

Reasons for Leaving the Academy: a Case Study on the 'Opt Out' Phenomenon among Younger Female Researchers

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This study provides a contemporary case for exploring the assumed 'opt out' phenomenon among early-career female researchers. Based on rich data from a Danish case study, we adopt an integrated, holistic perspective on women's reasons for leaving the academy. We propose the concept of 'adaptive decision-making' as a useful analytical starting point for synthesizing structure- and agency-centred perspectives on academic career choices. Our study provides new insights into the myriad of structural and cultural conditions circumscribing the career ambitions and expectations of younger female (and male) researchers, at a critical transition point epitomized by high demands for scholarly productivity, international mobility and accumulation of social capital. Located within the context of Danish higher education, our study also adds to the current discussion of why academic gender stratifications persist in a country renowned for its leading international position on issues of societal gender equality.

Keywords: academic career, pluralist methodology, university, gender, early career

Introduction

Despite the rapidly increasing entry of women into European higher education systems, gender inequalities persist in the higher echelons of the academic profession. Indeed, a disproportionate number of female scientists leave the university sector at the earliest career stages (European Commission, 2013). Why is this so? The scholarship on academic recruitment and selection indicates that female applicants are sometimes at a disadvantage due to subtle gender biases among evaluators (see e.g. Moss-Racusin *et al.*, 2012). However, these findings do not explain why early-career female researchers leave the academy far more often than their male colleagues without applying for tenure-track positions, as illustrated in large-scale US studies (Goulden *et al.*, 2011; NRC, 2010). While the 'opt-out' phenomenon is well documented in the US, we know little about whether similar self-selection patterns exist in Europe. With considerable effort and some luck, we have been granted access to all recruitment records concerning appointments for academic positions at Aarhus University (AU) in Denmark for the period 2008–12. These records enable us to clarify whether complementary findings can be observed in a Danish academic setting. As documented in this article, the evidence is clear: the proportion of female Aarhusian researchers at postdoc level far exceeds their representation in the applicant pool for relevant research vacancies at the associate professor level. In other words, a disproportionate number of local female candidates abstain from competing with their male colleagues for the available positions at this university.

Based on rich qualitative and quantitative data material collected as part of a larger project on gender inequalities in the academy (Nielsen, 2015a), we explore the complex processes of stratification forming this pattern. Inspired by Cole and Singer (1991), we propose the idea of *feedback loops*

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as a useful starting point for analysing the marginal kicks and drawbacks constraining the career choices of younger female academics. Marginal kicks and drawbacks, so we assert, operate through self-reinforcing cycles of path-dependent developments (i.e. the feedback loops), where disadvantages in one context hamper women's chances of succeeding in another, and vice versa.

To tease out these disadvantages and explore their impact on younger women's (and men's) preferences for a future career, we bring together two distinct strands of theory: one focusing on how subtle assumptions about gender are built into the structures and functioning of modern bureaucracies and organisations (i.e. Acker's [1990] concept of *the ideal worker*); the other addressing the actors' capacity to exercise agency by placing ethical emphasis on people's capabilities to function and be what they have reason to value (i.e. *the capabilities approach* developed by Sen [1993] and Nussbaum [2000]). In particular, we propose the idea of 'adaptive decision-making' (Leahy and Doughney, 2006; Nussbaum, 2000) as a fruitful heuristic for combining structure-oriented and more agency-centred accounts of how career preferences and ambitions are formed in the academy.

This article's empirical anchoring is based on two organizational surveys on work-life issues, recruitment data, and qualitative interviews with both department heads and former researchers who made a conscious choice to leave AU.

We make four key contributions to the literature. (1) The integrated, holistic framework and pluralist methodology deepens our understanding of the cultural and structural conditions influencing the career ambitions and expectations of young academics. Indeed, the existing literature provides innumerable insights adding to our knowledge on the institutional barriers facing early-career female faculty (more on this in the following). Yet few studies have adopted a similar multilevel approach (see Etzkowitz *et al.*, 2000; Husu, 2001), making it possible to empirically pin down the complex feedback loops fusing these barriers into broader patterns of cumulative disadvantages. (2) By bridging Acker's account of the gendered organization with Nussbaum's and Sen's focus on 'agency inequalities', our study introduces a novel theoretical framework for interrogating the complex interplay between individual agency and structural constraints circumscribing younger female academics' career decisions. The advantage of this framework is that it leaves open the analytical option that young female (and male) researchers actively make choices, but make such choices under the influence of cultures and structures over which they have little or no influence (Walby, 1996). (3) Universities are facing expanding demands to render their activities accountable on externally defined parameters of quality, efficiency and economic relevance. As a result, academic life and working conditions have come under increasing pressure (Altbach, 2000; Musselin, 2008). This development highlights the continued relevance of thoroughly scrutinizing the cultural and structural conditions circumscribing the career choices of junior faculty: while gender inequalities persist in the academy, the systemic disadvantages keeping women from advancing at the same rates as their male colleagues have been proven to change over time (Caprile *et al.*, 2012). (4) Our final key contribution relates to the particularity of the contextual and cultural setting in which our study unfolds. Denmark has for long been considered an international frontrunner on parameters of societal gender equality (GE). Indeed, the country is rated among the top performers in the most recent international GE rankings, highlighting Danish women's relatively high employment rates, educational attainment, representation in parliament, health condition, and generous childcare and parental leave policies (EIGE, 2013; WEF, 2014). However, despite a strong international reputation on general parameters of GE, stratifications persist in the Danish academy. In fact, the female share of associate and full professorships in Denmark is below the European average (see Table A1). Recent cross-country comparisons also highlight noteworthy national differences between Denmark's national and institutional approaches to GE in research and that of its neighbouring welfare states in the north (i.e. Norway and Sweden) — countries with whom Denmark share many similarities concerning culture, welfare system, family-friendly policies and dual-breadwinner models. The Norwegian and Swedish legislative frameworks provide clearer structures of responsibility for universities' work with GE than is the case in Denmark. Moreover, Norway's and Sweden's national and institutional efforts to promote women's advancement in research revolve around a broader span of different policy measures and programs compared to the Danish (Nielsen, 2016). These findings all

add to the picture of Denmark as a somewhat special context when it comes to GE in research. This study deepens our understanding of the Danish case by giving voice to the lived experiences of young academics and their managers, and by mapping the structural and cultural conditions perpetuating gender inequalities in this particular setting.

The article proceeds as follows. First, we outline the central findings from the existing gender and science literature dealing with the transition point from early career to senior faculty. Second, we present and discuss the selected theoretical framework. Third, we account for case-selection issues and outline the empirical scope. Fourth, we present the analysis. We conclude by summarizing the main findings and reflecting on implications for policy.

Reasons for leaving academia: a brief review of the literature

As Bailyn (2004) observes, the postdoctoral career stage, which generally occurs at a point in life when many academics start families, is characterized by enormous pressures for quick success. Thus, women at this career point are sometimes at a slight structural disadvantage due to high career–family conflict levels (Etzkowitz *et al.*, 2000; Goulden *et al.*, 2011). Mason and Goulden (2004), for instance, show how early-career male parents in the US are 38 per cent more likely to achieve tenure than their female colleagues with children (Mason and Goulden, 2004). Numerous studies also point out the adverse gender effects of the precarious employment conditions characterizing the early phases of the typical academic career (Todd and Bird, 2000; Wolfinger *et al.*, 2009). As observed by Ackers (2004), this uncertainty is further reinforced by increasing international demands for research mobility across institutional and national boundaries. She shows how women's mobility may be particularly challenged due to family obligations and dual-career priorities.

Many scholars have also highlighted the subtle ways in which cultural ideals and organizational logics serve to perpetuate gender disparities in academic institutions. Schiebinger (1999), for instance, highlights the war-like, competitive nature of much scientific activity, noting that this type of environment 'intentionally or not, tends to sideline women' (p. 89). Knights and Richards (2003) similarly describe the academic production as 'shrouded in masculine norms and values surrounded by the rational and competitive pursuit of knowledge' (p. 214).

Finally, scholars have pointed at women's insufficient social ties to institutional gatekeepers and more experienced research colleagues as a key factor in explaining the disproportionate female attrition rates. For instance, Etzkowitz *et al.* (2000) assert that 'the presence or lack of connections to a mentor or role model of scientific success [that] gives some individuals a head start and places others at a disadvantage ... is all too often gender linked and makes a difference even among the successful' (p. 118) (see also Husu, 2001).

Taken together, these examples sketch a picture of the early career stage as a critical transition point epitomized by a myriad of more or less subtle barriers and drawbacks. Our pluralist methodology and multilevel approach provide a fruitful framework for capturing how such barriers and drawbacks interact and become self-reinforcing patterns tapping into the career decisions and subjective strivings of this group of researchers.

Theoretical framework

As observed by Walby (1996), feminist theorizing on gender stratification in the labour market often involves a puzzling structure–agency dilemma. This dilemma imposes an analytical choice between two symmetrically problematic positions: 'if women are seen as having agency then they must be seen as choosing their oppression, and if they do not choose it, as in structural account, then they are merely passive victims' (Walby, 1996, p. 2). A basic premise for overcoming this dilemma, according to Walby, lies in the development of a conceptual framework 'which allow[s] for both the abstraction of institutional formations, which are beyond and above any individual action, as well as recognizing the reflexivity of human actors' (Walby, 1996, p. 3). By bridging sociologist Joan Acker's influential theory of the gendered organization with the capabilities approach developed

by economist Amartya Sen and philosopher Martha Nussbaum, this study contributes to the development of such an integrated theoretical framework.

According to Acker (1990), subtle assumptions about gender constitute an inherent part of how allegedly gender-neutral organizations and bureaucracies are structured. Her work addresses the social processes of rationalization and legitimization through which gender hierarchies are produced and reproduced in modern organizations. More specifically, she asserts that the gendered nature of the prevailing organizational logic permeates everything from work rules and job descriptions to pay scales and job evaluations. Organizations, therefore, continuously reinforce a cultural image of the ideal employee as a loyal male worker with few obligations and commitments outside the workplace. Acker identifies five distinct processes through which the gendering of organizations take place: (1) the construction of gendered divisions of employee tasks and responsibilities, acceptable employee behaviours and hierarchical power relationships; (2) the construction of gendered symbols and images, legitimizing and reinforcing the aforementioned gender divisions; (3) gendered patterns of social interaction, sometimes represented in role patterns as dominance and repression; (4) the construction of gendered components of individual identity, reflected in the gender-specific behaviour and subjective strivings of employees; and (5) the constant reproduction of an allegedly gender-neutral organizational logic structured around the male norm (Acker, 1990).

By giving analytical priority to structures, hierarchies and culturally embedded gender symbols and identity formations, Acker's theory convincingly challenges the axiomatic assumptions underpinning the more voluntaristic, rational-choice-inspired approaches to gender and career preference formation (see e.g. Hakim, 2004; Wolkowitz, 2000). However, one may question whether her theory succeeds in accounting for how gender dynamics — as is the case with other types of organizational behaviour — are contingent on institutional conditions and the agency of the actors taking part in these organizations. Critics have, for instance, questioned her basic assertion that bureaucratic organizations are essentially gendered. As Britton (2000) notes, 'simply assuming, a priori, that organizations are gendered drastically limits the potential of this approach to produce social change' (p. 423). Sayer (2000), in a similar vein of criticism, argues that Acker and like-minded theorists, while providing convincing evidence of the gendered aspects of bureaucratic organizations, have failed to demonstrate that these organizational forms are not only contingently masculine in their features. In this regard, it is relevant to highlight Acker's ethnomethodologically informed understanding of gender (i.e. the idea of 'doing' gender). In line with West and Zimmerman (1987), she interprets the gendered divisions structuring organizational life as expressions of socially acquired attributes and behaviours produced and reproduced by organizational actors in their day-to-day activities (Acker, 1992). The implicit notion of social action underpinning her work, in other words, by no means denies the possibility of human agency and social change; but her meta-theoretical standpoint on these questions could benefit from more explicit reflections and analytical operationalization.

In this regard, we propose a joint analytical framework bridging Acker's account of the gendered organization with Nussbaum's and Sen's focus on 'agency inequalities'. We see this theoretical combination as a synergetic 'dual framework' leaving open the analytical option that young female (and male) researchers actively make choices, but do so under conditions determined by institutions and structures over which they have only little or no power (Walby, 1996).

Sen and Nussbaum's capabilities theory (e.g. Nussbaum, 2000) implies an ethical emphasis on the question of whether human beings are 'freely able to fully function, and to be or do what they have reason to value' (Cornelius and Skinner, 2008, p. 141). As Hobson (2011) puts it, the core issue 'is not only what individuals choose, but the choices that they would make if they had the capabilities to lead the kind of lives that they want to lead' (p. 148). This formulation epitomizes a central conceptual distinction between *functionings* and *capabilities*, i.e. the difference between what people actually do and the possibilities available to them for actualizing a different scenario. This conceptual distinction opens theoretical space for scrutinizing the influence of various external (e.g. organizational or structural) conditions on the actors' capacity to exercise agency.

Nussbaum distinguishes between three different types of capabilities. *Basic capabilities* cover the innate equipment (e.g. the ability of practical reasoning and imagination) that constitutes the basis

for developing more advanced capabilities. *Internal capabilities* refer to the readily usable abilities promoted and developed (through socialization, training and education) on the basis of the basic abilities. Finally, *combined abilities* are defined as 'internal capabilities combined with suitable external conditions for the exercise of the function' (Nussbaum, 2000, pp. 84–85). The applicability of internal capabilities is, in other words, contingent on the organizational and societal conditions in place. Agency always operates in a universe of constraints (Hobson, 2011), and the gender dimension therefore often becomes the focal point in a capabilities-based conceptualization of social justice (Nussbaum, 1999). Nussbaum's (2000) *adaptive preferences* concept represents a particularly fruitful contribution in this regard. Building on the capabilities approach, she argues that human beings adjust their aspirations and desires in accordance with their given life situation. This means that the ambitions, motivations and expectations of female academics should be interpreted in the context of the specific structural and cultural circumstances defining their work situations. When studying the 'opt out' phenomenon among young academics we are, in other words, illuminating a complex social pattern of *adaptive decision-making*, which calls for a detailed multilevel analysis of the internal capabilities and the contextual conditions involved.

As argued by Zimmermann (2006), shifting moments in career trajectories can be viewed as 'privileged observation sequences' when applying the capabilities framework in sociological empirical investigations. This is because such moments, due to their transitional character, make social patterns of adaptive decision-making — and the preferences, aspirations and capabilities involved — more salient. However, while the capabilities approach provides useful analytical tools for capturing agency in such transitions, the framework's capacity for detecting the subtle organizational practices conditioning the decision-making of early-career researchers and producing gendered career outcomes appears somewhat underdeveloped. This highlights the relevance of linking it to Acker's more structural account.

Data and methods

This article is based on a case study exploring the opt-out phenomenon among early-career researchers at AU, the second-biggest public institution of higher education and research in Denmark. With approximately 40,000 students enrolled, AU covers a broad range of disciplinary domains and research fields and currently employs approximately 4000 researchers. The academic career system at AU is characterized by a decreasing number of available vacancies as one advances in the organization. The tenure-track model is rarely employed, meaning that most postgraduate researchers effectively begin an academic career without any prospects of a formal career path. As Table A1 illustrates, the university's modest share of female researchers reflects a broader national and international trend. For an overview of the gender distributions across scientific fields at AU, see Table A2.

AU's most recent GE action plan was introduced in 2009. A new action plan has been under construction since 2014, but is yet to be announced. Existing research comparing AU's GE work with that of five other Scandinavian universities (one Danish, two Norwegian and two Swedish) reveals noteworthy national and institutional variations. The promotion of GE is less frequently framed as a rights- and justice-based issue in the policy documents of the Danish universities. As opposed to its Norwegian and Swedish sister universities, Aarhus and Copenhagen mainly legitimize their GE activities by emphasizing the strategic advantages of retaining more women in research (e.g. increasing innovation, creativity and quality). The underlying assumptions structuring the GE rhetoric in the policy documents of the Danish universities are also more oriented towards the 'fixing the women' paradigm (i.e. addressing the persistent inequalities as a problem related to the women rather than to the organization) than is the case at the Norwegian and Swedish universities (Nielsen, 2014). These institutional disparities are also reflected in the actual measures taken to promote women's advancement. The Danish universities have weaker governance and responsibility structures for GE in place, and they are less inclined to adopt measures aimed at changing organizational structures and cultures for the benefit of women (Nielsen, 2016). These distinctive features of the Aarhusian case

may, as illustrated in the following sections, serve to influence the awareness, framing and expression of the gendered career outcomes among the participants in this study.

Pluralist methodology

We adopt a critical realist-driven pluralist methodology. To move beyond the merely empirical depiction of reality and reach a deeper understanding of its underlying structures and mechanisms, critical realists advocate a scientific approach that integrates theory-guided conceptualizations and methodological pluralism (Danermark *et al.*, 2002). In this study we combine the quantitative overview provided by survey data and organizational recruitment statistics with more in-depth and interpretive understandings generated by qualitative interviews with postgraduate researchers and department heads. This methodological strategy makes it possible to address the social phenomenon under investigation from numerous angles, while also accounting for the complex connections between individual experiences and organizational and societal structures. Figure 1 displays our data sources and the combination and integration of methods (more on this follows).¹

Survey data and recruitment statistics

We draw on three different quantitative datasets. The first (dataset 1) includes information about all associate professorship appointments at AU from 2008 to 2012 ($N = 440$). This dataset provides a unique opportunity to investigate proportional gender differences in the number of postgraduate scholars deciding to opt out of a research career. The second dataset (survey 1) draws on a comprehensive psychological workplace assessment survey conducted at the university in 2012. The survey addresses all employees in the organization (more than 6000 people, including 561 postdocs, completed the questionnaire, resulting in an 82.5 per cent response rate) and includes several topics of relevance to this study (e.g. information on job satisfaction).² (See the specifications in sample Table A3.) Third, we have conducted a web-based survey (survey 2) addressing career-life issues among junior research faculty. As depicted in Figure 1, the survey was developed to elaborate on the selected findings of the aforementioned workplace assessment. Moreover, we used exit interviews

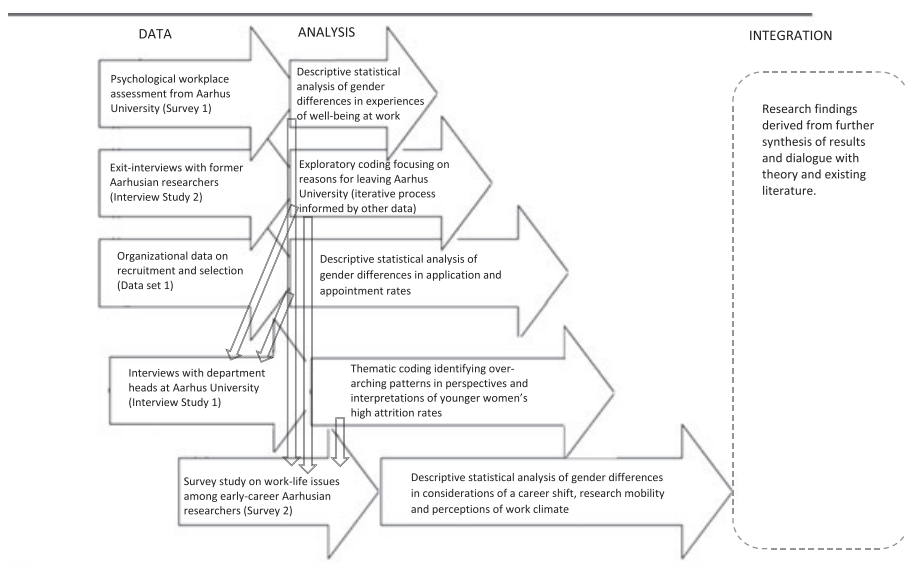


Figure 1: Research design

with former Aarhusian researchers at the postdoc level and department heads (see the following specifications) to develop a number of survey questions illuminating various issues affecting young research employees' considerations regarding a career shift.

The data collection took place between January and March 2014. Initially, the idea was to send the survey questionnaire to 700 PhDs (50 per cent women, 50 per cent men) and 800 postdocs (50 per cent women, 50 per cent men). Since there were only 274 female postdocs in the organization at the time, we ended up with a final sample of 700 PhDs and 674 postdocs. The response rate was 38 per cent, which is within the expected normal range for this target population (Baruch, 1999). (See the sample specifications in Table A4). The three quantitative datasets have been analysed in SPSS using descriptive statistics. We are not employing the survey data with an ambition of acquiring externally valid response patterns representative of a larger population. In fact, the analytical conclusions derived from these data are restricted entirely to the respondents involved in the studies. We have made this decision to account for the statistical fallacies involved when making general inferences from data that do not meet the statistical requirements of probability sampling (for a discussion on this, see Gorard [2015]). That being said, we consider the survey data to contribute important insights adding to our understanding of younger academics' career choices.

Qualitative interviews

We conducted in-depth, semi-structured interviews with 24 of the 27 department heads (interview study 1).³ Of these, 20 were conducted face-to-face; the rest took place over the phone, and lasted 30–90 minutes. The interviews focused on the department heads' explanations for and interpretations of the high dropout rates among young female researchers. As illustrated in Figure 1, the analytical themes structuring the interview guide were derived from a preceding quantitative analysis of the recruitment and survey data (i.e. dataset 1 and survey 1).

We also draw on 16 exit interviews with researchers in positions equivalent to the postdoc level (nine women and seven men from a wide range of different scientific fields), who (in most cases) deliberately decided to leave the university before the expiration of their employment contracts (interview study 2).⁴ These interviews took place in 2010 as part of a larger qualitative study initiated by the AU GE taskforce. The study addresses the interviewees' reasons for leaving, their job satisfaction at the university, and their social integration in the local research environments. On average, the interviews lasted around 30 minutes; most (13 out of 16) were conducted face to face.⁵ Approximately half of the (former) AU researchers were recruited on the basis of a survey distributed among the department heads asking them to identify candidates that they lost but would have liked to keep in their departments. The other half was selected randomly from a dataset including information on all scholars opting out of a career at the university 1–3 years prior to the study. Both of the qualitative datasets were coded in Nvivo. The thematic coding of the qualitative material occurred in a reciprocal process, where 'coding facilitates the development of themes, and the development of themes facilitates coding' (Ayres, 2008, p. 4). In our coding of interview study 1, we started out by developing a number of overarching thematic nodes adhering to the interview themes structuring the interview guide. These included 'the employable researcher', 'recruitment and selection procedures', 'international research mobility', 'scientific performance' and 'women's disproportionate attrition rates'. To develop a more in-depth and nuanced understanding of the data, the second step in the coding process drew on perspectives from the selected theoretical framework, existing literature on gender stratification and insights from our prior work on GE discourses and practices at AU (Nielsen, 2014, 2016). This iterative process resulted in the following analytical themes, among others: 'symbolic boundary work' (with sub-nodes for each attribute differentiating female researchers from their male colleagues), 'the ideal employee', 'prerequisites of the academic environments' and 'relationships between the private and work domains'.

The coding of interview study 2 started out as an iterative analytical process involving several rereadings of the data material. The initial analysis was exploratory and focused on identifying different patterns that could inform our interviews with department heads and the construction of

survey study 2 (see Figure 1). As part of this coding process we also focused on identifying differences and similarities in male and female postdoctoral researchers' reasons for leaving the university. The themes identified during this step included 'inclusion and exclusion in local research environments', 'international research mobility', 'limitless time norms and performance demands', 'experiences of recruitment and selection', 'job insecurity' and 'family concerns'. After analysing other types of data, we returned to the interviews with the purpose of connecting the interview material with central insights from the additional data sources. For instance, overriding patterns detected in the survey studies were connected with relevant examples and counter-examples from the interview material, thereby forming the basis for a more in-depth understanding of the complex connections between individual experiences and broader organizational patterns.

Results

Figure 2 juxtaposes the representation of women among applicants for associate-professor-level positions at AU with their presence in the pool of local candidates for such positions. The figure shows a gender imbalance of 8–16 percentage points for associate professorships, depending on the year. In other words, a disproportionate number of the early-career female candidates abstained from applying for vacant positions at the university. A closer look at the data (see Table A5) reveals that this pattern is consistent across scientific fields. Further, they show that women's share of appointments exceeds their representation among the applicants. This means that women applying for associate professorships have a higher chance of being appointed than their male competitors, which may be explained by the high levels of self-selection in this group. As illustrated in the following, subtle and unintended gender bias may, however, still be at play in the recruitment processes.

Institutional practices of preselection

A recent study on recruitment and selection processes at AU reveals that 37 per cent of the vacant associate professorships in the organization have merely one applicant (Nielsen, 2015b).⁶ As the study documents, preferred internal candidates for academic positions are sometimes identified prior to the actual recruitment process, which may partly explain this imbalance. The department heads (and deans) can, for instance, frame a given vacancy to meet the qualifications of one or a few local 'excellent' candidates, and positions are in some cases announced at specific points in time to fit the career progression of preferred internal candidates, which may prevent other local candidates from competing for these positions. While such practices possibly favour male and female researchers alike, Acker's work reminds us that their reliance on formal and informal network relations, at least to

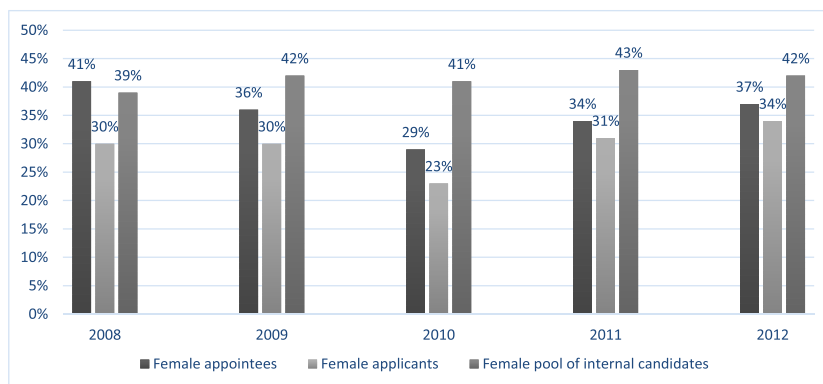


Figure 2: Proportion of women applying for grade B positions relative to the share of potential female candidates occupying grade C positions (dataset 1)

some extent, risk putting women at a disadvantage (Acker, 2006). This perspective is also emphasized in the interviews with three former female postdocs, one of whom notes:

There's a line of people and maybe just one senior position available... And when I began to ask about it, I realized that they have a kind of list — a secret recruitment list — somebody decided who they wanted to put their money on; which men they wanted to put their money on ... In the end, I became completely desperate of being ascribed this role as 'the little helper' — being a woman in a male-dominated environment and experiencing that you are put off in a waiting position. (Female researcher, interview study 2)

This quotation is an illustrative example of how informal and opaque practices of recruitment and retention sometimes operate to narrow the advancement opportunities of younger female academics. The postdoc interviewed here feels neglected by the local gatekeepers. Curious to make her way to the upper ranks, she has been asking around at the department only to realize that issues of selection are treated with high levels of confidentiality. Hence, her postdoc has become a 'dead-end' job. She feels put off in a waiting position, and does not know how to effectively reap the benefits of her hard work. Unlike some of her male competitors, she lacks the necessary personal ties to 'someone' with money and power. Indeed, her exclusion from the circles of high-status scholars deciding 'who's in and who's out' even prevents her from making an informed choice as to whether her hard work in the long run measures up with the actual chances of someday getting tenure. Hence, to regain control of a stagnant career and actively resist the undesired role as the 'little helper', a career shift becomes her only meaningful option. Another interviewee describes a similar experience:

It was kind of strange seeing this group of men being rescued by their colleagues every time they ran out of external funding. 'We've made plans for you', they said. I experienced a strong difference in treatment based on gender. The men were just more privileged ... It's just 'part of the game', but these circumstances frustrated me sometimes ... You need to be very strategic and collaborate with those in power. It's not so much about the quality of your research — it's all about knowing the right people. (Female researcher, interview study 2)

What makes this quote interesting is how the preselection of local candidates is represented as an obvious and well-known practice at the department level. 'It's just "part of the game"', our interviewee remarks, and female academics in particular have to be very strategic to advance under such circumstances.

Both of these quotations highlight the continued relevance of Martin's (1996) pioneering work on the subtle 'mobilizations of masculinities' at play in organizational hiring processes. Recently, this idea was revitalized by van den Brink and Benschop (2014) in a study of recruitment and selection in the Dutch academy. As they observe, liminal enactments of masculinities (i.e. subtle practices of 'gender homophily' that male academics are not fully aware of) influence who is encouraged to apply for positions and whose reputations are boosted by senior colleagues. What we can derive from this work is that deep-layered, implicit behavioural patterns sometimes operate to reinforce the hierarchical divisions of the gendered organization through informal practices of networking. While the available recruitment data make it difficult to estimate the extent to which academic recruiters make use of preselection, the interview material illustrates that (female) researchers, despite their 'readiness to act' (i.e. internal capabilities), are sometimes prevented from effectively reaping the benefits of their academic contributions under such circumstances. As we shall show in the following, gender dynamics also tend to influence the day-to-day interactions in many Aarhusian research environments, with particular implications for the wellbeing of younger female faculty.

Perceptions of work climate

The psychological workplace assessment (survey 1) provides noteworthy insights into how postgraduate faculty members perceive the departmental climate. As illustrated in Table 1, no overall differences can be identified between women and men regarding interest in their work (Q1). Women,

Table 1: Job satisfaction of postdocs; proportion responding 'always/almost always/often' (survey 1)

	Total (%)		S&T (%)		Health (%)		BSS (%)		Arts (%)	
	F	M	F	M	F	M	F	M	F	M
Q1. Do you find your work interesting?	92	93	88	94	90	94	97	94	93	88
Q2. Do you feel comfortable at work?	76	83	78	83	71	97	87	81	70	76
Q3. At my workplace we're good at working on tasks together	64	72	67	73	72	82	65	69	57	64
Q4. At my workplace you're recognized for a job well done	47	60	55	67	46	78	46	50	42	37
Q5. At my work we're willing to listen to colleagues	67	74	72	81	63	79	64	64	66	62
Q6. At my workplace I feel part of the larger social community	56	64	59	63	49	79	66	62	52	61
Q7. Do you feel lonely at work?	18	12	20	11	20	6	8	9	20	19
<p>The questions included the following response options: 'always', 'almost always', 'often', 'rarely', 'hardly ever' and 'never'.</p> <p>S&T, science and technology; BSS, business and social sciences.</p> <p>N = 561.</p>										

however, feel less comfortable (Q2) and more lonely at the workplace (Q6 and Q7) than their male colleagues. They also experience their local work environments and colleagues as less collaborative (Q3) and accommodating (Q5), and feel less recognized for a job well done (Q4). The gender variations are particularly noteworthy within the health sciences, illustrating that even in areas where women comprise the majority of junior faculty their job satisfaction may be impeded by gender dynamics. While these differences may seem only marginal when interpreted separately (in total, the gender variation extends from 6 to 13 per cent), their impact on female postgraduate attrition rates should not be underestimated. As illustrated in the work of Callister (2006), there is a direct effect of department climate on the intentions of academics to quit, and this relationship is particularly strong for female researchers.

A key factor explaining this variation may be that some early-career female researchers struggle with lower levels of social capital (i.e. the accumulation of resources based on networking and personal relationships), which hinders them from taking part in the networks in which new ideas are developed, research projects are planned, efforts are recognized, funding is distributed and future job openings are sketched out. A former female postdoc describes it thus:

We weren't that many women in my department, and I often felt that we weren't included in many of the activities going on. In the printing room, for instance, we found some printouts indicating that our male colleagues were establishing networks, creating centres, and collaborating in many different constellations, and we actually felt that it would be relevant for us to participate in these networks, but we weren't asked to participate. I'm not sure if my male colleagues did this intentionally, but they had this 'friends only' boys club, and we weren't part of it. (Female researcher, interview study 2)

As illustrated in this quotation, liminal mobilizations of masculinity may not only work to the disadvantage of women in practices of recruitment and selection; they sometimes underpin the day-to-day interactions in academic environments, operating as 'non-events'. Non-events, as observed by Husu, 'are about not being seen, heard, supported, encouraged, taken into account, validated, invited, included, welcomed, greeted or simply asked along' (Al-Gazali *et al.*, 2013, p. 38; see also Husu, 2001, 2005). Due to their hidden character, these forms of subtle and covert

discrimination are both difficult to recognize and challenging to address. Nevertheless, even apparently harmless non-events may accumulate over time and result in marginally weaker network ties for women, which will impede their social capacity to act as academics (i.e. to employ their internal capabilities) and successfully translate their talents into scientific rewards and career advancement. At the same time, such 'non-events' may serve to reinforce the symbolic boundary work of the organization (more on this follows) by covertly reminding women of their exclusion from hidden male domains of friendship cliques and informal network ties.

Managerial explanations for the leaky pipeline phenomenon

In interview study 1, we specifically asked the department heads to reflect on what they considered to be the main explanations for the persistent gender inequalities in their own departments. In response, 14 of the 24 interviewees specifically addressed issues related to women's 'otherness' and incompatibility with the prevailing cultures and characteristics of the local research environments.⁷ Table 2 displays the central characteristics highlighted by the interviewees about their research environments and the usual attributes differentiating female researchers from their male colleagues. Each letter in parentheses represents a particular department head. The letters, in other words, provide an overview of the variation in whom and how many, emphasizing the different characteristics.

As displayed in Table 2, according to the interviews women typically lack the necessary self-confidence, mobility and 'competitive spirit' to succeed in an individualistic, performance-based organization. Similarly, women's typical prioritization of their responsibilities outside the workplace (e.g. family) and their need for job security are also emphasized as central explanations for women's higher attrition rates. Drawing on the work of Lamont (2001) and Epstein (2007), these findings can be interpreted as examples of how gender roles are formed and perpetuated in academic organizations through symbolic boundary work. Women's attributes and qualities are here symbolically separated from the main features and characteristics of the research environment, thus representing them as 'soft actors' in a 'hard' world of science. This is a world epitomized by pre-given and indispensable organizational requisites structured around the notion of the ideal employee as being highly competitive, individualistic and with few commitments outside the workplace. Hence, the interpretation of gender inequality as a problem relating to the women rather than to the organization

Table 2: Department heads' reflections on gender roles in research and the compatibility of women with the research environment (interview study 1)

Research environments	Men's attributes	Women's attributes
<ul style="list-style-type: none"> • Competitive environment (a, f, j) • Individualistic organization (a, j) (focus on individual CVs) • Macho culture (a) • High publication pressure (b, j) • Science as elite sport (c) • Insecure career path (c, f, h, j, n) • Tough world (j) • Egoistic (f) • Self-centred (f) • Making big sacrifices for research (f) • Limitless work-time norms (not a 9–5 schedule) (c) 	<ul style="list-style-type: none"> • Alpha males (a) • Competition-driven (a) • Egoistic (b, c, f) • Science as elite sport (work > family) (c) • More but less exhaustive and thorough publications (l) • Societal structures: traditionally easier for men to pursue a career in academia (b, g, k, m) • 'New type of men' (holistic/network focus/take responsibility) (c) • Live (work) from hand to mouth (c) • High-speed production (c) 	<ul style="list-style-type: none"> • Lack of self-confidence (a) • Shy away from competition (a, g) • Need job security (c, n) • More social (c, j) • Less egoistic (c, f) • Better at networking (c) • Collectivist approach (c, d) • Communication competencies (c, d) • Family priorities (b, c, f, g, h) • Need economic security due to family responsibilities (e, h) • Some shy away from management (i) • More exhaustive and thorough in their approach to publications (l) • More holistic worldview (work–life balance) (b) • Less mobile (e, n, c, g)

not only permeates the policy discourses at AU (Nielsen, 2014); it also manifests itself in the symbolic boundary work of some of its representatives. One of the department heads notes:

At some level, I consider the women to be more social and less egoistic. And if you want to share your work with others and don't want to dedicate your whole life to science, this is sometimes counterproductive to the aim of gaining tenure ... It's hard to get this far running at half-speed. It just is. So, it's a paradox, because those that get really far, they put some hours and life into it. If we want to be a part of the world elite, then we'll definitely also need the ones that focus on the detail and just keep on going. (Department head, interview study 1)

This quotation constitutes an illustrative example of the symbolic boundary work underpinning the viewpoints of some department heads. Due to their allegedly non-egoistical and social behaviour, women are represented as unwilling or incapable of making the necessary sacrifices in their private life to succeed in an academic career. This interpretation tends to revolve around an idea of the academic career as a (religious) 'calling' secluded from any other aspect of social life. 'Presenteeism' (Etzkowitz *et al.*, 2000) and long-hour working days are here considered as indispensable 'sacrifices' that any researcher must be 'willing' to make to become a part of the 'world elite'. Having commitments outside the workplace, therefore, becomes an 'active choice' incompatible with the aim of getting tenure. From a capabilities perspective this interpretation can be viewed as problematic because it fails to account for the differential ways in which organizational structures and performance assessments impact the advancement opportunities of younger male and female academics (more on this follows). Moreover, this type of symbolic boundary work risks stereotyping women as 'soft actors' even when they behave in accordance with the image of the ideal employee.

As displayed in Table 2, several of the department heads also highlight allegedly positive features (e.g. women are less egoistic and more social than men, more collectively oriented, better at communicating, and more exhaustive and thorough in their publication activities). However, in the context of the prevailing research cultures, these qualities collide with the image of the ideal employee and become a gendered disadvantage through 'disappearing acts' (Fletcher, 2001). From a capabilities perspective, one might therefore also contend that the university departments, to varying extents, lack the necessary conditions to enable female researchers to employ their internal capabilities and be rewarded for their invisible work (Fletcher, 2001).

Consideration of a career shift

As outlined in Table 3, 47 per cent of the male postdocs participating in AU's 2012 psychological workplace assessment (survey 1) consider themselves satisfied with their future job prospects at the university. In contrast, this is the case for 36 per cent of the women. The gender disparities are

Table 3: Postdocs' satisfaction with future job prospects at Aarhus University, 2012 (survey 1)

	Total (%)		S&T (%)		Health (%)		BSS (%)		Arts (%)	
	F	M	F	M	F	M	F	M	F	M
I'm happy with my job prospects at Aarhus University (Totally agree/partly agree)	36	47	32	43	27	56	49	55	39	45
The question included the following response options: 'totally agree', 'partly agree', 'neither agree nor disagree', 'partly disagree' and 'totally disagree'. S&T, science and technology; BSS, business and social sciences. N = 561.										

particularly noteworthy in the health sciences, which may be explained by the availability of a somewhat appealing alternative career path outside the university in this field. As one department head from health sciences remarks, a general practitioner job, for instance, often involves a more secure position with a better salary for medical scholars than what is available in the academy. However, noteworthy gender disparities in perceptions of work climate among the junior faculty in this field (see Table 1) may also play an important role in explaining this pattern.

Survey 2 focuses attention on the different factors influencing the considerations of male and female junior researchers regarding a career shift. As outlined in Table 4, the number of female PhD candidates who feel that their current employment, at least to some extent, has provoked the consideration of a career shift (Q1) is ten percentage points higher than among male PhD candidates (56 per cent versus 46 per cent), while the gender distributions among postdocs regarding this question differentiate by five percentage points (75 per cent versus 70 per cent). With regard to job insecurity, 92 per cent of the female and 76 per cent of the male postdocs highlight this issue as a factor that has somehow affected their thoughts on quitting (Q2), whereas there are no noteworthy gender differences among the PhDs regarding this question (59 per cent versus 58 per cent). As illustrated by these results, the flexible and precarious work arrangements characterizing the early stages of the academic career — while adding to the multiplicity of factors reinforcing gender inequalities in academic career outcomes — do not necessarily represent an ideal work situation for men. Such conditions deteriorate the job satisfaction and wellbeing of both male and female faculty. Six of the former AU researchers participating in interview study 2 also emphasize the university's opaque and unclear career paths as a factor influencing their decision to leave the organization. Two interviewees note:

The uncertainty and the stress, I couldn't live with it ... Job insecurity may be the key explanation why I left AU. The management is totally invisible for the individual worker. They care about the department as a whole, not the individual. (Male postdoc, interview study 2)

The uncertainty was horrible, really horrible. It was so sickening. This feeling of being in suspense — 'what am I going to do?' No one tells you anything ... You're turning 40 soon and you're still a postdoc. It makes sense to me that many opt out. They're simply fed up. (Female postdoc, interview study 2)

Both of these quotations highlight potential adverse effects of an academic system producing far more researchers than it is capable of absorbing. Indeed, temporary jobs and 'embedded' project

Table 4: Thoughts about a career shift (survey 2)

	PhD				Postdoc			
	Gender	N	Great extent	Some extent	Gender	N	Great extent	Some extent
Q1 Thinking about opting out?*	F	138	23%	33%	F	113	37%	38%
	M	111	24%	22%	M	128	40%	30%
Q2 Job insecurity?*	F	100	28%	31%	F	95	60%	32%
	M	79	30%	28%	M	128	51%	25%
Q3 Family?***	F	101	28%	31%	F	94	20%	30%
	M	80	27%	31%	M	109	20%	22%

The questions included the following response options: 'great extent', 'some extent', 'little extent' and 'not at all'.
 * Question: 'To what extent have your current terms and conditions of employment given rise to any considerations of opting out of a research career?'
 ** Question: 'To what extent are these considerations influenced by concerns about job insecurity?'
 *** Question: 'To what extent are these considerations influenced by concerns about prioritizing your family?'

appointments may work to the benefit of departments by increasing the overall research productivity through relatively cheap, highly skilled labour. However, the uncertainty and pressure circumscribing the day-to-day struggles of younger researchers leaping from one ice floe to another may at the same time lead to a situation where universities are losing talent that they would have liked to keep.

With regard to the influence of family concerns (Q3), no noteworthy gender differences can be identified for the PhD survey respondents (59 per cent versus 58 per cent). Among the postdocs, eight percentage points more women than men highlight family as a factor that to some extent has affected their thoughts of opting out. As opposed to the rational-choice-inspired argument that women, due to a stronger propensity to caring and domestic responsibilities, deliberately opt out of a professional career (see e.g. Hakim, 2004), the gender variations detected here do not stand out as the main explanation of women's disproportionate attrition rates at AU. As illustrated in the following quotations, family issues may, however, operate to the disadvantage of women in more indirect ways:

Having a child will lower your performance for a while. And then you get pregnant again and it starts all over. In that sense, you're at a disadvantage. But I'd like to know how much worse [than the men] you're allowed to be? Because it's difficult to evaluate yourself ... If they want more women, then they should be clearer about how much is enough as regards papers. (Female researcher, interview study 2)

I had a hard time combining my work and family life. Quite often, I struggled with a bad conscience. I woke up at night and thought it was tough. These were my worst years at the university; the first years. It was heart-rending to constantly feel that you're not good enough. (Female researcher, interview study 2).

Both of these quotations add to our understanding of how domestic responsibilities and family obligations restrict the work autonomy of younger (female) academics and limit their capacity to function fully under 'blurry' performance thresholds and limitless work-time norms. Indeed some postgraduate academics may deliberately opt out to spend more time with their families, but others feel forced to make such decisions due to the irreconcilability of their lives inside and outside the university. This is clearly illustrated in the first of these quotations, where the 'external event' of having a child becomes a source of increasing job insecurity for a younger female scholar, incapable of performing at the success rates defined by her male colleagues with shorter career breaks and fewer commitments outside the academy. Keep in mind here that several department heads, as illustrated earlier, interpret these conditions as pre-given and indispensable requisites of a successful academic research environment. Further, the second quotation highlights the severe emotional consequences experienced by another woman facing a similar situation. While both women and men tend to be suffering under these conditions, the prevailing image of the ideal postgraduate employee as a researcher devoting most of his/her waking hours to science may put women in particular at a slight disadvantage due to high career-family conflict levels. Bailyn (2004) describes this as a clash between the 'temporal morphology' of an academic career model epitomized by particularly high performance pressures at the postdoctoral stage, and many women's restricted work autonomy at this point in the academic career. Following Nussbaum (1995), one could contend that this career model involves a problematic exclusion of the 'affective domain', resulting in a subordination of care and love as 'goods of public significance' (Lynch, 2010), with gendered implications to follow.

In a national context renowned for its family-friendly policies, these findings may seem surprising. However, it is important to distinguish the extra-organizational conditions circumscribing Danish women's general participation in the labour market from the advancement structures underpinning the traditionally male-dominated academic work domain. As Seierstad and Healy (2012) assert, the inherent affirmation of women as the main care givers in the Danish family-friendly policies may operate as a distinct structural feature reinforcing the gendered career outcomes in the academy. A generous maternity/parental leave model, for instance, implies that the average Danish female academic has considerably longer periods of research inactivity than her colleagues in most other western countries.⁸

International mobility

Another requirement creating work–life dilemmas for young researchers relates to the increasing institutional emphasis on long-term periods of research work abroad as a qualification criterion for gaining tenure. At the Faculty of Science and Technology at AU, international research mobility is already incorporated as part of the qualification scheme when candidates are evaluated for tenured positions; the rest of the faculties are currently considering the possibility of introducing similar requirements. In survey 2, we specifically asked respondents to reflect on how this institutional requirement influenced their considerations regarding a research career at the university.⁹ As illustrated in Table 5, a larger share of the female respondents than the male respondents — especially at the Faculty of Science and Technology — note that this requirement has at least to some extent led them to consider leaving AU. A male researcher in interview study 2 describes his personal experiences with the mobility demands in the following way:

When you get your PhD degree and reach an age where it's time to start a family. At that point you just can't go four years abroad. . I think they're losing people on that account. It was impossible for me to stay under these conditions. (Male researcher, interview study 2)

In interview study 1, we also asked the department heads in the science and technology fields to reflect on the potential gender consequences of this institutional requirement. While most responded by emphasizing the crucial importance of such requirements, their opinions on the gendered implications were more divided. Two department heads note:

It's a real hurdle ... For many of the women I know, this is a real problem. They usually also have a partner, and maybe he's got a good job here as well. How do you suddenly pull your whole family out of their context for a two-year stay abroad? It's really tough, and it's harder for the women than the men. (Department head, interview study 1)

If you want to make it in the international competition, you need a period of study abroad. And I agree, that can be a BIGGER ISSUE if you have children. But you'll have to overcome that. It's possible to bring children to the US — it's been done before. My wife wrote her PhD when we were in the US. She spent her time writing while I was doing research. That's how we made it all work ... But no, I didn't go with her for a stay abroad, and she didn't go. But in principle that's a private discussion each family needs to take, if it's not possible to do both. (Department head, interview study 1)

Here again, the structural conditions circumscribing the 'opt out' phenomenon are represented as pre-given and indispensable requisites pertaining to the image of the ideal academic as a scholar willing to make comprehensive personal sacrifices to remain competitive. Both of the interviewees

Table 5: Requirements of international research mobility and considerations of opting out, PhDs and postdocs (survey 2)

Area	Gender	N	Great extent/ some extent	Little extent/ not at all	Don't know
S&T*	F	74	51%	38%	11%
	M	103	37%	57%	6%
Other**	F	164	47%	43%	10%
	M	126	44%	51%	5%
<p>* Question: 'Has the standard requirement to postdocs/assistant professors regarding a long-term research stay abroad made you consider giving up your academic career at Aarhus University?'. ** Question: 'Would a potential standard requirement to postdocs/assistant professors regarding a long-term research stay abroad make you consider giving up your academic career at Aarhus University?'. S&T, science and technology.</p>					

are aware of the potential gender consequences of such conditions, but as the second interviewee remarks 'you'll have to overcome that'. Further, his quotation exposes an underlying distinction between a 'private' and 'academic' self. While his own story represents a clear example of how early-career female researchers' mobility will sometimes be hampered by commitments outside the laboratory, he refuses to interpret this as a problem related to the organization. Indeed, a decision to pull your family out of their context for a two-to-four-year period is made in the private domain, but as Nussbaum reminds us, such choices are not 'flourishing independently of material and social conditions. If one cares about autonomy, then one must care about the rest of the form of life that supports it and the material conditions that enable to live that form of life' (Nussbaum, 1995, p. 225). From a capabilities perspective, the increasing organizational emphasis on extended periods of research work abroad in this sense feeds into the aforementioned discussion on whether, due to external conditions and commitments in the 'affective domain', female postgraduates are provided with fewer opportunities than their male colleagues to function effectively and succeed as academics. This may eventually lead a disproportionate share of the younger female researchers to alter their career plans and adjust their aspirations towards a career outside the academy.

Concluding discussion

With this article, we have provided a contemporary case for exploring the puzzling phenomenon that early-career female academics leave the academy without applying for vacant positions at the associate-professor level far more often than their male colleagues. To our knowledge, this study represents one of the first attempts to empirically document the prevalence of this so-called 'opt out' phenomenon in a European context. The evidence is clear: the number of female postdocs at AU far exceeds their representation in the applicant pool, meaning that a disproportionate number of local female candidates abstain from competing with their male colleagues for the relevant vacancies at the university. The main objective of this study has been to explore the complex processes of stratification forming this pattern.

The integrated, multilevel framework has enabled us to approach the 'opt out' phenomenon from numerous angles, while accounting for connections between individual experiences and broader organizational trends and dynamics. The 'opt out' phenomenon, so we have argued, is interrogated most fruitfully as a process of adaptive decision-making embedded in complex webs of interrelated obstacles and gender practices. Our key contribution thus lies in mapping out the 'ecology of gender stratification' among early-career scholars by connecting these obstacles and gender practices into larger patterns of interacting, path-dependent feedback loops and cumulative disadvantages.

As summarized in Figure 3, early-career female researchers face a number of marginal kicks or drawbacks producing constrained career choices and preventing some of them from successfully translating their capabilities into sufficient scientific rewards and career advancement. These marginal kicks and drawbacks are sometimes reinforced through feedback loops, where disadvantages in one context hamper women's chances of succeeding in another, and vice versa. Such feedback loops have no distinct starting or end points, and several loops may operate simultaneously to form cumulative disadvantages.

We have detected three distinct feedback loops informing the career decisions of early-career female academics in both direct and indirect ways. As depicted in the upper left side of Figure 3, the subtle mobilizations of masculinities underpinning the day-to-day interactions of some academic environments may inform the career choices of some female academics by lowering their general job satisfaction and feelings of belonging. Such gender dynamics may at the same time render female candidates less visible to the institutional gatekeepers, thereby lowering their chances of promotion and retention, which in turn may reinforce such feelings of not belonging.

As depicted in the right side of Figure 3, the high levels of job insecurity and performance demands circumscribing these appointments may also increase the work-life tensions of many academics, with indirect implications for gender stratification. Domestic responsibilities and family obligations often restrict the work autonomy of younger female academics to greater extents than their male

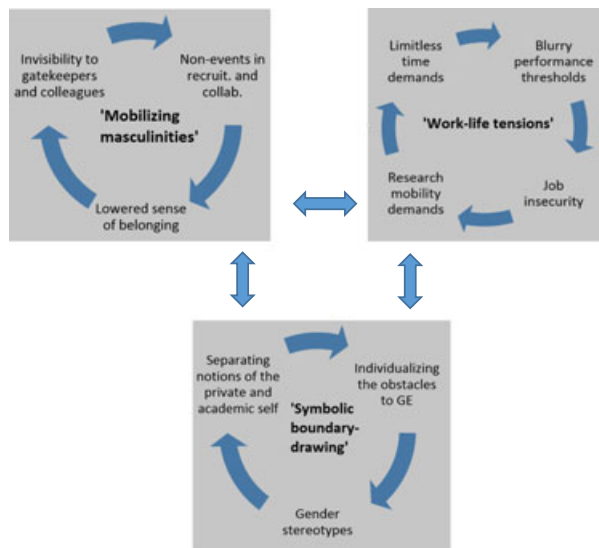


Figure 3: Self-reinforcing feedback loops informing younger female academics' career choices

colleagues, thereby limiting their capacity to fully function under blurry performance thresholds, limitless work-time norms and inflexible demands for research mobility. Moreover, in a system where success and advancement is heavily dependent on accumulating social capital, women's absence due to leave periods and responsibilities in the affective domain leave them at increased risk of becoming invisible to colleagues and institutional gatekeepers. In this sense, stratification processes pertaining to the feedback loop depicted in the right side of Figure 3 spill over into the left side.

Further, our interviews with departmental heads illustrate how these processes of stratification are legitimized by organizational representatives through the construction of gendered symbols and images (Acker, 1990). As shown in the bottom half of Figure 3, women's attributes and qualities are sometimes separated from the dominant characteristics of the local research environments through symbolic boundary work; this boundary work may spill over into the upper left side of Figure 3, and render recruiters and colleagues less attentive to the qualifications of early-career female candidates. The local research environments are represented here as 'tough' working settings epitomized by pre-given and indispensable organizational requisites, structured around the notion of the ideal employee as being highly competitive, individualistic and with few commitments outside the workplace. Hence, in line with the assumptions underpinning the Danish policy discourses on GE in the academy (Nielsen, 2014), the 'opt-out phenomenon' becomes a problem related to the women (or to society as a whole), rather than to the organization. It seems reasonable to interpret this framing against the backdrop of broader public and political understandings of GE in the Danish context. As Dahlerup (2008) observes, GE is already considered a reality by most Danish politicians, and discussions on structural discrimination and gender justice are therefore often rendered trivial in the public and political debate. One could add to this argument that since the promotion of GE in Denmark traditionally has taken the form of state-driven interventions (e.g. through family-friendly policies and GE legislation), organizational representatives will be more inclined to interpret women's underrepresentation in the academy as a state-related concern as opposed to an organizational responsibility pertaining to the university and its departments.

Finally, our study adds to the existing literature on gendered career choices by proposing a synergetic 'dual framework' bridging Acker's account of the gendered organization with Nussbaum's and Sen's focus on 'agency inequalities'. On the one hand, Acker's theoretical framework has provided a useful starting point for teasing out the distinct organizational processes reproducing gender

inequalities at the early-career levels. As we have shown, the gendering of academic career outcomes operates through the construction of gendered symbols and images (in our case the symbolic boundary work of institutional gatekeepers); gendered patterns of social interaction (in our case the subtle mobilizations of masculinities); and the reproduction of organizational logics structured around the male norm (in our case the image of the ideal employee as being highly competitive, willing to make sacrifices, individualistic and with few commitments outside the workplace). Nussbaum's capabilities approach, on the other hand, has enabled us to delve deeper and question what people actually do and the possibilities available to them for actualizing a different scenario. As we have shown, the marginal kicks and drawbacks constraining younger women's ability to function as academics and pursue the lives they want to live lead some of them to adjust their personal ambitions, preferences and career aspirations along the way through acts of adaptive decision-making. Many of these women embark upon a continuous struggle to make their way in the academy, but their possibilities to exercise agency and function as human beings in this arena will sometimes be constrained to the extent where staying becomes unbearable or meaningless.

This study has clear implications for the managers and promoters of GE in academic organizations, since it illustrates the importance of raising ethical questions as to how we can create more inclusive and attractive research environments in which women and men alike are free to function fully, to do and be what they have reason to value. As Nussbaum asserts, policy efforts to promote equal rights 'will remain mere words on paper' (Dixon and Nussbaum, 2012, p. 561) if human beings — despite their 'readiness to act' — cannot realize these rights under the prevailing organizational and societal conditions.

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Notes

1. Figure 1 is inspired by Woolley (2008, p. 6).
2. The data from the psychological research assessment have been obtained from AU's human resources department. For more background information on the design of the study, see http://medarbejdere.au.dk/fileadmin/www.medarbejdere.au.dk/hr/Arbejdsmiljoe/Arbejdsmiljoe/Psykisk_arbejdsmiljo2012/09.pdf
3. Three department heads chose not to participate due to time issues.
4. For an elaborate presentation of the results of this study in Danish, see Faber (2010). To protect the participating scholars, we abstain from giving any information on former faculty and department affiliations. Likewise, all quotations have been moderated slightly to improve readability and render the participants unrecognizable to former colleagues/leaders.
5. The rest of the interviews were conducted via e-mail.
6. Indeed, the 'one-applicant phenomenon' represents a broader trend in the Danish academy, where 17 per cent of the vacancies for associate professorships and 31 per cent for full professorships had only one applicant in the period 2011–13 (Staahle, 2014).
7. Five of the department heads (Business Communication, Department of Education, Department of Odontology, Department of Food and Department of Legal Medicine) note that they already have equal gender distributions at the higher ranks of their departments, and sometimes even an overrepresentation of women.
8. Danish parents are entitled to 52 weeks of leave with substantial covering per child: 18 weeks for the mother, two weeks for the father, and 32 weeks to be shared between the parents as they wish.

9. These results may be subject to some degree of uncertainty due to a mistake in the structure of the web survey. PhDs and postdocs from all of the faculties were first asked to consider whether the standard requirement to postdocs/assistant professors regarding a long-term research stay abroad made them consider giving up their academic career at AU. However, such a standard requirement only exists at the Faculty of Science and Technology, while no clear requirements are in place in the other faculties. The initial idea was to ask the respondents from these faculties to consider whether a *potential* standard requirement to postdocs/assistant professors regarding an extended period of research abroad would make them consider giving up their academic career at AU. In other words, this group of respondents was asked to answer two similar questions one after the other, which may have caused some confusion.

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Biographical notes

Mathias Wullum Nielsen is a postdoctoral fellow in gendered innovations at Stanford University. He recently finished his doctoral thesis, entitled 'New and Persistent Challenges to Gender Equality in Academia', at the Danish Centre for Studies in Research and Research Policy, Aarhus University. He has published a number of articles on the topic of gender equality in higher education in journals such as *Science and Public Policy*, *Studies in Higher Education*, *Scandinavian Journal of Educational Research* and *Nordic Journal of Feminist and Gender Research*.

Appendix

Table A1: Proportion of female researchers in positions equivalent to postdoc level (grade C), associate professor level (grade B) and full professor level (grade A)

	Grade C	Grade B	Grade A
Aarhus University	43% (2013)	32% (2013)	15% (2013)
Denmark	38% (2010)	29% (2010)	15% (2010)
EU27	44% (2010)	37% (2010)	20% (2010)
EU15	43% (2010)	36% (2010)	18% (2010)
(EC, 2013; Aarhus University human resources)			

Table A2: Proportion of female researchers in positions equivalent to postdoc level (grade C), associate professor level (grade B) and full professor level (grade A) among faculty at Aarhus University in 2013

	Grade D	Grade C	Grade B	Grade A
S&T	42% (640)	30% (350)	22% (453)	6% (106)
Health sciences	58% (355)	58% (131)	33% (513)	14% (170)
Arts (humanities)	57% (196)	58% (157)	32% (356)	29% (65)
BSS	60% (205)	43% (116)	40% (257)	18% (126)
Numbers in parentheses represent the total number of scholars within each position category. S&T, science and technology; BSS, business and social sciences.				

Table A3: Distribution of population and respondents in survey 1

	Grade D (M/F)	Grade C (M/F)
Respondents	988 (52%/48%)	561 (53%/47%)
Population (Aarhus University)	1443 (51%/49%)	758 (57%/43%)
Respondents: share of the total population	68%	74%

Table A4: Distribution of sample and respondents in survey 2

	Grade D (M/F)	Grade C (M/F)
Respondents	267 (54%/46%)	261 (46%/54%)
Sample	700 (50%/50%)	674 (41%/59%)

Table A5: Actual proportion of women applying for grade B positions and the internal pool of women occupying grade C positions at Aarhus University (2008–12) (dataset 1)

Main area	Positions	Applicants	2008	2009	2010	2011	2012
Total	656	2835	30% (39%)	30% (42%)	23% (39%)	31% (43%)	34% (42%)
S&T	219	891	18% (31%)	31% (35%)	18% (33%)	19% (35%)	16% (32%)
Arts	182	586	47% (48%)	33% (50%)	37% (50%)	39% (51%)	37% (53%)
BSS	128	559	29% (47%)	21% (44%)	12% (41%)	29% (46%)	35% (48%)
Health sciences	127	346	33% (52%)	39% (54%)	36% (52%)	51% (59%)	47% (57%)

*'Positions' denotes the total number of appointments for the period. 'Applicants' denotes the total number of applicants for the period. Numbers in bold represent the proportion of female applicants. Numbers in parentheses represent the internal pool of women occupying grade C positions at the university.
S&T, science and technology; BSS, business and social sciences.*