been used and developed in different projects. Joan Acker's (1992) theoretical work served as the main source of inspiration during this development process. Documentation of this process can be found in Kvande (2003), and Gunnarsson et al. (2003) and Gunnarsson et al. (2008) (See also Meyerson & Colb's (2000) article, *Beyond Armchair Feminism*).

Acker's (1992) model contains four different, coexistent processes which are separated for the purposes of analysis. Combined, they form one organisation's gender order:

- a Gender division, i.e., vertical and horizontal division between women and men.
- b Symbols, images and discourses.
- c Interaction.

d Internal mental work.

The model is both theoretical and methodological: theoretical, in that it brings together much early feminist research on organisations; methodological in that it may be used as a tool for systematising an analysis of an organisation wherein each point may be studied individually or together (Andersson 2003). The model can also help anchor practical equality work in gender research so that both quantitative and qualitative aspects of gendered organisational life are focused on and become subject to change (Andersson, Amundsdotter & Svensson 2009; Vänje 2003, 2005).

Action Research: A Methodology for Reflection and Learning for Transformation

In developing action-orientated gender research, we turned to learning theory within the action research tradition. We felt these theories could be significantly complementary to gender research, in both a theoretical and a methodological sense. Thus, action research becomes the other theoretical leg of the action-orientated gender research approach. Action research has been carried out in organisations since the days of Lewin, one of the founders of the tradition in the 1940s. Today, action research includes a wide range of methodologies, even those grounded in different traditions and with distinct epistemological and ontological assumptions (Casell & Johnson 2006). Nevertheless, it is not within the scope of this article to dig deeper into these differences; what Reason and Bradbury (2001) refer to as the action research “family”. Rather, we will present only those parts which we believe offer a fruitful contribution to gender research aimed at developing gender-aware and innovative organisations. In line with Greenwood and Levin (2007), we believe that action research can offer feminist gender research a greater understanding of the variety of intervention and group process techniques which have been developed through action research. We also believe that action research can contribute to a deeper theoretical understanding of how people learn in organisations (including learning how to do gender) and what methods are important in achieving transformative learning.

Argyris and Schön (1974) are central action research theorists. As with Martin’s conceptualisation (2003, 2006), Argyris and Schön also believe that people are unreflective of the values which guide their actions in everyday life. Rather, people are guided by what they call tacit knowing or knowledge, i.e. performing skilfully without needing to reflect on it. Reflection is a central part of an ability to learn. Reflecting *in* action is a way of making explicit some of the tacit knowledge embedded in action, so that the practitioners can figure out how to do things differently; what Brockbank and McGill (2006) call learning for improvement. This is not enough to develop a gender-aware organisation; transformative learning is necessary and reflection *on* action becomes indispensable.

Argyris and Schön (1974) differentiate between single-loop or instrumental learning; that is, learning in order to improve the ways things are done (but with the under-

lying assumptions and values unchanged) and double-loop learning, which takes place when assumptions and underlying values are challenged and changed. In our case, the aim of learning processes is to work to uncover the implicit understanding of gender. It is this latter form of learning which must be achieved in order to develop transformative learning and create gender-aware and innovative organisations.

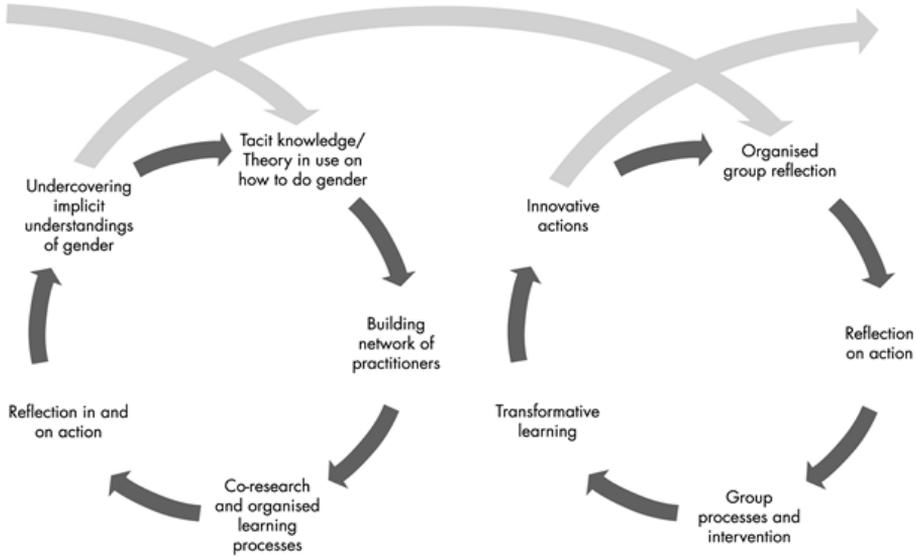
There are further complications when working with developing gender-aware organisations. Argyris (1992) distinguishes between what people say (and even genuinely believe) they will be doing in a given situation (espoused theory) and what they actually do (theory in use). These have relevance in uncovering the doing of gender. For example, people in an organisation can describe the workplace as an equal organisation, and genuinely believe this is the case. A detailed study of the same organisation can show this not to be the case. In everyday interaction, people act in ways which give rise to unequal conditions or reproduce gender coding. They act unwittingly and do not, therefore, reflect upon it. When working to create gender-aware and innovative organisations, an important first step is to organise learning processes with the aim of uncovering the implicit understandings of gender (Amundsdotter 2009b).

The methodology used within the action-orientated gender research approach entails organising participants in networks which meet over a relatively long period. Furthermore, different kinds of methods are used to facilitate reflection and learning. Like Brockbank, McGill and Beech (2002) we have found that when people have the opportunity to reflect together, they can get a different perspective on their own practices. This can move learning forwards and contribute to double-loop, or transformative, learning. Transformative learning is crucial if an organisation is to be innovative. The following is a quote from Brockbank, McGill and Beech (2002): “Reflective learning for transformation offers the potential for learners to move one step further and reconsider their work in strategic terms, questioning and challenging existing patterns, thereby opening the door for creativity and innovation”.

When working with a group of practitioners it is important to focus on what they say and genuinely believe they are doing as well as studying in co-research how they actually act in everyday organisational life. Seeing one’s own actions in a new light is not easy; reflecting on actions with others and organising networks thus becomes central. The reflection should not stop at confirmation (unproductive for transformative learning processes); group members participating in the networks also need to be critical and act on what they are hearing (Amundsdotter 2009b).

For this purpose a couple of methods have been used, co-research where the practitioners as well the researcher study the same context and then using concentric circle to facilitate reflection on their own practices together with other participants. (See figure 1 which illustrates the learning processes, from tacit knowledge on how to do gender to new and gender-aware and innovative actions.)

The working model that was formed within the Gender Network project was developed to facilitate learning processes aimed at uncovering implicit and unreflected doings of gender, the first loop. Then the learning processes move to the second loop with reflection on action, group processes and intervention and transformative learning leading to new and innovative actions. The model with two loops was developed with theoretical inspiration from Argyris & Schön (1974) and Brockbank & McGill (2006)



Joint Learning in the Gender Network through Actual Events at One Workplace

The Gender Network – the 13 middle managers – carried out different reflective processes with the researcher and process leader. During these learning processes, when using the concentric circle method for example, the roles of process leader and researcher were as facilitators stimulating the reflective processes. Not by lecturing and telling, instead the analysis from the co-research became the objects around which the reflection on action and the transformative learning evolved. Inspiration for this way of working as a process leader and researcher was drawn from Freire (1971), Field Belenky et al (1986) Andersen (1994) and Brockbank & McGill (2006). See also Herr & Anderson (2005: 40) in *Participatory Methods: Means to What End?* which discusses different kinds of participation and the research relationship.

The following is an example of how the reflective processes were organised when the Gender Network met. One way of organising these processes was to use observations from a co-research occasion from one company which then was the object for reflection and learning which came into play when using the concentric circle method.

Before the meeting in the Gender Network, the researcher and two of the middle managers had conducted a co-research observation studying one meeting where the

two of the middle managers (a man and a woman) from the Gender Network worked. This was a large company. The female manager worked in a small unit while the man was in charge of a large unit, with 15 team leaders and 350 metalworkers.

One meeting in particular was studied and the following is a short description of what happened during this meeting. The male middle manager led and observed the meeting and the female middle manager and researcher were participant observers.

The majority of the male middle manager's subordinate team leaders attended the meeting and some other subordinate staff members. Of the 40 people gathered in the large conference room only a few were women.

The male middle manager started the meeting by outlining an important development project in the company. He described its purpose and why the company considered the project should be prioritised. One of the woman team leaders present at the meeting, seated almost opposite the male manager, was also involved in the project. When the middle manager was discussing who was working in the project he forgot a name and turned to the female team leader. She responded in a low voice. He then repeated the name so that everyone could hear it. The same pattern was repeated when the middle manager indicated how often they would meet. Here, too, the female team leader had the detailed knowledge which she whispered to the middle manager. The manager again repeated what she said to the other participants. This pattern continued; the male managers were talking about the project, while the female team leader had the role of supporting her manager with key information. This gave her the appearance of a prompter, whispering key information to her boss without getting any credit herself even though she knew more about it than him. According to the researchers' interpretation, she was marginalised during this meeting.

Three more items were dealt with during the meeting. The meeting ended with a discussion about the company's Christmas party. The discussion which ended up involving a lot of people was whether external staff would also be invited. This started when a woman from HR said that only regular employees would attend the Christmas party and not the external staff. Anxiety now pervaded the group; people began interrupting each other and speaking uninvited. They stopped listening to each other and instead of addressing the middle manager or group as a whole, turned to their neighbours. Some showed their irritation towards the woman from HR, who tried to defend the decision. After a while she became upset and said that she felt people being unpleasant. Her role was just to inform of the decision and nothing else; it was her boss that was responsible for it. The male middle manager managed to calm the group down by suggesting how the problem might be resolved. The meeting ended with a consensus that this was a good solution.

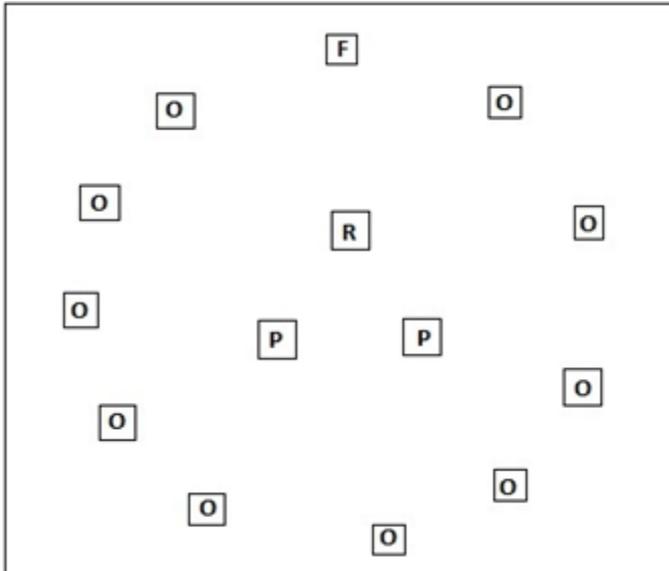
When the researcher spoke after the meeting to the woman from HR, she started to cry. She felt that everybody had turned against her when it was her manager in HR who had taken the unpopular decision.

Forming a concentric circle

Some weeks later, when the middle managers within the Gender Network had their meeting, the co-research observation became the object of reflection processes. Two particular sequences of the interaction were highlighted: the sequence where the male middle manager marginalised the female team leader and the sequence which ended with the women from HR crying.

In this case the concentric circle method was used, which is beneficial to reflection and learning (McGill & Brockbank 2004). The room was organised as follows: three people formed a small inner circle; two of the middle managers, the woman and the man and the researcher – the same people who had previously conducted the co-research. The rest of the group formed a larger, outer circle. The process leader facilitated the exercise and sat with the rest of the participants in the larger circle.

The illustration shows how the concentric circle method was used during one network meeting. The method design is inspired by McGill & Brockbank (2004). P: Participant, R: Researcher, O: Observer, F: Facilitator



The male middle manager in the inner circle began relating his interpretation of the meeting. Then the female manager conveyed her observations. Finally, the researcher shared her report. Both the managers, especially the male one, emphasised that they had found it difficult to observe the meeting whilst chairing it. In the process of discussing and reflecting with the researcher on the events of the meeting, it became apparent that the two middle managers had nearly the same interpretations. The difference in attitude and behaviour was that the woman sought the man’s confirmation as she told her story, whilst he did not seek hers. Neither the man nor the woman noticed

that one woman was marginalised, as per the researcher's interpretation. The male middle manager did not even remember that the female team leader had taken part in the meeting. The woman crying was nothing unusual; they claimed that she often cried and that it was not as serious as it seemed. Different understandings, experiences and thoughts were shared between the three participants.

Then the word was given by the process leader to the participants in the outer circle, who reflected on the conversation. During this dialogue, the three people in focus were able to listen. Some of the participants in the outer circle wondered what kind of culture or climate prevailed in this workplace, where there had been raised voices, a woman crying and another woman being marginalised. Several observers in the outer circle also commented on the interaction that took place in the room between the male and the female middle managers. It seemed as if she was seeking confirmation from him.

The floor was then handed back to the three people in the inner circle, who continued their reflections, supported by comments from the observers in the outer circle. Finally, the three joined the outer circle to share and close the process.

In this final discussion, a somewhat harsh workplace culture was uncovered, one which strongly affected the two managers. Their interaction in the organisation (which they took for granted in their day-to-day lives) had been scrutinised, not only by the researcher but also by the other participants who shared their observations on it. One conclusion from this process was the difficulty faced by women in general in playing a significant role in meetings within the organisation. Also uncovered was the gendered power relationship reproduced during the interaction in the inner circle between colleagues within the organisation; the man and the woman. She repeatedly turned to him, asking for confirmation, a habit that they were not aware of, but a practice which drew comment.

In conclusion, the process of reflection in several steps on one specific organisational context was commented on from both a methodological and a knowledge perspective. One of the middle managers considered it a very good format because it gave room for listening, reflecting and learning. Another expressed the view that the process had a clear focus – the learning and interpretation of a particular meeting from a gender perspective. The participants in this learning process expressed that they had gained a deeper understanding and new knowledge of how gender was constructed in organisations. The reflection process made them understand that gender was something done in everyday organisational life, without them being aware of it. In this process, the two middle managers with their quite harsh culture and gendered power relations were uncovered, but this was not new to them. They knew it tacitly, but it was not something upon which they previously had reflected. For the other participants, the reflection process of one organisational culture offered a comparative relief to their own context. The comparison contributed to the others' ability to see their own organisational culture from a more gender-aware perspective. For some of the middle

managers, this reflection process contributed to transformative learning, which included new measures through which they decided to organise their meetings more democratically; working to constrain gendered power relationships and create a more inclusive and creative culture. The middle managers took various stages to become more aware and inclusive: to start meetings by having all colleagues say something about themselves or the work and by discussing gender and norms, reflecting to themselves on how gender assumptions hinders personal leadership and, on that basis, becoming more aware of ways to develop new expectations of, and perspectives on, their staff.

Action, Reflection and Learning

Thus, the learning process was organised as reflection in several steps and from different perspectives. This started with the inner circle in which the three people reflected and shared interpretations of a special occasion. From there the focus moved to the outer circle, where the others commented on what they had just seen and heard. Then, focus again shifted back to the inner circle where the three participants were given the opportunity to deepen the discussion of the others' comments. Finally, the whole group was brought into a common discussion not only about what had been learned, but also reflecting on how the learning process had been organised.

The concentric circle method was a source of inspiration for this kind of learning processes (McGill & Brockbank 2004). This method enables a smaller group to benefit from each other's reflections and it develops skills in the group for thinking and reflection about each other's experiences and perspectives. It also supports the skills of active listening and of listening and speaking without interruption.

Andersen (1994) elaborates different kinds of reflective processes, where the focus is shifting between a centre and observers who later reflect on what they hear. He suggests a variety of possibilities for using reflective processes to assist for different purposes (dilemmas and problems) but also as a means of studying a practice as co-researcher.

One important aspect of these processes is the formation of a network group composed of participants who are given the opportunity to reflect with others on their own organisational lives (Amundsdotter 2009a; Argyris, Putman & McLain Smith 1985). By learning from experiences through reflection with others, possibilities open up for reconsideration of past events, making sense of one's actions and finding new ways of behaving in future events. One aspect of this learning is recognising the link between action and learning. Another is the aim of making the action learning process supportive and challenging.

Brockbank, McGill and Beech (2002) stress the importance to the potential learning relationship of giving opportunities for uncertainty and instability. This is what can happen if we reflect, for instance, on organisational contexts which are taken for granted. An openness of feelings or emotions is needed in order to trust the learning

context: “When we really learn, particularly that which is potentially transformative, we lay ourselves open to uncertainty and can be temporarily unstable” (ibid).

How the learning processes were organised in the network was important; the subject of this paper’s analysis. The different knowledge processes, stories from everyday organisational life and gender analysis were all starting points for the knowledge process. Process leading is meant to guide the learning process about gender and create knowledge, not only of gender in the different organisations and the focus on middle managers’ agency, but also of the actual change processes. A central part of action research is a basic optimism concerning the human ability to learn from joint experiences in groups (Berge & Ve 2000).

Using gender theory meant critical reflection and an understanding of everyday life in organisations (Wahl et. al 2008). A tendency to “censor” the role of gender, which can be seen as a form of resistance, makes it especially useful for finding ways of intervening in order to create learning through creative and critical reflection (Gunnarsson & Ghaye 2009, Amundsdotter 2009b). An example of how this was possible was our case using the concentric circle method.

The Group: Its Role and Importance

The group developed a deeper understanding and knowledge of gender constructions in the organisations as well as on an individual level. Different experiences were shared in the groups and these were combined with theory and reflective processes.

However confidentiality is an essential precondition if we are to confirm each member in a group and also be able to create a constructive climate of challenge for each other. Support is needed, but not sufficient, to challenge the prevailing assumptions and norms in a group (McGill & Brockbank 2004). Cultivating trust is another crucial aspect of the work in order to function well and be able to learn through knowing, doing and feeling.

The empirical example in this paper uncovered, among other things, norms at the workplace which could be described as harsh. This was displayed by the way in which the interaction took place at the actual meeting, with harsh words and a demanding attitude amongst the managers. An emotional experience was also expressed by the two middle managers involved. To challenge embedded discourse is to uncover the taken-for-granted status (Brockbank, McGill & Beech 2002; Argyris & Schön 1974; Argyris 1991).

The learning process made it possible to make power relations and norms clear. The feedback given from the outer circle was supportive and critical. A commitment in the group, of wanting to contribute to each other’s learning, made it possible to engage in this kind of learning process.

Ellström (2002) stresses that to enable effective collective learning of this kind, openness is important in which people are allowed to ask new questions and critically

examine what is taken for granted. Experimentation must also be allowed and failure must be permitted.

Sharing and analysing observations provided insights and thoughts to the rest of the Gender Network about norms, interactions and power relations in their organisations. By conducting reflective processes in several steps, like the one mentioned, reflection was linked to development. From the learning processes we aimed for transformative learning where new perspectives and choices of actions could emerge.

Conclusion

Action-orientated gender research is a merger of two theoretical traditions: gender research and action research. The aim of the approach is to develop gender-aware and innovative organisations. This article has presented characteristics of the approach and shown how the processes of uncovering, learning and changing have been employed within an R&D project called the Gender Network.

The use of action-orientated gender research has made it possible to develop gender-aware and innovative organisations. These are organisations with the capability to uncover assumptions and power relations which constrain the development of new innovative possibilities. For that purpose, reflective processes leading to transformative learning are necessary, both in and on action. Equally important is for an innovative organisation to be able to constantly let the development of gender-aware and innovative practices emerge.

Towards developing gender-aware and innovative organisations, we have argued in this article for the importance of focusing on what the practitioners say and genuine believe they are doing in everyday organisational life as well as studying how they actually act through co-research. Supported by gender theory, reflection on actions becomes central. These learning processes can be improved, if they are organised in groups. We have argued that when people are able to reflect together, they can gain another view of their own practices. For the reflection in the groups not to stop at just confirmation, i.e. improving what already exists but is unproductive for transformative learning and innovative processes, the other group members need to be critical and act on what they are hearing. For this purpose a couple of co-research methods have been used which imply reflection in action and reflection on action to facilitate single as well as double-loop and transformative learning.

In conclusion, what we have come to understand about how to build a group of actors for developing gender-aware, innovative organisations is:

- Time for reflection, with a different kind of focus in reflective processes.
- Opportunity to reflect with others about day-to-day life in the participating organisations.
- Developing trust, safety and connections in the group support learning and actions which may potentially be transformative.

- A stated commitment to contribute to one's own and others' development yielding a stronger focus in the joint work.
- When feelings can be expressed and are welcomed by the group, it helped to be open to different kind of experiences, learning from and understanding the effects that gendering orders have on people.
- In a network the participants have different experiences which contribute to a variety of perspectives and help challenge assumptions in the group.

Our contribution is knowledge on how gender is constructed in organisations. Furthermore, knowledge on how a change process in a group and in organisations can be organised. Power relations need to, and can be, addressed through the commitment and the relationships developed within the context. The often unreflected, and sometimes censored way of how gender is done in organisations, has been brought out more. In this regard, we have uncovered how gender is a constraining structure in these organisational contexts. This knowledge has been a basis for transformative learning and for developing gender-aware and innovative organisations.

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Gendered Innovative Design - Critical Reflections stimulated by Personas

Eva Källhammer & Åsa Wikberg Nilsson

Abstract

This chapter focuses on our re-design of the Persona Method into a tool for critical reflection on gender issues in entrepreneurship and innovation systems. Whereas such systems often are considered gender neutral, we in contrast are emphasizing the need for communicating and discussing the 'doing of gender' with actors within those constellations. The aim of this chapter is to explore our development of the Persona Method for action-based design in gender equality interventions. A persona is a fictional character used in our research work to increase gender awareness in interventions. The method is used to communicate issues and concerns as well as visions in participatory inquiries. In our experience the Persona Method engages people in dialogues about gender; people totally unfamiliar with gender theories. We therefore examine action-based design using personas in order to advance the discussion beyond the "problematic women issue". Not only do we highlight a way to discuss gender inequality, ultimately we illustrate a means of unsettling and challenging conventional beliefs on gender.

Keywords: Innovation, design, gender, personas, scenarios

Introduction

The subject of this chapter is an action-based research approach, in which we focus particular on a redesigned practical method for collaborative gender analysis in entrepreneurship and innovation systems. Other contributions in this book demonstrate that traditional entrepreneurship and innovation systems preserve and even reproduce unequal gender structures. Whereas there generally exists a rhetoric of gender equality as relevant within most Swedish organisations, the general gender mainstreaming tactic of pointing out women as being in need of remedial efforts may contribute to a preserving of, rather than challenging of, gender constructs (Lorber, 2000; Ahl, 2004; 2006; Fältholm et al., 2010). Even if this insight is not new, it calls for new theoretical and methodological approaches. Gender research needs to move forward, not by merely establishing and describing gender inequality, but by actually challenging gendered structures. For this reason, there is a need for new intervention designs, which communicate gender theories in less academic and more practice-orientated language; in short, we propose a merger between design methods and gender theory. Thus, the aim of this paper is to explore our design of the Personas Method for critical reflections on gender equality interventions.

One understanding of the concept of innovation is as something new, useful and/or commercially successful (Schumpeter, 1983). However, there is argument for considerations of ‘newness’ as dependent on what is new, how new and to whom it is new (Johannessen et al., 2001). Hence from this perspective, some ‘innovations’ could more be a matter of incremental change(i.e. building on and reinforcing what already exists) rather than radical change (something that breaks stable states) as a way of building something completely new and desirable (Schön, 1973). In the field of design, there is continuous training in breaking established rules and patterns. Simon (1996 p.114-115) argues that whereas “the natural sciences are concerned with how things are, [...] design, on the other hand, is concerned with how things ought to be”. Our action-based approach combines the ideology of design as emphasising human experiences and uses situations and the field of gender to stress equality and diversity and to build innovative and more socially robust future businesses. For this reason, this chapter illustrates a way of involving stakeholders in critical reflections on current states and in imagining future possibilities. We propose the way we communicate gender as an important aspect of making change possible.

In parallel with the increasing interest in entrepreneurship and innovation, other contributions in this book illustrate methods and tools developed with the objective of moving beyond ‘armchair feminism’ in gender research (see e.g. Andersson & Amundsdotter, 2012; Lundkvist & Westberg, 2012). Likewise, in this chapter we explore a practical tool for increasing gender awareness; the Persona Method. A persona is a fictive character illustrating and communicating issues and situations identified during an initial mapping. This well-known design method has traditionally been used to help design teams engage in user experiences (Cooper, 1999) and thus design future objects to better fit the user’s lifeworld. Our contribution redesigns this method to communicate gender issues in participatory interventions. Personas are used to reflect gender inequality and the tool thus contributes to increased gender awareness and illustrates how it might become a force for changing obsolete systems. The Persona Method is exemplified as useful in reflecting on experienced realities, for an increased awareness of norms and values, and for dialogues of change (Wikberg Nilsson et al., 2010).

The reason for implementing gender theory in innovation systems is the argument that gender equality contributes to the creation of a more favourable environment for growth (Kveine et al., 2011). Another reason is the statement that diversity appears to contribute to creative environments (Florida, 2002). Thus, our contribution deals with both identifying the gendered aspects of innovation systems and increasing gender awareness in collaborative activities.

In this chapter, we first outline the bases of our action-based research design. We then present the research projects, as context for the two personas. These personas are presented as illustrations of how the method can be used for gender reflections. We also demonstrate the ‘switching of gender’, as a way of further reframing participants’

understandings of gender constructs. In the final part of this chapter, we propose that the Persona Method may be a way, not only of illustrating and discussing gender inequality, but of actually challenging and ultimately making a fundamental and sustainable contribution to changing gender constructs.

Innovation and design

Entrepreneurship and innovation theory stems mainly from the economist Schumpeter's (1983) notions of innovation as new ways of combining ideas and organising businesses and activities. According to Schumpeter, innovations are always discontinuous, meaning radically new. However, Schön (1973) argues that this often means talking about small steps of transformation rather than radical changes tearing down obsolete structures to create something new. In later studies, the terms incremental and radical innovation have gained acceptance (Dewar & Dutton, 1986). In this context, incremental means small steps of transformation and radical means significantly different than previously known. The various classifications of innovation are interesting since they reveal a lot of what is considered innovative and what is not. For example, in *Innovative Sweden* (2004) the industrial sector is emphasised as the business able to create value and growth by being innovative. The paradox is that the industrial sector emphasises continuous improvements rather than radical innovations. Additionally, within academic entrepreneurship, innovation is mainly considered within a bounded rationality of traditional male areas and competences (Fältholm et al., 2010). Based on Schumpeter's view, these are not radically new ways of thinking; hence, this does not lead to growth and new businesses, only a continued state of stability.

Within the field of design, there is continuous training in breaking established rules and patterns and thinking in terms of alternatives. This does not mean that designers own the concept of innovation, as Edeholt (2004) proposes; rather, it implies that design is a deeply rooted human activity that is given further training within design education. The process of design is referred to as an intervention aimed at changing an existing stage into something better (Simon, 1996). In general, the design process is not explicitly spoken of as radical or incremental, innovative or optimising, since what is considered radical and innovative in one situation may be seen as simply incremental and/or optimising in another (Edeholt, 2004). Likewise, Johannessen et al. (2001) stress the perception of innovation as associated with those who perceive it as such. Illustrating this, is Simon's (1996) notion of "satisficing", describing how people in general do not aim for the best possible solution, but are instead content with solutions that are "good enough". Thus a relevant question is whether the same phenomenon applies to innovation as well; that incremental innovations are considered good enough solutions within business?

We consequently propose that there is a need to involve a multitude of actors in interventions, in order to discuss a variety of perceptions of what is innovative and what is merely good enough, who is allowed to be innovative and who is not; this is particu-

larly the case for future imaginations of what an innovative society could be. Accordingly, Kveine et al. (2011) propose several drivers for realising gender theory in innovation systems; for example in the competition for well-educated employees, in gender diversity as driver for creativity and innovation and in competition with user-driven innovation and gender as means of design innovation. In summary, a gender perspective may contribute to fresh thinking. Correspondingly, Sherry (2003) argues that innovation involves a process of radically changing the form or function of a thing, system or person. This implies a reframing of mind-sets, new approaches to innovation. An innovative business may hence facilitate fresh thinking by promoting different perspectives and perceptions within current activities.

The action-based research (AR) design we use draws inspiration from *critical reflections* necessary for change, as discussed by Freire (2000), Dewey (1998a; 1998b), Schön (1995) and Argyris (1991). For example, these authors seem to agree on change only being accomplished through critical reflections, which allow actors to become aware of alternative understandings of contexts and situations. Obviously, this assumes actors are able to take action and change the structures of their lives. Dewey coined the concept of ‘reflective thinking’, meaning that turning a “subject over in the mind and giving it serious and consecutive consideration” is needed in order to realise change (Dewey, 1998a p.3). Nevertheless, this requires a prevailing norm upon which to reflect; stereotypical assumptions of what is female and what is male being one example of such a norm. Elsewhere, Dewey discussed ‘experienced realities’ as an important notion to grasp, meaning that there is a variety of experiences which are equally real to the actors involved. In his view, this is vital for a more human lifeworld (Dewey, 1998b). For this reason, the aim of our activities has been to facilitate reflection on existing experiences and so ensure sustainable change. Schön (1995) refers to this as creating a reflective mind-set, meaning that being involved in serious discussions of various interpretations and perceptions of situations and practices contributes to changed mind-sets. Otherwise a community of practice may find it difficult to escape established ways of thinking, even if criticism is put forward (Argyris, 1991). Thus, the motivation for this approach is the basic assumption in AR that people learn better and are more willing to apply what they have learned, when they have participated in the development process (Lewin, 1947).

However, at the same time there is criticism of reflection not contributing enough to considerations and change. For example, Haraway (1997) instead uses the metaphor of “diffraction” for reflections on diverse meanings and experiences. Drawing on diffraction means critically reflecting on the current state of things as well as constructively imagining how things ought to be in the future. Consequently, an important argument is to not just talk and discuss current gender inequality, but to actually take action for change. However, change must be preceded by awareness of various experienced realities.

The design of gender

The general understanding of gender is the dichotomy between women or men, in other words a division according to biological sex. However, the objective within the field of gender research is often to explore the social construct of gender; i.e. the subjective perceptions of female and male present within certain contexts and society as a whole. Given the discussion to realise alternatives in order to become more innovative, we propose the same reasoning goes for gender constructs. With a social constructionist view, the process of “doing gender” can be seen as undertaken in social interactions that present feminine and masculine “natures” (West & Zimmerman, 1987; Acker, 1999). The relevance of this perspective is that social constructs of gender, in contrast to biological sex, are therefore not natural, biological, eternal or “true”. Gender identity is said to be an unstable, multifaceted, and variable construct, dependent upon the various discourses, which affect each individual (Hollway, 1996). For this reason, gender inequality seems to be a result of the stereotyping of women and men and the assumptions, values and practices, which result in certain men gaining power and privilege at the expense of women and other men. To illustrate this, Acker (1999) argues that the doing of gender within organisations can be identified as four gender processes. Inspired by Acker, we refer to the processes as structures, symbols, interactions and individual identity, as illustrated in the figure.

Our model for mapping and analysing gender, inspired by Acker (1999). A gender order is produced at the intersection of these four gender processes

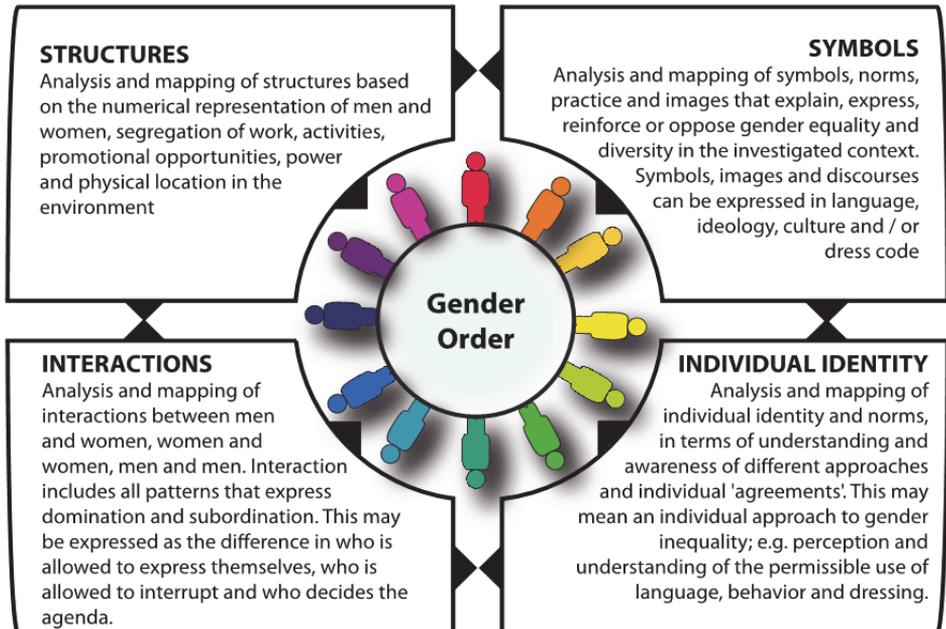


Illustration: Åsa Wikberg Nilsson

These four processes were used for mapping and contextualisation for our persona development and as a framework for our participants to reflect on their own experienced realities. Using the Persona Method for creating gender awareness can therefore be seen as Haraway's concept of diffraction. Accordingly, the ideology in AR is that actors act as co-inquirers, reflect on their own practice, ideally reframe their understandings and take action for change (Rasmussen, 2004).

Persona design

A persona is a fictional description of a person, whose characteristics are of importance for the project it is designed for (Nielsen, 2007). It is a frequently used design method to focus a development process on users' needs and preferences (Cooper, 1999). Based on one of the authors' previous experience of the method within the design field, the objective in the present research studies has been to test, further develop and evaluate the Persona Method in applied gender research. The research basis for our persona development is qualitative, drawing on interviews, observations, focus groups and workshop activities. Developing a persona is an iterative process consisting of mapping, contextualising, characterisation, persona and scenario creation and validation (Cooper, 1999; Grudin & Pruitt, 2002; 2003; Pruitt & Adlin, 2006; Nielsen, 2004; 2007).

The personas are formed consisting of: a *body*, a fictive name and an image to illustrate the character; a *psyche*, such as an overall attitude to life, work and the situation being designed for; a *background*, e.g. social background, education, upbringing which influence abilities, attitudes and understanding of the world; and finally *personal traits*, which brings the Persona to life and makes it an engaging character rather than a flat stereotype (Nielsen, 2004). The fictional personal details are included in order to increase communication with and commitment to the character.

Also, Acker's (1999) suggestions of mapping an organisation's symbols; what kind of images and values are used and in relation to employee behaviours, such as who is doing what and how, where, when, and in what circumstances are also useful for the Persona creation process.

Based on our understanding, a persona is in itself basically a different way of presenting empirical material; it is during the interaction with people it becomes a valuable tool for discussing and challenging unequal gender orders and for fresh thinking. For this reason, we emphasise placing the persona into a scenario which makes "her" valuable. In this context a scenario is a story, with a character (the persona), a context where the action takes place, goals that the persona wants to achieve and actions that the persona takes to fulfil those goals. The persona development process is described in the model presented in the figure.

Our process of making a persona

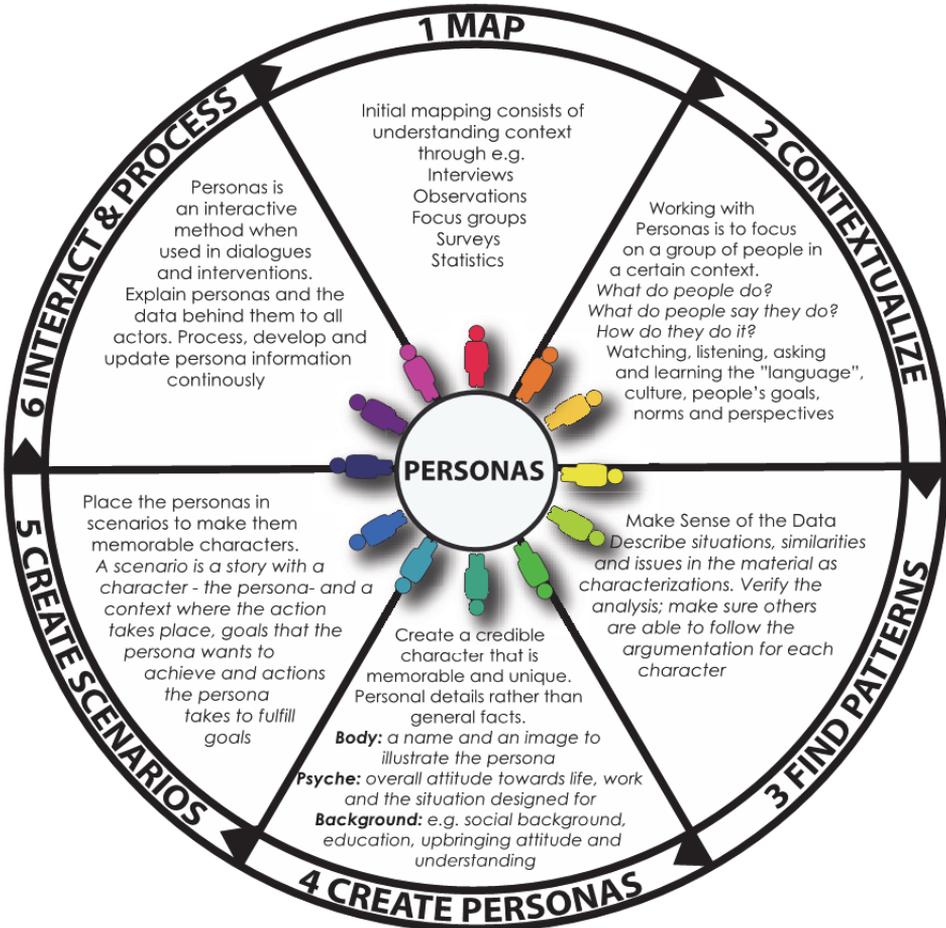


Illustration: Åsa Wikberg Nilsson

Persona approach

The Persona Method was used in two research projects, see overview below.

Overview of the two research projects which form the basis of the current research

	‘The Future Factory’	‘Daring Gender’
Context	Swedish industry sector	Swedish universities
Aim	Collaborative design of visions of a future factory emphasising women and young people’s participation	Create gender awareness and contribute to equal and innovative environments
Mapping	121 participants in interviews and future workshops	117 participants in interviews and workshops
Personas used	Anna, Dan, Eva - and Svea	Sven & Sara, Leif, Anita, Mats
Relevance	A ‘social innovation and experiment’ that can be one way to unsettle gender inequality	A ‘social innovation and experiment’ that can be one way to unsettle gender inequality

In the Future Factory project, personas were used to focus participants on various realities experienced in the context of the Swedish industrial sector. In this project we initially performed interviews and observations. Based on this mapping, three personas were created and discussed in activities with interest groups such as a group of young people aged 17-18 years, several trade unions representatives and several representatives of both industrial employees and employers. In the subsequent work within a design team – a group of women engineers, production technicians, CEOs, human resource managers, system designers, industrial designers, architects, students and researchers – the method was used to focus the outcomes on these personas (see Wikberg Nilsson et al., 2010). In collaborations, we have further developed the method by making a future ‘ideal’ persona; Svea is fictive character who works in the future factory where gender is no longer an issue, where power and possibilities are equally distributed and where innovation and entrepreneurial actions can be undertaken by both women and men. Accordingly, the participant’s vision of the Future Factory illustrates an innovative business, which contributes to sustainable growth in the region and where there are equal numbers of women and men as role models in all positions. Naturally, visions are one thing and realisation another. This approach associates with what Jungk (1987) refers to as a ‘social innovation’, in the experiment of what

can support a change of stable orders. According to Jungk, future imaginings help reduce apprehension of change and thereby strengthen the possibility of realisation.

In the Daring Gender project, personas are currently used to challenge gender perspectives at two Swedish universities, with the aim of raising gender awareness, initiating change in order to include both women and men and thus contributing to equality, innovative environments and sustainable growth (see Fältholm, et al., 2010). In this project, the initial mapping consisted of a statistical review of Swedish university structures, followed by 72 interviews as well as workshop activities which included 45 participants in learning and understanding the current practice of doing gender within so-called ‘entrepreneurial universities’ (Etzkowitz et al., 2000).

Initially the research contexts were explored with the help of Acker’s (1999) model, i.e. mapping of structures; gender divisions of work, men and women’s location in physical space in terms of research areas or workplace tasks. A further line of inquiry was concerned with symbols and images and was used to “explain” the respective organisations. Working with personas means focusing on a group of people in a certain context and emphasis is therefore placed on understanding the context and the people within it (Nielsen, 2007). The next step was to analyse the material, since it has been said that the analysis reveals patterns, which consequently provide the basis for a persona (Cooper, 1999). As mentioned above, the focus of the research on increasing gender awareness meant a concentration on issues and situations that dealt with gender issues. We subsequently developed a number of personas for each project.

Until this phase in the process, a persona appears as basically a different way of presenting empirical material and a way for a researcher to understand the context and practices within it. In the next phase, however, interactions commence with actors from the respective contexts; in the current case this means contexts of university, industry and, to some extent, society. During this phase, we present the personas to actors within the contexts and discuss scenarios. A persona development process should ideally include “all concerned” so as to ensure its validity (Nielsen, 2007). There are further arguments for validating research results by including actors from outside the research community to produce more socially robust knowledge (Novotny, Scott & Gibbons, 2001; Gunnarsson, 2007). For this reason, we discuss the personas in collaborative activities to ensure they are credible characters within the projects’ contexts. This results in a continuous development of our personas as participants provide us with new insights and knowledge. A usual procedure is that the personas are presented during a workshop and participants are asked to reflect on the scenario. Participants also develop personas as a way to stimulate critical reflection on the present and the future.

Experiences with personas

In this section we present our findings as two personas and describe our experiences of using the method in two interactive projects. After the presentation and elaboration of

personas Anna and Sven, we present our experiences of using “gender switching” to further reframe participants’ awareness of gender constructs in research contexts.

Persona Anna

Persona Anna was used in *the Future Factory*, a three-year action-based research project, performed in collaboration with various interest groups. The project idea was to challenge the traditional design of production systems by including groups which do not normally participate in change processes. Due to the heavy male domination of the Swedish industrial sector⁶⁹ and the fact that young people are not choosing industrial work (Ziebertz & Kay, 2005), we chose in this project to specially emphasise women’s and young people’s needs and preferences in designing a vision for a future factory. In this project the action-based approach was used to design a conceptual future factory in collaboration with a variety of project stakeholders, including employees and employers from the industrial sector, trade unions and young people (as prospective future employers, employees, shareholders or simply people with a stake in the future). The project approach can be seen as an innovation in itself, since it includes new thoughts, behaviours and solutions that are qualitatively different from existing practices. A practical focus in the Future Factory project was to explore new practical approaches and methods for change and fresh thinking. A theoretical focus was to develop knowledge of change by design.

Traditionally in the industrial sector there has been a long-term emphasis on efficiency; this has been said to result in a “bounded rationality” on economic growth (Simon, 1997; Cairns et al., 2010). There is currently a strong discourse in most European countries supporting innovation and entrepreneurship (e.g. European Commission, 2003; Innovative Sweden, 2004). We propose that the concept of innovation can be used to change various dimensions within the industrial sector. Put differently, talking about “what might be” instead of “what is” makes it possible to reflect on a variety of issues with a multitude of actors.

The Future Factory project used the Persona Method as a means for reflecting on various realities experienced in activities with interest groups. Anna’s scenario is based on an initial mapping of Swedish industrial sector. Some details are fictive, such as the name, age, and the image. Others are taken directly from the mapping, such as quotes from interviews. As mentioned above, the story reflects some experiences of working within male-dominated structures and with work tasks coded as male (see e.g. Faulkner, 2001; Abrahamsson, 2002). Thus, this story addresses some experiences identified in our inquiry into the Swedish industrial sector.

⁶⁹ The labour force within the Swedish manufacturing sector is 16.5 percent women, according to Statistics Sweden (2010).

Persona Anna from the Future Factory project



Photo: Nicke Johansson

This is Anna, a 27 year-old woman working in the Swedish industrial sector. She works on an assembly line in a team of 13 people; all male apart from her. Anna thinks this is okay as she claims she's always been something of a "tomboy" having grown up with three older brothers. For example, she learned to repair motorbikes before she started school.

On the production line, each work operation is time-constrained; Anna and her team are supposed to perform the tasks assigned to her station within a given time. If she, or someone else, does something wrong or doesn't finish in time, a bell rings and the line stops. This happened to a woman working at the plant before Anna and they are still talking about "*women not being fit for the job*"

The mistake of one woman symbolises all women's mistakes, thus Anna is determined to do well, although her shortness causes her some problems. There is also a problem with clothing. Her male-sized work wear does not fit very well since Anna is small and there is no women's workwear. She rolls up trouser legs and sleeves, but it's difficult to work effectively.

Anna has worked at the company for 18 months and is really determined to do a good job. The job is quite simple, '*it's not like it's brain surgery*', says Anna, and '*you learn the jobs in just a few weeks*'. Anna's manager has noted her efforts and would like Anna to get further training and thus new duties. However, at this company it is

the team members who decide who will get the training and they have turned down Anna's application based on the argument that no woman has done that job before.

"I've thought a lot about this; why didn't they want me for that job when they knew I could do it? I think they felt challenged by a woman being able to do the same thing they did. I am so naïve, thinking they'd consider it good to get someone committed to doing a good job! [Laugh]"

This incident has left Anna a bit puzzled, why didn't her team members suggest her for the job, and does this mean she will she stay at the factory or not? Her manager is good though, for example, he always makes sure Anna is included when there are company presentations, photoshoots and suchlike, though this is not that popular among her colleagues.

"I just want to do a good job and get some appreciation for it, that's all!" says Anna.

Our experience of using persona Anna is that the participants have been troubled by the situation presented and has discussed what kind of actions to take in order to change it. As far as we understand, in the different interest groups where Anna has been presented, both "she" and the scenario have been identified as credible and several participants have told of similar incidents and issues. We consider the method useful in applied gender research since we are working in collaboration with actors from industry and people therefore have the opportunity to take action for change.

In addition to discussing issues and situations presented by our personas, the participants in one workshop developed a persona, which the project outcome would supposedly "satisfy". Persona Svea, as she is called, illustrates a somewhat idealistic situation where gender is no longer an issue, a situation similar to ideas of a 'feministic de-gendering movement' (Lorber, 2000). The future scenario of Svea also reflects current perspectives of innovation networking systems on such things as economic and social benefits. In our experience, the Persona Method has shown prospects of being a tool to communicate and challenge gender constructs within the research context. For example, the Anna persona has been presented and discussed with academics, industrial actors, government and students. In all of these contexts and among a multitude of actors, the method has proven a useful tool for talking about gender without referring to it as 'the problematic women issue'.

Persona Sven

As was the case for Anna, Sven is based on issues and situations identified during our preliminary mapping. Sven's story is of a somewhat stereotypical academic entrepreneur, active within a field dominated by men. In our mapping, we identified the structure as male-dominated and Sven's behaviour and identity illustrates what we found as indicative of male academic entrepreneurs, i.e. being promoted by both sponsors and peers and with access to funding.

Persona Sven was used in Daring Gender – Academic Entrepreneurship, an integrated gender mainstreaming and interactive research project at two Swedish universities. The project could be defined as “a Knowledge Space” (Etzkowitz & Ranga, 2010), in which participants in entrepreneurship and innovation systems explore how gender is constructed in their respective environments. In the Daring Gender project, we analysed, highlighted, challenged and ultimately contributed to a change of participants’ awareness of gender constructs. The project idea is thus to address questions of how gender equality interventions should be designed within the arena of academic entrepreneurship. For example, Ahl (2004; 2006) illustrates that what is referred to as “women entrepreneurship” actually sustains beliefs of men and women as fundamentally different, rather than seriously questioning existing norms of innovation and entrepreneurship as gender-neutral. In the project we also question how support systems for the commercialisation of research and collaboration with industry should be designed to attract and include both women and men. Rather than developing interventions, which tend to restrict targeted women into “entrepreneurial ghettos” (Fältholm et al., 2010), the main objective therefore is to challenge stereotypical ideas and assumptions of gender and conceptions of entrepreneurship within the research context. The Daring Gender project uses personas as a means for reflecting on the concepts of innovation and entrepreneurship from a gender perspective.

Persona Sven from the Daring Gender project



Photo: Istock

This is Sven, a thirty-nine-year old senior lecturer in the engineering faculty at the university. He comes from a family of entrepreneurs so entrepreneurship and commercialisation are not new to Sven. Within his research team of fourteen men and one woman, almost everyone has a business on the side or has sold a product. Sven has a large network of companies and board members whom he meets on regular basis. According to him;

“Being entrepreneurial means building bridges between academia and society, finding a solution in collaboration with industry that meets market needs”.

Even though the university promotes entrepreneurship, Sven sometimes finds it is not accepted as a university activity. Nevertheless, Sven perseveres. He says,

“Commercialisation of research is important because of its benefits to society. Research is the raw material which needs to be processed and packed by industry. You have to highlight what is valuable and frame it in marketable words – a success can lead to regional development and job creation”.

His research team is doing very well; they get a lot funding and have been able to recruit many doctorate students. However,

“It’s like it’s dirty to make money on research, but I think it’s OK as long as it doesn’t compete with the universities’ activities”, says Sven.

He thinks academic entrepreneurship is about doing something of value for society, such as developing businesses and new products. He considers the social field a bit “soft”, not doing “real, valuable research”.

Sven has a family. His wife Annika works as a part-time pre-school teacher and they have two children, Johan and William. Sven considers that he and Annika are quite equal; for example, his ambition is to help Annika with things like the vacuuming, though Annika has usually finished by the time he gets home. He doesn’t mind, after all he earns most of the money and does something valuable for society and his wife understands this. Sven usually spends at least 60 hours at work and also works from his home office or is away on business trips. Still, Sven would like to have a bit more “quality time” with his children; he used to play football himself and his eldest son has now started playing. Nevertheless, he did actually take parental leave when his youngest son was born and is quite proud of having worked from home for ten whole days. This is not something the other men in his research team have done, and they often make fun of him being so “soft”.

Our experience of using persona Sven is that “his” scenario has raised a discussion about the paradox of being a successful academic entrepreneur. The measuring instrument currently used in Sweden for career promotion and university ranking makes it difficult to produce research articles. The “third mission” for Swedish universities (to collaborate with society, inform about their activities and promote useful research

results (Högskolelag, 2009:45)) is not valued within this system. Czarniawska and Genell (2002) recognise the paradox of company-like competitive universities, which are measured and ranked through research contributions. This issue is a discussion we are able to have with the participants aided by Persona Sven.

Sven furthermore illustrates the entrepreneurial concept of such things as doing something valuable for society, for regional growth and job creation. The entrepreneurial university discourse is quite powerful in Sweden, as defined by Czarniawska and Genell (2002 p. 464): “People speak of markets, competitions, networks and strategies, as though these concepts can be taken for granted”. In contrast to the “entrepreneurial discourse”, we identified some scepticism among university employees regarding how to combine the idea of an entrepreneurial university with education and research based on a critical perspective. This is exemplified by such authors as Jacob et al. (2003).

In mapping of Swedish academic entrepreneurial contexts, we also identified what could be called an entrepreneurial identity and behaviour, articulated as, say, dedication to work partially explained or excused by the higher aim of “doing something valuable” for society etc. However, when considering dedication to work from a gender perspective, the question is whether the conditions for women and men are the same. For example, in Sven’s scenario, he is said to have an understanding wife who works part-time and is responsible for their children and their home. Our experience is that by using Sven, we can address the issue of whether the conditions would be the same if the genders were reversed. In other words, the different conditions which the idea of the “entrepreneurial university” may hold for women and men. Thus, in further developing the method and in order to be able to address different conditions for women and men, the next step in the projects has been switching the personas’ genders, as illustrated in the next section.

Sven’s scenario also addresses whether he is happy with the situation. This is articulated in such things as his desire for quality time with the children. Sven’s story, although illustrating a structure of male alliances, also deals with interaction aspects such as parental leave not being considered a “correct behaviour” for a man, as illustrated by his colleagues making fun of him for being “soft”. We believe this demonstrates arguments for some contemporary men having to deal with dual loyalties, in which the loyalty towards work usually outweighs the loyalty to home and family responsibilities (Mellström, 2006). In the initial inquiry we understood most men in our research contexts to be thinking of gender equality as something obvious, although our participants say they do not always practice what they preach. Our respondents claimed they preferred being present in their children’s lives, in contrast to being absent in the way many of them experienced their own fathers to be. We believe it is important in these contexts to discuss masculinities as well as femininities and, in our experience; Sven has been a valuable tool for such dialogues.

“Switching gender”

An implication of using the Persona Method is that images and representations, such as Sven, risk presenting gender as unitary categories and thereby reproducing gender stereotypes rather than challenging gender inequality. We have therefore developed the design method as a practical tool for communicating and discussing gender blindness within innovation and entrepreneurship systems. Inspired by the qualitative method of Memory Work (Widerberg, 1999), we have challenged the stereotypical representations by switching the genders of the personas. During workshop activities our participants are asked to address the situations presented by the personas and discuss the consequences for women and men. The participants are then presented with, say, Persona Sven, and a discussion initiated based on his story. The participants are then presented with another persona, Sara (see below) who is a “female representation” of Sven and asked to reflect on whether the scenario becomes different due to the switching of gender.

Persona Sara used in the Daring Gender project



Photo: Istock

This is Sara, a thirty-nine-year old senior lecturer in the engineering faculty at the university. She comes from a family of entrepreneurs. Entrepreneurship and commercialisation is hence not new for Sara, and within her research team, of fourteen men and one woman, almost everyone has a business on the side or has sold a product. Sara

has a large network of companies and board members whom she meets on regular basis. According to her,

“To be entrepreneurial means to build bridges between academia and society, to find solution in collaboration with industry that meets market needs”.

Even though the university is promoting entrepreneurship, Sara finds sometimes it is not accepted as a university activity. Nonetheless, Sara perseveres.

“Commercialisation of research is important because of its benefits society. Research is the raw material which needs to be processed and packed by industry. You have to highlight what is valuable and frame it in marketable words – a success can lead to regional development and job creation”.

Her research team is doing very well; they get a lot funding and have been able to recruit many doctorate students. However

“It’s like it’s dirty to make money on research, but I think it’s OK as long as it doesn’t compete with the universities’ activities”, says Sara.

She thinks academic entrepreneurship is about doing something of value for society, such as developing businesses and new products. She considers the social field a bit “soft”, not doing “real valuable research”.

Sara has a family. Her husband Anders works as a part-time pre-school teacher and they have two children, Johan and William. Sara considers that she and Anders are quite equal; for example, her ambition is to help Anders with things like the vacuuming, though Anders has usually finished by the time she gets home. She doesn’t mind; after all she earns most of the money and does something valuable for society and her husband understands this. Sara usually spends at least 60 hours at work and also works from her home office or is away on business trips. Still, Sara would like to have a bit more “quality time” with her children; she used to play football herself and her oldest son has now started playing as well. Nevertheless, she did actually take parental leave when her youngest son was born and is quite proud of having worked from home for ten whole days. This is not something the men in her research team have done and they often make fun of her being so “soft”.

One experience with “switching gender” activities is that participants do not initially recognise the story. It usually takes a while before they become aware that the story is the same but the gender is different. When presented with Persona Sara, the participants have commented that “she” becomes the only woman working at the department, in contrast to Sven’s story. Thus, our experience of using Sara is addressing issues such as “tokenism”, meaning being the only one or one of a few in a structure dominated by the other gender. According to Kanter (1977), this may result in increased visibility; for example, one woman serving as a stand-in for all women and subsequently experiencing performance pressure. Another issue that can be addressed is

arguments for the very symbol of an entrepreneur being a man (Ahl, 2004; 2006). This is exemplified in the resulting identity, as expressed by one of our participants:

“Women at the university often try to defuse differences between women and men and women adapt to men’s behaviour in order to be accepted”
(Interview in the Daring Gender project).

During our mapping, we identified what could be called a result of this: women do not want to be presented as “female entrepreneurs” or “female” whatever the suffix may be, in line with claims of a “stigmatising identity” (Ahl, 2004; Lewis, 2006; Fältholm, et al., 2010). Consequently, based on our understanding, the strategy for some women is to adopt an identity, which suppresses female identifiers and work harder to prove themselves worthy. However, one positive effect of being a woman in a male-dominated structure may be increased positive attention from people higher up in the hierarchy (Kanter, 1977).

An additional experience of using Persona Sara is our participants’ comments on Sara’s family situation. For example, the question of why she has children at all if she does not take care of them? In our experience, this issue has not been discussed at all in regard to Persona Sven. Our participants consider the scenario unrealistic because of Sara’s husband, who is said to work part-time and take care of the home and the children. Apparently this is an issue where gender division is obvious; amongst our participants, it is not considered normal for men work part-time and take on the main responsibility for home and children. Another thoroughly debated issue is that Sara has chosen to take only ten days of parental leave. Although Sweden has very generous parental leave which fathers and mothers can both use, it is still more common for women to take the bulk of it. The fact that Sara’s “home service” and short parental leave are often the subject of harsh discussion (not the case for Sven) reveals a lot of gendered values and norms, both for us and for the participants themselves.

Thus, we argue that the critical reflections promoted by the switched gender of a persona contribute to a reframing of gender awareness, because our participants reflect on and recognise their own, often stereotypical, norms. In our activities, we use “switched gender personas” to highlight and discuss strategies and consequences within the research contexts. Sara is a persona whose story is not based on empirical data. Still, our experience is that “she” becomes a useful tool for challenging gender perspectives amongst our participants and we therefore consider the method a contribution to a critical reflection of current gender perspectives.

Reflections on a gendered innovative design

This chapter involves an exploration of our re-designed Persona Method for realising gender theory. In this, the objective is to illustrate our development, experience, and continuous refinement of, the Persona Method and its use within collaborative interventions. In our view, the main challenge is to widen perspectives and increase awareness within both institutional and individual arenas of unequal gender orders. Thus, we

consider the Persona Method supports an unsettling of the former stable gender inequality.

In our persona development, we map the contexts and subsequently communicate our findings to the actors within them using the personas. We would emphasise that awareness is only possible if actors are given the opportunity to distance themselves from the situation and the structures they are in through reflection. We consider the Persona Method to be a new approach to innovations by being a way of critically reflecting on situations and structures and thereby identifying new options. Despite this, it has been noted that when reflecting we risk seeing only a mirror image of ourselves and our beliefs and that reflection as a critical practice may not therefore seriously challenge current conceptions (Haraway, 1997). We therefore draw inspiration from both Simon's (1996) oft-quoted saying of design dealing with "what ought to be", and Haraway's (1997) metaphor of "diffraction", as deliberate interventions aiming at making a difference in the world. Elsewhere, Haraway (1988) calls for an ability to translate knowledge between different communities. We consider the Persona Method illustrates the possibility of communicating gender theory in a practical, straightforward and visually attractive way that goes beyond that of spoken or written word. In particular, we believe the switched gender personas "mess with" stereotypical gender representations and create an imbalance of stable states, which, in turn contributes to fresh thinking. In our experience, the Persona Method helps participants (people not familiar with gender theories at all) engage in gender issues, both present states and future possibilities.

However, we also recognise the implications of reproducing gender stereotypes by using the personas as stand-alone objects. The personas are presented as either women or men and thus risk reproducing the dichotomy between them. On the other hand, we discuss a diversity of masculinities and femininities, working in a variety of disciplines doing a multiplicity of tasks. Our use of the Persona Method can therefore be seen as one input into a diversification of gender. However, we do emphasise that the personas should not be used as single objects; we use them as tools for discussing gender and not as posters on a wall. Each persona is based on thorough background investigation and in-depth discussions during workshops. In our experience, the success of using a persona also depends on our ability to be open to new perspectives and be in resonance with the actors, picking up on their experiences of gender inequality in structures, interactions and symbols and the accompanying construct of individual identity. In both projects we have worked in practice-oriented contexts, which means that participants in the activities have various interests and most often not with gender equality as a first priority. In such constellations, the Persona Method seems a useful tool for communicating gender issues in a communicative way, or put another way, a tool which can support an actor's diffraction and thereby realisation of other experienced realities. Hence it may be one way of challenging former stable states, i.e. the understanding of alternative ways of doing things and interacting with the world around us.

Our findings indicate that as negative attitudes towards gender projects still exist, personas seems to be a way of dismissing conceptions of gender discussions as threatening, useless and “feministic”, in a negative sense. Using the Persona Method may also be seen as a radical innovation in itself, because it is a new application of a design method which, in interactions with participants, has been shown to aid the unsettling of stable states (Schön, 1973). In our experience, it is also a method that facilitates the analysis of the dynamics of practice and awareness of constructions of both masculinities and femininities in organisations.

However, the challenge is to find a method that helps go beyond individualistic and structural explanations and solutions and on to imagining what could be. For example, prompting questions of what if gender was no longer an issue, what would the world look like then? Participants thus initiate a process of transforming their mind-sets into increased gender awareness. For this reason, our interventions may be seen as social innovations or an experiment (Jungk, 1987) which helps reduce apprehensions of what the world would be like without gender inequality.

Finally, in this chapter we have elaborated on our experiences of the Persona Method as one way of illustrating and discussing gender inequality as well as actually challenging, provoking and ultimately contributing to promoting fresh thinking.

Consequently, based on our experience, the Persona Method helps take discussions beyond the “problematic women issue” and on to issues concerned with both women and men and what kind of lifeworlds we ought to have.

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Are Female and Male Entrepreneurs equally Innovative?

- Reducing the Gender Bias of Operationalisations and Industries studied

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Abstract

This chapter examines the gender bias of the innovation concept and the proposed differences in innovativeness between male and female entrepreneurs. We critically discuss previous definitions, operationalisations and surveys of innovation and observe that gender has not been a topic in innovation studies: the concept is male-gendered, women are less visible as innovators than men, and studies of innovation have primarily been focused on male-gendered industries. So far, studies on innovation have been gender blind but not gender-neutral. There is a need for innovation studies in industries that are not male-gendered, like the public sector and other female-labelled and female dominated sectors. Further, the word innovation is male-labelled and researchers must be careful in the use of the word in contact with these sectors, since the word itself may lead to an underreporting of the phenomena of innovation. The second part of the chapter focuses on male and female entrepreneurs in an explorative quantitative study of a set of female-gendered industries i.e. healthcare industries. Here we apply the lessons learned from the first part of the chapter. In the study the operationalisation of innovation was deliberately made more gender neutral, a female-labelled and dominated sector was focused, and finally the study distinguished between male and female innovators to test if women are less innovative than men. We find that there are no significant differences between men and women: Men and women are equally innovative. We argue that the visibility of innovation is dependent not only upon the labelling of sector and sex of actor, but also upon the gender-neutrality of the operationalisation of innovation. Those ideas are summarised in a model in the chapter. Hence the way we measure innovations have a great impact upon the visibility of innovations from men and women.

Keywords: operationalisation of innovation, female-labelled sectors, healthcare

Introduction

This chapter discusses the gender bias of innovation on a conceptual, methodological and empirical level. Previously, it has been noted that an important obstacle to mainstreaming innovation lies in the very concept. In short, it is difficult to mainstream innovation based on a male-labelled concept (Amble 2010). Previous definitions, op-

erationalisations and surveys are scrutinised from a gender perspective; we then move into the empirical part where we attempt to apply lessons learnt to an explorative quantitative study of male and female entrepreneurs in the health and care industries in Sweden.

More specifically, the gender-labelling of industries is discussed and we focus on female-gender labelled industries. These are industries which have been little studied in the fields of entrepreneurship (cf. DeBruin, Brush & Welter, 2006) and innovation (Statistics Sweden, 2009; Lindberg, 2010). The health and care industries are dominated by women (at least as measured by number of employees) - as many as 84% of the employees in the healthcare sector in Sweden are women (NUTEK B 2007:2). However, women represent only 57% of the employees in the healthcare sector. This means the number of female employees is higher in healthcare than in other sectors, a fact partly explained by this being a sector in which many women have their past experiences (cf. Shane, 2000).

Still, the gap between 57% of the entrepreneurs and 84% of the employees is obviously an under-representation. Women are under-represented as entrepreneurs, even in a female-labelled sector. This can be explained by gender-aware approaches taking the social macro environment (Brush, de Bruin, & Welter, 2009), the discourse on women entrepreneurship (Ahl, 2004) and gender-labelling (Sundin, 2002; Holmquist & Sundin, 2008) into account. This study seeks to extend studies in women's entrepreneurship by further exploring this female gender-labelled sector as a site for innovative entrepreneurship. This is an important means of advancing studies of women's entrepreneurship and innovation.

The overall aim of this study is to examine the alleged gender bias of the innovation concept and alleged differences in innovativeness between male and female entrepreneurs. In so doing, we propose a model distinguishing three dimensions to be considered in future studies on innovation.

The overall aim is achieved in stages. Firstly, in the theoretical part of the chapter (after outlining the conceptual background and define key concepts) we examine the studies in the field of innovation from a gender perspective and propose how innovation could be operationalised. Secondly, we report from an explorative quantitative study of innovativeness among male and female entrepreneurs in the health and care industries in Sweden. Thirdly, in the discussion and conclusions, these parts are discussed in the light of each other.

Conceptual background

Before moving into scrutinising previous studies on innovativeness among men and women, we will define key concepts and outline our conceptual background and the perspectives used in this explorative study.

Gender-dominated -vs- gender-labelled

Although, for empirical reasons, we are forced to regard gender partly as a variable, we acknowledge gender as a social construct of what is regarded as male and what is regarded as female (Hirdman, 1988, Acker, 1992). As phrased by West and Zimmerman (1987, p. 129): “gender is not a set of traits, nor a variable, nor a role, but the product of social doings of some sort”. By the same logic, we distinguish between gender-domination in the numbers of men and women and the socially constructed gender labelling (Sommerstad, 1992, Westberg Wohlgemuth, 1996, Gunnarsson et al, 1998).

Men and women in the Swedish economy work in different occupations and sectors, i.e. some professions and sectors are male-dominated whereas others are female-dominated. Of the 30 largest occupations on the Swedish labour market, only four could be considered equal in the sense of there being 40-60% employees of each sex (Statistics Sweden, 2010).

Loosely connected to the gender-dominance of a profession or a sector is the gender-label, i.e. the gender-connotations linked to a certain profession, sector or phenomenon. In other words, the principle of gender-labelling makes us conceive a phenomenon as either female-coded or male-coded. Previous studies have also shown that different occupations are given different gender labels, although this varies over time and space (Sundin, 2002, Sommerstad, 1992).

Although there is an iterative relationship between gender-domination and gender-labelling in general, the two concepts do not always coincide. Physicians are an obvious everyday example; although the occupation is currently characterised as demonstrating equal opportunity, it is still male gender-labelled.

The pioneering study of Sundin and Holmquist (1989) found that many women refused to be regarded as business people, since the strong male connotations of the word threatened the identity and self-esteem of their husbands. A similar attitude among female innovators towards invention and innovation was found by Nyberg (2009). These are two examples of how the concept of gender-label goes beyond our understanding of sector and profession: Phenomena such as entrepreneurship, owner management and self-employment are male gender-labelled (Cohen and Jennings, 1995; Sundin, 2002).

The perception of business operations and entrepreneurship as male is strong even today (Ahl, 2004; Nilsson, 2002; Sundin, 2002). Males dominate in numbers and they fit the picture better of the entrepreneur as a person who works almost 24 hours a day. One expression of this is that males are almost always over-represented among business-owners, particularly in female-dominated sectors (Sundin, 1997, 2002). As a consequence, a female nurse entering into entrepreneurship encounters mixed expectations and stereotypes (Tillmar, 2009).

The female-dominated care sector is one example of the intrinsic relationship between gender-domination and gender-labelling. In this sector, the logics of care were devalued in favour of the more male gender-labelled economic and efficiency logics

(Johansson 1997, 1998). In turn, the logics of economy and efficiency are very closely related to those of technology and innovation. This is one example of why healthcare is not only dominated by women, but also female gender-labelled in a way which directly concerns innovation⁷⁰, as will be elaborated in this chapter.

Innovation and entrepreneurship

The border between innovation and entrepreneurship is not always clear. Comparing definitions of entrepreneurship and innovation, the two concepts seem synonymous – both concepts include a component of (new) change and implementation. However, the emphasis is usually different and the research traditions are parallel and seldom intertwined – innovation researchers seldom cite entrepreneurship researchers and vice versa. Not many researchers publish in both fields (Amble 2010, Nählinder 2011).⁷¹

In this study, we make an analytical distinction between the two concepts and use the concept of entrepreneur synonymously with that of business owner, as is often the case in mainstream entrepreneurship studies, such as the Global Entrepreneurship Monitor. The entrepreneurs who have developed further goods and services and/or developed new working methods are considered innovative. This implies that we should consider all respondents in the empirical part as entrepreneurs. However, only some of the respondents are considered innovative.

The concept of innovation is defined in many ways due to its use in many contexts. A useful definition is the one proposed by Fagerberg et al in the Oxford Handbook of Innovation:

“Invention is the first occurrence of an idea for a new product or process, while innovation is the first attempt to carry it out into practice”
(Fagerberg et al, 2005:4).

The above definition distinguishes between two different requirements, both of which must be fulfilled for a specific change to be regarded as an innovation. The first requirement is the first occurrence of an idea. The second requirement is that this idea is, in one way or another, carried out in practice. Innovation may thus be seen as change, but not any kind of change – the change must be important (OECD 2005). The Fagerberg definition of innovation is not so different from a definition of entrepreneurship – see also Nählinder (2011).

Although the definition of innovation per se is inclusive, operationalisation of the concept is usually more restricted (cf. Acs et al 2002, Green et al 1995). For example, it is not uncommon to use patents as an operationalisation of innovation (Archibugi and Pianta, 1996) although it only captures the first of the two requirements of an

⁷⁰ However, one should be aware that within the sector there are sub-sectors and occupations among which the gender label varies.

⁷¹ An important distinction between the two is where the emphasis is put. Innovation researchers tend to focus more on the first stages of the innovation process (i.e. less on commercialisation). Entrepreneurship researchers tend to focus more on the organisation of the endeavour - how the opportunity is realised.

innovation. As will be seen later, when we discuss the operationalisation of innovation in the influential Oslo Manual and Community Innovation Survey (CIS), operationalisations may be inherently gender-biased.

There is more to innovation than meets the eye but, depending on which operationalisation of innovation we use, we get very different understandings of how innovative a certain area is. In the public debate, innovation is often understood as advances in high-technology products and sectors. This delimitation of the concept does not correspond to common definitions of innovation, such as the one presented in the Oxford Handbook of Innovation, cited above.

Distinguishing the definition of innovation from the operationalisations of innovation is an important stepping stone towards understanding the gender-labelling of innovation and its consequences for gender mainstreaming as we will see throughout this study.

Innovation and gender-labelling

The notion of gender-labelling is important in order to understand the gender bias of innovation. It is highly probable that the same type of gender-labelling we saw concerning the concepts of entrepreneurship, self-employment and invention, also relates to the concept of innovation. The effects on gender mainstreaming can hardly be overstated. We suggest that this may have implications not only on the operationalisation but also that women may be less prone to identifying with the image of innovator, since the concept is perceived as male-labelled. This is also noted by Amble (2010:10):

“In principle, a seemingly gender-neutral word such as innovation, out into practise through policy documents [...] can involve practises which are heavily gendered and context dependent without saying so. In the description of Norway today, innovation is claimed to be something masculine and perceived to be connected to something new, physical and technical, with the ability to compete in a globalised reality”

As we will discuss, this is taken into consideration in our study: for example, we have chosen not to use the word innovation per se in the questionnaire. It also raises important questions on the nature of innovation. Is innovation perceived not only as male-labelled but also, in reality, more pronounced in male environments? In this study, we argue that common operationalisations of the concept of innovation are male-labelled whereas the definition of innovation, more importantly, is gender-neutral. This has important implications for gender mainstreaming.

Examination of previous studies

In this section, we scrutinise and analyse previous studies of innovation and innovativeness among men and women, from a gender perspective. We start by outlining our main observations from the literature review, before moving into a discussion about

the definition and operationalisation of innovation. We then discuss influential innovation surveys from a gender perspective before summing up our theoretical points so far.

Observations from the literature review

There are surprisingly few previous studies of innovativeness among men and women. Reviewing the literature available – most of which has not been published in journals – we make five different observations, outlined below.

A first observation is that, to date, gender has not been a topic of innovation studies, although there are exceptions (Nählinder, 2010; Nählinder et al, 2010). As a paragon, we may note how, as mentioned above, entrepreneurship research is a field which used to be gender-blind, but which now takes gender into account. Surprisingly little research within the field of innovation studies includes gender. For example, Nählinder (2010) noted that *The Oxford Handbook of Innovation* (Fagerberg et al, 2005) only mentions “women” four times. In those contexts, however, it never refers to women as innovators. There is a tendency to view women as actors on the receiving end of technology or as users, rather than as possible innovators (Cockburn & Ormrod, 1993). Innovation processes are considered gender-neutral (Kvide & Ljunggren, 2011); a plausible reason for this is that innovation studies seldom focus on the person, the innovator, as such. A small and scattered discussion on innovation and gender is taking place in other disciplines, including entrepreneurship (Ljunggren, Alsos, Amble, Ervik, Kvidal, & Wiik, 2010), economic geography (Blake & Hanson, 2005), political science (Lindberg 2010) and amongst policy analysts. However, the discussion does not appear to be making an impact on either academics in innovation studies, or on the policy discussion surrounding those important instruments of innovation measurement, the Oslo Manual (OECD 2005) and Community Innovation Survey (CIS).

A second observation is that the operationalisation of the concept of innovation is gender-biased. Amble (2010) suggests that altering the formulation of the innovation concept itself would include more female activities as innovative. The theorising in the area has also been devoid of any understanding of gender as a dimension of innovation. The Oslo Manual (2005) distinguishes between innovations new to the world and those new to the firm. Similarly, Hanson and Blake (2005) suggest that activities not ordinarily carried out as innovations should still be regarded as such. They give the example of a female-run auto repair shop which ought to be recognised as an innovation, since women do not usually run auto repair shops.

A third observation is that women are less visible as innovators than men (Nyberg 2009; Nählinder et al, 2010). The social visibility of technology (and hence of innovation) is more often recognised in some (male-dominated) sectors. For example, textiles constitute a technological sector without being regarded as such. Care is a problem-solving activity, but is seldom seen as innovative. However, men tend to be visible as innovators to a much higher extent than women. One possible reason is the image of

the inventor himself (*sic!*) - he is a nerd and there are many women who find that image unattractive (Nyberg 2009). This could be compared to the tendency to look upon entrepreneurship as male-normed, as discussed above.

A *fourth observation* is that there is a bias towards male-labelled sectors in our understanding of innovation. Lindberg (2010) shows how male-labelled areas in the Swedish economy receive innovation funding more often than others. Almost 80% of all projects which received funding came from male-dominated sectors. Kvidal & Ljunggren (2011) conduct an interesting analysis in which they discuss why innovation policy support tends to promote male-dominated industries and the viability of changing the gender-pattern through promoting female-dominated sectors as well.

A *fifth observation*, which partly follows on from the previous ones, is that men dominate largely among innovators in existing innovation surveys (cf. Ljunggren, 2002). The same applies to those seeking a patent (Nyberg, 2002). In Sweden, where our study is conducted, approximately 5% of patent holders are female (Nyberg, 2009). Nyberg mentions that the sex of the actor also has an impact on innovativeness within a given sector. A female engineer would then be less innovative than a male engineer, a fact visible through the official statistics of patents, where the share of female patent holders has been stable, even though the share of female engineers has risen (Nyberg 2009). However, the gap in measured innovation among men and women is not necessarily a reflection of a gap between male and female innovativeness.

These five observations clarify the fact that although innovation studies are often gender-blind, they are by no means gender-neutral. The implementation and formulation of innovation policies and innovation research are often designed *as if* innovation is gender-neutral. As long as the concept is regarded as gender-neutral, the (non-) innovativeness of women will be invisible. The above studies suggest there is a difference between men and women regarding innovativeness, but less certain are the nature, causes and extent of these differences, or exactly how gender impacts on the innovativeness of the firm. Their suggestions stretch from an inherent gender *problematique* in the concept of innovation per se to a gender-biased selection of sectors identified as innovative. This has important implications on the gender mainstreaming of innovation, as will be seen later on.

Operationalisation -vs- definition of innovation

Gender-labelling of innovation was discussed in an article by Amble (2010). She compares three definitions of innovation, drawing the conclusion that terms such as “production”, “market” and “economic value” are male-labelled whereas a definition focusing on use and usability of is more inclusive from a gender perspective.

Amble’s discussion of why a certain definition is gender-neutral or not, is difficult to generalise and apply in other contexts. However, one important part of her argument is that, since the female workforce is very largely employed in services and welfare, a suitable definition must take this into account and not systematically exclude these activities from the potentially innovative. In other words, the commercial aspects of

the definition of innovation must be downplayed; this could be done by replacing terms such as “commercialisation” and “economic value” with “utilisation” and “exploitation”, thus disconnecting the concept of innovation from pecuniary value. She thus makes a direct link between female-dominated sectors and women’s typical response to innovation.

Amble (2010) discusses the gender-neutrality of the definition on the basis of not excluding female-dominated sectors. Nyberg, on the other hand, points to the concept of innovation (or rather invention) as based on the engineering profession, which is strongly male-labelled.

Our argument is that the definition suggested in this study (Fagerberg et al 2005) is apparently not gender-labelled. Many operationalisations of the definition, on the other hand, are. The use of patents as an operationalisation of innovation has a clear male-gendered connotation, as shown by Nyberg (2009). We argue that the term “innovation”, in parallel to terms such as “business owner”, “self-employment” and “inventor”, is male-labelled and that one important reason for this male-labelling of the concept is the intrinsic popular connection between innovation and new industrial products and processes. We therefore argue that a gender-neutral operationalisation of innovation should take care to:

- 1 exclude references which make the operationalisation impossible to apply to welfare or public sector activities, such as the explicit reference to commercialisation;
- 2 exclude the term “innovation”, since the concept in itself is male-gendered;
- 3 exclude references, including terms primarily used within a manufacturing, engineering or high-tech context, for example the term “patents”;
- 4 use a typology of innovation which clearly also includes innovation other than goods and technological process innovations. One example is using the extended taxonomy of product and process innovation (Edquist et al 2001, Nählinder 2005) since it also includes organisational and service innovation.

Gender in innovation surveys

Innovation policy has developed in parallel to scientific research on innovation with the OECD and the EU as important drivers. In both cases, the innovation concept has become more inclusive (Nählinder 2011). This implies that research and policy within the area are intertwined to some extent. Therefore the study of the policy aspect, more specifically the measurement and surveys of innovation, is relevant for understanding the gender-aspect of operationalisations of innovation.

The Oslo manual, developed by EUROSTAT with the OECD, is highly influential. Now in its third edition, it gives recommendations regarding the measurement of innovation. It is therefore an important document in understanding (a baseline) of how the concept of innovation is operationalised.

The first version (1992) of the manual focused on technological products and processes in manufacturing industries and was thus rather narrow in scope. The second version, issued in 1997, covered technology based innovation across a broader range of sectors. The third version, issued in 2005 covered a much wider conceptual range and had a fuller treatment of non-technological product and process innovations. The EU's CIS series of surveys is based on the Oslo Manual.

Several researchers are using CIS data in their innovation research. CIS has been criticised by researchers who highlight such things as the narrow definition of innovation, the strong focus on technological product and process innovations and the invisibility of the service industry. What is or not is defined as an innovation might differ, depending on whether the sector is dynamic; a change in a sector that is highly dynamic is probably neglected, whilst a change in a less dynamic sector is noted (Tether, 2001). Furthermore, the CIS survey excludes healthcare services.⁷²

With the discussion on gender-labelling/gender-coding in mind, two issues are paramount. The first is which sectors (male-dominated/female dominated) CIS has chosen to include and the extent to which these are male-dominated or female-dominated. We may note that the most of the (female-dominated) public sector is missing from CIS, as is the healthcare sector.

The second issue concerns the degree to which CIS's wording of the innovation questions is gender-labelled and the consequences of this. We argue that CIS's operationalisation of innovation (see Table 1) is gender-biased since it uses the word "innovation". We have already argued that, just like the terms "business owner", "self-employment" and "inventor", "innovation" is also gender-labelled. Following that argument, it is reasonable to assume that the inclusion of the word "innovation" will repel many female questionnaire respondents. Also Statistics Sweden (2009), conducting the CIS in Sweden, remarks upon the suitability of including the word "innovation" into the survey, but without making reference to gender. They noted that several of the respondents considered it hard to interpret the concept of innovation. For them, the concept of innovation was a value-loaded word representing something unique. To say that you are innovative, you have to have introduced something very special.

In our survey (Healthcare Sector Firms in Scania, HCSFS) we framed the questions on innovation to capture the meaning of innovative activities rather than the familiarity with the concept itself. One stepping stone was to distinguish between product and process innovation, not primarily because we suspect gender differences in propensity to make product and process innovation, but because the distinction

⁷² CIS is based on the following ISIC codes: 5-9 (extraction of minerals), 10-33 (manufacturing), 35 (maintenance of electricity, gas, heating and cooling), 36-39 (water supply; drainage cleaning, waste disposal, clearing), 46 (wholesale and commission trade), 49-53 (transport and warehousing), 58 (publishing), 61-66 (telecommunications, programming and consultancy for computers, information services, finance and insurance services), 71 (architectural and technical consultancy, technical testing and analysis) and 72 (scientific research and development).

helps us ask questions on innovation without using the word itself. We thus improve the validity of the study through measuring the extent of innovative behaviour rather than the familiarity of the word itself.

Comparison of the operationalisation of product and process innovation in CIS and HCSFS

	CIS	HCSFS
Question(s) regarding product innovation	During the 3-year period [1 January 2006 – 31 December 2008] did the business introduce: a) New or significantly improved goods? Exclude the simple resale of goods purchased from other businesses and changes of a solely aesthetic nature. b) New or significantly improved services?	Among the products you are selling, are there any goods/services that you have developed or developed further during the last few years?
Question(s) regarding process innovation	During the 3-year period [1 January 2006 – 31 December 2008] did the business introduce new or significantly improved processes for producing or supplying goods or services? Between 2006-2008, did your firm introduce... New or considerably improved production methods? New or considerably improved supply methods? New or considerably improved support activities for the company's processes?	Have you, during the last few years, developed new working methods in your company to produce goods/services?

We argued above that a gender-neutral operationalisation of innovation should (1) take welfare services into account, (2) should not mention the word innovation, (3) not explicitly be connected to manufacturing/engineering and finally (4) include not only goods and technological process innovation.

Starting with the criteria suggested by Amble (2010), we may note that both the CIS and HCSFS operationalisations specifically mention companies, an uncommon form of organisation in the public sector. Also the terms “production methods”, “supply methods” and “support methods” (CIS) and, to some extent “working methods” (HCSFS) are likely to repel respondents from healthcare and/or the public sector. Both operationalisations explicitly mention the product (good/service) and in the case of CIS, its sale as well. Both operationalisations make reference, to different extents, to the commercialisation (of goods/services) and ask the question in business terminology.

Concerning the second criteria, the mention of the term “innovation”, CIS mentions the word in the heading, in contrast to the HCSFS which does not. Regarding this criteria the HCSFS is definitely more gender-neutral than the CIS.

The third criterion concerns the extent to which the operationalisation repels respondents who are not from a manufacturing/engineering or high-tech background. In neither case are patents used as an operationalisation of innovation. However, the terms used to specify the contents of process innovation (“production methods”, “supply methods” and “support methods”) are very much taken from a manufacturing context and do not automatically describe working methods in services for example. Regarding the third criteria, the HCSFS is formulated more openly in a manner which is not as likely to repel non-manufacturing respondents.

The fourth criteria concern the extent to which the operationalisations also include innovations such as service innovation and organisational innovation. This chapter has already discussed the bias against service innovation. Regarding organisational innovation, CIS is very focused on goods and services, as is HCSFS. On the questions(s) concerning process innovation, many organisational innovations (i.e. those not associated with production methods, supply methods, support activities) are practically omitted. Here, HCSFS is more open in asking for working methods, which means the respondent may feel that organisational innovation are included into the question.

Neither operationalisation is gender-neutral, but CIS’s is more gender-labelled than HCSFS, according to the suggested criteria. It also shows the difficulties in designing a gender-neutral operationalisation of innovation. We argue that our operationalisation of innovation is more gender-aware than the one presented by CIS. However, we acknowledge that further empirical research should be conducted concerning how innovation may be operationalised so as to avoid being gender-biased.

Summing up: three theoretical points

We want to emphasise three important theoretical points we have made so far.

The *first* point is that there is great need for further research to provide a basis for gender mainstreaming of innovation policy. Current research is not only scarce but also suffers from a gender-bias in several dimensions, including the selection of industries. This, in turn, has led to misleading results and interpretations.

The *second* point is that our point of departure, the male-labelling of innovation, has held true. By making paragon to other similar concepts, such as business ownership and invention, we made it probable that the same gender-labelling also concerns innovation and have a negative impact on the (measuring of) innovativeness among women.

The *third* point is that, nuancing the gender-label of innovation: we conclude that it is the operationalisations, rather than the (wide) definition of innovation which is male-labelled. As a consequence, we reach the conclusion that the concept of innovation in itself can be interpreted in a less gender-biased way than is currently the case in many operationalisations.

Empirical testing of lessons learnt

In this part of the chapter, we report from an explorative, quantitative study of innovativeness among male and female entrepreneurs in the health and care industries in Sweden. As will be discussed below, this is where we attempt to apply the lessons from the literature study outlined above.

The context of our study

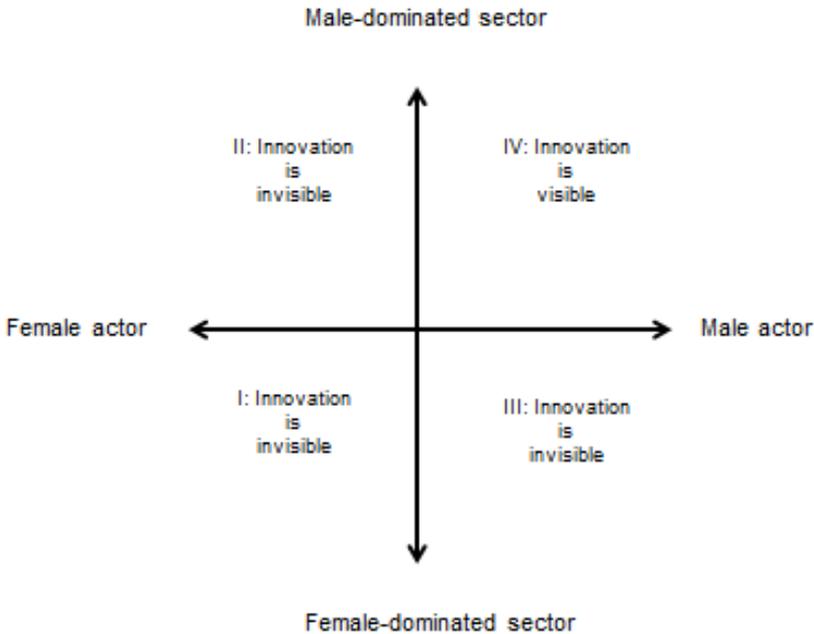
The businesses studied operate in a Scandinavian welfare state which is in transition. Healthcare and care services are funded by the government and until recently were also delivered exclusively by municipal organisations and county councils. However, in line with the general New Public Management trends (Hood, 1991, Christensen & Lagreid, 2000), there is currently a dramatic increase in outsourcing to private organisations of various kinds. The first wave of outsourcing took place after the Conservative/Liberal victory in the 1992 elections. As municipalities have a large degree of autonomy, outsourcing was applied to varying degrees in around one-fourth of the 290 municipalities. A second wave of privatisation and outsourcing is currently underway. The arguments often made in favour of outsourcing are freedom of choice for users as well as stimulation of entrepreneurship and new businesses. The market construction model advocated this time is the customer-choice model (cf Sundin & Tillmar 2010a). On 1st January 2009, a new Customer Choice Act (SFS 2008:962) was passed as an amendment to the Public Procurement Act (SFS 2007:1091). The new law is compulsory in primary healthcare, for which the county councils are responsible in Sweden. It is still elective for the municipalities, which are responsible for care services. Among politicians and policymakers, there are great hopes and aspirations that this system will stimulate entrepreneurship in these sectors. However the research results to date are inconclusive (Sundin & Tillmar, 2010b). In Scania, the customer choice model for primary healthcare has been used since 1st May 2009. Childcare (1st January 2009), pain rehabilitation and Cognitive Behaviour Therapy (1st September 2009) are further services to which the Customer Choice Act is applicable in the region. Scania consists of 33 municipalities, about 10 of which applied the new Act in July 2010; about seven were in the process of implementing it.

Research design of the study

Of the five theoretical observations presented in a previous section, we have taken three into account in our empirical study. Firstly, the operationalisation of innovation is deliberately made more gender-neutral, following the thoughts of Amble (2010). Secondly, the study focuses on a female-labelled and female-dominated sector, in which technology and thereby innovation, is supposed to be less visible. Thirdly, the study distinguishes between male and female innovative entrepreneurs, making it possible to compare the innovative levels of men and women and to test whether women are less innovative than men.

In her dissertation, Nyberg (2009) presents a model in which she cross-tabulates sector (dominated by women, dominated by men) with actor (women, men). In so doing, she notes that only one of the cells – dominated by men and where the actor in question is male – is visible as innovation. She argues that this is due to the fact that invention is seen as masculine. Therefore it is difficult not only to see women as shapers of technology but also new technology sprung from women’s experience. In other words, the male-labelling of invention contributes to making invention invisible if it is not (a) in a sector dominated by men and (b) carried out by a male inventor. Nyberg further suggests that male innovators in female-dominated sectors are also invisible. The model proposed by Nyberg (2009), which is based on empirical research on patent register studies and women’s narrative of invention, concerns our gendered understanding of technology and invention. Taking inspiration from Nyberg, we illustrate the visibility of innovation using the same dimensions in the figure below.

Distinction between the concepts male/female gender-labelled sector and female/male actor



Adapted from Nyberg (2009:127)

Following our theoretical observations, we would suspect that female-dominated sectors would be less innovative than male-dominated ones (i.e. Cells II and IV would be more innovative than I and II). We would further suspect that men are, or appear to be, more innovative within a given sector (i.e. Cells III and IV would be more innovative than Cells I and II, respectively). Since few quantitative studies distinguish the sex of the innovator, we are unable to compare our study with previous ones in that di-

mension. However, scrutinising the data on women and men innovators within the female-dominated healthcare sector, we can test whether the assumption that men are more innovative within a given sector holds true. By focusing on a female-gendered sector, and comparing innovativeness among male and female entrepreneurs in this sector we aim to contribute to this knowledge gap, which is linked to cells I and II in figure above.

Sample description

The data set consists of 203 structured telephone interviews with entrepreneurs in healthcare sector firms in the region of Scania in Sweden, referred to here as the HCSFS database. The ISIC codes 86-88 were included in the sample, representing healthcare and care services.⁷³ Generally speaking, the entrepreneurs in the sample are active in six different sectors: housing and accommodation, primary healthcare, other public medical services, specialist care, social work and non-institutional care.

The total population of healthcare firms in this sector and region is 2,318 companies. As many as 1,638 of those companies had no employees, i.e. about 70 % were run by sole entrepreneurs. Because of this large group we stratified a random sample, i.e. interviewed 100 solo entrepreneurs and 100 entrepreneurs with employees. Details of the non-response rate and questionnaire are discussed in Nählinder et al (2010). The sample was not stratified by the size of the firms, but a follow-up analysis has shown that the firm size distribution in the sample does not differ from that of the population at large (Nählinder et al, 2010). An important implication of the sampling is that we have data on the innovative behaviour of very small firms. The differing propensity to innovate is discussed in (Nählinder et al, 2010).

The sample covers an array of different care services, all of which are gender-labelled or dominated by women. The proportions of male and female entrepreneurs in the sample are on a par with the proportion of men and women working in the sector as a whole (Nählinder et al 2010).

Empirical findings

We have analysed the innovativeness of men and women in our database of healthcare entrepreneurs. Our starting point is an analysis of the data concerning the proportion of innovativeness. Table 2 below represents whether the company has made any innova-

⁷³ The following ISIC codes were excluded from the sample: dentists and dental hygienists, since those services have been on the private market for quite a long time in Sweden; medical laboratories, since they do not directly serve individual patients/customers; children's care, a market that was opened up to private actors some years ago; operation of refugee camps and humanitarian services (the Red Cross for example); physiotherapy services. The ISIC physiotherapy services code covers quite a large group of firms, with many sole entrepreneurs, as physiotherapists have acted on the private market for a long time. When deciding which codes to include in the sample we had the new Freedom of Choice Act in mind, believing that it would open up new windows of opportunity for the entrepreneurs. We therefore primarily included those codes which would be directly influenced by the Act, with the exception of ISIC code 86909 which consists of a broad range of services, in which only some professions can deliver healthcare services.

tions during the period, i.e. whether the entrepreneurs have carried out either a product innovation (a new or improved good or service) or a process innovation (a new or improved method of producing goods or services), or both.

Proportion of men and women who have made innovations during the period

Has the firm made any innovations?	Yes
Men	81 % (67)
Women	76 % (91)

Source: HCSFS

A first important observation is that the proportion of innovative firms is very high, regardless of the sex of the entrepreneur. We may further observe that there are small differences in innovativeness between men and women and that these differences are not statistically significant.⁷⁴ In other words, there are no differences in innovativeness between men and women when treated as statistical categories.

When looking closer into which type of innovation the entrepreneurs have carried out, we find (see Table 3) that women appear slightly more prone towards process innovation and men towards product innovation. However, neither of these differences are statistically significant.⁷⁵ In other words, when innovation is broken down into product innovation or process innovation we do not find any numerical differences between men and women.

Proportion of men and women who have carried out product or process innovation

Percentage of firms which made	product innovation	process innovation
Men	64%	65%
Women	60%	68%
Total	62%	67%

Source: HCSFS

Discussion: Female and male entrepreneurs are equally innovative

An empirical result here is that, according to the HCSFS material, female and male entrepreneurs are equally innovative. This result stands partly in contrast to previous studies (Nyberg 2009). Or put another way, it kills some of the myths about gender and women as entrepreneurs (cf. Fausto-Sterling, 1995). We argue that the main reasons for our result are, firstly that we use more gender-neutral innovation operationali-

⁷⁴ A one-way ANOVA was performed with innovativeness as the dependent variable and gender as a factor. The significance value was 0.412, i.e. far from statistically significant.

⁷⁵ Two different one-way ANOVAs were performed, both with gender as a factor. In the first ANOVA, product innovativeness was the dependent variable and in the second, process innovativeness. The first ANOVA has a significance level of 0.394 and the second 0.915.

sation than mainstream innovation studies and secondly that the sector in question is female-labelled.

When studying innovativeness, the operationalisation of innovation is of the utmost importance for correctly measuring the innovative activity within the firm. The firms in HCSFS are active in a female gender-labelled sector and do not automatically feel comfortable with concepts such as innovation. Therefore the formulation of the innovation questions is also of the utmost importance. These differences in wording have contributed to the comparatively high level of innovativeness among both men and women. Our second observation from previous studies was that the operationalisation of innovation was gender-biased.

We argue that the (more) gender-aware operationalisation of innovation used in our survey has had a strong positive impact on the range of firms which have identified themselves as innovative. In consequence, we have a very high level of innovativeness among both male and female entrepreneurs. The operationalisation of innovation has contributed to making many previously invisible innovations visible. This confirms our third observation from previous studies on innovativeness. The visibility of innovations is important, not least of all because it is more difficult to support and diffuse invisible innovations.

The gender-neutral operationalisation of innovation applied in the HCSFS survey is a prerequisite for understanding why men and women are equally innovative in our analysis, despite previous research. However, another important fact is that innovativeness is measured here in a female gender-labelled sector. It is puzzling that this has been done so infrequently. It can, however, be regarded as an expression of the gender-biased conception of innovation as something taking place primarily in technology-intensive contexts. This confirms our fourth observation from previous studies on innovativeness. The very high innovation level in the HCSFS is a clear indication that this type of sector should also be included in surveys of innovation, such as CIS. The exclusion of the healthcare sector from Sweden's CIS reproduces a skewed understanding of innovation and reinforces the vicious circle in which certain sectors do not see their problem-solving as innovative, since it is invisible as innovation. The fundamental problem, however, is the male gender-labelling of innovation and entrepreneurship; this at once makes the phenomenon invisible among women, whilst helping keep them invisible.

In this section we have presented plausible reasons as to why men and women are equally innovative. We have taken the differences, not the similarities, of sexes as a basis. On the other hand, it should be no cause for surprise that female entrepreneurs are innovative in the sectors where they represent 85% of the employees. Since Scott Shane's article (2000) about the role of previous experience, it has been well known that most entrepreneurs find opportunities and new combinations in areas in which they are experienced and feel at home. We argue that by using a gender-neutral innovation operationalisation we have gained a more correct representation of innovative-

ness among healthcare firms in Scania and, in turn, opened up a discussion on how to operationalise innovation gender-neutrally.

Why, then, did we reach a different conclusion to previous research on gender and innovation concerning the differences in innovativeness? Nyberg (2009) found that the share of female engineer patent holders did not increase as the share of female engineers increased. In the case studied by Nyberg, the profession was strongly male gender-labelled, whereas in the HCSFS the sector has an equally strong female gender label. Perhaps this is because the innovativeness of women is (potentially) more pronounced in a female gender-labelled sector. Another possibility is that the proxy for innovation, e.g. patents, used by Nyberg may in itself have a male gender label.

Conclusions summarised

Based on the above, we want to emphasise: Firstly, the gender-labelling of a certain sector has an impact on the understanding and visibility of innovation in that particular sector, i.e. the degree to which problem-solving is understood as innovation. Secondly, we have argued that in order to understand innovativeness, it is also important to take the (operationalisation of) the concept of innovation into consideration. A male-labelled operationalisation (called gender-biased in Figure 2), such as the one proposed by CIS, yields different results as compared with a more gender-neutral innovation operationalisation. Thirdly, we have argued that the gender of the innovator may be important to innovativeness, but that the importance varies with sector and operationalisation. In HCSFS, with a gender-aware operationalisation and performed in a female-labelled sector, no statistically significant differences were detected.

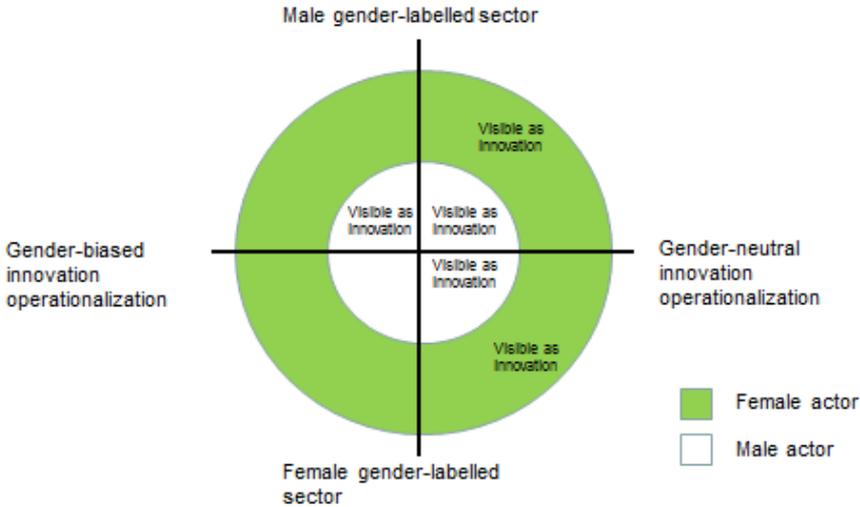
The issue of gender and innovativeness could thus be described in a three-dimensional setting, as presented in the figure below.⁷⁶ The model suggests that the visibility of innovations is dependent not only upon a labelling of the sector and sex of the actor, but also upon the gender-neutrality of the operationalisation. The important point is that when we introduce the third dimension (the gender-neutrality) the previous relationship between the sex of the actor and innovation disappears, i.e. that women are less innovative than men. When we include the extent to which the operationalisation of innovation is gender-neutral the previous dissimilarities disappear⁷⁷. There-

⁷⁶ Another important aspect is that two out of the three variables are continuous: both gender-labelling and the gender-neutrality of innovation concepts are gradual.

⁷⁷ If we sort the three empirical studies we have discussed in the study according to the three dimensions, we find that the HCSFS study covers female gender-labelled sectors (i.e. healthcare) and innovation is investigated via a fairly gender-neutral innovation operationalisation. The study covers both men and women and it found no differences in innovativeness due to sex of the actor. By contrast, CIS covers almost exclusively male-labelled sectors (compare footnote 6) and the operationalisation is more gender-biased. CIS does not take gender of actor into consideration and may therefore not be used to see the relationship between gender and innovativeness. The Nyberg study based on the Swedish patent register does not make a sector-delimitation. If we regard patents as a male-labelled operationalisation of innovation follows that the operationalisation of innovation is gender-biased. Lastly, it focuses on women actors but includes the number of

fore, all fields to the right in Figure 2 are visible as innovation but only one field to the left. In short, the way we measure innovation will have a great impact upon the (number of) visible innovations from men and women!

Three-dimensional distinction between the concepts of male/female gender-labelled sector, gender-biased and female/male actor



Implications for further research

In order for society to take advantage of the innovative and entrepreneurial capacity, and for research to understand innovation in all sectors, this strongly signals the need for extending innovation scholarship to female gender-labelled sectors, such as healthcare and care services. These are important sites for women’s (and men’s) entrepreneurship and innovation which are under-explored. Our contribution has been to help extend research into women’s entrepreneurship and innovation in this direction.

We acknowledge the importance of awareness of gender-labelling of innovation. We believe that further research analyzing the gender-labelling of innovation studies and innovation policy is needed. In this study we have identified four such factors, which should also be empirically tested. Not only is women’s entrepreneurship still vastly under-studied, but also women’s innovativeness, as is innovativeness among entrepreneurs in both male and female gender-labelled sectors. Healthcare is one such sector, which is also of particular importance since it is currently in a period of transition which opens up for new possibilities for entrepreneurship as well as innovation. Healthcare is often rhetorically understood as a prospective industry of great im-

male actors as comparison. The Nyberg patents study, interpreted as an innovation study, then shows that men are more innovative than women.

portance. The sector is traditionally female-dominated, and abundant resources have also been invested in supporting women to become entrepreneurs in this field.

The discussion here shows the need for further studies in these areas, of both a quantitative and a qualitative nature. The potential for cross-fertilisation between the entrepreneurship and the innovation fields of research, perhaps especially in regard to gender, has also been illustrated. A similar discussion could be made based on intersectional perspectives, bringing such issues as class and/or ethnic minorities into the analysis. We also believe that the model we present in Figure 2 should be scrutinised. Of particular importance is exploring the empty cells in the figure. In particular, we believe it would be valuable to also study male gender sectors with a gender-neutral concept of innovation.

Policy implications

This has important implications for gender mainstreaming of policy and practice regarding innovation. The current understanding of innovation is male gender-biased. Awareness of the extent of this bias is obviously important before gender can be mainstreamed in, say, efforts to promote innovation. Without such awareness, diversity cannot be achieved. Here, we have particularly pointed out the importance not only of unbiased definitions, but also operationalisations. The context of innovation has also been highlighted, implying that there also needs to be greater focus from policymakers on innovation in female-labelled industries.

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VINNOVA strengthens Sweden's innovation capacity

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