

Becoming a professional

A longitudinal study of graduates'
professional trajectories from higher
education to working life

Sofia Nyström



Linköping University
EDUCATIONAL SCIENCES

Linköping Studies in Behavioural Science No. 140
Linköping University
Department of Behavioural Sciences and Learning
Linköping 2009

Distributed by:
LINKÖPING UNIVERSITY
Department of Behavioural Sciences and Learning
SE-581 83 Linköping

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Edition 1:1
ISBN 978-91-7393-691-0
ISSN 1654-2029

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Department of Behavioural Sciences and Learning, Linköping University

Cover: Sofia Nyström, Rotorua, New Zealand, 2006

Printed by: LiU-Tryck, Linköping 2009

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List of original papers

The present thesis is based on the following papers;

I. Nyström, Sofia., Abrandt Dahlgren, Madeleine., & Dahlgren, Lars Owe. (2008). A winding road – Professional trajectories from higher education to working life; a case study of political science and psychology graduates. *Studies in Continuing Education*, 30, 3, 215-229.

II. Nyström, Sofia. (2009). The dynamics of professional identity formation: Graduates' transition from higher education to working life. *Vocations and Learning: Studies in vocational and professional education*, 2, 1, 1-18.

III. Nyström, Sofia. (2008). *Graduates 'doing gender' as early career professionals*. Manuscript submitted for publication.

IV. Nyström, Sofia., & Reid, Anna. (2008). *Beyond Higher Education: Critical Transformations in Becoming a Professional*. Manuscript submitted for publication.

Acknowledgement

This thesis is about becoming a professional and it is also my journey towards becoming a researcher. A thesis is often viewed as the product of your years as a doctoral student. For me, becoming a researcher is more than just writing a thesis, it is also the process of becoming a member of an academic community. These years have been a joyful experience and an intriguing process but I would not have been able to complete my thesis without the support, encouragement and friendliness that I have met.

I would like to start by thanking my supervisors Lars Owe Dahlgren and Madeleine Abrandt Dahlgren for opening the doors to the academic world. You have always been there for me with your encouraging comments and constructive input on my research. You also gave me confidence to expand my academic horizons and introduced me to Anna Reid and Peter Petocz, Macquarie University (MQ), Sydney, Australia. Anna (my Australian supervisor) and Peter, you are one of a kind! You welcomed me to Australia and MQ with your support and collaboration but also by opening up your home for me. For that I am forever grateful and I hope that our collaboration will continue.

Becoming a doctoral student was not self-evident for me and without the encouragement from Marie-Louise Sandén, my supervisor and inspiration during my undergraduate studies, I would not be where I am today. I would also like to acknowledge the Journeymen project and especially the Swedish research team, without you and your generosity with your empirical data this thesis would have looked totally different. This longitudinal study would have been impossible to accomplish without the participants, who have contributed their precious time. Thank you!

Becoming a professional is also being a part of a community and for me this has been Linköping University, the Department of Behavioural Sciences and Learning, but foremost, the unit for Adult, Popular and Higher education (VUFo). Thank you for all the laughter, coffee breaks and discussions. I would also like to thank all the members of the Higher Education Research seminar for your constructive comments on my papers.

Writing a thesis is a somewhat lonely task but I would like to give special thanks to Song-ee Ahn, Ulla Alsin, Andreas Fejes, Anna Fogelberg Eriksson, Håkan Hult, Andreas Wallo and Sofia Wistus for reading and commenting on my writing. I would also like to acknowledge the help from Gunnar Handal (Oslo University, Norway), who gave me valuable comments on my final seminar, and Alexander de Courcy, who edited my articles and this extended abstract.

In becoming a researcher, you not only need comments on your writing, you also need support on a more personal level. This I have found in Andreas F, Ellie, Kattis, everyone in 'Kohorten', Sofia, and Song-ee. Without you, this would not have been half as much fun.

It is not only the academic community that has influenced my process. Without my close friends (you know who you are) this would have been a mission impossible. Thank you for being there! I also want to express my deepest gratitude to my parents, Kristina and Evan, to my sister, Anna-Lena (and your family), and to my brother, Mattias, for always being there for me and supporting me in everything I decide to do.

Finally, to you Stefan, my husband and best friend, you are simply the best!

Sofia Nyström
Lingham, February, 2009

1. Introduction

'What are you going to be when you grow up?' This is a question that some of us might have got from our families and relatives, friends, school teachers or career counsellors but also a question that we might have asked ourselves – *what* do I want to be? The underlying meaning of the question is, in most cases, related to work and our professional future. Thereby it is also a question related to time – something that will (or should) happen in the future (when you have grown up). This thesis focuses on graduates' process towards becoming professionals in their transition from higher education to working life.

Students enrol in higher education with different incentives or prospects for entering a certain profession, getting a degree (Axelsson, 2008; Blackmore, 1997; Nilsson, 2007), and doing something new (Wästerfors, 1998) or just as a 'Bildung' project (Johansson et al., 2008). In higher education they meet the academic tradition and culture (Neumann, 2002), a specific curriculum but also teachers and peer students (Fejes et al., 2005). The students' experiences of studying at university shapes and changes their life (Brennan & Teichler, 2008) as well as forming their identities (Kaufman & Feldman, 2004). Their journey towards an educational degree or profession has started.

During the years spent in higher education, students' identification with a certain profession or their perception of their future professional work will influence how they experience learning (Reid et al., 2006; Reid & Petocz, 2004; Reid & Solomonides, 2007). Their experiences will, however, also influence the way they look upon themselves as individuals and interact with teachers and peer students (Kaufman & Feldman, 2004). After graduation students leave the educational system and enter the reality of work life. What happens in this process? Has a degree from higher education had the qualifying function for working life as hoped for (Nilsson, 2007)? Has their education enhanced their employability at the start of their professional future (Cranmer, 2006)? How will they be looked upon as female and male newcomers (Tanggaard, 2006)? Do they have what it takes? In recent decades, there has been a growing debate about graduate employment and professional development based on the relationship between higher education and the world of work (Axelsson, 2008; Bowden & Marton, 1998; Cranmer, 2006; Johansson, 2007; Johnston, 2003; Nilsson, 2007; Teichler, 1998, 2000, 2007).

This debate is often talked about as a transition stage between higher education and work (Abrandt Dahlgren et al., 2006; Allen & Van Der Velden, 2007; Teichler, 1998, 2007), a transition that has been described as a

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problematic and chaotic time for the individual (Graham & McKenzie, 1995; Perrone & Vickers, 2003). Some argue that graduates go through a cultural shock, are poorly prepared for their tasks and the demands of working life (Candy & Crebert, 1991; Perrone & Vickers, 2003). Also noticeable is that graduates do not always end up with appropriate employment and with tasks related to their educational background (Allen & Van Der Velden, 2007; Teichler, 1998, 2000, 2007). Despite these difficulties, statistics show that Swedish individuals (74% of a student cohort) with a university degree have established themselves in the labour market one to one and a half years after graduation (The Swedish Agency for Higher Education, 2006). But the question here is how the graduates go through the process of transition.

The process of becoming a professional continues in working life. This process has been pictured as an interface between the workplace and the performed work tasks and the individual's values and goals (Kirpal, 2004). But it is also influenced by gendered processes and practices in the workplace in terms of a distinction between male and female, masculine and feminine (Abrahamsson, 2006; Acker, 1992, 1999; Aurell, 2001; Tanggaard, 2006). Consequently, the individual's involvement and learning in work plays a transformative role in shaping who a person is (or wants to become) as well as influencing how he or she goes through life (Axelsson, 2008; Billett & Sumerville, 2004; Fuller et al., 2005; Hodkinson et al., 2004; Lave & Wenger, 1991; Salling Olesen, 2001; Wenger, 1998). So it seems as if it is a 'never ending' story of becoming.

The debate about graduate employment and professional development concerns graduates' experiences and background, their needs, employment opportunities and the recruitment process, and career decision-making (Johnston, 2003; Teichler, 1998, 2007). However, researchers (Johnston, 2003; Teichler, 2007) emphasize the need for more research concerning the early years of employment, knowledge use, development of graduate employment paths and identity formation. This kind of research remains scarce. The present study aims to contribute to this field of knowledge. Political Science and Psychology graduates have participated in a longitudinal study, where they have been followed from higher education into the world of work. Qualitative longitudinal studies of the transition from higher education to working life are scarce (Johnston, 2003). Research is even scarcer concerning the process of how professional identities are formed (Billett, 2006). The design of this study makes it possible to problematize and explore variations and changes in graduates' processes of becoming professionals.

Aim

The overall aim of this thesis is to describe graduates' trajectories towards becoming professionals as they enter working life with a master's degree in Psychology or Political Science.

More specifically, the focus is on:

- how graduates construe their professional trajectories in terms of their envisaged future work as senior students, and later as novice and early career professionals with 18 as well as 34 months of working life experience. (paper I)

- how the relationships between professional and personal aspects of life experiences and imperatives impact on the processes of professional identity formation in the transition from higher education to working life. (paper II)

- how early career professionals do gender when they do professions with particular emphasis on how graduates acquire legitimacy in relation to their colleagues and clients. (paper III)

- how novice and early career professionals experience critical transformations in their transition from higher education to working life. (paper IV)

The structure of the thesis

This thesis will continue with an overview of previous research on professional development and identity formation with special reference to the contexts of higher education and working life (chapter 2). This is followed by the theoretical frame of reference (chapter 3) focusing on situated and social theory of learning as well as gender perspective. These theoretical standpoints will be the tools for the interpretations presented in this thesis. This section is followed by a description of the context of the study (chapter 4), i.e. the Master programme in Political Science and Economics and the Master programme in Psychology, their history as an academic subject as well as working life prospects. Chapter 5 consists of an overview of the empirical study, how it was designed and analysed, followed by a summary of the four articles (chapter 6). The thesis ends with a discussion (chapter 7) of the findings and the contribution of the thesis. Enclosed as appendices are four articles all submitted to or published in international journals.

2. Previous research on professional development and identity formation

The aim of studying graduates' trajectories towards becoming professionals concerns both the development as well as the formation of their identities. This section contains an overview and selection of some of the research that has discussed and problematized these issues as a *relationship between higher education and working life*.

Central phenomena in the previous research are *identity*, *development* and *professional*, and they need some further elaboration before being used as a theoretical frame of reference for this study. The theoretical concept *identity* has its roots in psychology, but nowadays it is used in many different disciplines and with different connotations (Alsmark, 1997; Aurell, 2001; Gee, 2000). One important distinction in the debate is whether one can consider identities to be essential and constant or to what extent they are constructs of our social interactions (Gee, 2000). Alsmark (1997) suggests the metaphor *shirt* to describe identity as something that can be changed when ever it is needed, or *soul* as a more stable and internal entity. These are two extreme points and many researchers take the middle way, suggesting that some parts of our identity are relatively unchangeable and stable while others are more adaptable and changeable depending on the situation and social interactions (Abrahamsson, 2006; Aurell, 2001; Thunborg, 1999; Wenger, 1998).

According to Skovholt and Rønnestad (1995), the concept of *development* always implies some sort of change: a change that can be organised systematically and involving a progression over time. Their standpoint springs from psychology suggesting that the basic elements of development are change, order/structure and succession (ibid, p. 3). With reference to Freud, Erikson and Kohlberg, Skovholt and Rønnestad argue that the classical theories of development are based on evolving stages structured in a hierarchical and sequential order. This perspective has been questioned on the basis of universality and the hierarchical order by stressing the complex nature of human behaviour (Skovholt & Rønnestad, 1995).

These two concepts, identity and development, should be seen in relation to work. Work is understood to be a key element and a central activity in the life of adults (Billett, 2007; Noon & Blyton, 2002). This defining role makes work one important aspect of how adults' identity is constructed, developed and exercised (Billett, 2007). It is also important to emphasise that all work is gendered in how it is structured, practised, experienced and in the interaction

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between individuals (Acker, 1990, 1992, 1998, 1999; Collinson & Hearn, 1994; Martin, 2003). But more specifically, this thesis concerns *professional* development and identity formation. The term professional refers to a member of a profession in the classical sense and belonging to a collective with specific knowledge, competence and expertise (Abbott, 1988; Davis, 1996; Hellberg, 2002; Nilsson, 2007; Salling Olesen, 2001, 2007; Witz, 1992). By having this status, professionals could claim legitimate control over certain kinds of work and tasks based on their specialized knowledge and professional responsibility. This gives the different professional groups an autonomous position in society, but this position is only given to professional individuals if they subject themselves to the quality demands of the profession (Abbott, 1988; Hellberg, 2002; Nilsson, 2007; Salling Olesen, 2007).

Since the professional groups define their field of expertise, it is possible to distinguish different professional types based on the kind of knowledge the professions control, or based on who the consumers/buyers of the professionals' services are (Hellberg, 2002). Despite the professional groups' status in society, an inequality can be seen between what is considered to be a traditional male and female profession (Aurell, 2001; Davis, 1996; Witz, 1992).

This thesis focuses on two groups of professionals, coming from different educational programmes in higher education, Psychology and Political Science¹. I have not set out to define whether the two groups are 'professions' in terms of specialisation and control of knowledge, as described above. The term 'professional' is used in a general sense, referring to the different tasks and responsibilities that graduates from these two educational programmes have to deal with in their work. Here, interest is focused on how they develop a sense of professional identity in their work context.

Higher education in focus

Kaufman and Feldman (2004) have - by using a symbolic interactionist approach - explored how senior students felt identities are formed by their college experiences. They identified three domains that were most likely to transform the students: intelligence and knowledgeability, occupation, and cosmopolitanism. Of interest to this study is the occupation domain, which concerned students' expectations for future occupation and career choices. Being a college student, soon to graduate, made them dissociate themselves

¹ More information about the different educational programmes can be found in chapter 4.

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from certain jobs below their educational standard with the motivation that they ‘deserved’ better jobs. The authors also emphasise that students’ experiences of college and their felt identities are influenced by gender since male and female students’ have different ways of relating to the domains. This could be influenced by the fact that female and male students make different educational and occupational choices (Blackmore, 1997). Moreover, the students also argue that interactions with their peer-students exert a substantial influence on their visions for their future occupation and career (Kaufman & Feldman, 2004). To sum up, the authors (ibid) stress the importance of the social environment and interactions regarding students felt identity. The importance of the social context is also emphasised in Eteläpelto & Saarinen’s (2006) study of how teacher students develop their subjective identities by engaging in two learning communities, the university context and the context of authentic working life. Based on their results, the authors suggest that:

...in order to negotiate and redefine one’s personal and professional identity in the learning community, there have to be mutually constitutive spaces for learning in terms of developing professional subjectivity. (ibid, p. 173)

Eteläpelto and Saarinen (2006) suggest that such a space is an environment in which the individual is able to set up his or her own goals and motives in relation to the community.

In relation to the above, Reid and Petocz (2004) have developed a theoretical model where they have found a relationship between students experiences of learning and their perception of professional work. They call this framework ‘Professional Entity’ and it has been applied to many different disciplines such as musicians, designers, statisticians and mathematicians (e.g. Reid et al., 2006; Reid & Petocz, 2002, 2004; Reid & Solomonides, 2007). The ‘Professional Entity’ consists of a hierarchical category system of students’ ways of understanding their future professional work. At the narrowest, *extrinsic technical level*, students have a technical perception of their future professional work where knowledge is seen as something applicable when work demands it. At the *extrinsic meaning level*, students focus on understanding the discipline-specific characteristics of their future professional work. At the highest level, *intrinsic meaning level*, students’ knowledge incorporates a personal stance and approach to their future field of practice.

The above studies take a student perspective concerning professional development and identity formation. Abrandt Dahlgren et al. (2005, 2006),

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and Karseth and Dyrdal Solbrekke (2006) explore the same issues but with a focus on how students' engagement in an educational programme influenced their identity formation. Abrandt Dahlgren et al. (2006) have followed Political Science, Psychology and Mechanical engineering graduates from higher education to their first year of professional practice. The processes of *continuity*, *discontinuity* or *transformation* could be discerned when exploring graduates' identity and knowledge formation in the transition. The Psychology educational programme has the most obvious professional focus, implying a high degree of continuity between being a student and a novice professional. The design of the programme (i.e. the practical elements and problem-based learning) had contributed to preparedness for work and also a strong connection and identification with a professional practice and community. For the other programmes, it was a process of transformation and discontinuity. In the case of Political Science, which is of interest to this study, the transition to working life meant a transformation for the students. The knowledge acquired had to be transformed and re-contextualised into a specific work practice. This made the students associate with the work practice instead of identifying themselves as a political scientist (ibid). The results have similarities with Karseth & Dyrdal Solbrekke's (2006) comparative study of graduate professional education involving students from the educational programme in Psychology and in Law. The findings indicate that the educational programmes prepare the students well as regards the academic side of the profession by focusing on the theoretical aspects of their professional work. But the educational design does not sufficiently prepare the students for the complex professional practice with special reference to moral conflicts in their professional work. Abrandt Dahlgren et al. (2006) also give a more abstract description of the relationship between higher education and work by using the constructs of *ritual* and *rational*. Ritual refers to knowledge and skills that do not have a specific field of application. Rational refers to knowledge and skills with a utility value that prepare students for a specific field of knowledge or professional field of work. Rational knowledge is divided into *substantive* and *generic* skills. Abrandt Dahlgren et al. (ibid) argue that the impact of education as encompassing substantive skills means that the skills are content specific and contextually situated. But the impact could also consist of generic skills, which are transferable between different contexts and contents.

Graduates' professional development and identity formation has now been pictured from both the student perspective and as influenced by an educational programme. But both these perspectives could be seen as a response to the ongoing debate on graduate employability, i.e. what knowledge and skills the graduate needs in order to be employed and hold on

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to a job (Atkins, 1999; Cranmer, 2006; Kohler, 2004). One response to this debate is the restructuring of higher education in Europe or the Bologna process. The aim of these changes was to reform the structures of European higher education systems in a convergent way. One clearly defined common goal in the action programme is to bring about free movement and employability of citizens and to increase the international competitiveness of European higher education. Two of the objectives specified are to have comparable degrees and a common credit point system. (Bologna Secretariat website, 2008) These incentives are in line with the demand for higher education to supply the labour market with a well-educated workforce (Cranmer, 2006; Harvey et al., 1997; Harvey et al., 2002). This debate concerns what knowledge and skills the graduates should have or acquire in order to be employable and 'useful' in working life (Cranmer, 2006; Kohler, 2004).

Working life in focus

This section will give some examples of previous research on professional development and identity formation in work life.

Today, there is an increased differentiation and specialisation within and across the professional groups, making the vision of homogeneous professions blurred (Hellberg, 2002). There has been an increase in individualisation where the individual has to take on responsibilities and functions that, traditionally, were up to the collective of professionals to govern (Nerland & Jensen, 2007; Hellberg, 2002). This has created the vision of a professional self where the individual is responsible for his/her own professional career and mobility, knowledge production and learning (Fejes, 2008; Nerland & Jensen, 2007; Williams, 2005).

Through the involvement, their learning and practising in work, individuals construct and deconstruct how they form their identity. This is a relationship which is stressed as a relationship and interaction between the individual and the professional context (e.g. Hodkinson et al., 2004; Kirpal, 2004; Salminen-Karlsson, 2003, 2006). Hodkinson et al. (2004) and Hodkinson and Hodkinson (2003) have conducted biographical studies of school teachers' learning in working life. They found that the individuals' learning careers, i.e. how they go about learning and participation in work, were based on the interaction with the work context. Moreover, the learning careers were influenced by their prior experiences and skills as well as by individual dispositions, i.e. their gender, age, class, and values (Hodkinson et al., 2004). Hodkinson et al. (2004) and Hodkinson and Hodkinson (2003) suggest that they contributed to development and construction of work identities as an arena for self-fulfilment and self-perception. These results

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have similarities with Salling Olesen's (2001, 2007) studies of professional identities as learning processes in life histories. Professional identity is thereby seen as subjective learning processes between the individuals and a professional practice and tasks, but also as the social interaction with other individuals. Similar results have been reported by Thunborg (1999). Moreover, Salling Olesen (2001, 2006, 2007) also suggests that this interrelationship is influenced by the life history of the subject since individuals have to construct and form their own relation to the profession. Eriksson and Eriksson (2003) also emphasise the construction of oneself as professional in their study of physicians. Their focus is on how gender is constructed in relation to the profession and the organization. These individuals are, according to Eriksson and Eriksson (*ibid*), engaged in a professional project where the physicians transform themselves into good professionals through development of appropriate behaviours, values and interactions, which can thus be seen as a gendered project. The professional project could also be expressed as learning to perform a certain profession (see also Connell, 1995; Collinson & Hearn, 1994; Mörck & Tullberg, 2004). This doing is a dual relationship between the individual and the collective of professionals, where they influence each other (Eriksson & Eriksson, 2003).

Axelsson (2008) also emphasises the importance of a 'larger' perspective, when exploring professional identity formation, in her study about physicians' and engineers' understanding and experiences of knowledge and identification processes during their first years in the profession. The results indicate an interplay between subjectivity, everyday life experiences and conditions for practising their professions. Becoming a physician or an engineer is characterised by two different processes. Axelsson suggests that becoming an engineer is like 'playing the game with a safe hand'. They describe their profession as stable and safe (with reference to the status of the profession in the labour market) but they are shaped as generalists with knowledge and skills useable in different areas. The physicians, on the other hand, have strong personal relation to their profession and are 'playing the game with oneself as stake'. For them, the profession takes over their lives since they are working long hours, have little leisure time and they say that they are 'always physicians'.

Billett (2007) explores how individuals engage in and learn through work, but with a focus on the individuals' sense of self in terms of subjectivity and intentionality. Many of the researchers above (e.g. Hodkinson et al., 2004; Salling Olesen, 2001) argue for the importance of exploring the professional's life outside work in order to obtain a more complete picture of his or her identity formation and learning. This is something that Billett and his co-authors also stress (Billett, 2001, 2007; Billett & Pavlova, 2005; Billett & Somerville, 2004), but their focus is on

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how these communities influence the individual's sense of self. The authors emphasise that this intertwined relationship between individuals' perception of and identification with their work depends on how their work permits them to 'be themselves' (Billett & Pavlova, 2005). Abrahamsson (2006) also emphasises the individual's sense of self, but stresses that it is closely related to a gendered identity. Both Abrahamsson (2006) and Aurell (2001) argue that there is a symbolic and discursive connection between the profession (in their case, mining work and cleaners), masculinity or femininity, and how and what identities that are constructed or reconstructed.

Much of the research on professional development concentrates on the development of expertise and expert knowledge. One example is Dreyfus and Dreyfus's (1986) model of acquisition and development of skills, which Benner (1982, 2004) applies to nurses' development as professionals. They differentiate between five professional development levels: novice, advanced beginner, competent, proficient and expert. The levels are grouped according to the individuals' ability to handle complex situations and see the larger picture. The differences between the levels concern how individuals relate to knowledge in their work, i.e. whether they relate to experience or to abstract rules or principles generated from formal education (Benner, 1982, 2004; Dreyfus & Dreyfus, 1986). Skovholt and Rønnestad (1995) found a model like this to be limited since it has a narrow perspective on professional development. Therefore, they constructed a broad model for the entire professional life space including both professional and personal life. Their research builds on a large interview study of over 100 therapists and counsellors with the aim of capturing their professional development over a lifespan. The analysis yielded an eight-stage career model: conventional, transition to professional training, imitations of experts, conditional autonomy, exploration, integration, individuation, and integrity. These stages contributed to 20 emerging themes concerning therapists' and counsellors' professional identity, skill development and different sources of influence. Skovholt and Rønnestad (ibid) suggest that their development is a movement over time from '...reliance on external authority to reliance on internal authority and that this process occurs through the individual's interaction with multiple sources of influence...' (p. 123). They conclude by arguing that the major influences on professional development take place after formal education has been completed.

Skovholt and Rønnestad's (1995) views of professional development as a lifelong project can be related to the notion of career. There has been a change in the perception of career from a notion of hierarchical progression to a multidirectional, dynamic and fluid career (Adamson et al., 1998; Baruch, 2003). This shift has been caused by the organizational restructuring

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and new forms of employment seen in the labour market today. The change has made the individual responsible for planning and enabling his or her own career: as an individual project (Baruch, 2003; Fejes, 2008; Hall & Moss, 1998; Harvey et al., 1997). Many researchers emphasise the importance of career, not in the traditional sense, but more as self-fulfilling and an expression of personal values and identity (Baruch, 2003; Hall & Moss, 1998). Therefore, Hall and Moss (1998) argue for a new 'protean' career which is '...lifelong series of experiences, skills, learning, transitions, and identity changes.' (p. 26). The notion of career also has to be scrutinized from a gender perspective. Studies indicate that females and males have 'different' life-paths where the experiences of and aspiration to a career differ (e.g. Axelsson, 2008; Blackmore, 1997; Einarsdottir, 2007), which could be derived from gendering practices in organizations and society in general (Acker, 1990, 1992; Collinson & Hearn, 1994; Davis, 1996; Ranson, 2003).

Concluding comments and reflections

When reviewing the research concerning professional development and identity formation in higher education, different approaches emerge. Some researchers take the student perspective and stress that it is the experience of being at university that forms students' identity or that it is students' thoughts about a possible professional future that shapes their learning and identities. Others emphasise the specific educational programme role in preparing and forming students' professional identity in various ways. But there is also a more general debate about graduates' employability as regards professional development with a labour market prospects. But the overarching focus of the studies presented is the emphasis on the future professional practice when it comes to knowledge formation and use as well as identity formation.

The studies about working life are - in one way or another- related to learning in working life and how the individual relates to and engages in a specific professional practice. The review shows two different perspectives on professional development and identity formation. Firstly, there are studies defining professional development as a process by emphasising the meaning of work in adults' lives and the influence it has on how they define themselves and how they go about their lives. Secondly, there are the studies defining professional development as a 'path towards better knowing'. Characteristic of these studies is the notion that professionals follow a stepwise progression in their professional development.

The focus of this thesis is graduates' process of becoming professionals. Previous research raises different issues concerning their professional development and, moreover, what role higher education and working life

2. Previous research on professional development and identity formation

play in that process. It is worth reflecting on what happens to individuals in their transitions from higher education to the world of work. What changes or experiences influence their professional development and identity formation? As a result of the longitudinal design, where the graduates have been followed from their last year of university studies to three years of working life experience², it is possible to explore graduates' professional trajectories. The review of previous research indicates that there is a lack of longitudinal qualitative empirical studies in relation to professional identity formation. This study could contribute to this, somewhat sparse, field of knowledge and hopefully give an insight into graduates' professional trajectory.

² More information about the design of the study can be found in chapter 5.

3. Theoretical frame of reference

In this study, becoming a professional is seen as a transition between two contexts: higher education and working life. This is a process where graduates bring with them their sense of self, their understanding of disciplinary knowledge and contexts of work as well as their social networks in their encounter with an educational programme and a workplace. How can this encounter be described? What happens in the process of becoming a professional? To explore these phenomena I will use the theoretical tools of a situated and social theory of learning. My choice fell on Lave and Wenger's (1991) theory of situated learning, and their subsequent individual work (Lave, 1993; Wenger 1998, 2000), since it elaborates on the concepts of identity, practice, participation, learning, and the process the newcomer goes through in order to be included in a practice. But these tools are not enough since I also want to explore whether the individuals and their professional identity formation could be influenced by different social categories such as gender, age, class and ethnicity (Eriksson-Zetterquist & Styhre, 2007; Lykke, 2003). I have, in line with Lykke's (2003) suggestions, chosen to focus on the gender perspective as one power position in order to see how it influences and interacts with graduates' trajectories when becoming professionals. More specifically, the theoretical perspective of doing gender was selected to make it possible to discuss the gendering processes and practices within organizations (Acker, 1990, 1992).

Situated and social theory of learning

This thesis is based on a social theory of learning, which postulates that we are all social beings who learn in our interaction and participation with the surrounding world. Learning is thereby a social activity in which we are all active participators. (Lave, 1993; Lave & Wenger, 1991; Wenger, 1998, 2000)

One of the defining features of the theory is the process of *legitimate peripheral participation* enabling a discussion about '...the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice.' (Lave & Wenger, 1991, p. 29). Lave and Wenger stress this relationship as being a process the newcomers have to go through or the journey they make in order to become a part of or full members of a community of practice. This striving towards becoming a member is also the process by which our knowledge develops (Wenger,

3. Theoretical frame of reference

1998), involving two interplaying components (Wenger, 2000). The first component is the *competence* that the individuals have in relation to their belonging in a specific community with special reference to what it takes to become a member. The second is the individuals' *experience* of being a member in a community of practice. (Wenger, 1998, 2000) With these two components, social competence and personal experience, Wenger (2000) defines learning as;

...an interplay between social competence and personal experience. It is a dynamic, two-way relationship between people and the social learning system in which they participate. It combines personal transformation with the evolution of social structures. (ibid, p. 227)

Communities of practice

This thesis concerns graduates' transition from higher education to working life. I want to relate these different contexts, higher education and working life, to Lave and Wenger's (1991) concept of *community of practice*, further elaborated by Wenger (1998). He suggests that communities of practice can be found everywhere and that we all belong to different communities. They should not be viewed as isolated phenomena but rather as interconnected parts of the world since they share members (Wenger, 1998).

For Wenger (1998), practice is associated with doing but it is doing in relation to a historical and social context. For him, it is always a social practice through which the individual participates and experiences the world as meaningful. A community of practice is where these practices are developed, negotiated and shared as an essential part of our learning. In this thesis, such a community of practice could be the graduates' participation in an educational programme or a workplace. Wenger (1998, 2000) suggests that a community of practice is defined by three elements or dimensions. The first is *mutual engagement*, which is the collective understanding of what it means to belong to the community but also what norms and values that are characteristic of how the members interact. The second is *joint enterprise* or the members' mutual understanding of what their community stands for and their shared responsibility towards it. Finally, he points out how the community of practice has developed a *shared repertoire* containing common resources, i.e. activities, symbols, language or artefacts that could be seen as symbols for the community.

3. Theoretical frame of reference

Lave and Wenger (1991) describe the learning process newcomers go through in order to become a part of a community of practice³ or *legitimate peripheral participation*. What is essential for learning to take place are the ways of belonging that indicate how the newcomers gain legitimacy through participation in a community. The newcomers are seen as peripheral participants since there are different levels or different ways of participating in a community. Lave and Wenger suggest that the notion of being peripheral changes over time, influenced by newcomers' learning trajectories and identities. But it is not just a process that the members can control all by themselves. It is a complex process since being a peripheral member implies being partly kept outside. It is an empowering position⁴ where your legitimacy and acceptance as regards participating are dependent on social structures involving power relations (Lave & Wenger, 1991).

Lave and Wenger suggest a process from peripheral participation to full participation but not along a straight line of skill acquisition or a community centre. The individual can, therefore, be a full participant in one community but peripheral in others. Lave and Wenger (1991) and Wenger (1998) also talk about the development from being a newcomer to becoming an old-timer. Wenger (1998) argues that the community of practice is a '...system of interrelated forms of participation...' (p. 90).

Identity formation within (or across) communities of practice

We define ourselves by what we are not as well as by what we are, by the communities we do not belong to as well as by the ones we do. These relationships change. We move from community to community. In doing so, we carry a bit of each as we go around. Our identities are not something we can turn on and off. (Wenger, 2000, p. 239)

A crucial aspect of Lave and Wenger's (1991) social theory is the process of becoming, or the construction of identities. They suggest that learning engages the whole individual and, as the quote above indicates, develops in

³ Also old members engage in a new practice within the same community but I have chosen to focus on newcomers in a community of practice since the aim is to describe graduates' trajectories in becoming professionals.

⁴ Much of the critique of Lave and Wenger's theory concerns the issue of power and the need for further elaboration concerning power, social categories and their relation to communities of practice (e.g. Contu & Willmott, 2003; Salminen-Karlsson, 2006). (see also the section 'Critical voices')

3. Theoretical frame of reference

relation to different communities and activities. The development of an identity is thereby not just an individual and isolated project, but a part of a social practice (Wenger, 1998). His reasoning about identity as *negotiated experience of self* is, therefore, of importance. He suggests that individuals construct their identity through *participation* in a community of practice but also through the communities' perceptions of themselves - its *reifications*. Participation and reification are therefore interrelated since they contain our experiences and their social interpretations (ibid, p. 151) when forming our identities.

Wenger (1998, 2000) interprets this continuous work of identity formation as a *trajectory* which includes '...where you have been and where you are going, your history and your aspirations.' (Wenger, 2000, p. 241). With this term, Wenger wants to show that identity comprises the past, the present, and the future in a trajectory that cannot be foreseen. The individual participates in many different communities of practice and as the concept of trajectory indicates, there are movements between them. Wenger (1998, 2000) suggests that the individual belongs to a *nexus of multimembership* but with shifting forms of participation and belonging – where some communities of practice are more important for our identity than others. The different forms of participation accentuate different forms of behaviour or aspects of a person's identity.

Wenger (2000) emphasises that being in a position in a nexus of multimembership could reinforce the participation but sometimes there could also be a clash and a tension between different communities of practice. Furthermore, Wenger (1998) stresses the issue of *reconciliation* or '...the construction of an identity that can include these different meanings and forms of participation into one nexus.' (p. 160). The work of reconciliation is a challenging process for the individual since it concerns how to maintain identity across different communities of practice – a process that could be successful or be a constant struggle. Wenger emphasises that the nexus of multimembership and the work of reconciliation is fundamental when it comes to the process of identity formation. This is something that is constantly going on and evolving since the individual participates in and moves between different communities of practice.

This theoretical perspective has had large impact on research (Hodkinson & Hodkinson, 2003; Paechter, 2003; Salminen-Karlsson, 2006) in related areas such as education (Abrandt Dahlgren et al., 2006; Bathmaker & Avis, 2005; Fejes et al., 2005; Johansson, 2007) and working life (Fuller et al., 2005; Hodkinson & Hodkinson, 2003; Hodkinson et al., 2004; Köpsén, 2008; Thunborg, 1999).

3. Theoretical frame of reference

Critical voices

Lave and Wenger's theoretical framework has been criticised concerning the issue of power relations and conflicts (Contu & Willmott, 2003; Salminen-Karlsson, 2006; Tanggaard, 2006), the position of the subject (Billett, 2006; Billett & Somerville, 2004) and the learner's identity formation (Fuller et al., 2005; Hodkinson et al., 2004).

Contu and Willmott (2003) express an ambivalent position regarding the power relations in Lave and Wenger's (1991) theory of situated learning. On the one hand, they suggest that the theory expresses '...contradictions, ideology, conflict and power.' (Contu & Willmott, 2003, p. 292), where the issue of power is incorporated in their writing about legitimate peripheral participation. They argue that:

This notion highlights the power-invested process of bestowing a degree of legitimacy upon the novice as a normal condition of participation in learning processes. (ibid. p. 285)

But being a newcomer and trying to participate and gain legitimacy is difficult if you are denied access. However, on the other hand, Contu and Willmott (2003) stress that Lave and Wenger's (1991) and Wenger's (1998) radical viewpoints are watered down by their usage of language. The complexity and the issue of power are downplayed by stressing coherence and consensus in communities of practice. Salminen-Karlsson (2006) agrees with Contu and Willmott but she suggests that Lave and Wenger's theory would profit by incorporating a gender perspective (as one possible power relation). She emphasises that gender appears to be highly relevant when exploring participation and learning in a community of practice⁵.

Billett (2006) also stresses the issue of power relations but he is concerned with '...how power relations between the personal and social are experienced and enacted including the role of the subject as both exerciser of power and being subject to it.' (p. 11). He is critical of Lave and Wenger's (1991) way of seeing the individual's learning as a product of participating in a social practice such as work. He suggests that the individual is in a reciprocal relationship but yet a separate part of the social practice (Billett, 2001). For him, learning is an ongoing and interactive process based on how the individuals think about their work and act in different work activities.

Fuller et al. (2005) and Hodkinson et al. (2004) are also critical of Lave and Wenger's (1991) and Wenger's (1998) reasoning about identity formation. By focusing on how the individual's identity is formed by their

⁵ The gender issue will be further developed in section 'Gender and organizations'.

3. Theoretical frame of reference

belonging to a community of practice, Lave and Wenger (1991) do not acknowledge and develop what the newcomers bring to a specific community from outside (Fuller et al., 2005; Hodkinson et al., 2004). The individual develops and modifies his or her whole person by participating in a new community of practice, something Lave and Wenger (1991) and Wenger (1998) do not recognise in a satisfactory way according to Fuller et al. (2005).

Gender and organizations

Prior to the early 1970s, research on organizations and workplaces was relatively uncritical and conducted with the male norm as the preference (Acker, 1990; Collinson & Hearn, 1994; Connell, 1995). But some feminist researchers (e.g. Kanter, 1977) raised the issue that the concept of organization is not gender neutral, rather, it is infused with gender (Acker, 1990, 1992). These researchers contribute to the knowledge of gendered structures and practices in organizations, e.g. the (unequal) distribution of power, rewards and opportunities, how different social interactions confirm and recreate gendered patterns (Acker, 1998, 1999).

The meaning of gender is a debated issue today and has been so for decades⁶. In this discussion, I agree with Acker's (1992) statement that:

Gender refers to patterned, socially produced, distinctions between female and male, feminine and masculine. Gender is not something that people are, in some inherent sense, although we may consciously think of ourselves in this way... (p. 250)

In their classic work, West and Zimmerman (1987) start by postulating that social interaction is the foundation of the construction of gender. Gender is therefore seen as an ongoing activity that is done in everyday interaction and they stress that 'In one sense, of course, it is individuals who "do" gender. But it is a situated doing...' (West & Zimmerman, 1987, p. 151). The

⁶ The term gender was introduced in the 1970s and an early definition of the term was 'social sex', compared with sex as biologically defined. The introduction of a new term was important in order to dissociate from biological determinism (the relationship between biology and social and cultural identity formations). But the term also made it possible to discuss gender as social and cultural constructions (see Gothlin, 1999). Although there were reasons for the division, it has given rise to a debate among feminist theorists about the relation between gender as socially constructed sex and biological sex where scholars have different standpoints and theoretical interpretations (see e.g. Butler, 1990; Gothlin, 1999).

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situated aspects of gender imply that it is constructed both by the individual and the collective and changes over time and in different practices (Acker, 1992). These theoretical considerations have turned the discussion about gender from being something passive into a more active and interactive way of seeing gender (Acker, 1992; Kvande, 2003); we do gender when we participate in our workplaces or engage in different interpersonal relations.

Doing gender as a theoretical perspective can be divided into different approaches; the ethnomethodological, the cultural, processual and the performative (Korvajärvi, 2003; Kvande, 2003). The difference is based on different research foci, assumed outcomes as well as what key processes are emphasised (Korvajärvi, 2003). I have chosen to emphasise the *processual view* since it stresses the analytical and empirical analyses of gendering processes and practices making the people within organizations visible (Kvande, 2003). Acker emphasises four gendered processes: the gender divisions or structures in the organization, symbols or forms of consciousness, interactions and, finally, gender identity (Acker, 1992, 1999). These *gendering processes* can be studied by exploring ‘...what people do and say, and how they think about these activities, for thinking is also an activity.’ (Acker, 1992, p. 251). In Acker’s work, the issue of power is always present in the distinction between male and female, masculine and feminine as regards advantage and disadvantage, exploitation and control, action and emotion, meaning and identity (Acker, 1992).

Doing gender in communities of practice

So far, two different theoretical perspectives have been discussed; situated learning in communities of practice and doing gender. The focus of both traditions is *organizational practices* together with either knowledge or gender but also *identity* (Salminen-Karlsson, 2006).

Despite their similarities, not many researchers have taken the step of combining the two. However, two different approaches to gender in communities of practice have been identified. The first, concerns how the doing gender perspective would benefit from the situated learning approach when understanding how women and men learn to do gender (e.g. Paechter, 2003). The second, and also the starting point for the discussion in this thesis, is based on the critique of situated learning and communities of practice in terms of the lack of a gender perspective in the tradition (Salminen-Karlsson, 2006; Tanggaard, 2006). Salminen-Karlsson (2006) suggests that it is necessary to take doing gender into account when analysing situated learning within a community of practice. One of the important aspects to discuss is the issue of power, which Lave and Wenger (1991) mention as an important

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issue, but do not elaborate on further. Salminen-Karlsson (2006) stresses, along with others (e.g. Acker, 1990; Collinson & Hearn, 1994; Connell, 1995), that organizations or communities are not gender-neutral. With reference to Kanter's (1977) studies, Salminen-Karlsson argues that being a newcomer in a community is a highly gendered and empowering position where females' and males' trajectories towards full participation differ.

Key concepts in Lave and Wenger's (1991) and Wenger's (1998, 2000) theory of learning are communities, identities and boundaries. Salminen-Karlsson (2006) suggests that all three of these elements have gendered aspects which would be fruitful to explore in order to deepen the analysis of situated learning. The discussion could concern who has legitimacy and why, what participation actually means in different communities of practice, and how the peripheral positions are distributed between different members. Here, Salminen-Karlsson (*ibid*) emphasises the importance of acknowledging that not all newcomers start from an equal position.

Two examples of empirical studies that combine situated learning with doing gender are Salminen-Karlsson (2003) and Tanggaard (2006). They have somewhat different fields; Salminen-Karlsson focuses on employees at a computer company and Tanggaard on young people's apprenticeship in two major industrial companies. Both Salminen-Karlsson (2003) and Tanggaard (2006) argue that gender plays an important role when it comes to how to gain legitimacy as a newcomer where male and female have different trajectories. But they also stress that the learning process of how to be a member of a community of practice is gendered since it also involves social codes and ways of thinking. Together, these influence the individuals' identity formation and how the female and male relate themselves to a community of practice.

The implications for this investigation

The consequences of using a situated theory of learning in this investigation are that becoming professionals is learned in the interaction and participation in a community of practice. The focus is on graduates' participation in higher education and their transition to working life. These two practices are, according to Wenger (1998, 2000), characterised by mutual engagement and a shared repertoire of what it means to belong to these particular communities of practice. Acker (1990, 1992) would also argue that these practices are influenced by gender. Acknowledging these two standpoints, becoming professional seems to imply a learning of collective understanding about the profession and practice, but also social expectations about how they, as

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female and male novice professionals, should be and behave to acquire legitimacy.

Following Lave and Wenger's (1991) reasoning, professional development could be characterised by legitimate peripheral participation where the graduates are newcomers in a workplace. Lave and Wenger (1991) suggest that this is a process the individual has to go through in order to become a full participant. Being in a peripheral position is, as Lave and Wenger suggests, an empowering position and in line with Acker (1990, 1992) and Salminen-Karlsson (2006) I think that it is important to explore gender as one power aspect, which can influence graduates' aspirations to become full participants.

An important implication for this study is the construction of identities or, as I have argued above, the graduates' trajectories towards becoming professionals. Wenger (1998) emphasises that identity formation is not just an individual project but also a part of a social practice. In this study, I therefore want to emphasise professional identity formation as continuing work and a never ending process of becoming. I hence agree with Wenger (1998) that identity cannot be seen as a core or something the individual acquired since their identity is under constant renegotiation. When describing this process, I found the concepts of trajectory and nexus of multimembership helpful (Wenger, 1998, 2000). The process that the graduates go through could be seen as a trajectory (Wenger, 2000) since it is a continuous work process including their past and present experiences as well as future aspirations. I have pointed to graduates' transition from higher education to working life but I also want to suggest their belonging to and participation in other communities of practice, e.g. the immediate family. By using Wenger's (1998, 2000) concept of nexus of multimembership, i.e. the individual's belonging to different communities of practices, I hope to include different meanings and forms of participation regarding their professional identity formation.

Based on the discussion above, I see professional identities⁷ as learning processes (Salling Olesen, 2001, 2007; Wenger, 1998) where individuals are formed by their social interactions but also in their reflection over themselves (Billett, 2006). Becoming a professional is the individuals' effort to take already existing professional knowledge and skills to create their own identity and relation to a specific professional practice (Lave & Wenger, 1991; Salling Olesen, 2001, 2007). By doing so, professional identity becomes one part of many learning processes as well as, more importantly,

⁷ The concepts of *work identity* (e.g. Kirpal, 2004) and *professional identity* (e.g. Salling Olesen, 2001, 2007) are used synonymously in this thesis.

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becoming integrated in the individual's whole life situation (Billett & Sumerville, 2004; Hodkinson et al., 2004; Salling Olesen, 2001, 2007; Thunborg, 1999). Professional identities are thereby seen as relational, dynamic and changeable. They develop in interaction with work practices and a collective of professionals (containing professional knowledge as well as social expectations of the profession). This development is influenced by gendering processes. But professional identity is also closely interrelated with the ways individuals engage with other social interactions and make sense of their experiences throughout their life (Billett, 2006; Salling Olesen, 2006).

4. Context of the study

The participants in this study graduated from the Master programme in Political Science and Economics and the Master programme in Psychology at Linköping University in 2002. This section will give a description of the educational programmes as well as their history as subjects in higher education, and their status in the labour market.

The history of Political Science and Psychology as academic disciplines

The academic disciplines Political Science and Psychology have two different histories of establishment as academic subjects in higher education.

Political Science or the science of politics is very old. Some would argue (Lundquist, 1993) that already the work of the philosophers Plato and Aristotle had its foundation in political science. The science of politics also has a long history in higher education, but as a part of other disciplines. In Sweden, a professor was appointed in ‘Rhetoric and Political Science’⁸ as early as in 1622 at Uppsala University (Lundquist, 1993). Consequently, one can argue that higher education in Sweden has a long tradition of research and education in political science. But political science as an independent academic discipline is a much more recent development (Ruin, 1990). At the end of the 19th century, Political Science was organised in a form we would recognise today. It took until after the World War II for the discipline to be established internationally and in Sweden, and since then the discipline has become a common discipline in higher education (ibid).

Despite its long tradition, the discipline is not among the most prestigious social sciences in higher education, and is often positioned somewhere in the middle of the ranking (Lundquist, 1993). One reason given for this is the professional side or outcome of the studies. Lundquist (1993) and Ruin (1990) suggest two professional contexts: the academic and the labour market. Academic professionalization concerns political science research and the establishment of scientific journals and professional associations (Lundquist, 1993). As regards the more occupational preparation for the labour market, political science is in general a broad and an ‘all-round’ academic degree. Ruin (1990) argues that in Sweden the discipline is

⁸ In Swedish it would be ‘Vältalighet och statsvetenskap’.

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commonly seen as occupational preparation, alone or in combination with other disciplines, for employment in the public sector.

The entry of the discipline of *Psychology* into higher education in Sweden differed from that of Political Science. Until the end of the 1950s, Psychology was a part of an academic degree in Education (Education and Psychology). It was not until 1948 that the first professor of Psychology was appointed at Uppsala University along with the establishment of the first department of Psychology in Sweden.

The establishment of Psychology as an independent academic discipline and an educational programme was a long process. This was, according to Göransson (1997), a process and a quest that took place both within and outside academia. From a union perspective, it was a quest for the legitimacy of the psychologist's work. In society, there was an increased need for individuals educated in Psychology to meet the demands from the labour market, especially from schools and industry. In 1953, the planning of an educational programme in Psychology was initiated but there were disagreements over the course syllabus (structure, length, type of educational forms), formal entry requirements, practical elements and what kind of official certificate the graduates should receive upon graduation. Many different investigations and Swedish government official reports followed upon each other so it was not until after the educational reform in 1958 that the educational programme in Psychology could begin its first academic year in 1958/59. The general directives were to design a theoretical educational programme without practical elements. This was the start of a continuous struggle to include more practical elements in the programme and a degree that would lead to formal authorisation and a certificate (Göransson, 1997). A more comprehensive education programme was introduced in 1982. From then on, it was a 5-year full-time study programme including theory and methods as well as more practical elements. The programme, as it is designed today, has a clear professional focus with graduates receiving their official certificate after one year of supervised professional work (Persson, 1989).

A description of the educational programmes

In 2001, when the Journeymen project started, the Political Science and Economics programme in Linköping was a 4-year educational programme. The programme led to a liberal arts master's degree with either Political Science or Economics as the main subject.⁹ In the first two years, the student

⁹ After the Bologna process in 2007, the programme has changed to comprise a 3-year Bachelor of Political Science containing 180 hp (one semester is now 30 higher

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gets basic knowledge of Political Science, Economics, Statistics and Law. After the two mandatory years, the students choose a main subject but there is also the option to take courses outside the Political Science and Economic subjects to broaden the degree. The programme ends with a master thesis of 10 credits (the whole programme represents 160 credits and one semester is 20 credits). It is a traditional study programme based on lectures, exercises and seminars aiming at building up an independent analytical ability. The intensity of the programme varies. In the introduction courses the students have three or four lectures, exercises and seminars a week and towards the end of the programme the students are expected to pursue more individual studies. The programme contain no practical periods where the students could get an understanding of the work of a political scientist (Linköpings universitet, 2005b). The admission process for the Political Science educational programme is focused on grades and the Swedish scholastic aptitude test as entry requirements (Linköpings universitet, 2005b, 2008b).

The Master's programme in Psychology at Linköping University is a 5-year problem-based study programme.¹⁰ The programme contains of five mandatory blocks, which integrate the subjects' Psychology, Education and Sociology. By doing so, the curriculum integrates theory and methods training with more practical elements and aims to stimulate critical reflection by emphasising experiential and self-directed learning. Much attention is directed towards skills development by focusing on: diagnoses, psychological treatment, consultation, supervision, research and evaluation. The students are expected to develop these skills by working in small tutorial groups as problem solvers, actively seeking knowledge and developing their own learning goals. The intensity of the programme is therefore high since the students work in their groups. But compared with Political Science, the programme contains few lectures. The practical elements of the programme are emphasised as being highly important. Two periods of clinical placements are included during the course of the programme to enable the students to acquire a practical understanding of the work of a psychologist. More regularly, the students also work under supervision with clients in a clinic situated at the university. The programme ends with a master's thesis of 20 credits (the whole programme contains 200 credits). To get their certificate as a psychologist, the students have to complete 1-year supervised

education credits). After their BA the students have the entry requirements to continue to a Master's programme (Linköpings universitet, 2008b).

¹⁰The Bologna process in 2007 did not bring about a change in the programme. It is still a coherent master's programme in Psychology of 300 credits (Linköpings universitet, 2008a).

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clinical placement (the PTP period). The requirements for admission to the educational programme in Psychology includes one year of working life experience (in any professional field). In addition to this, the general entry requirements are high grades or high scores on the Swedish scholastic aptitude test. From this group of applicants, potential candidates are selected for a personal interview¹¹ (Linköpings universitet, 2005a).

The educational programmes and working life

Both programmes provide information about possible future occupations and workplaces where the former students work today. According to the information from the Political Science educational programme, possible occupational positions are different investigator positions with the municipal authorities or the national authorities but also private companies and organizations. The programme information emphasises that many of the former students have been, or are, working for Swedish Government Offices (Linköpings universitet, 2005b).

The information from the study programme in Psychology describes the work of a psychologist as being very varying. Psychologists work in all sectors and meet people in education, in working life and in health care. The work of a psychologist could be characterised by an emphasis on preventive measures, as investigators, support and treatment of children, teenagers and adults. They also work in organizational development. The information emphasises that many former graduates work for the local authorities but also in the private sector (Linköpings universitet, 2005a).

The Swedish National Agency for Higher Education (2008) publishes annual reports on the employability of students from different educational programmes. Its forecast indicates that the demand for graduates will fall in some areas and increase in others. When it comes to one third of the educational groups, for example, psychology, architecture, law, etc., there is a good balance between the numbers that graduate and the labour market's future employment needs and the current number of study places. When it comes to Political Science, which goes under the label social science, the forecast is more complicated. According to the Swedish National Agency for Higher Education, the groups categorized as social and behavioural science come from a variety of educational backgrounds with a broad range of occupational possibilities. The report emphasises that social and behavioural

¹¹ From the academic year 05/06, the entry requirements are still one year of working life experience after which they are only based on grades and the Swedish scholastic aptitude test (Linköpings universitet, 2008a).

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scientists have competence that is close to other occupational groups, e.g. masters of Business Administration, indicating that there is competition for the same positions but also an occupational exchange between the groups. The report also suggests that there will be an increase in available jobs since a high proportion of employees in the public sector will retire in the near future. This forecast could imply a favourable labour market for political scientists in the future (The Swedish National Agency for Higher Education, 2008).

5. The empirical study

The aim of this chapter is to give an overview of the whole research project: from the design of this longitudinal study, the selection of educational programmes and informants, the interviews and the data analysis to a critical reflection over the study.

Design

In 2003, a large European Commission financed project, *Students as Journeymen between Communities of Higher Education and Work*, was about to end. This was a joint research project between Norway, Germany, Poland and Sweden. The general aim of the project was:

To develop a conceptual framework for understanding learning strategies that students and novices apply in their trajectories within and across “communities of practice” (education and work life). Our intention is to better describe transition from higher education to professional life in different European countries and to explain the “travelling” of students and new professionals within and across these sectors... (Dahlgren et. al., 2005, p. 4)

The research project¹² was coordinated from Linköping University and the Department of Behavioural Science and Learning. The research team had conducted in-depth interviews with 20 first-year and 12 senior students¹³ in the Political Science, Psychology and Mechanical Engineering programmes. The first two educational programmes (Political Science and Psychology) were similar in all the countries but the third (Mechanical engineering) was a country-specific choice. The interviews with the first year students formed a cross sectional study while the interviews with the senior students was part of a longitudinal study since they were interviewed a second time after 15-18 months of professional work (Dahlgren et. al., 2005; Dahlgren et. al., 2007; Johansson, 2007).

¹² The following persons participated in the research team from Linköping University: Madeleine Abrandt Dahlgren, Lars Owe Dahlgren, Håkan Hult, Helene Hård af Segerstad, and Kristina Johansson.

¹³ ‘Senior students’ do in this case refer to the interviews conducted with the informants during their last semester before graduation.

5. The empirical study

When I started as a doctoral student in September 2003, I had the opportunity to use not previous analysed data from the longitudinal part of the Journeymen study, i.e. the senior students who had also been interviewed after 15-18 months of professional work, and conduct another round of interviews after approximately three years in working life. Qualitative longitudinal studies of this size are rare in the field of higher education (Johnston, 2003; Teichler, 1998). Having a longitudinal design was appealing since it was possible to explore changes in the informants' understanding in relation to their experiences and development (Bryman, 2001). I went ahead with the graduates from the Political Science and Psychology educational programmes but excluded Mechanical Engineering. The delimitation of the data was made for practical reasons since it could have been problematic to make comparisons between three educational programmes over three years. So as an extension of the original longitudinal study, the same political scientists and psychologists who had already been interviewed twice were interviewed a third time after approximately 30-34 months of professional work (early 2005).

Consequently, the interview material in my empirical study is based on interviews conducted on three consecutive occasions:

- the last semester before graduation (early 2002). From now on, they will be referred to as *senior students*
- a second time after approximately 15-18 months of professional work (mid-2003). From now on, they will be referred to as *novice professionals*
- as an extension of the original longitudinal study, the graduates were interviewed a third time after approximately 30-34 months of professional work (early 2005). From now on, they will be referred to as *early career professionals*.

My relation to the Journeymen material

The Swedish part of the Journeymen Project focused mainly on a comparison between the educational programmes and the transition from higher education to working life from different perspectives such as educational design, knowledge and competence, learning trajectories (e.g. Abrandt Dahlgren et al., 2005; Abrandt Dahlgren et al., 2006; Johansson, 2007).

These studies give interesting insights into the role of higher education as well as the educational programmes' influence on graduates' learning trajectories. The Journeymen studies raised questions about identity formation and by having a third panel wave of interviews it was possible for me to focus on what happens concerning graduates' professional trajectories

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and development – higher education and beyond. Compared with the Journeymen Project, this study has a more pronounced working life focus and can contribute different aspects to the knowledge about identity formation by exploring how processes in working life influence graduates. The Journeymen Project did not emphasise the power aspects in identity formation. The present study, according to my perspectives, makes it possible to raise questions concerning graduates' professional development in relation to gendered practices and processes present in working life.

It is important to highlight the fact that the analysis in this thesis builds on not previously analysed data gathered in the Journeymen Project as well as a third panel wave of interviews conducted by the author.

Selection of educational programs and informants

The selection of educational programmes for the Journeymen Project aimed at representing a programme with a clear professional focus as well as a more classical liberal arts programme with a more diffuse professional focus in each of the four project universities. The choice fell on the Master programme in Political Science as a liberal arts programme, and the Master programme in Psychology as a professional educational programme (Dahlgren et al., 2005).

The Journeymen Project comprised interviews with two groups of students. One group consisted of students in semester one and the other group of students in their last semester. This latter group of students was interviewed on two occasions. These students make up the investigation group for this study. The selected students were all at the end of their studies. Students who had already completed their studies in another area were excluded (Dahlgren et. al., 2005). The samples were design to represent the distribution of age and gender in the total group of students in their programmes. Twelve students from each programme were chosen, which meant that the informants consisted of a total of 24 senior students (ibid).

Some of the informants from the original study could not participate in a third interview. The decision not to participate a third time was mostly based on personal reasons such as a hectic life situation or that they lived abroad. This reduced the total numbers of participants in this study to 19. Altogether, the longitudinal study comprises interviews with 11 psychologists and 8 political scientists.

The age of the informants at the time of the third interview ranged from 26 to 29 years for the Political Science programme and between 28 and 46 years for the informants from the Psychology programme (with a mean of 33 years). Five of the informants were male and 14 were females. In general, the

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informants were a diverse group as regards background, upper secondary education, parents' educational background and work. Some of the informants were married or cohabited with a family while others were single. The informants were given fictive names to protect their anonymity and as a way of making the quotations more personal.

Establishment in working life

A longitudinal design makes it possible to show the informants' employment situation and their establishment in working life. Tables 1 and 2 illustrate the employment situation and sector of employment among the graduates at the time of the three interviews.

Table 1. The informants' employment situation

	The informants					
	Senior students		Novice professionals		Early career professionals	
Employment	Psy.	Pol.	Psy.	Pol.	Psy.	Pol.
Employed	7	2	10	5	10	6
Not working	4	6	1	3	1	2

As table 1 shows, nine of the senior students had a preliminary job already during the last month of their studies, or started working right after their graduation. The psychologists seem to have become established earlier in the labour market than the political scientists. The label 'not working' includes those graduates who were unemployed or on parental leave at the time of the interview.

Table 2. The informants' sector of employment

	The informants					
	Senior students		Novice professionals		Early career professionals	
Sector of Employment	Psy.	Pol.	Psy.	Pol.	Psy.	Pol.
Public sector	7	1	9	3	9	4
Private sector	0	1	1	2	1	2
Not working	4	6	1	3	1	2

Table 2 shows the employment sector. At the time of the third interview, four of the political scientists were working in varying fields in the public sector, e.g. the national migration board and social welfare administration, while two of them were working for private companies. The label 'Not working' in this case indicates that two of the informants were unemployed at time of the third interview. The majority of the early career psychologists were working in the public sector. The most common area of employment for them was in

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psychiatric care involving children, teenagers and adults. One person was working for a private organization and the label 'Not working' in this case indicates that one individual was on parental leave.

Interviews

A semi-structured interview guide (see appendix 1a and b) with specific topics and domains was used for the interviews in the Journeymen Project. The first interview concerned the senior students' thoughts about learning and knowledge, their studies and work and their future professional role. The second interview focused on the novice professionals' reception in working life, their work, professional role and identity. The interviews with the senior students were conducted in their homes or at an undisturbed place at the university while the interviews with the novice professionals were mostly conducted at their places of work.

In the present study, a semi-structured interview guide (see appendix 1c) was used for the interviews with the early career professionals. The interview domains concerned the informants' educational choice, professional work, profession, organizational structure, and the future. The domains started with broad entry questions concerning the issue, followed by possible follow-up questions to give the informants a chance to elaborate their answers. In order to make a longitudinal comparison, some of the questions from the Journeymen Project were retained. These were mostly about educational choice and their current work situation (e.g. work tasks, their reception) as well as their perception of work, professional role/identity and professional future. See appendix 1a-c. A pilot study was conducted in order to test the interview guide, the length of the interview and whether the questions captured my research interest (Bryman, 2001; Kvale, 1997; Patton, 2002). I interviewed two former psychology students with satisfying results and only made minor changes to the guide. The interview guide functioned as a way of directing the interview but at the same time allowed me to be flexible and to follow up on threads that the informants started. By doing so, I think that I succeeded in creating a spontaneous and secure environment, which hopefully is illustrated in the answers (Bryman, 2001; Kvale, 1997).

The majority of the interviews were done face-to-face and I usually met the informants at their office or in some undisturbed area in their workplace. Four telephone interviews were conducted due to economical and practical reasons since the informants lived far away or were on parental leave. In general, the telephone interviews went well, but I agree with Bryman (2001) that you lose some of the communication pattern when it is not possible to interpret the body language or facial expressions. This could be one reason why the telephone interviews were a little shorter than the face-to-face

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interviews. The duration of the interviews, both in the Journeymen Project and in the present study, varied between 45 and 90 minutes. All the interviews were tape recorded and later transcribed verbatim to enable the interviewer to concentrate on the interview, but also to make a more thorough interpretation (see Bryman, 2001; Kvale, 1997).

There are different ethical principles associated with research in order to protect those involved (HSFR, 1996). These principles have been taken into consideration since the informants were informed beforehand about the ethical aspects associated with research. The informants gave their consent to participating after I had informed them about the aim of the research, how the research material was to be used and handled (*ibid*).

Data analysis

Data analysis is an ongoing process throughout the whole research process and not just an isolated stage (Kvale, 1997). This is especially important to acknowledge in a qualitative interview study since the researcher is also the research tool making choices based on interpretation and reflection. The challenge the researcher confronts is to ‘make sense of’ and interpret the massive amount of data generated by conducting interviews (Patton, 2002). In this study, 57 interviews have been transcribed and this generated almost one thousand pages. This chapter concerns how a conversation between a researcher and an informant was transcribed and then analysed and interpreted.

From speech to text: an issue of translation

One important aspect in my research is the issue of translation both from oral communication to written text and from Swedish into English. Kvale (1997) and Alvesson and Sköldbberg (2008) suggest that every transcript from one form to another involves different interpretations and decisions. The first issue concerns the transcription from speech to written text. The interviews from the Journeymen Project were transcribed by a person outside the project and I subsequently transcribed the third interview panel. I transcribed the interviews as closely as possible to the spoken language (which was the same for the Journeymen interviews). The interviews were transcribed verbatim but I did not mark longer breaks or hesitations since I did not intend to do e.g. a linguistic analysis (Bryman, 2001).

The second issue concerns the translation from Swedish into English of the quotations that are used in the articles. According to Temple and Edwards (2002), language gives expression to a social reality that does not always translate well into another language.

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Language is an important part of conceptualisation, incorporating values and beliefs, not just a tool or technical label for conveying concepts. It carries accumulated and particular cultural, social, and political meanings that cannot simply be read off through the process of translation, and organises and prepares the experience of its speakers. (ibid, p. 5)

When working with quotations for the articles, I have translated them so as to be as close as possible to the original meaning. This has sometimes been a problem when it comes to metaphors, slang and other ‘cultural’ expressions. To make the translation as ‘accurate’ as possible I have been helped by a native English speaker and we have discussed the underlying meanings of e.g. a specific metaphor.

The decision on which quotation(s) to choose to illustrate a theme was sometimes a demanding and difficult task. Based on the theme, the choice fell on the quotation(s) that best contained the underlying meaning of a theme. The selected quotation(s) was therefore the most representative of many for a specific theme according to my interpretations. With this selection process, some informants’ voices are more dominant than others since they express themselves in a reflective and articulate way.

Interpretation and categorisation

I searched for a research method that would help me to organise the findings but still allow me to be flexible and critical toward the interpretations found. The choice fell on *thematic analysis* which is a qualitative analytical method (Boyatzis, 1998; Braun & Clarke, 2006; Patton, 2002; Roulston, 2001). Boyatzis (1998) characterises thematic analysis not as a research method, but more as a tool used within different analytical traditions. Braun and Clarke (2006), on the other hand, argue that thematic analysis could be seen as a method in itself. For me, one of the advantages of the method is its flexibility and usefulness as a tool for ‘encoding qualitative information’ (Boyatzis, 1998, p. 4). Inspired by such an analysis, it helped me to search for significant themes in people’s thoughts and interactions (ibid).

The analytical process consists of a search for themes, which are patterns that describe and organize as well as interpret parts of the phenomenon. Here, the process of analysis conducted for each of the separate papers is described in detail. Due to space constraints and page limitations, the description of the analysis in the journal articles has been truncated.

Braun and Clarke (2006) start by suggesting the need for *familiarizing yourself with your data*. This was an important process for me both when I transcribed my own interviews and when I read and re-read the Journeymen interviews. The second step is what Boyatzis (1998) labels as *sensing themes*

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– the process in which the researcher recognizes concepts and information relevant to the inquiry and in relation to the overall aim (Braun & Clarke, 2006). Since the articles have different research aims, the process of sensing themes was done with different questions in mind and at different times. Because the data material was so extensive I chose to focus on specific interview questions in the transcribed longitudinal material. I used these questions as the base from which I created themes’ on similarities and differences. The third step is *doing it reliably* which, according to Boyatzis (1998), is recognizing and using the encoding consistently. Braun and Clarke (2006) suggest that this is the phase where the researcher divides codes into potential themes and applies them to the whole material. For me, this was a phase of revision and reorganization of my themes based on new codes and interpretations. Boyatzis (1998) continues by arguing for a fourth step, *developing codes* in order to process and analyze the findings. In this step, I generated definitions and names for each theme in relation to their contribution to the ‘whole story’. The choice of quotation(s) was done in order to illustrate a theme in a way that brings out the argument that I wanted to elaborate. The final step is *interpreting the information and themes in the context of a theory or conceptual framework* (Boyatzis, 1998). The main issue was how these findings contribute to the development of knowledge. According to Boyatzis (ibid) and Braun and Clarke (2006), this requires some theory or conceptual framework as a tool to view what occurs and indicates important meanings. I supported my interpretations by relating to Lave and Wenger (1991) and their subsequent work (Lave, 1993; Wenger, 1998, 2000) as well as taking a gender perspective, mostly based on Acker’s theory (1990, 1992, 1998, 1999) about gendering practices. Acker’s theory was also used more actively in the process of sensing themes since the theory supplies categories to understand what influences the gendering processes in the organization, e.g. gender division, symbols or forms of consciousness, and interaction. I do not want to suggest that my themes were only data-driven and that I only applied the theory at the end. My theoretical standpoints are based on a social situated learning theory and this could have influenced my pre-understanding of the interpretations that I have made.

In article four, I worked with the qualitative software analysis program Nvivo8. This software enables researchers to track and compare themes and codes across the transcript group as a whole and within the specific cases. It did not change the nature of the analysis, but contributed technical support to the process.

Quality aspects of the study

It is important to consider the quality aspect of a study, which often is referred to as validity and reliability (Kvale, 1997; Patton, 2002). I have chosen to use the concepts dependability, credibility and transferability since they are more applicable in qualitative research (Bryman, 2001; Glaser & Strauss, 1967; Kvale, 1997; Larsson, 2005a, 2005b; Miles & Huberman, 1994; Patton, 2002).

The quality of a study can be discussed in terms of *dependability* or trustworthiness relating to the study as a whole (Miles & Huberman, 1994) or the internal consistency (Larsson, 2005a). By presenting the choice of method and theory, the data collection and interpretation procedure I hope that I have created openness in the research process. As regards the dependability of the data material, I would like to stress that it was collected in two parts. The Journeymen material was collected by five researchers in close collaboration and the last interview panel was conducted by the author but in relation to the project (as described above). This makes the data collection consistent across researchers (Miles & Huberman, 1994). It is also important to discuss the interpretation of the results and the analysis. When conducting a thematic analysis, Boyatzis (1998) stresses the importance of reflecting and being aware of the fact that the researcher is her/his own instrument. By discussing the interpretations and findings with my supervisors as well as others in the Swedish Journeymen research team (who are familiar with the first two interview panels), it has been possible to validate the trustworthiness in my use of the data and myself as a research instrument.

The *credibility* of the study concerns whether the results and conclusions presented are reasonable in relation to the empirical data (Miles & Huberman, 1994). When describing graduates' trajectories towards becoming professionals, I have chosen to be close to the empirical data by giving the informants' voices a lot of space in the results presented. I have aimed at giving thick descriptions (Patton, 2002) so the reader can make her/his own interpretations based on the quotations presented. By choosing a longitudinal design, my intention was to show contradictions as well as coherence regarding graduates' professional development. Another aspect of credibility is 'negotiated consensus' or other researchers' presence and collaboration in the research process (Glaser & Strauss, 1967; Miles & Huberman, 1994; Wahlström et al., 1997). Two of the articles in this thesis are a product of collaboration (paper I and IV), making the findings a product of our shared knowledge and interpretations.

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The next quality aspect is *transferability* (Miles & Huberman, 1994) or as Larsson (2005b) argues, generalisation through maximum variation, context similarity and recognition of a common gestalt. I would argue for generalisation through context similarity where the interpretations made could possibly be transferred to a similar context. Psychologists' and political scientists' professional development and identity formation could therefore have similarities with the professional development and identity formation of graduates' from other educational programmes and professional practices.

6. Summaries of the articles

The results from this thesis are reported in four articles. The articles are presented in an order that hopefully contributes to the larger picture of graduates' trajectory towards becoming professionals. In the first two articles, the results are based on the whole longitudinal study of how the graduates envisage their future professional work and construct their professional identity formation. The third article has a more working life focus since it concerns how the early career professionals acquire legitimacy in their professional practice. The last article takes more of an overarching approach by exploring the critical transformations that graduates' experience in their transition from higher education to working life.

A winding road – professional trajectories from higher education to working life; a case study of political science and psychology graduates

Studies in Continuing Education, 30, 3, November 2008, 215-229.

Sofia Nyström, Madeleine Abrandt Dahlgren, & Lars Owe Dahlgren
Department of Behavioural Sciences and Learning, Linköping University,
Sweden.

Today, there is a growing interest in graduate employment and how to enhance students' employability in the labour market. The debate has concerned how higher education prepares students for the labour market's demands but also what knowledge and skills students should have in order to be attractive. Research has shown a diverse picture and there is a demand for more research concerning graduates' early years of employment and the development of career paths. Accordingly, the aim of this article is to explore the present professional trajectory from higher education to working life, with particular reference to graduates from two different study programmes at Linköping University in Sweden, Political Science and Psychology. More specifically, the article focuses on how graduates construe their professional trajectories in terms of their envisaged future work as senior students, and later as novice and early career professionals with 18 as well as 34 months of working life experience.

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The article argues that the concept of professional trajectory could be seen as an interface between the formation of a professional identity as something that is negotiated and materialised in a community of practice (Wenger, 1998) and a movement in time. The novices' professional trajectories can therefore be seen as a constant process influenced by events within a certain community of practice, e.g. a workplace, but also by the individuals' involvement in other communities, such as close family and private life.

The analysis yielded a thematic category system that illustrates the variation in the envisaged professional trajectory among the graduates over a three-year period. The six thematic categories identified as the most important part of the graduates' future professional work were: *Learning continuously*, *Establishing oneself*, *Mastering a tool-box*, *Fulfilling a commitment*, *Searching for a professional field*, and *Changing directions*.

The distribution of the informants over the categories indicates that the graduates' vision of their future work is not a linear development, but rather a trajectory that changes in the transition from higher education to working life. In the article, we illustrate this change by presenting four cases to exemplify how the graduates' vision remains stable and/or changes. Moreover, we argue that the cases also illustrate typical features of the trajectories of students from the two educational programmes.

When it comes to the comparison between the educational programmes, we choose only to make tentative observations based on differences and similarities since the two groups are relatively small. When exploring the professional trajectory of graduates from the Master programme in Psychology it can be seen that they have a clearer professional role to step into when compared with the political scientists. They establish themselves quickly on the labour market and the analysis also indicates that they become full legitimate participants in a professional community. In the third interview, however, the majority of the graduates express a need for a change, which could be interpreted as a need for an *outbound professional trajectory*. We argue that they are on the way out of their initial professional community, and are seeking to forge new relationships and develop their professional identity. The political scientists, on the other hand, leave their studies with an unclear picture of their professional trajectory. They have knowledge but are searching for a professional field. Three years later, their professional trajectory looks different since most of them are employed. We argue that many of the political scientists envisage an *insider professional trajectory* since they are more hopeful and the majority stress the need for continuous learning in their professional field.

6. Summaries of the articles

In the general analysis of professional trajectory, we suggest that higher education seems to have given the majority of the senior students a good knowledge base and a positive vision of their future work, even if they have different ways of reasoning about their professional identity and learning.

We argue that when leaving higher education as one community of practice and encountering working life, the novice professionals meet a community with other sets of boundaries and traditions. This influences and changes the newcomers' identity formation as professionals as well as how they envisage their future professional trajectory. One possible explanation is the negotiation of meaning that takes place in the interaction between the novice professionals and their colleagues, clients, and the workplace as such. This social interaction and the work practice influence graduates' construction of their future professional trajectories. Closely linked to this is their emphasis on learning which is maintained throughout the whole study. Worth noting is that the issue of learning is closely related to a specific professional practice or, as mentioned earlier, an insider professional trajectory.

The transition from higher education to working life as well as the first period in working life is dominated by a striving towards becoming established on the labour market, an *inbound professional trajectory* with the prospect of becoming a full participant in a community of practice. Our results, however, indicate that after approximately three years of employment, there is in many cases a pronounced ambition to move on, even to new professional areas, an *outbound professional trajectory*.

We conclude the article by suggesting that the graduates' vision and experiences of their professional trajectories do not seem to follow a temporal and logical order of appearance in their career. Rather, they appear in different order and at different points in time after graduation. The graduates display a movement from taking in new knowledge and making it their own to a need to change direction and, for some, to do something different. The results, rather, endorse the discourse of life long learning and the need for flexibility and employability on the labour market.

The dynamics of professional identity formation: Graduates' transitions from higher education to working life

Vocations and Learning: Studies in vocational and professional education, 2, 1, 1-18.

Sofia Nyström

Department of Behavioural Sciences and Learning, Linköping University, Sweden.

Research on professional identity formation often emphasises how a profession is learned in higher education or in working life. This research often takes the work practice as a point of departure and how it forms identity. This study takes a more comprehensive approach concerning professional identity formation by expanding the horizons and exploring the relationship between professional and personal aspects of life.

This article attempts to understand how individuals form their professional identity and the dynamics between their experiences in educational institutions, working life and other aspects of their lives. Accordingly, it seeks to explore the characteristics of the relationships between professional and personal aspects of life experiences and imperatives. These issues are elaborated and appraised through considerations of student and novice professional psychologists' and political scientists' processes of professional identity formation in their transition from higher education to working life.

The article builds on a longitudinal study where graduates from two educational programmes, Political Science and Economics and Psychology, were interviewed on three occasions.

Drawing on Wenger's (1998) theory of community of practice and identity as a nexus of multimembership, the findings indicate that professional identity formation is more of a relationship between different life spheres than an isolated phenomenon only taking place at the universities or in the work practice. The graduates stress a relationship between the professional and the personal aspect as well as a more private aspect. These three are described as different spheres since the graduates put together certain aspects of life into a 'space'. All of the spheres are social in character, even the personal one, since they are constructed in a specific community of practice as personal and socially derived imperatives. The analysis yielded

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three different relationships between the spheres; *non-differentiated identity*, *compartmentalised identity* and *integrated identity*.

The relationships between the spheres could be interpreted in line with Wenger's (1998) nexus of multimembership, or how our belonging in different communities of practice contributes to our identity. For me, his argument is in one way uni-directional and static because it does not describe the process within the nexus. Here, the findings imply (see below) that, over time, interplay occurs between the spheres and the multimembership changes – more like a nexus in action. To discuss this dynamic relationship, I use the phenomenological terms *figure* and *ground* (Gurwitsch, 1964).

When examining *non-differentiated identity*, it is described as a typical pattern of the senior students' identity formation. The senior students move between different contexts, or communities of practice, but even if the contexts vary, they are fairly homogeneous. Typical of the senior students' nexus of multimembership (Wenger, 1998) is that they maintain their student identity across borders. Using Gurwitsch's (1964) terms, one could argue that being a student is a strong identification, like an enclosed figure with clear contours. The enclosing ground, or the different life spheres, does not have sufficient impact to shift the image since the senior students continue to talk about themselves as students.

I described *compartmentalised identity* as a typical pattern of the novice professionals. They have another way of relating the spheres to their identity formation. As a novice in working life, they try to differentiate the spheres from each other but the dominating one is the professional sphere. Relating to Wenger's (1998) work, the novice professionals' emphasis on identity as compartmentalised could be a response to the process they go through as peripheral members in a new community of practice. Being a newcomer in working life and engaging in a new community of practice seems to imply that other communities in their nexus of multimembership are downplayed or screened out in favour of the professional sphere. Applying Gurwitsch's terms again, the novices in working life try to differentiate between the life spheres but the dominating figure is the professional sphere. The enclosed professional figure could, from the quotes, be derived from being a newcomer in working life where everything is new and unfamiliar. But the contours are not clear since the other spheres are also calling for attention.

The last category, *integrated identity*, is described as a typical pattern of the early career professionals. At this time, they express a more interchangeable relationship between the different life spheres, implying a more comprehensive approach to their professional identity. They have solved how to relate their nexus of multimembership to each other and they are now full members in the professional community. Using Gurwitsch's

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terms, it could be argued that the early career professionals now have a more changeable relationship between figure and ground or the different spheres in life. Depending on the context, the graduates are now able to shift between what they see as figure and ground, e.g. to use their personal sphere in their professional practice. This ability to shift is seen by the early career professionals as a strength since the spheres together represent different phenomena compared to the parts separately – more of a comprehensive professional identity.

The differences between the educational programmes are not that large. The most prominent difference can be seen among senior students where some of the psychologists try to distinguish between their professional and private spheres. This could be caused by their clear professional focus gained from the practical elements of the educational programme. For the political scientists, the labour market is more diffuse, which makes it hard to identify with a certain work practice.

In this article, I argue that the graduates emphasise their professional development as prioritising and excluding one or more of the different sphere, i.e. the professional, the private, and the personal. This is done in order to construct an identity that can include different meanings and forms of participation within their nexus of multimembership. I suggest that by using a longitudinal design, the results indicate that professional identity formation could be interpreted as a change; from a more individual to a more relational and integrated way of reasoning about one's profession. This indicates that professional development seems to be a way of bringing balance and interplay into the whole life situation. The process creates an identity that is sustainable and liveable, which is important in a hectic and stressful working life. To conclude, professional identity formation could, therefore, be viewed as a set of dynamic relationships involving all aspects of an individual's identity and life spheres in a lifelong learning process. It is through the negotiations between personal and socially-derived imperatives that identity formation progresses throughout working life.

Graduates 'doing gender' as early career professionals

Manuscript submitted for publication

Sofia Nyström

Department of Behavioural Sciences and Learning, Linköping University, Sweden.

The transition from higher education to working life or the process of going from being senior student to being a newcomer in working life has been described as a chaotic time for the individual. This concerns post graduate employment and how the individuals encounter a professional practice. When it comes to the process of becoming a professional individual, research points to an inequality in how female and males are viewed as competent and skilled. According to Acker (1990, 1992), all organizations and workplaces are infused with gender, which implies that the individuals are under influence of the gendering practices but also practise gender themselves.

Accordingly, the aim of this study is to explore how individuals do gender like they do professions. More specifically, the article explores how two different groups of graduates, psychologists and political scientists, do gender as early career professionals with particular emphasis on how graduates acquire legitimacy in relation to their colleagues and clients.

This article is based on one interview with graduates from the Political Science and Economics and Psychology educational programmes. At the time of the interviews, the early career professionals had been working for approximately 30-34 months.

This article takes a *doing gender* perspective as its theoretical standpoint with special reference to the work of Acker (1990, 1992, 1999). Acker argues that gender could be viewed as a dynamic process and something that is being done and constructed in all social situations. Acker is an advocate of the processual view of doing gender, which focuses on understanding what influences the gendered processes in organizations. In this article, doing gender is related to the process of becoming a professional or the professional project the early career professionals go through.

The analysis yielded two different ways the early career professionals do gender in their professional practice in order to *acquire legitimacy*. These two ways of doing gender have two contrasting dimensions, which has been combined in a pair. The first way is *one of a kind* or *the same as others* in which the early career professionals emphasise how they interact with their

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colleagues and clients. The second way is *construction* or *self-possession* as two strategies the graduates express in order to acquire legitimacy.

In the first contrasting theme, *one of a kind*, the graduates say that their gender become visible when they work in specific contexts dominated by the opposite sex. The division of gender is thus emphasised by the informants as the gender structure in the organizations, where they point to the separation of females and males in different work positions and work tasks. The second position, *the same as others*, concerns the informants' perceptions of their interactions, which to a large extent confirm the gender order in the organization. The majority of the graduates state that their gender matters in meetings with clients or colleagues. The early career professional emphasise an expectation of affinity: that it would be easier for men to be understood by men and the same with women. This affinity implies the idea of difference between women and men.

When it comes to how the early career professionals acquire legitimacy, two different strategies can be seen: *construction* and *self-possession*. The first, *construction*, is mostly referred to by the female early career professionals when they relate to symbols and metaphors in organizations. These may be viewed from a stereotypical masculine perspective, such as competence, leadership and professionalism. Some of the female newcomers are struggling to construct a professional identity, which includes a certain behaviour and appearance to acquire legitimacy. The second position, *self-possession*, is mostly stressed by the male early career professionals. This strategy is different from 'construction' since the males do not emphasise gender-appropriate behaviour or physical attributes as a way of seeking legitimacy. Instead, it seems that being a man and having a certain profession strengthens their legitimacy as a professional since they are perceived as a person with power, knowledge and skills.

When it comes to the development of a work identity, the early career professionals present it as an individual professional project based on their professional interactions. I suggest that the graduates' professional projects are reflected in a masculine discourse about professionalism and competence within a specific work practice. This discourse creates a duality between how the female and male early career professionals relate themselves to other professionals and/or their clients. The positions the graduates take on could also be viewed in a hierarchical order, which strengthens the gender binary in the organization. In this study, this dichotomous form is reinforced in the interaction where the newcomers express the idea of affinity with their gender.

The way the early career professionals do gender when it comes to gaining legitimacy as a professional indicates a reproducing and

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strengthening of the prevailing gender order in the workplace. I suggest that the newcomers have to negotiate with the ‘masculine’ stereotypes of what is considered a professional person.

To conclude, when the graduates, as early careers professionals, practise their profession, they also do gender. The female and male graduates acquire a different kind of legitimacy derived from the gendered processes in the organization. This is done by emphasising their behaviour and appearance as well as their interactions with colleagues and clients. When graduates do gender, they also produce and reproduce a gendered notion of a professional project that has an influence on their professional practice, an influence that cuts across different educational programmes and professional contexts and affects how they position themselves as a professional person with specific knowledge and competence.

Beyond higher education: critical transformations in becoming a professional

Manuscript submitted for publication

Sofia Nyström* and Anna Reid**. * Department of Behaviour Science and Learning, Linköping University, Sweden. **Learning and Teaching Centre, Macquarie University, Sydney, Australia.

This article focuses on student and novice professional psychologists’ and political scientists’ critical transformations in their transition from higher education to working life. At various times in novice and early career professionals’ working life, they will experience some critical transformations that are the cumulative result of their previous learning, the way their knowledge is made sense of in the workplace, and the way in which their workplace activity (and associated new learning) combine to change the way they think about themselves. This is a complex exploration that recognises that new graduates in the workforce and early career professionals come to their work with their own sense of self, their own understanding of disciplinary knowledge, their own contexts of work and early work experiences, their own social networks and so on.

The article uses empirical data based on a longitudinal study where 19 graduates from two educational programmes, Political Science and Economics, and Psychology, were interviewed on three occasions. This article focus in particular the panel waves two and three (that is, when the participants were in the midst of their transition from novice professionals to early career professionals). From the pool of 19 participants we selected 4

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cases as examples to show typical critical transformation discernable in the group. We juxtapose this with literature that explores different ways people come to understand and participate in complex situations in order to investigate what constitutes the critical transformations.

In the analysis, we suggest that 'critical transformations' are a result of an ontological change through a process of reflection. The participants in this study have gone through the experience of learning at university and now have experience and insight developed in working life, and are also able to re-create (or think of in different ways) their experiences of learning in higher education. In this sense, we recognise that the participants are not describing a single experience [the transition to working life] but rather a continuous reflected experience that incorporates their formal and informal learning opportunities.

In the analysis of our data – focusing on panel waves two and three of the interviews – we saw that several themes that moved the spotlight from, for instance, their understanding of atomistic work activities to their understanding of their knowledge of themselves as workers. Our analysis highlights the way in which participants a) reflected on the completion of their formal studies, b) paid attention to work and world realities, c) paid attention to professional practices, d) paid attention to their personal abilities, and e) reflected on their overall career choices. We do not assert that *all* new professionals experience these things, but rather that the 'critical transformations' described here, seem – to our participants – to be aspects that enabled them to change their view of *themselves* as professionals.

We found that novice and early career professionals' critical transformations are a complex and reflective process involving both an inner reflection and a more overt reflection on the circumstances in which they find themselves. The first concerns the transformation the participants experience as a development of themselves and how they see that they have changed. This first transformation includes a revised understanding of the role of their formal studies in their personal and professional lives and the contribution of this understanding towards their own on-going development. The second transformation is the influence the participants have received from the people and communities of practices in which they participate. This transformation includes their reflected experience on the job, their confidence in their ability, and their ability to critically consider the worth, importance and longevity of their job. However, besides the identification of these two orientations, critical transformation is foremost an interplay between these two as a continuous reflected experience that involves both formal and informal learning opportunities. We suggest that it is a process that involves the

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experiences from the past, the present but also the envisaged reflections about the future.

Becoming a professional is an important step in an adult's life, an important cornerstone or base for building a life. It is also a time of multiple transformations which seem to change the individual in many different ways. The transformations the graduates go through in their first years of employment are something that could be acknowledged and supported by educators and employers.

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In this last chapter, the thesis will be discussed based on the results presented in relation to the theoretical framework. This will be followed by a critical reflection on the study and some thoughts about future research.

Results revisited – an analytical summary

When revisiting the results presented, what picture(s) concerning Psychology and Political Science graduates' trajectory towards becoming professionals are discernable?

One aspect of this process is how the graduates construe their professional trajectories and envisage their professional future. As senior students, the majority of the graduates have a positive vision of their future work. They also emphasise that higher education has provided them with a good knowledge base. When entering working life, as novice professionals, they meet a professional practice with new work tasks and responsibilities but they also interact with colleagues and clients. This encounter influences and changes the way they regard their knowledge and learning, their profession and role as psychologists/political scientists but also their future work. After three years of professional experience, the early career professionals are established in working life. At this time, they express satisfaction with their work situation and their work tasks. Many of them also emphasise the importance of continuous learning as a way to better practise their profession in the future. There is also a pronounced ambition to move on to new professional areas, try out new work tasks or other professional areas. In some cases, there is also an expression of a wish to switch to some other professional field.

The overarching results indicate that the graduates' professional trajectories and visions of their future work change over time. These changes are influenced by the encounter with a professional practice and the interaction with colleagues and clients as well as their increased professional knowledge and experience. These changes do not seem to follow a specific temporal and logical order, as in the traditional vision of career (Baruch, 2003); instead the graduates stress different visions at different points in time after graduation. The graduates' views of their working life suggest that other factors than temporality and logics are influencing their professional trajectories.

One aspect that could shed light on the changes in the graduates' professional trajectories is how the relationship between professional and

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personal aspects of life experiences impact on the processes of professional identity formation. In the results, the graduates form their professional identities as a connection between different life spheres, e.g. the professional, the private and the personal. By employing a longitudinal design, the results show that graduates stress their professional development as a matter of prioritising and excluding different spheres in order to form a professional identity. The interplay between the spheres is emphasised differently in different contexts. As senior students they stress a strong identification with being a student and even if they change context the spheres are becoming part of their student identity. When entering working life this relationship changes. The novice professionals state that the professional practice and sphere take over more of their life situation, pushing their private and personal life sphere into the background. After three years of working life experience, the early career professionals have gained more self-confidence regarding who they are as professional persons and how to practise their profession. These experiences lead them to emphasise a professional identity that integrates all the life spheres in order to bring interplay and balance into their professional life. The results indicate that these forms of professional identity are to some extent sequential: from an individual focus (as a senior student) to a more relational and integrated way of reasoning about one's profession as an early career professional.

The empirical study has shown that becoming a professional is a changeable professional trajectory influenced by the formation of a professional identity and the relationship between the spheres in life. One aspect that, so far, is unspoken but always present in the background is how to acquire legitimacy as a newcomer in working life. When exploring how the early career professionals acquire legitimacy, this is emphasised as a relationship between the graduates, their colleagues and clients. This is also a relationship influenced by the gender practices and processes in the workplace. In the female and male early career professionals' talk, they draw on their gender when emphasising different behaviour and appearance, as well as interactions that influence how they practice their profession. One example is the strategies that the graduates develop in order to acquire legitimacy which, to some extent, is reflected in a stereotypical masculine norm of competence and professionalism. Many of the females emphasise a gender-appropriate behaviour or physical attributes they use to 'construct' themselves as professionals. The males, on the other hand, point to their formal competence and belonging to a professional collective. Therefore, it could be argued that the professional identity and practice is constructed in relation to a gendered identity. This seems to have an influence on how the graduates perceive their legitimacy.

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As discussed, it seems as if the graduates experience many changes in their transition from higher education to working life. But what are the critical transformations they experience during this time? The results show that the transformations can be characterised by both inner reflection and more overt reflection. The inner reflection concerns the development that they have gone through from being a senior student to becoming an early career professional and how these experiences have changed them as individuals. The overt reflection concerns how their social interactions and experiences of working in an organization/workplace have transformed their understanding of learning and work. In conclusion, the results indicate that the graduates go through many critical transformations, which include both formal and informal learning opportunities.

When reflecting on the differences between the graduates from the two educational programmes some tentative conclusions can be drawn concerning how the graduates construe their professional trajectories. The results suggest that the graduates from the educational programme in Psychology start the process towards becoming a professional during their years at university. Due to the design of the programme (i.e. the clinical placements, the work in the clinic, the mandatory therapeutic conversations and working with problem-based learning) the senior students have gained practical knowledge about their future profession and work practice. One could argue that the university experience is a 'long adjustment period' for becoming a psychologist. This could be one reason for their quick establishment in the labour market and 'easy' trajectory towards identifying with their professional role as a psychologist. This is also discernable in the results concerning the development of a professional identity where the psychologists, already as senior students, reflect on how their future professional role will influence their personal and private sphere. This result has similarities with other studies (e.g. Abrandt Dahlgren et al., 2006) but since this study has a longitudinal design, it is also possible to obtain a more comprehensive picture. Despite the psychologists' rapid establishment and identification with their profession, they are not fully satisfied. After three years, the dominating vision of their future profession is the need for change. A possible interpretation is that they want to change professional practice as a way to develop their professional identity or change professional field completely.

The political scientists' process of becoming a professional follows a somewhat different trajectory. Because of their years at university, and as Political Science students, the senior students have a diffuse and unclear picture of their profession (see also Abrandt Dahlgren et al., 2006; Johansson, 2007). One could thus argue that the political scientists' process of becoming

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a professional starts with their encounter with a professional practice. This is the time when their knowledge becomes contextualised and applicable. After three years of professional work, their slower establishment in working life (compared with the psychologists) means that many of the political scientists are still trying to learn and develop within a specific professional field. The comparison between the educational programmes suggests that the graduates have somewhat different employment paths and processes in becoming professionals.

Meeting a professional community of practice

The aim of describing graduates' trajectories towards becoming professionals as they enter working life with a master's degree in Psychology and Political science is, I would argue, foremost a meeting with a professional community of practice. In line with Lave and Wenger (1991) and Wenger (1998, 2000), I suggest that the graduates' participation in these communities of practice is essential for their learning to become a professional individual. Throughout the results presented, the graduates have emphasised the importance of their interaction with fellow students, colleagues and clients as well as the work practice for their learning and professional development. These results suggest that it is possible to characterise graduates' professional trajectories as a process of legitimate peripheral participation.

Being a student is characterised by a special membership. As a student they are, in their role as fulltime enrolled students, full members and a legitimate peripheral participant in higher education. But this membership can be scrutinized since they are only guests in the academic community with the prospect to leave higher education with a degree that can grant them membership of a professional practice. When entering work life the novice professionals experience a totally different process. The 'easy' acceptance that they got in the higher education context based on being a student is now replaced by a struggle to get accepted and seen as a legitimate member. This 3-year longitudinal study makes it possible to follow the senior students' process as they enter working life as newcomers and their striving to become established and eventually full members of a professional practice.

This is a period during which the graduates' professional knowledge and skills develop, but it is also a critical time for the development of a professional identity. This movement can be described with the theoretical constructs of *inbound professional trajectories*, *insider professional trajectories*, and *outbound professional trajectories*. The first, inbound professional trajectories, concerns the newcomers' prospects of becoming a full participants in a professional practice. This movement is characterised by

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an ambition to establish themselves in the workplace by investing their professional identities to ensure future participation. The second, insider professional trajectory, aims for full membership but it is also an identity formation, which continues to evolve. Every community of practice changes over time and for the graduates this could take the form of new work tasks, new equipment or new clients, which increases the need for continued learning. These changes involve a renegotiation of graduates' professional identities. Finally, outbound professional trajectory, a trajectory that takes the graduates out of a community, in this case a particular workplace. For the graduates, this was a characteristic of those who expressed a need for change and to do something different, e.g. in a new field, new work tasks or the urge to do something completely differently. But the urge for change could also be scrutinized as an expression of a new type of career where the individual is supposed to strive towards new experiences, continue to learn and be a mobile worker (cf. Baruch, 2003; Hall & Moss, 1998; Harvey et al., 1997).

The graduates' professional trajectories could be characterised as a movement from taking in new knowledge and making it their own to a need to change direction and for some of them, do something different. The theoretical labels of professional trajectories indicate that identity formation is an ongoing development, constructed and influenced by a professional practice. Consequently, it seems as if professional identities are relational learning processes (Salling Olesen, 2001, 2007) changeable over time and in social practice.

Moreover, the process suggests that the newcomers meet traditions, norms and values concerning their profession that influence their work practice, behaviour and perception of themselves. The will to become full members is thus a process that they do not control all by themselves. Being a newcomer implies a power relationship since being a peripheral member indicates, as Contu and Willmott (2003) and Salminen-Karlsson (2006) argue, being kept outside and for some, denied access. This was especially discernible in the way female and male early career professionals acquire legitimacy. As argued, the graduates relate to a community of professionals through interactions and activities. In their talk about how to acquire legitimacy, they also emphasise the gendered practices within the organization or workplace. This is done, as Eriksson and Eriksson (2003) argue, by constructing themselves as good professionals or as a way of learning to practise a certain profession (Collinson & Hearn, 1994; Mörck & Tullberg, 2004). This doing is reflected in a gendered discourse about the profession (Abrahamsson, 2006; Aurell, 2001; Davis, 1996; Witz, 1992) concerning competence, appropriate gendered behaviour and appearance. The results imply that when the female and male early career professionals do or

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practise their profession, they also do gender (Acker, 1990, 1992, 1999). These results contribute to the understanding that the professional identity is a gendered identity constructed in relation to a gendered work practice. This influences how the newcomers encounter working life and are perceived as legitimate professionals.

Different programmes, different encounters?

The graduates from the two educational programmes have a somewhat different encounter with the professional community of practice; a difference that, to some extent, could be derived from the professional preparation provided by their educational background.

As argued above, the psychologists have a high degree of continuity from being a senior student to becoming a novice professional (Abrandt Dahlgren et al., 2006). The design of the educational programme has started to form their professional identity by giving them qualifications and skills that are function and substantive oriented, ready to be used and contextualised (see also Abrandt Dahlgren et al., 2006). In the encounter with working life, the novice professionals have an understanding of what it means to belong to a professional community of psychologists and they also have access to a shared repertoire, i.e. a professional language, methods and activities. This results in them, to a higher degree than the novice political scientists, experience an inbound professional trajectory and they quickly become established in a professional practice. Despite the investment in future participation, many of the early career professionals express, after three years, a need for change. The urge for a change stems from an aspiration to try out new work tasks and workplaces, i.e. a position with higher status in the private sector (compared with the public sector). Another explanation given by some of the early career professionals is the need for a change since they have difficulties coping with the emotional stress and even fatigue that go with the work of a clinical psychologist.

The political scientists, on the other hand, leave their studies with an unclear picture of what their professional community looks like (Johansson, 2007). As senior students, they have acquired qualifications that are somewhat ritual (see Abrandt Dahlgren et al., 2006) in nature, i.e. knowledge and skills that do not have a specific field of application. Despite this, they say that they have acquired generic skills, i.e. critical ability, writing and finding information, which they can use in any professional field. In the encounter with working life, the novice professionals are searching for a professional field and many of them find temporary employment or are unemployed. One could characterise their transition as rather chaotic and

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stressful (e.g. Allen & Van Der Velden, 2007; Graham & McKenzie, 1995; Teichler, 2007) when only being peripheral participants in working life. After three years, almost all of the early career political scientists have found themselves an employment (after some years of uncertainty and shorter periods of employment or unemployment) and they express an insider professional trajectory. This indicates that their knowledge has become contextualised and that they are about to become, or struggle to become, legitimate peripheral members in a professional community. They have formed a professional identity in relation to a specific professional community, but it is an identity under renegotiation since they still are trying to find their place in the organization and their work tasks. One can speculate whether the political scientists, with more work experience and time at their workplace, will have an outbound professional trajectory like many of the psychologists. Such a scenario could be possible since there seems to be a drive to move on or at least do something new after a couple of years at a workplace.

These results emphasise that becoming a professional and the development of a professional identity to some extent depend on educational background. In this particular case, there was a difference between a professional programme and a more liberal arts programme. One possible conclusion is that, for fast establishment and professional identity to develop, there seems to be close contact with a professional practice during the years at university, something Eteläpelto & Saarinen (2006) also emphasise.

Professional identity at the crossroads of the spheres of life

It has now been argued that becoming a professional is foremost a meeting with a professional community of practice, but this picture needs to be diversified and expanded. By emphasising the graduates' belonging to a nexus of multimembership (Wenger, 1998, 2000), i.e. the individual participation in many different communities of practice, it can be seen that the graduates' professional identity is developed not only by participating in the professional practice. The results show that it could be described as a relationship between different life spheres, i.e. the professional, the private and the personal. Three different relationships between the spheres evolved, i.e. *non-differentiated identity*, *compartmentalised identity* and *integrated identity*. These characterise different ways of illustrating the professional identity formation as an interplay between life spheres and how these are emphasised in different contexts and at different times. Accordingly, it is possible to argue that a professional trajectory could be seen as a life project.

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Such a life project is influenced by individuals' interaction with multiple sources (Skovholt & Rønnestad, 1995) rather than regarding it as a single trajectory (cf. Benner, 1982, 2004; Dreyfus & Dreyfus, 1986). But as a critique of these developmental theories, one could question whether the individual's skills always develop along a straight line. This study indicates that it is a more complex process. One example of this is the different forms of professional identity formations pictured as both an inner and a more overt reflection on the circumstances the graduates find themselves in. Here, their personal and private spheres, i.e. the graduates' reflection on themselves and their relationship with their family and friends, influence how they form their professional identities (see also Axelsson, 2008; Fuller et al., 2005; Hodkinson & Hodkinson, 2003; Hodkinson et al., 2004), which change over time.

It is important to emphasise that Political Science and Psychology graduates' process of becoming a professional is to a large extent a learning process regarding how to handle the relationship between their work practice and their private life, i.e. their nexus of multimembership. These relationships are not static in nature, rather, the opposite, it is a *nexus in action* where the relationship and positions changes dependent on the graduates' work experiences, interactions with colleagues and clients, expectations from themselves and others, and over time. Therefore, it is possible to postulate that how they solve these relationships is crucial for the graduates' identity formation. Wenger (1998) emphasises the importance of bringing the various forms of membership into coexistence. Throughout the results, both successful resolutions and more struggling relationships have been pictured. This was noticeable in the way the graduates envisage their professional trajectories, what transformations they described as critical and also how they emphasise the different life spheres. With the results of this study and previous research it is possible to argue that how the individual handle and solve this relationship is influenced by different social categories, e.g. gender (Salminen-Karlsson, 2003, 2006; Tanggaard, 2006), but also what they bring with them in terms of beliefs, experiences, skills and attitudes (e.g. Fuller et al., 2005; Hodkinson & Hodkinson, 2003; Hodkinson et al., 2004). The overarching results imply that gender plays an important role in how the female and male graduates' experience belonging in a nexus of multimembership. For example, the relationship between the different spheres of life, their professional practice and how they construct their gender identity.

So far, the discussion has focused on the graduates' relation to a professional community of practice and how this belonging enables or constrains their identities in a nexus of multimembership. This process could

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also be described as a subjective process. One aspect is the critical transformations the graduates undergo in their transition from higher education to working life. These changes are, in some cases, emphasised as transforming of the graduates' self (cf. Billett, 2007; Billett & Pavlova, 2005; Billett & Sumerville, 2004) and how they experience the world, their professional practice and themselves. One example is the early career professionals' identity, which has been given the theoretical label integrated identity. After three years of working life experience, the graduates have developed a strong sense of who they are as professional individuals. This learning process has been characterised by a striving to find out how the personal sphere (the more internal self where the individual reflects on him/herself) relates to the professional practice and how to handle the demands made on them as professionals and individuals. But it is also a process where the graduates underline, in Billett and Pavlova's (2005) words, '...a drive towards securing a 'sense of self' and 'bring themselves', both in their work and their life outside work.' (p. 209). Again, it needs to be emphasised that the individuals' identification with their professional practice and how they think about themselves are closely related to a gendered identity (e.g. Abrahamsson, 2006; Aurell, 2001).

Becoming a professional - a melting pot of experiences?

As stated in the introduction, this thesis has set out to describe the graduates' trajectories towards becoming professionals. What conclusion can be drawn from this longitudinal study?

First, I would argue that professional development and identity formation are not an isolated phenomenon only learned and nurtured in higher education and/or in working life. They are something more. It has been emphasised previously that this is a dynamic learning process between a reflective individual, a social professional community as well as a negotiation between being a professional and the life spheres. This statement implies that the professional individual could be seen as an 'intersection' where all his or her experiences pass through, are processed and then performed as actions and thoughts in a professional practice. Moreover, this study has shown that the graduates' professional trajectories are influenced by different forces, e.g. the educational design, the focus on developing an early professional identity, the encounter with a professional community of practice, gendering practices at the workplace and different spheres of life. But most importantly, it is a trajectory that changes over time, comprising experiences from the past and the present as well as ideas about the future.

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The metaphor, the *individual as an intersection*, also refers to an individual project where becoming a professional also concerns how the graduates solve their belonging to a nexus of multimembership or how their different forms of participation are combined. Their professional trajectory seems, to a large extent, to evolve and develop through the influence of the overall life situation the graduates' experience. To conclude, I would argue that becoming a professional seems to be a way of bringing balance into the whole life situation. This is accomplished by means of professional development and construction/deconstruction of a professional identity that is sustainable and liveable.

The end: implications, critical reflections & future research

As I have argued in the section above, it is important to emphasise the role of higher education and working life in the graduates' process of becoming professionals. This is where processes start and grow but it does not end with the encounter with a professional practice. As argued above, the professional development and identity formation is more of a constant trajectory and not stagnation. Could these findings be of any value for higher education or working life? Having an opinion or giving a recommendation is a bit problematic since the results are based on a relative small study, but some speculative interpretations can be made.

Since this study has followed Political Science and Psychology students, the results could be of interest in the design of these and similar educational programmes in order to learn more about what happens to their students after graduation. This knowledge could also be interesting when discussing and problematizing the issue of professional development and identity formation in relation to employability. These results could also be of value to the employers and workplaces in the public and private sectors since they problematize the possible changes the newcomer experience in their encounter with the world of work. The results raise questions about what role the employer and the organization play in order to facilitate the transition and the professional trajectories for the graduates. I do not have an answer for how this could be done but it is an interesting aspect to discuss.

At the end of a thesis, it is of interest (and also common) to look back and reflect upon the research project as a whole. One of the joys and strengths of this study was the longitudinal design since it is possible to follow graduates' professional development and identity formation as they enter working life with a master's degree in Psychology or Political Science. A design like this generates extensive empirical material, which has been

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both liberating and, sometimes constraining. Liberating in the sense of being able to perform extensive analyses and constraining since it was sometimes hard to achieve an overview over the empirical material.

A possible weakness of the study could be that both the situated theory of learning and a doing gender perspective emphasise practices and participation as being important. Including more participatory methods of data collection, such as observations, could therefore have enriched the data and provided important insights into the graduates' professional development. Despite this, both the theoretical perspectives stress communication as important for enabling participation and influencing practices. Consequently, this legitimises the use of interviews as a collection method.

The study could also be criticised on the basis of the unequal gender distribution since the study only has five male participants. This distribution of gender was not intentional but there were dropouts, due to the longitudinal design, something common in this type of study. The gender distribution could be questioned as regards the influence it could have on the gender analysis and the results presented. In response to this possible critique, I want to emphasise that gender is done in every organization, in all interactions between individuals, despite the gender distribution (e.g. Abrahamsson, 2006; Acker, 1992, 1999; Aurell, 2001), which justifies the gender analysis.

Despite the focus on gender, I also want to acknowledge the presence of other power relations, such as age and class, in the empirical data. These social categories could also play a distinct role in the graduates' process of becoming a professional. Since I focused on gender, I have chose not to perform such an analysis, although some of the quotations from the participants and interpretations I have made could have been deepened by means of such an analysis.

During the research project as well as when writing this thesis, some future research questions have been raised and my curiosity has been aroused. For some time, there has been an emphasis on the necessity of lifelong learning. Another aspect is the encouragement of the individual to have more than one career in life as a way of increasing mobility in working life (e.g. Fejes, 2008; Nerland & Jensen, 2007; Williams, 2005). This is interesting when it comes to the process of becoming a professional and how individuals in different age groups emphasise this. It would be interesting to problematize what impact previous work life experiences and careers could have on professional identity. Do these individuals have different foci compared with younger newly graduated individuals? Could their encounter with higher education and working life be pictured in different ways and what do the relationships between the different aspects of life look like?

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Since I have an interest in gender issues, I would also like to continue to problematize the role of gender. Especially when it comes to how the graduates perceive their future career opportunities in relation to how they emphasise different spheres of their lives.

This study has a graduate perspective and it would be motivated to apply the perspective of educational designers and employers concerning professional development. How do they view their role in this process? What would they emphasise as important and how could they help achieve it? This is one aspect that could be subject to an international comparison since there is a difference between how higher education and working life are structured and what role they play in developing a professional individual.

References

- Abrahamsson, Lena. (2006). Exploring construction of gendered identities at work. In Stephen Billett, Tara Fenwick, & Margaret Somerville (Eds.), *Work, subjectivity and learning* (pp. 105-121). Dordrecht: Springer.
- Abrandt Dahlgren, Madeleine., Hult, Håkan., Dahlgren, Lars Owe., Hård af Segerstad, Helene., & Johansson, Kristina. (2005). The transition from higher education to working life: the outcomes of a PBL programme and a conventional programme. In Esa Poikela & Sari Poikela (eds.), *PBL in Context - Bridging Work and Education* (pp. 23-45). Tampere: Tampere University Press.
- Abrandt Dahlgren, Madeleine., Hult, Håkan., Dahlgren, Lars Owe., Hård af Segerstad, Helene., & Johansson, Kristina. (2006). From senior student to novice worker: learning trajectories in political science, psychology and mechanical engineering. *Studies in Higher Education*, 31, 5, 569-586.
- Abbot, Andrew. (1988). *The System of Professions*. Chicago: The University of Chicago Press.
- Acker, Joan. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society*, 4, 2, 139-158.
- Acker, Joan. (1992). Gendering organizational theory. In Albert J. Mills & Peta Tancred (Eds.), *Gendering Organizational Analysis* (pp. 248-260). London, SAGE Publications Ltd.
- Acker, Joan. (1998). Future of 'Gender and organizations': connections and boundaries. *Gender, Work and Organization*, 5, 4, 195-206.
- Acker, Joan. (1999). Gender and organizations. In J Saltzman Chafetz (ed.), *Handbook of the Sociology of Gender* (pp. 177-194). New York: Kleuwer Academic.
- Adamson, Stephen J., Doherty, Noeleen., & Viney, Claire. (1998). The meaning of career revisited: implications for theory and practice. *British Journal of Management*, 9, 251-259.
- Allen, Jim., & Van Der Velden, Rolf. (2007). Transition from higher education to work. In Ulrich Teichler. (ed.), *Careers of University Graduates. Views and Experiences in Comparative Perspectives* (pp. 55-77). Dordrecht: Springer.
- Alsmark, Gunnar. (1997). *Skjorta eller själ?* Lund: Studentlitteratur.
- Alvesson, Mats., & Sköldbberg, Kaj. (2008). *Tolkning och reflection*. Lund, Studentlitteratur.
- Atkins, K. J. (1999). Oven-ready and self-basting: Taking stock of employability skills. *Teaching in Higher Education*, 4, 2, 267-291.

- Aurell, Maria. (2001). *Arbete och identitet om hur städare blir städare*. Academic dissertation. Linköping: The Tema Institute - Department of Technology and Social Change, Linköpings University.
- Axelsson, Rose-Marie. (2008). *Formbara människor*. Academic dissertation. Linköping: Department of Behavioural Sciences and Learning, Linköpings University.
- Baruch, Yehuda. (2003). Transforming careers: from linear to multidirectional career paths. *Career Development International*, 9, 1, 58-73.
- Bathmaker, Ann-Marie., & Avis, James. (2005). Becoming a lecturer in further education in England: the construction of professional identity and the role of community of practice. *Journal of Education for Teaching*, 31, 1, 47-62.
- Benner, Patricia. (1982). From novice to expert. *The American Journal of Nursing*, 82, 3, 402-407.
- Benner, Patricia. (2004). Using the Dreyfus model of skill acquisition to describe and interpret skill acquisition and clinical judgement in nursing practice and education. *Bulletin of Science Technology Society*, 24, 3, 188-199.
- Billett, Stephen. (2001). Learning throughout working life: interdependencies at work. *Studies in Continuing Education*, 23, 1, 19-35.
- Billett, Stephen. (2006). Work, subjectivity and learning. In Stephen Billett, Tara Fenwick, & Margaret Somerville (Eds.), *Work, Subjectivity and Learning* (pp. 1-20). Dordrecht: Springer.
- Billett, Stephen. (2007). Exercising Self Trough Working Life: Learning, Work and Identity. In Allan Brown, Simone Kirpal, & Felix Rauner (Eds.), *Identities at Work* (pp. 183-210). Dordrecht: Springer.
- Billett, Stephen., & Pavlova, Margarita. (2005). Learning through working life: self and individuals' agentic action. *International Journal of Lifelong Education*, 24, 3. 195-211.
- Billett, Stephen., & Somerville, Margaret. (2004). Transformations at work: identity and learning. *Studies in Continuing Education*, 26, 2, 309-326.
- Blackmore, Jill. (1997). The gendering of skills and vocationalism in twentieth-century Australian education. In A. H. Halsey, Hugh Lauder, Phillip Brown, & Amy Stuart Wells (Eds.), *Education. Culture, Economy, Society* (pp. 224-239). Oxford: University Press.
- Bologna Secretariat website. (2008). About the Bologna process. Retrieved October 16 2008, from <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/about/>
- Bowden, John., & Marton, Ference. (1998). *The University of Learning*. London: RoutledgeFalmer.

- Boyatzis, Richard E. (1998). *Transforming qualitative information: thematic analysis and code development*. London: SAGE Publications.
- Butler, Judith. (1990). *Gender trouble. Feminist and the subversion of identity*. New York: Routledge.
- Braun, Virginia., & Clarke, Victoria. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-110.
- Brennan, John., & Teichler, Ulrich. (2008). The future of higher education and of higher education research. *Higher Education*, 56, 259-264.
- Bryman, Alan. (2001). *Samhällsvetenskapliga metoder*. Malmö: Liber AB.
- Candy, P. C., & Crebert, R. G. (1991). Ivory Tower to Concrete Jungle: The Difficult transition from the Academy to the Workplace as Learning Environments. *The Journal of Higher Education*, 62, 2, 570-592.
- Collinson, David. L., & Hearn, Jeff. (1994). Naming men as men: Implications for work, organization and management. *Gender, Work and Organization*, 1, 2-22.
- Connell, Robert. W. (1995). *Masculinities*. Berkeley: University California Press.
- Contu, Alessia., & Willmott, Hugh. (2003). Re-Embedding Situatedness: The Importance of Power Relations in Learning Theory. *Organization Science*, 14, 3, 283-296.
- Cranmer, Sue. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in Higher Education*, 31, 2, 169-184.
- Dahlgren, Lars Owe et. al. (2005). Students as Journeymen between cultures of education and working life. http://www.hewl.net/HPSE_CT-2001-0068_final_ju.pdf
- Dahlgren, Lars Owe., Handal, Gunnar., Szkudlarek, Tomasz., & Bayer, Manfred. (2007). Students as journeymen between cultures of higher education and work: a comparative European project on the transition from higher education to working life. *Higher Education in Europe*, 32, 4, 305-316.
- Davis, Celia. (1996). The sociology of professions and the profession of gender. *Sociology*, 30, 4, 661-678.
- Dreyfus, Hubert. L., & Dreyfus, Stuart. E. (1986). *Mind over machines: the power of human intuition and expertise in the era of the computer*. Oxford: Basil Blackwell.
- Einarsdottir, Torgerdur. (2007). "On different tracks": The gendered landscape of educational and occupational paths amongst European graduates. In Ulrich Teichler (ed.), *Careers of University Graduates. Views and Experiences in Comparative Perspectives* (pp. 179-194). Dordrecht: Springer.

- Eriksson-Zetterquist, Ulla., & Styhre, Alexander. (2007). *Organisering och intersektionalitet*. Malmö: Liber AB.
- Eriksson, Kristina., & Eriksson, Maria. (2003). Gender doesn't matter, but a gender-mix is good. In Eva Gunnarsson, Susanne Andersson, Annika Vänje Rosell, Arja Lehto, & Minna Salminen-Karlsson (Eds.), *Where have all the structures gone?* (pp. 15-45). Stockholm: Edita Norstedt.
- Eteläpelto, Anneli., & Saarinen, Jaana. (2006). Developing subjective identities through collective participation. In Stephen Billett, Tara Fenwick, & Margaret Somerville (Eds.), *Work, Subjectivity and Learning* (pp. 157-177). Dordrecht: Springer.
- Fejes, Andreas. (2008). Governing nursing through reflection: a discourse analysis of reflective practices. *Journal of Advanced Nursing*, 64, 3, 243-250.
- Fejes, Andreas., Johansson, Kristina., & Abrandt Dahlgren, Madeleine. (2005). Learning to play the seminar game: students' initial encounters with a basic working form in higher education. *Teaching in Higher Education*, 10, 1, 29-41.
- Fuller, Alison., Hodkinson, Heather., Hodkinson, Phil., & Unwin, Lorna. (2005). Learning as peripheral participation in communities of practice: a reassessment of key concepts in workplace learning. *British Educational Research Journal*, 31, 1, 49-68.
- Gee, James Paul. (2000). Identity as an Analytical Lens for Research in Education. *Review of Research in Education*, 25 (2000-2001), 99-125.
- Glaser, Barney. G., & Strauss, Anselm. L. (1967). *The Discovery of Grounded Theory*. Hawthorne: Aldine Publishing Company.
- Gothlin, Eva. (1999). *Kön eller genus?* Skrift byggd på en föreläsning. Göteborg: Nationella sekretariatet för genusforskning.
- Graham, Colin., & McKenzie, Alasdair. (1995). Delivering a promise: the transition from higher education to work. *Education & Training*, 37, 1, 4-11.
- Gurwitsch, Aron. (1964). *The Field of Consciousness*. Pittsburgh: Duquesne University Press.
- Göransson, Bengt. (1997). *Profession på väg. Sveriges Psykologförbunds start och förhistoria*. Lund: Wallin & Dalholm.
- Hall, Douglas. T., & Moss, Jonathan. E. (1998). The New Protean Career Contract: Helping Organizations and Employees Adapt. *Organizational Dynamics*, Winter, 22-37.
- Harvey, Lee., Moon, Sue., & Geall, Vicki. (1997). *Graduates' Work: Organisational change and students' attributes*. Birmingham: Centre for Research into Quality.

- Harvey, Lee., Locke, William., & Morey, Alistair. (2002). *Enhancing Employability, Recognising Diversity: Making Links between Higher Education and the World of Work*. London: Universities UK and CSU.
- Hellberg, Inga. (2002). Expertkunskaper; specialisering och differentiering. In Kenneth Abrahamsson, Lena Abrahamsson, Torsten Björkman, Per-Erik Ellström, & Jan Johansson (eds.), *Utbildning, kompetens och arbete* (pp. 283-298). Lund: Studentlitteratur.
- Hodkinson, Phil., & Hodkinson, Heather. (2003). Individuals, Communities of Practice and the Policy Context: school teachers' learning in their workplace. *Studies in Continuing Education*, 25, 1, 3-21.
- Hodkinson, Phil., Hodkinson, Heather., Evans, Karen., Kersh, Natasha., Fuller, Alison., Unwin, Lorna., & Senker, Peter. (2004). The significance of individual biography in workplace learning. *Studies in the Education of Adults*, 36, 1, 6-24.
- HSFR. (1996). *Etik: forskningsetiska principer för humaniora och samhällskunskap*. Stockholm: Humanistisk-samhällsvetenskapliga forskningsrådet.
- Johansson, Kristina. (2007). *Broad Entrance – Vague Exit. The trajectory of Political Science students through higher education into work life*. Academic dissertation. Linköping: Department of Behavioural Sciences and Learning, Linköpings University
- Johansson, Kristina., Hård af Segerstad, Helene., Hult, Håkan., Abrandt Dahlgren, Madeleine., & Dahlgren, Lars Owe. (2008). The two faces of political science studies – junior and senior students' thoughts about their education and their future profession. *Higher Education*, 55, 623-636.
- Johnston, Brenda. (2003). The shape of research in the field of higher education and graduate employment: some issues. *Studies in Higher Education*, 28, 4, 413-425.
- Kanter, Rosabeth Moss. (1977). *Men and women of the corporation*. New York: Basic Books.
- Karseth, Berit., & Dyrdal Solbrekke, Tone. (2006). Characteristics of graduate professional education: expectations and experiences in psychology and law. *London Review of Education*, 4, 2, 149-167.
- Kaufman, Paul., & Feldman, Kenneth. A. (2004). Forming Identities in College: A Sociological Approach. *Research in Higher Education*, 45, 5, 463-496.
- Kirpal, Simone. (2004). Researching work identities in a European context. *Career Development International*, 9, 3, 199-221.
- Kohler, Jürgen. (2004). The Bologna Process and Employability: The Impact of Employability on Curricular Development. *Conference paper*, October 22nd, 2004, Blend, Slovenia, 1-21.

- Korvajärvi, Päivi. (2003). Doing gender – Theoretical and methodological considerations. In Ewa Gunnarsson, Susanne Andersson, Annika Vänje Rosell, Arja Lehto, & Minna Salminen-Karlsson (Eds.), *Where have all the structures gone?* (pp. 45-76). Stockholm: Edita Norstedt.
- Kvale, Steiner. (1997). *Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur.
- Kvande, Elin. (2003). Doing gender in organizations – Theoretical possibilities and limitations. In Ewa Gunnarsson, Susanne Andersson, Annika Vänje Rosell, Arja Lehto, & Minna Salminen-Karlsson (Eds.), *Where have all the structures gone?* (pp. 15-45). Stockholm: Edita Norstedt.
- Köpsén, Susanne. (2008.) *Från revolution till reträtt*. Academic dissertation. Linköping: Department of Behavioural Sciences and Learning, Linköpings University.
- Larsson, Staffan. (2005a). Quality in Qualitative Research. *Contribution to the International Summer school at Roskilde University*, Aug. 3-13, 2005, 1-35.
- Larsson, Staffan. (2005b). A pluralist view of generalisation in qualitative research. *Paper to be presented at Oxford Ethnography Conference, St Hilda's College, Oxford University*, Sept. 12-13, 2005, 1-15.
- Lave, Jean., & Wenger, Etienne. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, Cambridge University Press.
- Lave, Jean. (1993). The practice of learning. In Seth Chaiklin & Jean Lave (Eds.), *Understanding practice: perspectives on activity and context* (pp. 3-34). Cambridge: Cambridge University Press.
- Linköpings universitet. (2005a). Psykolog 200p. Retrieved July 7, 2005, from <http://www.liu.se/utbildning/program/filfak/psykologi/>
- Linköpings universitet. (2005b). Policies Magister 160p. Retrieved July 7, 2005, from <http://www.liu.se/utbildning/program/filfak/polmag/>
- Linköpings universitet. (2008a). Psykologprogrammet, 300 hp. Retrieved May 14, 2008, from <http://www.liu.se/utbildning/program/F7YPS>
- Linköpings universitet. (2008b). Politices Kandidatprogrammet, 180 hp. Retrieved May 14, 2008, from <http://www.liu.se/utbildning/program/F7KPO>
- Lundquist, Lennart. (1993). *Det vetenskapliga studiet av politik*. Lund: Studentlitteratur.
- Lykke, Nina. (2003). Intersektionalitet – ett användbart begrepp för genusforskningen. *Kvinnovetenskaplig tidskrift*, 1, 47-56.
- Martin, Patricia. Yancey. (2003). 'Said and done' versus 'Saying and doing'. Gendering practices, practicing gender at work. *Gender & Society*, 17, 3, 342-366.

- Miles, Matthew., B. & Huberman, A. Michael. (1994). *Qualitative Data Analysis*. Thousand Oaks: SAGE Publications.
- Mörck, Magnus., & Tullberg, Maria. (2004). *Catwalk för direktörer. Bolagsstämman – en performativ performance av maskuliniteter*, CFK-rapport 2004:02a.
- Nerland, Monika., & Jensen, Karen. (2007). The construction of a new professional self: a critical reading of the curricula for nurses and computer engineers in Norway. In Allan Brown, Simone Kirpal, & Felix Rauner (Eds.), *Identities at Work* (pp. 339-360). Dordrecht: Springer.
- Neumann, Ruth. (2002). Disciplinary Differences and University Teaching. *Studies in Higher Education*, 26, 2, 135-146.
- Nilsson, Staffan. (2007). *From Higher Education to Professional Practice*. Academic dissertation. Linköping: Department of Behavioural Sciences and Learning, Linköpings University.
- Noon, Mike., & Blyton, Paul. (2002). *The realities of work*. New York: Palgrave.
- Paechter, Carrie. (2003). Masculinities and Femininities as Communities of Practice. *Women's Studies International Forum*, 26, 1, 69-77.
- Perrone, Lisa., & Vickers, Margaret. H. (2003). Life after graduation as a "very uncomfortable world": an Australian case study. *Education & Training*, 45, 2, 69-78.
- Patton, Micheal. Quinn. (2002). *Qualitative Research & Evaluation Methods*, Thousand Oaks: SAGE Publications.
- Persson, Ruben. (1989). Psykologutbildningen under 30 år: Från fil kand och fil lic till femårig psykologlinje. *Psykolog Tidningen*, 9. Hägersten: psykologiFörlagetAB. 10-12.
- Ranson, Gillian. (2003). Beyond 'gender differences': A Canadian study of women's and men's careers in engineering. *Gender, Work and Organization*, 10, 1, 22-41.
- Reid, Anna., Nagarajan, Vijaya., & Dortins, Emma. (2006). The experience of becoming a legal professional. *Higher Education Research and Development*, 25, 1, 85-99.
- Reid, Anna., & Petocz, Peter. (2002). Students' conceptions of statistics: A phenomenographic study. *Journal of Statistics*, 10, 2, Online at <http://www.amstat.org/publications/jse/>
- Reid, Anna., & Petocz, Peter. (2004). The professional entity: Researching the relationship between students' conceptions of learning and their future profession. In Chris Rust (Ed.), *Improving student learning: Theory, research and scholarship* (pp. 145-157). Oxford: The Oxford Centre for Staff & Learning Development.

- Reid, Anna., & Solomonides, Ian. (2007). Design students' experiences of engagement and creativity. *Art, Design and Communication in Higher Education*, 6, 1, 27-39.
- Roulston, Kathryn. (2001). Data analysis and 'theorizing as ideology'. *Qualitative Research*, 1, 279-302.
- Ruin, Olof. (1990). Statsvetenskap. *Rapport 1990:3*, Stockholm; Stockholms universitet, Statsvetenskapliga institutionen.
- Salling Olesen, Henning. (2001). Professional identities as learning processes in life histories. *Journal of Workplace Learning*, 13, 7-8, 290-297.
- Salling Olesen, Henning. (2006). Learning and experience. In Stephen Billett, Tara Fenwick, & Margaret Somerville (Eds.), *Work, Subjectivity and Learning* (pp. 53-67). Dordrecht: Springer.
- Salling Olesen, Henning. (2007). Professional identities, subjectivity, and learning: be(com)ing a general practitioner. In Linden West, Peter Alheit, Anders Siig Andersen, & Barbra Merrill (eds.), *Using Biographical and Life History Approaches in the Study of Adult and Lifelong Learning: European Perspectives* (pp. 125-143). Frankfurt am Main: Peter Lang.
- Salminen-Karlsson, Minna. (2003). Situated gender in situated learning – experiences from a computer company. In Eva Gunnarsson, Susanne Andersson, Annika Vänje Rosell, Arja Lehto, & Minna Salminen-Karlsson (Eds.), *Where have all the structures gone?* (pp. 45-76). Stockholm: Edita Norstedt.
- Salminen-Karlsson, Minna. (2006). Situating gender in situated learning. *Scandinavian Journal of Management*, 22, 31-48.
- Skovholt, Thomas. M., & Rønnestad, Michael. Helge. (1995). *The Evolving Professional Self*. Chichester: John Wiley & Son Ltd.
- Tanggaard, Lene. (2006). Situating gender learning in the workplace. *Journal of Workplace Learning*, 18, 4, 220-234.
- Teichler, Ulrich. (1998). The transition from higher education to employment in Europe. *Higher Education in Europe*, XXIII, 4, 535-558.
- Teichler, Ulrich. (2000). Graduate employment and work in selected European countries. *European Journal of Education*, 35, 2, 141-156.
- Teichler, Ulrich. (2007). Graduate Employment and Work: Various Issues in a Comparative Perspective. In Ulrich Teichler (ed.), *Careers of University Graduates. Views and Experiences in Comparative Perspectives* (pp. 1-15). Dordrecht: Springer.
- Temple, Bogusia., & Edwards, Rosalind. (2002). Interpreters/translators and cross-language research: Reflexivity and border crossing. *International Journal of Qualitative Methods*, 1, 2, 1-22.

- The Swedish National Agency for Higher Education. (2006). Etableringen på arbetsmarknaden – examinerade 2002/03. *Högskoleverkets rapportserie 2006:40 R*, Kalmar: Lenanders Grafiska.
- The Swedish National Agency for Higher Education (2008). Högskoleutbildningarna och arbetsmarknaden. Ett planeringsunderlag inför läsåret 2008/09, *Högskoleverkets rapportserie 2008:2 R*: Kalmar: Lenanders Grafiska.
- Thunborg, Camilla. (1999). *Lärande av yrkesidentiteter. En studie av läkare, sjuksköterskor och undersköterskor*. Academic dissertation. Linköping: Department of Education and Psychology, Linköpings University.
- Wahlström, Rolf., Dahlgren, Lars Owe., Tomson, Göran., Diwan, Vinod., & Beermann, Björn. (1997). Changing primary care doctors' conceptions - A qualitative approach to evaluating an intervention. *Advances in Health Sciences Education*, 3, 221-236.
- Williams, Carolyn. (2005). The discursive construction of the 'competent' learner-worker: from key competencies to 'employability skills'. *Studies in Continuing Education*, 27, 1, 33-49.
- Wenger, Etienne. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge, Cambridge University Press.
- Wenger, Etienne. (2000). Communities of practice and social learning systems. *Organization*, 7, 2, 225-246.
- West, Don., & Zimmerman, Candance. (1987). Doing gender. In J. Lorber & S. Farell (Eds.), *The social construction of gender* (pp. 125-151). Newbury Park: Sage.
- Witz, Anne. (1992). *Professions and patriarchy*. London: Routledge.
- Wästerfors, David. (1998). Studiestarten som ett äventyr. *Studenterna i Sverige, StudS, Högskoleverket arbetsrapport nr 5*, Stockholm: Högskoleverkets informationsavdelning.

Appendix 1a

Interview guide for senior students

1. What has it been like to be a student?
 - a) Follow up with psychology/political scientist/...
 - b) Why have you studied psychology/political science/...?
2. What stands out as most important during your studies?
3. Which persons have influenced you mostly (during your studies)?

Now I want to ask you about your notion about learning/knowledge/studies?

4. What was your idea about what Psychology/Political Science/...dealt with before you started studying? Where did that idea come from?
5. Can you describe how you felt on the first day at university?
6. Has your life in general been affected by your university studies? How? Describe?
7. What has kept you going on with your studies?
8. What should one do, to be regarded as a good student? How do you know that?
9. Are you better at anything now as regards your studies compared to when you started?
10. What situations in your studies have been most rewarding from a learning point of view? Why?
11. In what way do you benefit from your peers' experiences?
12. How has the program/institution supported your learning efforts?
13. When (in the programme) did you first see yourself more as a psychologist/political scientist/... than as a student? What happened? Where?
14. Can you recall a situation where you felt like a good student? Give details, describe what happened?
15. If you think back on your studies, what would you have changed? What would you like to keep? Why?
16. Have you tried to change anything in the programme during your studies? How did you do it? If no, why not?

And now I would like to ask you some questions about finishing studies and starting to work.

17. What sort of knowledge do you consider is important for a Psychologist/Political Scientist/...to have? Why? How do you know that?
18. How does this correspond with the knowledge that you have been introduced to in this programme?
19. How do you feel now as you are approaching the end of your studies? (retrospective)
20. How do you think about starting to work? (prospective)
21. How has this programme helped you to become a psychologist/political scientist/...?
22. What do you think a good psychologist/political scientist/... is good at? What can one do to achieve this?
23. Do you know what you are going to work with (if no, proceed to next question)? With what? (Content of the work tasks) Where? (Context of the workplace, organization, values, routines, etc.)
24. What kind of work do you feel well prepared for? How does this relate to your studies?
25. What kind of work do you feel less prepared for? How does this relate to your studies?
26. What do you want to work with in the future? Why? Have you considered working in another country? Which? Why?
27. What do you not want to work with in the future? Why?
28. Have you done anything to get a job that you would like to have? What have you done?
29. Have you had any job during your studies? What kind of job was it? Has it had any significance?

I would also like to ask you some questions about your future professional role and then some general questions.

30. Why do we have psychologists/political scientists/...?
31. Do you see any moral dilemmas or challenges in your future role as a psychologist/political scientist/...? What? Do you think that being a psychologist/political scientist /... entails a certain kind of societal and moral responsibility?
32. How have you prepared to take on such responsibilities?
33. What stands out as most important during your journey through the university?
34. If I was a young freshman, what advice would you give me in order to help me to become a good student?
35. What stands out as most important during our interview?

Appendix 1b

Interview guide for novice professionals

Reception in working life.

1. What is it like to work? Challenges/surprises/benefits?
2. Is it different to work compared to studying?
3. What was it like to be a newcomer in this workplace?
4. How do you think you were regarded then?
5. How are you regarded now? How would you explain this change – if any?

The work.

6. What do you work with? Content/tasks, length of employment so far, permanent/temporary, periods of unemployment – why?
7. If you think about your work and I mention the word responsibility, what do you think about then?
8. If you think about your work and I mention the word independence, what do you think about then?
9. If you think about your work and I mention the word co-operation, what do you think about then?
10. If you think about your work and I mention the word learning, what do you think about then?
11. What kind of competence do you need for your present job? Why? How do you know that? Is that the general opinion here?
12. Tell me about something important/significant you have learnt in this during your employment? Why do you think that was important? How did you learn that? (by yourself/with others, incidentally/intentionally) Is this something you had expected to learn?
13. What did you learn in your studies that you appreciate most in your job? Why?
14. When you encounter a task in your work that you cannot cope with, what do you do? Describe (by yourself/with others, incidentally/intentionally)
15. What should one do to be regarded as someone who does a good job? How do you know that? Is that the general opinion here?
16. What gives you energy in your work? What drains your energy?

17. Did work turn out to be as you expected? Have you tried to change anything in your workplace? Why/why not? How did you do it? What happened?
18. Have you experienced any moral challenges in your present job? How did you deal with them? Do you feel prepared to deal with such challenges?

The professional role/identity.

19. If you think about being a X, what kind of knowledge is important to have? Why? How do you know that?
20. What do you think a good X should be good at? What can one do to be a good X?
21. Can you remember a situation in your workplace when you felt like a good X? What happened?
22. Do you feel like an X now? Why/why not?
23. Why do we have X?
24. Think about your professional role as X. When I say moral responsibility, what do you think about then?
25. Think about your professional role as X. When I say societal responsibility, what do you think about then?

26. – 33. are optional questions

26. Are these topics that you talk about with others? Explain what, where and with whom?
27. Do you belong to a professional organization/network? Which? Why/why not? Contact with previous peer students?
28. Do you subscribe to/read systematically any professional journal or read non-fiction literature to any extent?
29. Are there any persons/professional groups or any 'traits' of your profession that you identify with in particular or distance yourself in particular from? Which? Why?
30. As an X, are you in a position – or have knowledge – that gives you power? How do you feel about that?
31. How do you see X's status in society? How do you feel about that?
32. How are you different now from when you finished your studies as a professional X/as a person?
33. What will you be working with in five years from now? Why? Have you considered working in another country? Why?

The studies in retrospect.

34. Looking back on your studies, what do you think about them now?
Do you think differently about them now compared to when you were a student? How? Why? Which persons meant the most to you during your studies?
35. How do you think your studies have helped you to become a good X?
36. With the experience you have now, is there anything you would like to change in your study programme? Add/subtract, change. – Why?

Appendix 1c

Interview guide for early career professionals

Work life

1. I want you to start by telling me what you are working with?
2. If you would describe a typical workday for you, what would it look like?
3. What are your work tasks?
4. What was it like when you started working here? Did you feel welcome? Did you have an adjustment period or did you get involved right away?
5. What is typical of this workplace? What is it like to work here? How is the work climate?
6. Do you like it here? What is it that makes you like/dislike it? What does well-being at work mean to you?
7. Do you feel like one 'of the gang'? How do you become a member of 'the gang'?

Educational choice

8. I want to continue by you telling me how come you chose to study Political Science/Psychology.
9. Did you have other educational choices? If so, why didn't you pick that one? Are there some similarities/differences between your choice and your other choices?
10. What influenced your choice? Who? How did they influence you? Did you have a role model? Did any specific events influence you?
11. What was it like to finally make up your mind? Did the decision evoke any feelings?
12. What do you think about your choice today? Satisfied? Any regrets?
13. Would you have made the same choice today? If so, what and why? If no, why? Do you have a dream occupation? How come you didn't choose that one?

The Profession

14. I will now turn to your profession. I want you to tell me how you look upon your work as a political scientists/psychologist today now

- that you have about three years of work experience. Has your picture of political scientists/psychologists changed? How?
15. What status do political scientists/psychologists have in society? How do you know this? Is there anything typical about political scientists/psychologists?
 16. You are a female/male and a political scientists/psychologist, does it mean anything for your professional practice? Is there a perception at work of what you should be like as a female/male? How? Can you see any advantages/disadvantages in being a female/male in your profession? Which one? How do you deal with those issues?
 17. What are your thoughts when you think back to your time at university? Educationally? Knowledge wise? Personal development? Social aspects? What did you learn? If you think of what you learned, how useful is it today? What was especially valuable about your educational programme? Less valuable?
 18. What do you do to develop your knowledge within your profession today? Different activities? Education? Conferences?

The work organization

19. I'm interested to know more about the organization you work in. Can you describe it? What does the organizational structure looks like? Are there different departments? Is it a female or male dominated workplace? Would you describe your workplace as being non-discriminatory regards gender? What does gender equality means to you?
20. Who has the most influence in your workplace? Why? Is influence the same as being in a position of power? What network do you see? Formal/informal? Why is that so? Are both female and males in these networks? How come? What is characteristic of these persons?
21. How are important decisions made in your workplace? Board meetings? Staff meetings? Informal networks?
22. How would you describe the leadership in the organization? How come?
23. What do you have to do in order to be seen as an important person in your workplace?
24. What opportunities do you have to change something concerning your work? How would you do? Flexibility in the organization.

The future

25. Now I want to talk about the future. Where do you see yourself in five years? Will you be working in the same workplace?

26. This position you have now, is it a step on the way or are you where you want to be?
27. How do you feel about making a career? What does it mean to you? What is a good career for you? Is it important to move around (different positions or professional areas) to climb the career ladder? What career choices can you choose between? If you see different tracks, what is characteristic of the people that pick the different tracks?
28. If you imagine the future, what role does your work have compared with other things in life? What influences your vision? The profession that you have, can it be combined with family life or social life?

Background questions

29. Now I want to end with some background questions about you. What different degrees do you have?
30. What does your family situation look like?
31. What jobs do your mother and father have?
32. What educational background do they have?

Thank you!

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