



Journal of Technology Management &
Innovation

E-ISSN: 0718-2724

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Academic Entrepreneurship - Gendered Discourses and Ghettos
Journal of Technology Management & Innovation, vol. 5, núm. 1, 2010, pp. 51-63
Universidad Alberto Hurtado
Santiago, Chile

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Academic Entrepreneurship – Gendered Discourses and Ghettos

Ylva Fältholm¹, Lena Abrahamsson², Eva Källhammer³

Abstract

In this article, we explore how the academic entrepreneurship discourse is constructed and gendered, based on texts on academic entrepreneurship and interviews with teachers and researchers at two Swedish universities. We show that the global entrepreneurship discourse is met by both counteracting and contributory discourses in academia. We also show that entrepreneurship-promoting texts in which only men are depicted address both women and men, while pictures of women are only targeted to women, often found in 'entrepreneurial ghettos' and conceptualized as in need of support, as less risk-willing and less willing to commercialize their research. Another problem addressed in this article is how to design gender mainstreaming interventions without reproducing such stereotypes. We believe the solution is not gender neutrality, but to move back and forth between liberal feminist and social constructionist approaches.

Keywords: academic entrepreneurship; discourse; gender; entrepreneurial ghettos; gender mainstreaming.

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Introduction

Swedish and international higher education is in the process of changing identity, “from state-financed monopolies to self-financed participants in the knowledge-production markets” (Czarniawska and Genell, 2002, p. 455). In addition to competing for students and research funding, the universities are called to contribute to economic growth by, for example, cooperating with industry and by commercializing research results. In line with this global discourse, university teachers are encouraged to be ‘entrepreneurial’, told that research can and should be commercialized, that patenting is important, that it is a good thing to start businesses, but also to develop entrepreneurial approaches to teaching and to cooperation with society and organizations outside of academia. At most Swedish universities, there are technology transfer offices that are meant to support teachers to find funding and business partners, to develop their ideas, and to assist them in matters of intellectual property rights. In the vicinity of many universities there are also science parks including business incubators. Other actors, such as regional and governmental authorities, provide financial support for projects and interventions that aim at strengthening such innovation systems. One such example is a project called DARE (Development Arena for Research and Entrepreneurship at Luleå University of Technology and Umeå University), funded by VINNOVA (The Swedish Governmental Agency for Innovation Systems) which aims at supporting the transfer of knowledge and cooperation between industry, society and academia by, for example, developing triple helix partnerships in the northern region of Sweden. This and other similar projects are mediators of this entrepreneurship discourse, including goals of economic growth, innovation and sustainability.

At the same time, academia is subject to a gender equality discourse. More than ten years ago, it was shown that women had to be 2.5 times better than their male colleagues to be granted funding from the Swedish Medical Research Council (Wennerås and Wold, 1997). It was also shown how ties between male applicants played a role in the decisions regarding who was to be given a grant. This research has given rise to debates and to studies showing similar results in different research contexts (see e.g. Benschop and Brouns, 2003) and has formed a basis for many gender mainstreaming interventions at universities

today. Universities have, for example, been pointed out by the government for not doing enough to increase the number of women professors and, as a result, a number of gender equality interventions as well as gender mainstreaming measures (i.e. assessing the different implications for women and men of any planned policy action), have been introduced at the universities (Fältholm and Källhammer, 2009). As a consequence, projects such as the aforementioned DARE, are to deal with the issue of gender equality and to present measures to – in this case – increase the number of women entrepreneurs. This should be seen against the background that, at Swedish universities, most academic entrepreneurs are men, which although there is a certain ethnic diversity, represent a homogeneous group. Men between 35 and 50 years of age, who are well-recognized scientists, in engineering or medicine, dominate the commercialisation arena (Johannesson, 2008). So far, however, notwithstanding that gender equality is seen as an important goal, at least on a rhetorical level, most gender equality projects and interventions have not led to fundamental and sustainable change. One of the possible reasons is that, though there is a growing body of research on gender and gender equality interventions based on social constructionist approaches, most interventions are still based on liberal feminist approaches and therefore tend to ignore that both academia and the entrepreneurship discourse are gendered. Lagging behind current research development and based on analyses of differences between women and men, they often solely aim at removing barriers by helping individual women.

The main aim of this article, therefore, is to show how the discourse of academic entrepreneurship is intertwined with, and constructs and mediates, values and ideologies on gender, as well as to discuss if and how this can be problematic, both from a gender equality perspective and from an academic entrepreneurship perspective. More precisely, the article explores constructions of masculinity and femininity and academics’ identities in relation to ‘global’ and ‘local’ discourses and agendas on academic entrepreneurship, for example how women and men academics, in general, and within ‘entrepreneurial ghettos’ of academia, are represented as entrepreneurs, and to what extent and in what ways they internalize and relate to the discourse of academic entrepreneurship.

The article is organized as follows: First, we present a brief overview of research in the field of entrepreneurship to

show that extant research, as well as conceptions and discourses of, entrepreneurship in general and academic entrepreneurship, in particular, are gendered. Second, based on the analysis of texts dealing with academic entrepreneurship as well as on interviews with teachers and researchers at two universities who are subject to activities and interventions within the frame of *DARE*, we explore and show how the discourse of academic entrepreneurship is constructed and gendered. Lastly, drawing on these findings, we present conclusions on how to design gender mainstreaming interventions in the academic entrepreneurship arena.

The Gendered Nature of Entrepreneurship

As will be shown below, there is a growing body of research based on social constructionist approaches to entrepreneurship. Traditional research on entrepreneurship, however, is based on the assumption of economic rationality as universal and non-gendered (Bruni et al., 2004a). As noted by de Bruin et al (2007) and Ahl (2004, 2006), in this type of research, there is often a focus on differences between women and men, on obstacles faced by women entrepreneurs (see e.g. Marlow and Patton, 2005) and on what women might do to become successful entrepreneurs. Some of the solutions presented are that women in male-dominated contexts should partner with men (Godwin et al, 2006) or make sure they have access to business networks and mentors (McGregor and Tweed, 2002). There are also positive analyses, for example that the 'glass-ceiling' preventing women from careers as employees might work as a driving force for women to leave employment, in order to become entrepreneurs and start their own businesses (Kephart and Schumacher, 2005) and that out-sourcing of services might result in a larger number of women entrepreneurs (Baines and Wheelock, 2000). In this body of literature, women entrepreneurship is seen as an important, but underused resource. Other issues, such as relations between gender and power, tend to be ignored. Additionally, individual-level comparisons between women and men tend to leave societal and economic structures as well as organizational settings out of the analysis (Blackburn and Kovalainen, 2008). Further, Ahl (2004, 2006) shows that, in research on entrepreneurship, the image of 'women entrepreneurship' is sustained by analyses of the individual, rather than the structural level, meaning that it is based upon the conception of women and men as fundamentally different.

In contrast to these types of approaches, post-structuralist accounts of entrepreneurship, whilst drawing on a variety of influences, share in common the anti-essentialist belief that gender and other categories such as entrepreneur, race and class are social constructions. They discuss the images and stories upon which entrepreneurship is built, e.g. the entrepreneur as a (male) lonely hero, taking risks, fighting against difficult rules, but winning against all odds, or the entrepreneur as a highly technical problem solver and inventor (Ogbor, 2000; Ahl, 2007; Pettersson, 2007).

Moreover, innovation and entrepreneurship are often described as gender neutral and government policies and interventions are often claimed to be designed based on gender neutrality approaches (see e.g. Kyrö and Hyrsky, 2008). Research however, shows that the conception of entrepreneurship as gender neutral leads to the conception of women entrepreneurs as complementary, as not good enough, as 'the Other' (Ahl, 2004; Aaltio, 2008). These types of symbolic connections between entrepreneurship and masculinity and the pointing out of women as 'in need', and as weaker, might turn 'women entrepreneurship' into a stigmatized identity (Lewis, 2006). As will be shown below, also in the academic entrepreneurship arena, there is reason to draw on these types of gender and social constructionist approaches to entrepreneurship.

The Gendered Nature of Academic Entrepreneurship

Like research on entrepreneurship in general, the growing body of research on 'academic entrepreneurship' or 'institutional entrepreneurship' at universities (Liu and Dubinsky, 2000) in particular, which aims at improving universities' entrepreneurial activities, is based on traditional and 'gender-neutral' notions of entrepreneurship. Based on an article on research on academic entrepreneurship (Rothaermel et al, 2007), it can be noted that out of 173 articles reviewed, only three address gender, but only as one of many other variables, such as faculty, education and age. In line with this, many studies address obstacles and barriers faced by women entrepreneurs in academia. As in research on entrepreneurship in general, this body of research is based on analyses on the individual level and tends to search for answers within the women themselves. Women in academia are, for example, described as more ambivalent

about their selling skills and as more risk averse than their male colleagues (see e.g. Murray and Graham, 2007; Stephan and El-Ganainy, 2007).

In addition to comparing women and men, there are also studies investigating differences between different organizational contexts. For example, women's participation in commercialization activities is found to be larger in industry than in academia (Whittington and Smith-Doerr, 2005). Also, it is found that women are more likely to patent in flatter, more flexible, network-based organizational structures than in hierarchical organizations in academia and industry (Whittington and Smith-Doerr, 2008). Further, center-affiliated, as opposed to department-based women scientists within academia are found to be as likely to engage in commercialization activities as their male colleagues (Corley and Gaughan, 2005).

Though focusing on organizational context when investigating why women are less successful than men as academic entrepreneurs, this type of research is based on liberal feminist approaches (i.e. removing barriers by helping individual women) and does not draw on conceptions of *academia* itself as being gendered (c.f. Meyerson and Kolb, 2000; Acker, 2006). In other extant research, however, academia is depicted as being based on social constructions of "[...] structural and cultural factors such as ideology, subject discipline, and size and profile of department, and articulated by closeness or distance to powerful forces of the market" (Goode and Bagilhole, 1998, p. 161).

This indicates that there is a research gap to be filled; drawing on the above described conceptions of entrepreneurship and academia as gendered, how then is *academic entrepreneurship* gendered and socially constructed? What discourses are at play and what happens when they meet the contradictory and intertwining discourses of academia?

One way approaching this question is to look at research on how entrepreneurship in general is socially constructed and gendered. In an ideology-critique of entrepreneurial studies, it is for example argued that "[...] the discourse on entrepreneurship and its praxis in its present form reinforces an expression of patriarchy, producing and reproducing entrepreneurial ideas that give dominance to traditional male values" (Ogbor, 2000, p. 626). Other

critical accounts of research on 'women entrepreneurship' show that "women entrepreneurs are represented as located in ghettos within entrepreneurship, notably in more backward sectors where skills are an extension of what has been naturally learnt through gender socialization; sectors that are easier to enter and which therefore have little value" (Bruni et al, 2004b). In academia in general and in the universities studied, these sectors are found within health care and education fields.

Global and Local Entrepreneurship Discourses

In order to study the effects of the powerful international trend of academic entrepreneurship on women and gender equality, we believe it is useful to discuss it in terms of a discourse, i.e. a specific way to talk about and understand the world, a conversation policy or an interpretation repertoire (see e.g. Ogbor, 2000; Perren and Jennings 2005). Texts mediating the discourse of entrepreneurship, calling on universities and university teachers, researchers and students to commercialize their research, can be found at universities all over the world, in their visions, strategies and marketing, and also in calls from some national research funding agencies. Most Swedish universities have projects and administrative units involved in facilitating and promoting entrepreneurship among students, teachers and researchers. It is a strong and global discourse, providing 'rules' for ways of speaking and writing about entrepreneurship and it affects the way research and science is looked upon, both within and outside academia. It also affects the view of funding agencies, universities and researchers regarding the type of research that should be conducted and can be regarded as an example of how the ideology of New Public Management or new managerialism transforms academia and academic work (see e.g. Deem, 2001).

Notwithstanding that a discourse might be global, it is not always hegemonic. Even within some of the Swedish research funding agencies, this might be regarded as powerful promoters of the entrepreneurship discourse, there are alternative and counteracting discourses, including more critical or at least nuanced approaches to entrepreneurship. Discourses also compete with other discourses when they meet local contexts (in this case, the universities and research groups) and are translated and modified to adapt to local discourses and practices (Fairclough and Thomas, 2004). This is particularly evident

within academia, which is characterized by powerful and often contradictory discourses. An example of such a counteracting academic discourse is the idea of independent research, free from business or political preferences, i.e. research should be governed only by the needs of the research community itself. In an overview of Swedish universities' views on knowledge transfer and commercialisation (Johannesson, 2008), as well as in some critical research, 'the entrepreneurial university' is seen as endangering the core values of academia. The ideas of unfettered research and collegial autonomy are challenged by more management control emphasizing entrepreneurial activity and other types of managerial ideas imposed on academia (Mautner, 2005a). The critique concerns not only entrepreneurial activities, but also the idea that the scientific community should be guided by a short sighted market perspective (Fairclough, 1995; Czarniawska and Genell, 2002).

However, while there are parts of the academic discourse that might be described as contradictory, there are changes taking place in higher education and research that fit well within the entrepreneurial discourse. Such changes are, for example, the increased tendency to think of, measure and evaluate scientific quality and performance in quantitative ways (e.g. number of publications, the number of PhD graduates, the amount of external funding obtained etc) together with an increased focus on large and "excellent" research and innovation milieus. As in many accounts of the (male) entrepreneur, the excellent researcher is often conceptualized as a lonely hero, reflecting a hegemonic discourse privileging masculinity (see e.g. Benschop and Brouns, 2003). Additionally, research funding policy, characterized by a strong focus on the importance of 'centers of excellence', of the funding of larger and larger R&I-milieus, together with an yet stronger emphasis on meritocracy, might also be regarded as strategies for the preservation of male privilege in academia.

In addition to the fact that the global entrepreneurship discourse faces both contributory and contradictory discourses, it is not necessarily a matter of course that it is the same everywhere. Deem (2001) argues that research often assumes that most higher education organizations face the same problems and therefore, because of globalization, apply the same strategies to solve problems. Ignoring the local and organizational level

might lead to a risk of not seeing the different ways in which researchers characterized as 'academic capitalists', researchers in the humanities, women and men academics as well as managers, align themselves with and internalize the ideas on entrepreneurship. As will be discussed below, women and other groups in academia that do not fit in with the image of the typical (male) academic entrepreneur, risk finding themselves in 'entrepreneurial ghettos'.

Methodology: An Integrated Gender Mainstreaming and Research Project

The findings and the discussions of this article draw on preliminary results from an ongoing project, *Daring Gender*, which is an integrated gender mainstreaming and research project at Luleå University of Technology (LTU) and Umeå University (UmU). The project team consists of four researchers at LTU and two at UmU. The project is running from 2008-2012, with funding from VINNOVA's (The Swedish Governmental Agency for Innovation Systems) program on applied gender research in research and innovation (R&I) milieus.

The main aim of the *Daring Gender* project is to analyze, highlight, challenge and, in the long run, change prevailing gender patterns on academic entrepreneurship. A further aim of the project is to contribute to answering the complex questions of how gender mainstreaming interventions should be designed in the arena of academic entrepreneurship and how universities' supportive systems for the commercialization of research and cooperation with industry should be designed to attract and include both women and men academics.

In the project methods commonly used within gender research, such as individual semi-structured interviews, focus group interviews, observations and discourse analyses, are combined with action research and participatory design methods, such as workshops.

One part of the 'research object' is the aforementioned DARE project (Development Arena for Research and Entrepreneurship), a project promoting academic entrepreneurship at LTU and UmU. Other parts are R&I-milieus at the two universities, for example *Centre for Distance-Spanning Healthcare*, *The Bioactive Molecules Research Group*, *ProcessIT Innovations* and *Population Studies*.

Interviews about views on and attitudes towards gender, entrepreneurship, innovation and commercialization is scheduled to be carried out in three stages:

- (i) The first set of interviews was carried out with researchers and teachers (25 women and 20 men) and provided a base for our understanding of the context and for the discourse analysis.
- (ii) In the second and ongoing set of interviews, the interviewees are researchers, project leaders and other project actors in DARE and the R&I-milieus. So far, eight women and seven men have been interviewed.
- (iii) The third and future set will focus on interviewees holding leading positions at the two universities.

Observations are also done at DARE's activities promoting academic entrepreneurship and at similar activities in the regional innovation systems. Additionally, as part of the project, seminars, lectures and workshops on gender and entrepreneurship are arranged. So far, five workshops (with 15-20 participants each) have been carried out in which the method 'Personas' (fictive characters described in pictures and texts) have been used. Personas illustrate typical 'situations' and can function as a method for reflecting on and, hopefully, reframing norms and perspectives and for sharing knowledge and understanding among participants (Wikberg-Nilsson et al, 2010).

Moreover, discourse analyses of 'local' and 'global' texts on academic entrepreneurship are carried out. Some of the texts are collected on the Internet (c.f. Mautner, 2005b). The local texts, from the two universities, are for example reports, project descriptions, advertisements, invitations to seminars and courses, texts on internal debates, articles in the local newspapers and other kind of presentations of research and education activities, as well as results from our interviews, observations and workshops. The global texts are of similar types, but from the surrounding context and at regional, national and international level. Though the research project as a whole aims at studying both global and local discourses, this article is focused on the local discourse of academic entrepreneurship. This means that, instead of describing how global and local texts and discourses differ and converge, the findings are primarily based on the local level.

Findings

The Global Entrepreneurship Discourse Faces Problems when Meeting Academia

The interviews at the studied universities show that there is a strong skepticism about the phenomenon of academic entrepreneurship, in parallel with the growing awareness of, and openness to, the idea that both services and products are possible to commercialize. Even in areas with commercial traditions, there are examples of researchers (mostly men) who are skeptical and even negative:

"Academia shall not engage in entrepreneurship. Academics can not be teachers, researchers, leaders, and also entrepreneurs. It is not good to put in the university vision, that we should be an entrepreneurial university". (Senior lecturer, man, Faculty of Engineering).

Another man, who in addition to working as a researcher, also has a small business, and he experienced negative attitudes among colleagues. A woman researcher in an engineering field brings up similar kinds of experiences:

"I'm trying to be entrepreneurial in my work, but it seems not always to be the right thing to do. It is not easy, because there are many who want to preserve the traditional way of working within the university". (Senior lecturer, woman, engineering field)

Working too much with applied research or cooperating with companies is not always seen as 'real' research. It is common that university managements call for the university to get better at communicating knowledge on entrepreneurship and commercialization to students and researchers, while, in the same texts, there are statements saying that "only a very small part of our research is possible to commercialize". This kind of ambivalence and even resistance can be found also in the attitudes of academics towards the DARE project and other similar projects at other universities, as well as towards administrative units involved in facilitating and promoting academic entrepreneurship (Johannesson, 2008).

Our findings show that both women and men relate to these discursive ambivalences, they meet similar problems and reacts with similar types of resistance. However, women's lack of commitment to academic

entrepreneurship is mainly discussed in terms of a gender equality problem, a *women's* problem. More seldom is it discussed with references to the threat it represents to the core of science. In contrast, men's opposition towards academic entrepreneurship is seen as gender neutral.

Texts and Images on Entrepreneurship are Full of Gender Stereotypes

At the studied universities, many texts in circulation describe programs and measures to promote women in business and women entrepreneurship, in which the point is that women in business are “a corporate performance driver” and give “sustainable economic development” (see e.g. McKinsey, 2007; Nutek, 2007). In these texts, many of them from the ‘global’ level, women are often pictured as either outstanding or as in need of special support.

A typical example of the “women need special support” perspective is an EU report on entrepreneurship (EU, 2003), where the front page shows a smiling and walking man wearing a suit. In the text women are mentioned in connection to “other underrepresented groups” and there are statements like “Women frequently lack the confidence and skills necessary to start and run a business successfully”.

One new trend is that the concept of ‘female entrepreneurship’ seems to have been exchanged to ‘women in entrepreneurship’, ‘women entrepreneurs’ or ‘entrepreneur-women’. By avoiding explicit connections to ‘femininity’, the authors probably do not want to contribute to the conception of women as different or abnormal, a special kind of entrepreneurs, but not ‘real’ entrepreneurs. In many cases it works quite well, apart from the fact that the texts still do not talk about ‘men entrepreneurs’ as having a gender, but about business or entrepreneurship per se. Men do not seem to exist as a category and the concepts of ‘male entrepreneurship’, ‘men entrepreneurs’, ‘entrepreneur-men’ or ‘men in entrepreneurship’ seem to be non-existent. Texts on men entrepreneurs are not texts on ‘men’, but on ‘entrepreneurs’ as such.

An example of a local text is the information material from *The Idea House* (part of the DARE project) at LTU promoting student entrepreneurship and supporting commercialization of students innovations showing images of boys (men) as potential innovators. A poster invites

students and staff at the university to a luncheon lecture on the theme “How to sell yourself and your business idea”.



A little boy (see picture), dressed in a Superman-outfit triumphantly tightens muscles and fists, and above his head the following text can be found: “How can I as a student or researcher present and sell my idea to funders or potential partners in the most time-efficient and interesting way?”. The text is supposed to address *all* researchers and staff, but the picture suggests otherwise. The student or the researcher that *The Idea House* had in mind when producing the text clearly does have a gender and that gender is a man, illustrated by the little boy. The interviews confirm that the concept ‘entrepreneur’ has strong links to men and masculinity and also to what is seen as ‘products’ within the male-dominated engineering research fields, in which the concept of ‘innovator’ is associated with a male product developer or designer.

In a similar ad on “Entrepreneurship for girls” at the university, a girl is dressed as Superman (Superwoman?). This is quite a common phenomenon. Pictures of men address both women and men, and only when the target group is women in particular, is gender mentioned and women may serve as illustrations. In the workshops arranged by *Daring Gender*, by the participating academics, pictures of women entrepreneurs are conceptualized as pictures of stereotyped femininities, for example, the decorative and smiling young (and naïve) woman or the super efficient (and still decorative) woman, while pictures of men entrepreneurs are conceptualized as pictures of ‘ordinary people’.

Moreover, “Entrepreneurship for girls” and many other measures aimed at increasing the number of entrepreneurial women in academia are often based on a liberal feminist approach (i.e. removing barriers by helping individual women, c.f. Meyerson and Colb, 2000). At the studied universities, based on our analysis, we have found that descriptions of women’s experiences of problem situations might confirm presumptions of women in academia as not being able to handle the job, as well as consolidating presumptions of women as mostly found in areas not considered as being technological, innovative or entrepreneurial. It is easy to fall into the same trap as similar research in the field of leadership and entrepreneurship (Wahl, 1998, 2001), i.e. to be trapped in questions about what strategies and skills women should have to evolve into ‘academic entrepreneurs’. As noted in previous research, one of the consequences of the dominant myth of female experience in entrepreneurial praxis is that “female participation in entrepreneurship must go on through a process of *masculinization*” (Ogbor, 2000, p. 625).

Women Have more Problems than Men just Surviving in Academia

The interviews confirm that women researchers often feel they have less access to important networks and to large R&I-milieus, which probably can give them more difficulties than their male colleagues in obtaining external funding and being published. These problems, many of them probably caused by their ‘minority situation’ (Kanter, 1977) and gender biased merit valuation (Wennerås and Wold, 1997; Benschop and Brouns, 2003), mean that women researchers are more exposed to health and safety problems than men (Fältholm and Källhammer, 2007).

The symbolic links between technology and masculinity give additional problems, especially at LTU which has an engineering profile. A study of women students in the M.Sc. program programs at LTU also shows that there are unspoken conceptions of programs attracting many women as not representing ‘real engineering’ (Wikberg-Nilsson, 2008). There is reason to believe that the research and ideas of women in these areas are not considered to be technical and therefore not understood and communicated as innovative. This means that women usually need to work hard both to be able to stay within the core of engineering and to be seen as innovative.

Putting even stronger entrepreneurial pressure on women within these areas, with their own strong connections to men and stereotyped masculinity, without first solving several basic structural gender equality problems, is perhaps to increase the burden for women. This leads to a provocative question; perhaps it would be better for women in academia not to be subject to the prevailing entrepreneurial discourse? They have enough problems just carrying out and funding research (and surviving in academia). On the other hand, the alternative – to leave the academic entrepreneurship and innovation-oriented research to the men – is not realistic. Academic entrepreneurship can of course be refreshing and positive for women academics in many ways, as it brings possibilities of breaking up the traditional, and for women, sometimes problematic structures of academia.

Moreover, the use of the gender theory in *Daring Gender* has involved more problems than similar projects carried out in industry or design contexts, perhaps because both the academic context and entrepreneurship are so heavily loaded with stereotypical images strongly related to gender. This raises questions concerning working with gender mainstreaming interventions in a context such as academic entrepreneurship.

Women Stuck in ‘Entrepreneurial Ghettos’

The symbolic links between entrepreneurship, technology and masculinity are perhaps even more problematic for women who are active in research fields related to humanities, social science, health care and education or other areas of research that traditionally are not looked upon and described as entrepreneurial or innovative. Such areas also lack the tradition of commercializing research. Within these fields, when there is cooperation with partners outside of academia, they are often found within public sector organizations that often lack resources for research funding.

However, in the interviews a less expected picture appears. Several of the interviewed women who are active in these areas are actually not alienated from considering their own research results as innovative, although they have difficulties to see how they could be commercialized, and they claim not to have put these ideas into practice. They seem to be eager to obey and adapt local discourses regarding how to be entrepreneurial in their teaching. As they have lower access to important research networks

necessary for improving the possibilities of funding, they think of and describe alternative ways of being entrepreneurial; of developing new courses and of cooperating with students and external organizations in an innovative way.

“Even as a teacher you can be an entrepreneur. It is about ‘buying’ and ‘selling’ services, for example external supervisors, contract courses, etc.” (Senior lecturer, woman, Faculty of Arts).

This and other interviewees also emphasize the word cooperation to go around the problem that entrepreneurship and commercialization do not really work in these areas. Also at university level, in the DARE project, the same reformulations can be found.

One way of interpreting this is in terms of a manifestation of the powerful discourse on academic entrepreneurship, permeating and affecting local discourses. Another interpretation is that in spite of such efforts these women academics are not, and will probably not be, described as real entrepreneurs. There is a risk of segregation between real and second order type of entrepreneurship found in entrepreneurial ghettos. Therefore, it seems that women’s commitment to the discourse on academic entrepreneurship within these fields does not, in any fundamental way, contribute to changing gender relations and equality at the universities. Moreover, acting in line with the discourse, trying hard to be accepted by ambitiously following the rules, is instead typical for women and others in subordinated positions (Kanter, 1977). As the phenomenon of academic entrepreneurship in itself is not unproblematic, this way of positively accepting the entrepreneurship discourse can be contra productive to the careers of women. Or in other words: whatever women do, they seem to be doing the wrong thing.

Discussion and Conclusions

The examples above illustrate how the discourse of academic entrepreneurship is gendered and they also highlight the main dilemma of designing gender mainstreaming interventions in the academic entrepreneurship arena. On the one hand, women’s under-representation is a problem that needs to be addressed. If universities are going to promote entrepreneurship, for example in terms of commercializing research results, men

and women should have equal opportunities. The support systems of the universities support systems for entrepreneurial activities and praxis seem not to reach women and many of the women researchers do not see themselves as potential academic entrepreneurs.

On the other hand, by addressing these problems, there is a risk of reproducing the prevailing discourse and stigmatized identity (Lewis, 2006) on women entrepreneurs, representing women as special and different, less risk-prone and less self-promoting and not expected in the same way as men to be interested or not having enough competence in innovation and research commercializing and therefore in need of specific actions. Not surprisingly one of our interviewed women said: “I do not want to be a ‘female entrepreneur’”. As Ahl (2006), Marlow and Patton (2005) and de Bruin et al (2007) point out, gender mainstreaming efforts and focus on women and obstacles facing women might preserve and reproduce the existing unequal gender structures in organizations. For example, by pointing out women or groups of women as ‘weaker’ and ‘in the need of’ remedial efforts, gendered divisions of labour might be preserved, rather than challenged.

In other words, there is a clear risk that programs and interventions aimed at supporting women entrepreneurs reproduce and reinforce the image of the successful male entrepreneur, instead of leading to organizational and cultural changes. This is in line with extant research showing that certain equal opportunity and development programs aim at cultivating desired entrepreneurial norms and values in the individuals and that “the discourse of entrepreneurship and its praxis in its present form reinforces an expression of patriarchy, producing and reproducing entrepreneurial ideas that give dominance to traditional male values” (Ogbor, p. 626).

Furthermore, while women participate in non-research oriented activities, for example discussing how to promote gender equality and participating in activities promoting entrepreneurship, their male colleagues are left in peace to carry out research and are climbing the academic career ladder. Equally, while women are gathering in special arranged female networks, often seen as powerless, men continue to form and participate in more powerful informal networks, reproducing the distribution of power and the reproduction of the image and discourse of the

successful academic and entrepreneur as a male professor within certain fields of research (Fältholm and Källhammer, 2007, 2009). In other words, in spite of these efforts, women are restricted to entrepreneurial as well as academic ghettos.

In order to design, develop and implement gender mainstreaming measures related to academic entrepreneurship, based on the results of *Daring Gender* so far, we have come to the conclusion that gender mainstreaming measures can be problematic and even counterproductive, leading to the reproduction rather than the transformation of gendered structures. There is reason to argue that “[...] from a social constructionist gender perspective, it is the ubiquitous division of people into two unequally valued categories that undergirds the continually reappearing instances of gender inequality” (Lorber, 2000, p. 80).

The solution however is not gender neutrality, as it has been shown to give rise to prescriptive literature urging women to masculinize themselves (Bruni et al, 2004b). It would be naïve to ignore the prevailing gender and power structures of academia. Nor is it to focus on women from a more positive point of view, as “the discovery of a ‘good female’ experience has produced a gendering programme which prescribes ‘femalization’ at all costs” (Bruni et al, 2004b, p. 264).

So, although we agree with the above mentioned objections in principal, we argue that it is necessary to work both with measures aimed at changing the structure and at enhancing the opportunities and work environment for some of the women academics, as women that are part of the system today cannot wait for changes and they should not be expected to individually bear these types of transformations of the system. Though the long-term aim of our research is to eradicate the ubiquitous division of academics into two unequally valued categories, we need to constantly move back and forth between a liberal structuralist and social constructionist gender theory.

This means that, there is a need to develop gender mainstreaming interventions, promoting women academic entrepreneurs without reproducing gendered stereotypes. While liberal feminist approaches might benefit some of the targeted women, they do not “change the systemic factors within organizations that create an uneven playing-field for women in the first place” (Meyerson & Kolb,

2000, p. 561). Therefore, there is at the same time a need to, as we have started doing in this article, investigate the ways in which the processes, structures and discourses of academic entrepreneurship are constructed and gendered.

The discussion above highlights one of the dilemmas of our own research work: how to deal with the issue of ‘women entrepreneurs in academia without reproducing gendered conceptions of the true male academic entrepreneur? Acknowledging the problem that women are underrepresented as academic entrepreneurs, there is a risk that we, as researchers, contribute to the construction of women as in need of special support, as less willing to take risks and as not good at selling their ideas. In addition, there is also a risk that we contribute to the production and reproduction of women in ‘entrepreneurial ghettos’.

This can be related to the use of gender as a point of departure for our research. Even if this insight is not new, it calls for new ways of approaching the problem, theoretically as well as methodologically and for what might be called a “feminist degendering movement” (Lorber, 2000). Such a movement however still needs to start by attending to how gender divisions structure work places, work organizations and working life. It needs to start in critical analyses of the gendering of competence, work identities, technology, innovation, leadership and entrepreneurship. It needs to attend to complex relations between learning and ‘doing gender’ and to highlight paradoxes and unsymmetrical change processes. It also needs to move forward, not by merely establishing and describing these phenomena, but also by actually contributing to sustainable change.

Finally, another dilemma of our research is that we are active participants in the discourse of academic entrepreneurship ourselves, both as targets for, and as mediators of, the discourse. To us it is important to allow ourselves to be trapped in the story of entrepreneurship, but also to be able to distance ourselves from it in order to be able to criticize it. The critique of the discourse of academic entrepreneurship, from a gender perspective as well as from the perspective that it threatens some of the core values of academia, can be described and highlighted in terms of the aforementioned paradoxes of gender and entrepreneurship. We believe that, if the goal is to create sustainable growth and academia is to contribute to this,

by for example promoting academic entrepreneurship, we must be aware of, describe and problematize these paradoxes.

Acknowledgements

We would like to thank VINNOVA (The Swedish Governmental Agency for Innovation Systems) for funding the research project presented in this article. Thanks also to Åsa Wikberg Nilsson, PhD student at the Department of Human Work Sciences at Luleå University of Technology, for collecting some of the data for the article.

References

- AALTIO, I. (2008). Entrepreneurship in Organization – Gender and Social Capital. In: Aaltio, Kyrö, Sundin (red). *Women, Entrepreneurship and Social Capital*, Business School Press Copenhagen.
- ACKER, J. (2006). Gender and organizations. In: Saltzman Chafetz, J. (Ed) *Handbook of the Sociology of Gender*. Springer, New York.
- AHL, H. (2004). *The Scientific Reproduction of Gender Inequality. A Discourse Analysis of Research Texts on Women's Entrepreneurship*. Liber, Malmö.
- AHL, H. (2006). Why Research on Women Entrepreneurs Needs New Directions. *Entrepreneurship, Theory and Practice*, Sept, 595-621.
- AHL, H. (2007). Sex business in the toy store: A narrative analysis of a teaching case. *Journal of Business Venturing*, 22 (2007) 673–693.
- BAINES, S., Wheelock, J. (2000) Work and employment on small business: Perpetuating and challenging gender traditions. *Gender, work and organization*, 7(1), January 2000.
- BENSCHOP, Y., Brouns, M. (2003). Crumbling Ivory Towers: Academic Organizing and its Gender Effects. *Gender, Work and Organization*, 10(2), 195-212.
- BLACKBURN, R., Kovalainen, A. (2008). Researching small firms and entrepreneurship: Past, present and future. *International Journal of Management Reviews*, 1-22.
- BRUNI, A., Gherardi, S., Poggio, S. (2004). Doing Gender, Doing Entrepreneurship: An Ethnographic Account of Intertwined Practices. *Gender, Work and Organization*, 11, 406-429.
- BRUNI, A., Gherardi, S., Poggio, S. (2004). Entrepreneuriality, gender and the study of women entrepreneurs. *Journal of Organization Change Management*, 17,3, 256-268.
- BRUIN DE, A., Brush, C.G., Welter, F. (2007). Advancing a Framework for Coherent Research on Women's Entrepreneurship. *Entrepreneurship, Theory and Practice*, May, 323-339.
- CZARNIAWSKA, B., Genell, K. (2002). Gone shopping? Universities on their way to the market. *Scandinavian Journal of Management*, 18, 455-474.
- CORLEY, E., Gaughan, M. (2005). Scientist's Participation in University Research Centers: What are the Gender Differences? *Journal of Technology Transfer*, 30, 371-381.
- DEEM, R. (2001). Globalisation, New Managerialism, Academic Capitalism and Entrepreneurialism in Universities: is the local dimension still important? *Comparative Education*, 37, 7-20.
- EU (2003). *Grönbok – Entreprenörskap i Europa*, Europeiska gemenskapernas kommission, Bryssel.
- FAIRCLOUGH, N. (1995). *Critical discourse analysis: The critical study of language*. Longman, London.
- FAIRCLOUGH, N., Thomas, P. (2004). The Discourse of Globalization and the Globalization of Discourse. In: Grant, D., Hardy, C., Osrick, C., Putnam, L. (red). *Organizational Discourse*. Sage, London.
- FÄLTHOLM, Y., Källhammer, E. (2007). "Being a man weighs more" – gendered career patterns at Luleå University of Technology, paper presented at *The 5th European Conference on Gender Equality in Higher Education*, Berlin, August 2007.
- FÄLTHOLM, Y., Källhammer, E. (2009). "Being a man weighs more" – gendered career opportunities and gender mainstreaming measures at a Swedish university, paper under review for *Gender & Education*.

- GODWIN, L.N., Stevens, C.E., Brenner, N.L. (2006). Forced to Play by the Rules? Theorizing How Mixed-Sex Founding Teams Benefit Women Entrepreneurs in Male-Dominated Contexts. *Entrepreneurship, Theory and Practice*, Sept, 642.
- GOODE, J., Bagilhole, B. (1998). Gendering the Management of Change in Higher Education: A Case Study. *Gender, Work and Organization*, 5, 148-164.
- JOHANNESSON, C. (2008). *University strategies for knowledge transfer and commercialisation. An overview based on peer reviews at 24 Swedish universities 2006*. Vinnova report vr 2008:17.
- KANTER, R. M. (1977). *Men and Women of the Corporation*. Basic Books, New York.
- KEPHART, P., Schumacher, L. (2005). Has the 'Glass Ceiling' Cracked? An exploration of Women's Entrepreneurship. *Journal of Leadership and Organizational Studies*, 12, 1-15.
- LEWIS, P. (2006). The Quest for Invisibility: Female Entrepreneurs and the Masculine Norm of Entrepreneurship. *Gender, Work and Organization*, 13, 453-469.
- LIU, S.S., Dubinsky, A.J. (2000). Institutional entrepreneurship – A panacea for universities in transition? *European Journal of Marketing*, 34(11/12), 1315-1337.
- MARLOW, S., Patton, D. (2005). All Credit to Men? Entrepreneurship, Finance and Gender. *Entrepreneurship, Theory and Practice*, nov, 717-735.
- MAUTNER, G. (2005a). The entrepreneurial university – A discursive profile of a higher education buzzword. *Critical Discourse Studies*, 2(2), 95-120.
- MAUTNER, G. (2005b). Time to get wired: Using web-based corpora in critical discourse analysis. *Discourse & Society*, 16(6), 809-828.
- MEYERSON, D.E., Kolb, D.M. (2000). Moving out of the 'Armchair': Developing a Framework to Bridge the Gap between Feminist Theory and Practice. *Organization*, 7(4), 553-571.
- MCGREGOR, J., Tweed, D. (2002). Profiling a New Generation of Female Small Business Owners in New Zealand: Networking, Mentoring and Growth. *Gender, Work and Organization*, 9, 420-438.
- MURRAY, F., Graham, L. (2007). Buying and selling science: gender differences in the market for commercial science. *Industrial and Corporate Change*, 16, 657-689.
- NUTEK (2007). *Programplan – Främja kvinnors företagande 2007-2009*.
- OGBOR, J.O. (2000). Mythicizing and reification in entrepreneurial discourse: Ideology-critique of entrepreneurial studies. *Journal of Management Studies*, 37(5), 605-635.
- PERREN, L., Jennings, P. (2005). Government Discourses on Entrepreneurship: Issues of Legitimization, Subjugation, and Power. *Entrepreneurship: Theory & Practice*, 29(2), pp. 173-184.
- PETTERSSON, K. (2004). Masculine entrepreneurship – the Gnosjö discourse in a feminist perspective. In: Hjorth, D., Steyaert, C. (Eds.). *Narrative and Discursive Approaches in Entrepreneurship*. Edward Elgar, Cheltenham, pp. 177-193.
- ROTHAERMEL, F.T., Agung, S.D., Jiang, D. (2007). University entrepreneurship: a taxonomy of the literature. *Industrial and Corporate Change*, 16, 691-791.
- STEPHAN, P., El-Ganainy, A. (2007). The entrepreneurial puzzle: explaining the gender gap- *Journal of Technology Transfer*, 32, 475-487.
- WAHL, Anna (1998) Deconstructing women and leadership. *International Review of Women and Leadership*, 4(2).
- WAHL, Anna (2001). From lack to surplus. In: Sjöstrand et al. (Eds.) *Invisible management*. Thomson, London.
- WENNERÅS, C., Wold, A. (1997). Nepotism and sexism in peer- review. *Nature*, 387, 6631, 341-343.
- WHITTINGTON, B.K., Smith-Doerr, L. (2005). Gender and Commercial Science: Women's Patenting in the Life Sciences. *Journal of Technology Transfer*, 30, 355-370.

WHITTINGTON, B.K., Smith-Doerr, L. (2008). Women Inventors in Context. Disparities in Patenting across Academia and Industry. *Gender & Society*, 22, 2, 194-218.

WIKBERG-NILSSON, Å. (2008). *Kvinnor i civilingenjörsprogram – hinder och förutsättningar för ökad rekrytering*, forskningsrapport 2008:01, Luleå tekniska universitet.

WIKBERG-NILSSON, Å., Fältholm, Y., Abrahamsson, L. (2010). Reframing Practice through the use of Personas, forthcoming in *Reflective Practice*, 11, 3.

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