A policy to unleash innovation: How can gender improve innovation and entrepreneurship policy?

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Abstract

This article addresses two texts within the framework of the Lisbon strategy - Innovative Sweden (2004) and the Green Paper on Entrepreneurship (2003) - to discuss how innovation and entrepreneurship policy are impregnated by gender in a Swedish context and how these, in turn, shape policy initiatives in particular directions. A discourse analysis discloses that innovation and entrepreneurship policy discourses are constructed against a background of combined masculinities, which almost invariably addresses technical innovations to be the solution as well as engine of economic growth and development. As a consequence women are not considered as innovative actors in the innovation and entrepreneurship policy discourse. It is argued that this narrow view of innovation and entrepreneurship in policies does not contribute to creating innovations that help us meet the grand challenges contained in contemporary society. Hence, a different rationality should be considered. It is suggested that this can be done by applying a gender perspective. For that reason gender, as a theoretical lens with practical consequences, should be considered in altering innovation and entrepreneurship policies.

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 and greater social cohesion, and respect for the environment" (Lisbon European Council, 2000). In the follow-up to the Lisbon Strategy, the Commission proposed a new start, focusing their efforts around two principal tasks – delivering stronger, lasting growth and creating more and better jobs as the overall challenge and key to unlocking the resources needed to fulfil our wider economic, social and environmental ambitions (European Commission, 2005).

Criticism has recently been directed towards the prevailing view on innovation and entrepreneurship policy; it is argued that it has been too narrow and excluding (Pettersson, 2007, Lindberg, 2009, Hjalmarsson and Johansson, 2003). Innovation and entrepreneurship policy are parts of and expected to contribute to the overall objective of growth, an objective which has been questioned as well as criticized as it limits our visions on how "progress" can be perceived (Friman, 2002, Rönnblom, 2009). In view of that we have seen seen attempts to broaden innovation and entrepreneurship policy (e.g. Berglund, 2007, Johannisson and Dahlstrand Lindholm 2009; Johansson, 2009) ,and there are processes going on in Europe in preparation of the 2020 strategy and a new European innovation strategy, which are expected to lead to a broader and more inclusive growth policy. For instance, global warming, tightening supplies of energy, water and food, ageing societies, public health, pandemics and security are policy areas that are increasingly, and recurrently, referred to as "grand challenges" and thus highlighted at both EU and national levels (e.g. Lund Declaration, 2009, Government Bill 2008/09: 50).

Hence, innovation and entrepreneurship are no longer two words that only help us describe and explain 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. In the policy-making context innovation and entrepreneurship are considered as necessary prerequisites for economic growth. Consequently, they are often combined and intertwined in policy texts as well as in concrete programs and projects that are constructed in order to increase our society's innovative and entrepreneurial potential. According to Hjalmarsson and Johansson (2003: 94) "public advisory services towards SMEs represent a multi-billion pound industry", which is only one area brought forward in entrepreneurship and innovation policies. The entrepreneurship and innovation policy markets make up a billion Euros-market, consisting of several areas and programs. Arguably, there is a strong wish to create innovation systems in which entrepreneurs can develop ideas and realize products in order to provide ever increasing growth, in terms of money, solve problems such as climate changes and social exclusion, and create conditions for more stable financial markets.

This article takes Sweden as an example, exploring how policy is constructed against a background of theories such as the gender system, which argues that women and men are segregated horizontally as well as vertically (e.g. Hirdman, 1990, Wahl et al., 2001, Thurén, 2003). The vertical level teaches us that men and women are active within different sectors (see Appendix 1). In Sweden, gender equality only occurs in seven of the 30 largest occupations (Statistics Sweden, 2008). Horizontal segregation is evident in the fact that men and women hold different positions in organizations (see Appendix 2). Further separation at the individual level results in a

continuous discussion on the wage gap between men and women (In 2006, women's wages was 84 percent of men (Statistics Sweden, 2008). Two texts within the framework of the Lisbon strategy - Innovative Sweden (2004) and the Green Paper on Entrepreneurship (2003) – are analyzed to discuss how innovation and entrepreneurship policies are impregnated by gender and how these, in turn, shape initiatives in particular directions.

We acknowledge that there are many relevant theories on innovation and entrepreneurship (e.g. Schumpeter 1934, 1943, Kline and Rosenberg, 1986, Rogers, 1995, Tidd et al., 1997, Utterback, 1994, Fagerberg et al., 2005, Von Hippel, 2005, Chesbrough, 2006). However, in this article we will conduct a discourse analysis from a gender perspective, taking a social constructionist stance, which means that neither society nor humans are perceived as 'natural observable facts' but as social constructions which are constantly produced, reproduced and transformed by way of language (e.g. Berger and Luckmann, 1966; Burr, 1995). From a discourse perspective, policy texts are looked upon as an instance from which we can observe society as a whole, which makes it possible to challenge prevailing assumptions, and to create new opportunities within the European context.

This article is not about defining innovation and entrepreneurship, but about studying the underlying assumptions made in policy-texts on entrepreneurship and innovation from a gender perspective. We thus aim to discuss in what ways gender is "produced" in policy documents by elaborating on the following questions: How is gender produced in entrepreneurship and innovation policy? How can we understand the consequences of these constructions from a discourse perspective?

The purpose is thus to show how gender is produced in policy-texts on innovation and entrepreneurship and how we can understand the effects of these constructions in order to break ground for *innovative* policies. Even though there are attempts in bringing in discourse as a fruitful attempt in linking research on innovation, entrepreneurship and policy (Johannisson and Dahlstrand Lindholm 2009; Johansson, 2009), discourse analysis is a fairly new approach in innovation research (Beck, 2009, Perren and Jennings, 2005, Doloreux and Parto, 2005). At least in comparison to social science in large (Foucault, Michel (1971), Laclau and Mouffe, 1985, Flyvbjerg, 2001), as well as to organization studies in general (Alvesson and Kärreman, 2000), and gender studies in particular (e.g. Martin, 1990) is discourse methodology and theory still a new perspective in creating knowledge on innovation issues. This article thus also wants to contribute to innovation research by introducing discourse as a possible and praiseworthy method in studying how assumptions frame what is perceived as innovations from a gender perspective.

Next, we conduct a literature review of innovation and entrepreneurship from a gender perspective, and then we describe the method of discourse analysis that we have used to deconstruct the discourses in the two policy documents. After that we delineate the policy discourses of innovation and entrepreneurship in order to analyze in what way they are gendered. Finally we discuss the gender implications of a gendered innovation and entrepreneurship policy and make some suggestions for how policies may be constructed differently.

Literature review

The Lisbon Strategy has focused on expenditures on research and development, and European innovation policy has become somewhat biased in favour of what can be referred to as a science push or linear model (e.g.

Lindholm Dahlstrand & Stevenson, 2007), in which R&D is supposed to lead to increased innovation and entrepreneurship. In the Swedish context, as we will show, the Innovative Sweden strategy is heavily influenced by the perspective of National Innovations System (e.g. Freeman 1987, Dosi et al. 1988, Lundvall 1992; Nelson 1993; Edquist 1997) and related perspectives such as the Triple Helix (Etzkowitz & Leydesdorff, 2000) and Cluster (Porter, 1999).

The Green paper of Entrepreneurship takes another theoretical stand point by emphasizing the role of the entrepreneur in our society (e.g. Sørensen, 2008) discussing how people in general can learn entrepreneurial skills (e.g. Burns, 2005), but leaving out reflections that the traits ascribed as entrepreneurial also go along with traits that are perceived as masculine in our times society (e.g. Ahl, 2004). Moreover research shows that many of the opposite traits, in comparison to the ones being "entrepreneurial", are connoted feminine (Berglund, 2007). The entrepreneur is thus built from a number of traits that gendered, favoring men and turning women into "the other" (Czarniawska and Höpfl, 2002).

Golden et al (2003) investigate the potential relationship between the concept of national systems of innovation and entrepreneurial endeavors. Given that National Innovation System seeks to foster innovation, and entrepreneurship has innovation as a central component, they propose that the existence of a National Innovation System should promote entrepreneurship within an economy. Their paper focuses on economic measurements in areas relating to both National Innovation System and entrepreneurship, while we discuss these areas from the policy perspective. Nonetheless, from our point of view, and in the context of the Lisbon strategy, the important thing is what they have in common, namely that they see innovation as the key to gaining economic growth.

Lombardo, Meier and Verloo (2009) discuss discursive struggles and how the concept of gender equality is stretched and bent in policy making. This means that the concept of gender equality is adapted or adjusted to fit objectives in other policy areas. Rönnblom discusses the bending and stretching of the concept of gender equality in relation to growth. Economic growth is, as opposed to gender equality, often presented as a self-evident policy-goal. Referring to Friman (2002), Rönnblom (2009) draws the conclusion that growth can be perceived as a 'master narrative' and an obvious policy goal that it is impossible to question.

A related narrative that has become stronger in the policy discourse around growth is equality between women and men as essential for long-term sustainable economic growth and employment in Europe. In the Revised Lisbon Strategy the Commission proposes to refocus the Lisbon agenda on actions that promote growth and jobs in a manner that is fully consistent with the objective of sustainable development (COM (2005: 24). The actions falling under this strategy should reinforce the Union's potential to achieve and further develop our environmental and social objectives. This text emphasizes the need for sustainable development and social objectives. As we understand it, this should include gender aspects as well.

In entrepreneurship research the Schumpeterian view on the entrepreneur as an innovator and a person breaking the norm has gained acceptance (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 business from others'. In Schumpeter's *Capitalism, Socialism and Democracy* (1942), however, 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 crowd of people working together to produce and diffuse "newness", but instead contributed to constructing the entrepreneur as an almost superhuman masculine being (e.g. Ahl, 2004). Consequently, the discriminating effects of the entrepreneurship discourse have been criticized as being gender-biased (Sundin and Holmqvist, 2002; Ahl, 2004; Bruni, Gherardi and Poggio, 2004), and ethnocentrically determined (Ogbor, 2000). It should be of interest to study how the "hero" entrepreneurship discourse has been diffused to the policy-making context, as it arguably leads to separation, not only between men and women, but also between the search for 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), there is also an everyday conception that holds us back from identifying with the entrepreneur, which is strongly interlinked with a mythisized figure. In particular, this figure seems to have consequences for women's abilities to identify with being involved in innovative and entrepreneurial endeavours (e.g. Berglund, 2007, Warren, 2004).

As a result, several studies show how gender is constructing masculinities by way of both the innovation and entrepreneurship discourses (e.g. Ahl, 2006, Blake and Hanson, 2005, Bruni, Gherardi and Poggio, 2004, Lindberg 2009, Pettersson, 2007, Ljunggren et al, 2010). Some of them have a direct focus on policy. Lindberg, for instance, identifies two prioritized areas of technology in the Swedish innovation policy, connects them to two types of masculinities and introduces the "co-construction of gender and innovation" (Lindberg 2008, 2009). The groups of basic and manufacturing industries and new technologies, primarily employing men as employees and entrepreneurs, have been given high priority within Sweden's innovation policy (ibid). On a symbolic level, Lindberg connects the two prioritized 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, 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. Science, innovation and technology are connoted to masculinity (Pettersson 2007).

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 (see also Nyberg 2002, 2009). As shown, private high tech firms (generally considered to be populated by men and being given a masculine connotation) are usually related to innovation and entrepreneurship, while innovation and entrepreneurship within the public sector, generally considered to be populated by women and being given a feminine connotation, is often made invisible (e.g. Sundin and Holmquist, 1989; Holmquist and Sundin, 2002). These intertwined and mutually reinforcing understandings lead to making women and "female" connoted technical areas to become invisible, and men and their interaction with technology and "male" connoted technical areas to gain attention. This might be the explanation for the results by Thursby and Thursby (2005), showing that women are less likely to disclose inventions than men, despite the fact that there are no significant differences in publication patterns. Other studies have showed that gender analysis could revile unexploited innovative opportunities as well (Schiebinger, 2008, Nyberg, 2009).

Methodology

The gender concept refers to the relation between females and males as socially constructed categories (Thurén, 2003, Wahl et al., 2001, Hirdman, 1990). The international research tradition sees gender as socially constructed, and a common method called "doing gender" is applied, which means that the construction of gender is done in each and every corner of everyday life (Gunnarsson & Westberg, 2008). What the notion of gender then teaches us is that our conceptions of what is regarded as male and female permeate everyday life in subtle, yet thorough, ways.

In the "doing gender" tradition there is a strong connection to the broad landscape of social constructionism, in which language is not a viewed as a mirror, through which we can look at the world, but as a means for jointly constructing assumptions about the world (e.g. Bruni, Gherardi and Poggio, 2004,). Besides, discourse analysis is argued to be one of the appropriate methods available for revealing gender-based assumptions and calling them into question (Ahl, 2006, Thurén, 2003). Accordingly, this perspective departs from post-modern thoughts viewing language as unstable, implying that meanings are constantly being constructed, which opens up for taken-for-granted assumptions to be transformed.

A frequently referred to definition by Foucault (1972: 49) states that 'discourses are practices which form the object of which they speak'. Burr (1995) invites us to consider this apparently circular statement, which sums up the relation between discourses, ourselves, and the world we inhabit, claiming that we must regard our thinking and language as unseparated. Language makes up a ground for all our thoughts, which in turn determines our scope of action. Constructions are thus created through language, and are shaped by humans, whether it is in a conversation or from reading a text. When a particular set of words is used to create a reality, we may talk about it as a discourse, defining discourse as a set of meanings, metaphors, representations, images, stories and statements, which together produce a particular version of the world (e.g. Foucault, 1971; Burr, 1995, Laclau and Mouffe, 1985).

The reasons for studying policy texts on innovation and entrepreneurship is that these texts not only shape our understanding of innovation and entrepreneurship as such, but also make up a means in the production of policy initiatives aiming at creating a breeding ground for innovation and entrepreneurship among the EU member countries. The point is that these texts create boundaries for what we perceive as innovation and entrepreneurship, as well as whom we regard as an innovator or an entrepreneur. These texts – or the discourses applied therein - create different scopes of action, albeit in diverse ways, for men and women in our society. This is what we mean when we say that the discourses are gendered. We are thus not interested in initiating a discussion on whether men and women are similar or different, but in saying that the way we use our language creates different conditions for men and women in our society.

Ahl (2004) refers to Swale's use of the term "discourse community" and defines it as an association with a broadly agreed set of common public goals. By providing information and feedback, it creates mechanisms for interaction among its members. Ahl describes how discursive practices shape entrepreneurship discourse community and how these are formed in, and by, a certain community of people, who in their turn regulate the discourse. Policy documents can therefore be understood as expressions of the prevailing innovation and

entrepreneurship discourses, which are regulated by a discourse community. In order to put the discourse into a more concrete form, we examine the texts to identify what assumptions are taken for granted in this discourse community. The questions are developed with inspiration from the theoretical landscape of discourse, and in line with similar studies (Ahl, 2004, Berglund and Johansson, 2007 Pettersson 2002, 2007, Lindberg 2008, 2009). The following questions are asked to both texts in order to clarify how innovation and entrepreneurship are constructed in policy texts:

- 1. Who is seen as an actor?
- 2. How is the actor described?
- 3. What is seen as the contribution?
- 4. What is seen as the output?
- 5. What are the means required?
- 6. What does the process look like?
- 7. Where does it take place?
- 8. Level of description
- 9. What are considered important to "know"?

To sum up, we view policy texts as a way to make explicit the discourse applied by the policy community in constructing innovation and entrepreneurship. The discourse controls what statements have been made within this area, and thus how programs and projects are designed to improve the ability of men and women to produce ideas and put them into practice to create value in our society. Within a community, discourse practices shape the discourse and the practices shape the discourses (Ahl, 2004), which makes it difficult to break with the norm.

In this article we conduct a discourse analysis of two texts within the framework of the Lisbon Strategy - *Innovative Sweden* (2004) and the *Green Paper on Entrepreneurship* (2003) - to discuss how the policies on innovation and entrepreneurship are impregnated by gender and how they, in turn, shape initiatives in particular directions. We regard these two documents not only as discourses in an aggregated "discourse community" of growth policy, but also as documents mirroring the existing discourse within policies for economic growth. The discourse steers what statements are possible to make within the area. The policy documents are therefore regarded as reflections of the dominating discourse in the policy for innovation and entrepreneurship of this particular discourse community.

Bacchi's (1999) method to understand the interpretation of the problem in policy (*What's the problem?*) obviously focuses on the problem. Following Bacchi, our challenge in understanding the discourses in the innovation and entrepreneurship policy is that there are no problems in social policy terms. Still, there are representations of what the policy should address. The problem in innovation and entrepreneurship policy is a perceived need of something – such as increased economic growth. From this point of view, innovation and entrepreneurship are interpreted as a solution rather than a problem. Bacchi encourages us to look beyond the problem to understand and problematize not only what is on the policy agenda, but also what is not on it (ibid).

Hence, we will study how innovation and entrepreneurship are constructed in policy-texts on the public scene. Within the EU there are several organizations and programs that make the public scene possible; for instance the 7th Framework program, the Competitiveness and Innovation Program, and the Regional Development Fund.

Likewise, in Sweden, national agencies such as The Swedish Governmental Agency for Innovation Systems and Swedish Agency for Economic and Regional Growth, together with regional actors like Regional Development Councils and County Administrative Boards, make up important organizations that construct much of the public scene for innovation and entrepreneurship in Sweden. Several of the EU-programs are also administered at the national or at the regional level. As a consequence, we see these levels as intertwined and connected with each other.

We analyze "Innovative Sweden" (2004) and the "Green Paper on Entrepreneurship" (2003) separately. The former addresses innovation policy, while the latter addresses entrepreneurship policy. As the policy levels are as intertwined and connected as described above, we expect the documents to describe the discourses within the same particular discourse community. It should also be mentioned that discourse analysis builds on a more extensive study (including an extensive discourse analysis) of both Innovative Sweden (Granat Thorslund, 2009) and the Green Paper on Entrepreneurship (Berglund, 2007).

Policy discourse on innovation

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 in the Lisbon Agreement (Granat Thorslund et al. 2005). The process to develop the strategy, i.e., the contribution of a common understanding of innovation and how a policy to enhance innovation may be drawn up, was as important as the result (ibid). Furthermore, even though it was published as far back as 2004, it is still a relevant policy, in that no new strategy has replaced it.

"... Sweden to be 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, the public sector, industry and trade unions will guarantee the large-scale transformation of knowledge into goods and services". (Innovative Sweden, 2004, p. 15)

Quoted above are the first lines in the vision for *Innovative Sweden* and the statement is quite representative for the discourse in the strategy. One important picture in the document is the picture of the green house.



Picture 1. The green house (Innovative Sweden, 2004:)

The picture shows the house in a flourishing milieu, the door is open and a chair is placed inside the green house. The sun is glimmering through the foliation. Garden tools are placed against the wall of the green house. Everything required to take care of the garden is there – except the gardener. This picture reveals an important discourse in the Innovative Sweden strategy. It mirrors how the aggregated level - the green house - is accentuated, while the actors - the gardeners - are absent. According to Bacchi (2003), the understanding of a policy approach is dependent not only on what is placed in the policy agenda, but also on what is not included and discussed. As Foucault (1971) has taught us, the excluded parts of a discourse can be more relevant to consider than what is visible in the picture.

In our discourse analysis a number of themes appear, and it is apparent that the foremost objective is economic growth. Apart from this emphasis on growth, we also recognize a similar pattern: structure comes before process, production before reproduction, and system before the individual. In addition to the focus on the aggregated level, it is striking that competitiveness is emphasized, in relation to other countries as well as in relation to other regions. But competitiveness is also emphasized in the meaning of competition and to compete in order to reach the overall goal – economic growth.

The strategy aims to set an offensive agenda that 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)

Inspired by the Lisbon Strategy, 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). Hence, it is argued that a continued development of basic industry is crucial for the competitiveness of Sweden, which will contribute, we presume, to economic growth within EU countries. The strategy also mentions the areas in which Sweden may become competitive and how they can continue their competitiveness:

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 true especially of telecommunications, energy and railways. (Innovative Sweden, 2004: 5)

The competition discourse also shows how Sweden's performance is compared and measured in relation to other countries. For example, the strategy heavily stresses Sweden's identity as the world's leading investor in knowledge:

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 per cent of gross domestic product (GDP), which is the highest level in the OECD. (Innovative Sweden, 2004: 3)

The focus on structure before process creates a black box where we see that humans are absent, but outputs from processes where humans need to be involved are visible. It shows in the fact that knowledge is stressed, but learning (that is: processing knowledge) gets less attention. The same paradox is found in relation to entrepreneur and enterprises, where enterprise is mentioned 96 times in the document but entrepreneur only 19 times. Human being is down-played, as is the *process* of innovation.

The main conclusions according to our reading of Innovative Sweden are that organizations are regarded as actors and their roles in the system are stressed, 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 is dominating in the innovation strategy. Paradoxically, while innovation system theory attempts to include all factors relevant for innovation (e.g. Lundvall, 1992; Edqvist, 1997), the innovation strategy constructs a discourse which excludes important innovation aspects such as relations and processes.

The other theme that is made visible in our reading of Innovative Sweden is what is referred to as the emphasis on production before reproduction (Granat Thorslund, 2009). While production is interpreted as the production of artifacts within manufacturing, we understand reproduction 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 may as well be extended to include services, such as day-care, which calls this division into question. Moreover, reproduction can also make us aware of the fact that services can be used over and over again compared to the throwaway mentality of the consumer society that comes with many products. In the strategy, product is emphasized before service. The ideal enterprise, literally illustrated in the strategy, is the knowledge-based enterprise, which 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. We argue that innovation may be interpreted in a broader sense and that Innovative Sweden represents a narrow and sometimes contradictive view on innovation.

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 organizational and structural level, while the individual and relational level seems to be quite fuzzy from the policy view? We argue that it is as necessary for policy-makers as it is for researchers to understand relations and co-dependence, not only between individuals but between individuals and organizations as well.

Policy discourse on entrepreneurship

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. (Green Paper, 2003: 3)

These are the sentences that open the Green Paper on Entrepreneurship, which is the strategy of entrepreneurship formulated by the European Commission to initiate a debate on how entrepreneurship could be stimulated in the member states so that we could be better equipped in a time of uncertainty and sudden changes. The year after, i.e., 2004, the Action plan was presented as a "strategy frame for stimulating entrepreneurship, grounded on the public consultation that followed the announcement of the Green Paper" (p. 5). The Lisbon strategy is elaborated from an entrepreneurship perspective in the Green Paper and the Action plan, which thus make up the agenda for how the European member states should work on entrepreneurship. Consequently, the Green Paper may be seen as an important text that may tell us something about how entrepreneurship and its relation to innovation are constituted in the policy-making community.

Structural changes are a recurring theme in many policy-texts and are emphasized as the reason why the western world is in a troubled situation. The Green Paper is no exception, but is introduced with a discussion on how the industrial structures are changing, and how new knowledge-based markets are considerably more globally floating and relying on small firms. From the Green Paper we can see that entrepreneurship is strongly connected to the firm. Entrepreneurship simply is about starting a firm, or being creative and innovative in order for the firm to grow.

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

Even though it is admitted that entrepreneurship can take place in many types of contexts, it is business that is emphasized in the Green Paper. Hence, not all contexts seem to be as meaningful as the business context, which is associated with growth, new jobs, innovation and development. It is thus not surprising that the rhetorical question "Why is entrepreneurship important?" is answered with arguments in the following order. 1. Entrepreneurship contributes to job creation and growth, 2.Entrepreneurship is crucial to competitiveness, 3. Entrepreneurship unlocks personal potential, and 4. Entrepreneurship and societal interests. As in the discourse on innovation, entrepreneurship is primarily seen as a prime mover of economic growth, but entrepreneurship,

instead of being related to "newness" as innovation is, is mainly related to the growing number of people in the labor market, or perhaps to the growth of people when it comes to developing entrepreneurs.

The key to creating entrepreneurship seems to be 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" (Green Paper, 2003, p. 5-6). For policy the challenge seems to be to create programs that can unlock skills on a personal level and to 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. (Green Paper, 2003: 9)

The human being, in an entrepreneurial dress, seems arguably to be a necessary figure for entrepreneurship to come about.

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



Picture 2. The cover of the Green Paper on Entrepreneurship (2003)

The entrepreneur is not anybody, however, but 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. Nevertheless, the cover of the Green Paper is illustrated

with a picture of a western world business man in a proper suit and with a briefcase in his hand. He seems self-confident and on his way somewhere. Perhaps to start a new business?

Entrepreneurship is first and foremost a mindset. 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. (Green Paper, 2003: 5)

To sum up, entrepreneurship seems to be of utmost important for the European Member states to sustain and contribute to growth by starting and developing firms. Entrepreneurs are the ones who do it. 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 and it is not everyone who fits that description. The cover is quite eloquent with the picture of the business man (not woman) who seems to be on his way to seek possibilities for his company to develop, thrive and contribute to growth.

Innovation and entrepreneurship policy from a gender perspective

Hitherto, we have strived to draw a picture of how the discourses of entrepreneurship and innovation are expressed in policy documents. Starting out from a discourse perspective, our point is that these texts are not merely "texts", but make up realities for how policy-makers construct, and are shaped by, boundaries. These texts do not only constitute a resource for what is possible to say, but also for what is possible to do in constructing measures for entrepreneurship and innovation to contribute to development in European Member States.

Clearly, there are both similarities and differences between the discourses. Even though innovation and entrepreneurship follow two different paths, the analysis reveals the construction of economic growth, as a policy goal, seems difficult to call into question. For both innovation and entrepreneurship policies, the problem addressed is to meet a constant need for increasing growth. In Bacchi's (1999) words we could even say that there is no problem, at least not a concrete one, but instead a constant worry. However, the means to achieve growth differ. In Innovative Sweden investments in research and development are stressed, while in the Green Paper on Entrepreneurship the specific traits that entrepreneurs bear are emphasized for producing more entrepreneurs within the European Member States.

Furthermore, the action to achieve the common objective, economic growth, seems to take place on different levels. While innovation policy calls attention to the aggregate level (where

the individual is absent), entrepreneurship policy emphasizes the individual level as the most important. Moreover, while the main output in the innovation discourse is seen as "new products", new companies are regarded as the important output in the entrepreneurship discourse. In this vein, both differences and similarities can be found by studying the policy discourses of entrepreneurship and innovation, which is further elaborated in table 1.

Perspective/question	Innovation policy	Entrepreneurship policy	
	(Innovative Sweden)	(Greenbook on	
		entrepreneurship)	
The actor	Organizations	The individual	
Description of the actor	Not defined	ned The business man of high-growth	
		companies	
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	

Table 1, A comparison of innovation and entrepreneurship as policy discourses.

The gap between the discourses is highly visible in the description of the actor, constructed as a business man of a high-growth firm in the entrepreneurship policy, but made invisible in the innovation discourse. Making the actor invisible in the innovation policy discourse is dependent on the pronounced construction of the organization. In entrepreneurship policy the man with a flair for taking risks, and a taste for independence and self-realization, is visible. The paradox in innovation policy is that, even though the individual is made invisible, we can still see a clear construction of masculinity in how and where innovation is expected to come about e.g., as pointed out in the growth areas (Granat Thorslund, 2009, Lindberg, 2009)..

To sum up, the innovation and entrepreneurship policy discourses are constructed against a background of combined masculinities. Apart from the physically strong and mechanically skilled man, there is also the technological expert as well as the business man. The absence of women is obvious from this perspective. Women are not only excluded by the male-connoted traits that make up the entrepreneur, but are also silently excluded in a subtle, yet thorough, way. As our introductory example from Sweden showed, this leads to practical consequences emphasizing certain areas of interests as well as particular social groups.

This construction is also perpetuated by policy-makers who seem to have a strong influence on the accessibility of policy grants for men and women. As we have seen in the case of Innovative Sweden, the construction causes a division between men and women and shows males as innovative and females as not. It will steer the priorities and funding to different branches and, given the segregated labour market Sweden has, some branches, as we have seen, will be constructed as less innovative and not be prioritized. According to a recent study, men are much more likely to get access to public funds in the Swedish context (Nutek, 2007). The reasons for this are many, but in this case one explanation is worth noting; the difference in funding is that women and men are active in different branches and tend to start their businesses in the same branches as they have been employed. It is argued that women are less capital-consuming and therefore they ask for less, and receive less, funding,

(ibid) but these sectors are constructed as more or less innovative. Obviously the "female" sectors are described as less innovative as "masculine" sectors. Hence, the concepts of innovation have been constructed to refer to certain kinds of economic activities; largely those associated with certain kinds of technology, and to exclude other sorts of economic activity (Blake and Hanson, 2005). This separation arguably has consequences. It does not only narrow efforts in creating a more equal society in terms of gender, it also narrows our conception of what is perceived as innovation.

A policy to unleash innovation

That development is placed on equal footing with economic growth, and that innovators and entrepreneurs have become an engine in this process, seem to have acquired a meaning that has become "objective". In other words, it has become so taken for granted that we question whether it could ever be put in another way. However, from 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, instead of questioning the shortage of women in policy documents on innovation and entrepreneurship, we should make clear the masculinities that are constructed in these texts, as well as the societal values they uphold. Innovation and entrepreneurship policies are intertwined and twisted together in a nice fabric, but this fabric has gender implications, constructing masculinities at the cost of femininities. Moreover, it has consequences for how and what societal values are emphasized. Obviously, economic growth makes up an undisputed – and unquestioned goal. What is more, both innovation and entrepreneurship refer to certain kinds of economic activities, but exclude others sorts.

The grand challenges that humanity is now facing may well need a different rationality. For instance, we believe that constructing innovation and entrepreneurship policy based on femininities – as well – will make other innovations and other kinds of businesses possible. Perhaps that will help us tackle climate changes, or financial crises, in new ways. A more equal, as well as sustainable, society needs to understand innovation and entrepreneurship in a much broader sense. In recent years we have seen a broadening of innovation policy and earlier foreseen areas have been recognized as potential growth areas (e.g. Ramstad 2008, ITPS, A2009:007) and there are arguments for viewing gender as challenge for policy in altering globalization-politics (Beauzamy, 2007).

Western concepts surrounding gender is seen to constitute a hegemonic male discourse (e.g. Beck, 2009). We have found a similar hegemonic discourse about innovation in policy texts, which goes in line with the male hegemonic discourse of the western world. Accordingly, innovation is almost invariably used to mean technical innovation (Blake and Hanson 2005), and perceived of as the motor of economic advancement and development (Beck, 2005). As a consequence women are not considered as innovative actors in the innovation and entrepreneurship policy discourse, at least not in the Swedish context. However, it is important to bear in mind that this construction of gender and innovation is context dependent. As Beck (2009) points out little attention is paid to local discursive practices and is also detached from the realities of non-western societies and communities.

Beck (2009) shows that in another context, innovation can be attributed to women. This perception is met with the association of gender and innovation: the ambiguous position of women in Africa can be defined as a space that opens up for innovation, precisely because of its ambiguity which it owes to the necessity of women to

negotiate their gender roles in everyday life (Ibid). In this line, van den Berg and Schinkel (2009) points, yet in another direction, how policy by counteract the emancipation of Muslim women by way of an institutionalized gendered discourse on integration. In both cases gender-issues get practical effects in everyday life. In the latter, however, the practical effects are emphasized by policy efforts being undertaken in the Netherlands, one of the European Member states. Accordingly, policies are not "neutral" but impregnated by gender assumptions in a variety of ways.

In this article we have studied how gender is produced in innovation and entrepreneurship policy texts and we see it as necessary to discuss how these policies could be constructed differently; not only for the sake of women, but for the sake of us all. One could argue that a narrow innovation and entrepreneurship policy does not contribute to creating innovations that help us meet the grand challenges. For that reason gender, as a theoretical understanding but with practical consequences, should be considered in altering innovation and entrepreneurship policies.

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Appendix 1

Table 1. Occupational segregation 2007

Percentage distribution and numbers in thousands

Occupations with	women	men
90-100 % women, 0-10 % men	25	2
60-90 % women, 10-40 % men	42	11
40–60 % women, 40–60 % men	18	15
10-40 % women, 60-90 % men	14	42
0–10 % women, 90–100 % men	1	30
Total	100	100
Number	2038	2260

Source: Statistics Sweden, Women and Men in Sweden, Facts and figures 2008.

Appendix 2

Table 2. Managers by sector 2006

Number and sex distribution (%)

Sector	Number		Sex distribution	
	W	M	W	M
Private sector	38 500	128 400	23	77
Public sector	20 500	14 900	58	42
Government	1 800	3 200	36	64
Municipalities	17 300	10 500	62	38
County councils	1 500	1 300	54	46
Total	59 100	143 300	29	71

Source: Statistics Sweden, Women and Men in Sweden, Facts and figures 2008.