

# Academia as a Profession and the Hierarchy of the Sexes: Paths out of Research in German Universities

Beate Kraiss, the Technical University of Darmstadt

## Abstract

*The careers of women in German higher education are really careers which lead out of academe: women disappear on the route to the top. In order to track processes and structures which lead to this 'academic mortality of females', this article views higher education as a social field with its own dynamic of development, differentiated according to subject cultures. At the centre of the exploration lie organisational structures, hierarchies, time allocation, customs, traditions, everyday practices and interaction in the scientific community. In order to gain insight into these, detailed interviews were carried out with aspiring academics, institute directors and professors, both at universities and at research institutes outside the orbit of universities; the use of time was studied, and ethnographic material was assembled, together with statistical data. This contribution focuses on the structural conditions of the academic career, on symbolic violence in direct interaction, on patterns of competitive behaviour in the scientific community and on the role of mentors.*

## Research questions and study design

Academia is an area in which very few women hold high-ranking positions. By the end of the twentieth century, the proportion of top-ranking (C4) German professorships<sup>1</sup> held by women was well below 10 per cent, in most fields it was below 5 per cent, and the women directors of German non-university research institutes could be counted on the fingers of two hands.

Inspection of the education and career paths followed by women from the time they enter higher education reveals not only that fewer women than men obtain doctoral degrees, complete the *Habilitation*<sup>2</sup> procedure, or gain jobs as junior academics, but that the number of

women decreases as they progress up the career ladder: Women disappear on the route to the top. In academia, women's careers often appear to be processes of self-elimination; careers which have come to a grinding halt, which have led to the sidelines or niches of academic life – for example, documentation, didactics, public relations, organisation and administration. These career choices are typically interpreted as being the result of subjectively justifiable decisions taken against an academic career, and in favour of assistant positions which – although skilled – are far less stressful and demanding, even than the radical alternative of a life as wife and mother.

My question is the following: Why is it that women disappear along the academic career path? The question is not why fewer women than men enter academia, but why women who have already gained a foothold then decide to exit this career path. My working hypothesis is that career decisions which appear to be the result of personal choices are in fact, to a large degree, shaped and influenced by the structures and practices of academia itself. A second question couples onto this: Which aspects of academia and research are responsible for the fact that a large proportion of the women who manage to enter academic life – with a doctoral grant, for example – do not progress along this path? Why do their career paths lead them out of academia?

In order to address these questions, in the study reported here, the academic sector was regarded as a social field with structures and functional mechanisms of its own, a 'game' of power and influence with a logic of its own. In addition to the existing structures, hierarchies and social constellations, we ask which of the day-to-day practices, interactions and matters of course prevailing in the social field of academia act in such a way that hardly any women hold top-level positions in this field.

We have focused on four aspects:

1. The structural conditions of junior academic careers and the particular significance of these in the context of women's life courses and life management;
2. Processes of cooling-out in direct interaction;
3. The significance of agonal<sup>3</sup> behaviour and motivation for men and women academics;
4. The significance of mentors.

Nine research institutes of various sizes were selected for data collection, representing the fields of chemistry, nuclear physics, biology,

information technology, history and law. Between June 1995 and September 1996, detailed open interviews were conducted in all institutes with men and women academics at varying points on the career ladder and in the institute hierarchy. In general, we interviewed one director, three or four women academics, and three of their male colleagues per institute. In some institutes, the three women academics interviewed represented 100 per cent of the female population, including undergraduates. In the other institutes, the three to four women academics interviewed made up 50 to 80 per cent of the female population.

### **Results: Women and the social field of academia**

#### *Junior academics and the culture of scarcity*

When the situation of junior academics in Germany is compared with that in other countries with analogous societal development and similar research traditions, it is possible to identify a number of structural peculiarities of the German system which make the forging of an academic career a particularly difficult undertaking. The situation of junior academics in Germany is determined by two structural properties in particular.

First, the formally and explicitly defined hierarchy of universities and research institutes is relatively undifferentiated; it is characterised by a clear-cut distinction between senior positions with great decision-making power and freedom on the one hand, and junior positions on the other, and by a practical non-existence of intermediate positions. In contrast, the junior domain of the research institutes examined in our study is highly differentiated (and includes undergraduates preparing their final examination thesis, student assistants, doctoral students, post-doctoral fellows, freelancers, and academic staff with contracts of various types and duration). Between the large number of junior positions and the few directorships, however, there are only the C2/C3 professorships<sup>4</sup>, which are not only rare, but usually require the same qualifications as directorships (*Habilitation*). Where income, job security, decision-making power and external representation of the institute are concerned, there is a huge gap between the junior positions and the directorships. The few C2/C3 positions cannot create a continuum between these two career poles. While it is possible to make the leap to a university professorship – and this is ideally intended to be the rule – the qualifications required by the universities (*Habilitation*, in particular) have to be taken into consideration. That is, a significant role is

played by conditions and procedures which – when seen from the perspective of the non-university research institutes – cannot be controlled from within the institution. Junior academics in Germany are therefore not able to climb the career ladder; they are forced to leap from a position of relative dependency to a top rank.

Second, it is impossible to foresee when and whether this act of leaping to a responsible position will be successful. Moreover, it is beyond the control of the young academics. The unpredictability of their professional career has repercussions on the other areas of life and hence on the entire life management of junior academics.

Positions for young academics – both in universities and in non-university research institutions – are formally non-independent positions. Research-related decisions must always be approved by superiors (professors/directors). The employment situation is generally unstable; here again, there is a high level of dependency on superiors. This means that young people who want to build an academic career have to show that they can work independently and demonstrate decision-making and leadership abilities, despite the fact that they are restricted to a position of formal dependence in what is primarily defined as a learning situation. They have to make a name for themselves in their field; they must ensure the visibility of their ability to act judiciously and with initiative, to lead young people in their field of research, and to develop innovative research programmes.

To make matters worse, in the universities and, to an even greater extent, in the non-university research institutes, the ‘great personality model’ (or ‘great man/person theory’) prevails; this is the idea that the working methods and structures of an institute are shaped more by ‘great personalities’ (or the personal characteristics of ‘great men/people’) than by set structures, which are legally regulated and function irrespective of the person. The personality of the director in charge of a particular domain therefore assumes utmost importance – in the way the organisation sees itself, at least. The uniqueness and the pre-eminence of the position which more or less constitutes the vanishing point of young academics’ career paths is thus further accentuated, and the distance to be cleared is emphasised.

From the perspective of the junior academics, the power to define the decisive position in one’s career – the job in which the *Habilitation* procedure can be completed – rests with the director. Whether or not such a position can be attained is therefore dependent on complex – and usually implicit – processes of social interaction and negotiation. Thus, an academic career is always a balancing act between becoming

integrated into a professional and social structure which is strongly characterised by the personality of the director, and forging one's own way as an academic.

In our interviews, it was apparent that both the everyday working conditions and the understanding of a 'normal' career path vary greatly from institute to institute. In a number of institutes, we observed standards and conceptions of academic work and successful academic careers which constitute something we would like to term 'the culture of scarcity'. This includes the physical conditions, which are cramped and spartan, and money, which also seems to be limited. Time, however, is a particularly scarce commodity, and this does not just mean the daily or weekly working hours, but the time available for building an academic career. In sum, the academic career path appears to be a route which is both laborious and full of privation, a path which can best be described by the words '*per aspera ad astra*' or 'the harsh path to the stars'. This powerful image permeates the everyday life and consciousness of the young academic.

The scheduling of the working day and the academic career, along with the ratio of high-ranking positions to junior positions, are structural conditions which apply to both young men and young women. However, the effects of the 'culture of scarcity', particularly its temporal dimension, are gender-specific. For the following three reasons, the doctoral stage, in particular, seems to be a critical phase:

1. It is by no means clear for women commencing doctoral programmes that they will stay in research, just as it was by no means certain when they first entered higher education that they would continue on to doctorate level. In the same way as pupils from non-academic backgrounds decide which educational path to follow on the basis of their school achievement, young women who enter research obviously perceive this path as one of small steps. That is, the intention to take a doctoral degree develops only as a result of a successful first degree, and the decision to stay in academia is dependent on the experiences of the doctoral programme;
2. The young women portray academic life as a joyless existence in which life outside the institute, beyond academic work and, above all, life with a family, practically cease to exist for an extended period of time. An academic career and family life with children seem to be mutually exclusive: only one is feasible, and the two cannot be combined – or – not for women, at least. This is further confirmed by the fact that the social and professional networks of these young

women, even the more distant ones, do not include any academically successful women who have children;

3. The seemingly joyless existence of the academic is especially problematic for women doctoral students when they contrast their own prospects with those of their male colleagues. While women should focus their lives completely on work, should they set out on the thorny path of an academic career, their male colleagues should be able to have a family at the same time, with all the emotional support, security and compensation that this entails. In the words of Christa A. (doctoral student):

“... if you're a woman and don't have a family – and this job means that you really do have to work more or less around the clock – you might not have time to meet friends and acquaintances as often as you did before, and also I think you take everything that happens here in the institute so incredibly seriously, it becomes your whole world [. . .], and if something goes wrong [. . .], then you're left with nothing at all – as a woman. Men still have their families at home, almost all of them.”

#### *Cooling-out in face-to-face interaction*

Since formally regulated, transparent structures for the careers of junior academics are non-existent, informal arrangements, implicit negotiations and the latent sense of the interactions between senior and junior academics assume even more importance. However, young women often find that they are negated as academics. In day-to-day academia, this functions as follows:

1. First, young women academics find that less attention is paid to what they have to say. Their contributions to discussions are ignored and dismissed, they are interrupted, their achievements are discredited, and their output is excluded from the 'essential works' of the institute to which reference is then made. In the words of Charlotte P. (post-doc), women simply have 'much less impact' in discussions. A remark made by Christiane Nüsslein-Volhard, the recipient of the 1995 Nobel Prize in Medicine, quoted in the *Max Planck Society* magazine, provides further evidence for this: Nüsslein-Volhard stated that she frequently 'suffered from the feeling of not being taken seriously' – and by no means only at the beginning of her academic career (MPG-Spiegel 3/1991, p. 34). The message being conveyed in these interactions is: You don't belong here, you haven't got what it takes;

2. A parallel message to this is the following: If you really want to be a woman, that is, have children, then your place is at home in the kitchen. Women are thus continually referred to a role which they – visibly for all to see – have rejected by committing themselves to research, even if ‘only’ the first step in the form of a PhD. This message is also relayed by superiors, who are perhaps not even aware of the effect of their words. The following report was given by Christa A. (doctoral student):

Well, Ms F, for example, who’s having a baby soon, she published a really good article recently, and as a result of that, my boss was sent a letter asking whether he was interested in writing another review article. Now, it would have been fairest if he’d asked her to do it, firstly because he wrote the first review article [ . . . ] with the other post-doc, and secondly because he was only asked to write the article on the basis of Ms F’s publication [ . . . ] Anyway, when she pointed that out to him, and said that they could write it together, I think she sort of recommended that to him, in a nice way, politely, he said: No, no, you’ve got other things on your mind – you know, the baby.’

3. This account illustrates another aspect, which is often overlooked. Interactions do not only occur between the people directly involved; that is, they do not only affect the interactors, they also have the character of a performance. There are always observers of these events, onlookers who – by following the performance of this social action – learn not only which rules are valid in a particular social context, but who has to observe which rules, and who is allowed to break them. Thus, incidents such as that reported by Christa A. have repercussions which extend far beyond the individuals directly involved. Women doctoral students, for example, witness what happens to an academic when she gives birth: In this way she is negated as an academic. Cooling-out processes are thus set in motion; these processes eventually lead to the self-elimination of women from research. The point of this interaction, which centres on Ms F’s gender, rather than her performance, is to make it clear to women that they are women and, as such, have no place in academia or, more exactly, in leading academic positions. This type of interaction becomes all the more effective, the less women are aware of the fact that their situation is socially determined, and the more they take for granted the common perception of a woman’s role – in former West Germany, for example, this entails a concept of motherhood which basically excludes women from the world of work.

*Competition and agonal motivation in men and women*

Many studies have pointed out that women have a different approach to competition and rivalry than men do, and this was mentioned repeatedly in our interviews. It is certainly not the case that women invariably avoid competitive situations, or that they are unable to exhibit competitive behaviour, or that, conversely, men have an inherent ability to establish acceptable competitive relationships – which are, incidentally, negotiated in situations of rivalry. But that is a different paper. In order to get a clearer idea of the differences observed here, we find it productive to use the category of the agonal.

Academic institutions are largely organised on an agonal basis. That is, the construction of hierarchies on the basis of conflict, of achievement not only for its own sake, but to improve one's standing in relation to others, and the elements of challenging and asserting oneself against one's 'fellow players' are central to the functioning of academia. As one example of many, we cite a comment made by a professor of electrical engineering at the Technical University of Vienna. In an interview published in the academic journal *heureka!* 3/98, he says that: 'Academics are people with the same emotions as everyone else who want to make a career, *outdo others* and so on' (my emphasis). Any number of feelings and strivings could have been chosen to demonstrate that academics have the same emotions 'as everyone else' but one, in particular, occurs to this academic: *outdoing others*.

The agonal aspects of academia are not only regarded as legitimate, but great value is attached to them. Adversity, a basic feature of academic contests, is experienced by those involved as a stimulating, challenging element, and is an essential ingredient if exceptional performances are to be delivered. However, the critical aspect of this agonal structure is that it is based on rituals of adversity. In other words, a framework is constructed within which adversarial conduct is acceptable as long as established rules are observed, as in the knightly tournaments of medieval times or the sporting competitions of ancient Greece. Only within this framework is adversarial behaviour permitted. The conflict may not be extended beyond this framework – the opponents in an argument about the appropriate methodology or the correct interpretation of data have to be in a position to cooperate with each other at the next review committee meeting of a journal or an institute, for example. And not only that: the rituals of adversity also involve the recognition of one's opponents; the recognition of those one wishes to 'outdo'. Those who cannot assume the role of a rival are not 'capable



of giving satisfaction'; that is, they are not to be taken seriously in the academic field.

The ability to interpret events in research from this agonal perspective (in other words, a feeling for the agonal dimension of academic work) seems to be differently developed in women and men. Against the background of agonal motivation, young men often perceive the process of battling one's way '*per aspera ad astra*', proving to oneself and to others how good one is, as a challenge – as a trek that can be inflated to pure heroism. If particular emphasis is placed on this dimension, a process of natural selection ensues in which less agonally motivated men and, above all, women are compelled to exit the academic career path. Moreover, it is even less certain for young women that they will manage to reach their academic goals. According to the rules of the 'causality of the probable', their chances are far slimmer than those of their male colleagues, simply because high-ranking women are still grossly under-represented in the academic institutions.

### **The boss's backing: The role of mentors**

As a result of the structural significance of 'great men' in academia, the integration of junior academics into the scientific process is directly connected to the personality of the mentor/professor in charge of the department. An orientation to his academic style and his expectations, to his approach to the functional mechanisms and rules of academic life, is unavoidable. For beginning academics, in particular, this entails not only some strenuous adaptation processes, but also significant opportunities for imitation. For young women and men academics, mentors function primarily as role models who not only define research tasks, schedules and work techniques (thus defining how research is to be carried out), but demonstrate the qualities which make up an academic personality; they are the successful embodiment of academia and the academic nature. The fact that there are so few women in high-ranking academic positions, and thus barely any female mentors, means that young women academics have a severe handicap; they lack the role models embodying and exemplifying outstanding academic personalities, which are readily available to their male colleagues.

Conversely, it is not easy for male institute directors, doctoral supervisors and academic mentors to take young women academics as seriously as they do young men, because these senior academics, too, have to face up to the anticipated future of the young female academics. For young women academics, the possibility – and statistically, relatively

high probability – of future pregnancy casts a shadow over the present. Many directors and mentors have already witnessed that promising female junior academics, in whom they had invested time, energy, and personal commitment, did not stay in academia. In the eyes of many mentors, at least, the ‘baby problem’ caused many of these women to lose their footing on the academic career path. What approach should be taken in order to ensure the retention of competent young women in academia? Or, in other words, how have the mentors of academically successful women dealt with the ‘problem’ of child-bearing? Have they simply assumed that women academics who have gained a foothold in the social field of academia will not have children?

Two aspects are particularly apparent from our interviews. First, the mentors of academically successful women treat maternity as something which is largely irrelevant to academic ability. This attitude is evident in the following interview:

‘Yes, I’ve got three (promising women academics) at the moment, one is about to complete her doctorate, and the other two are post-docs, and I presume that both of them are going to do their Habilitation.’ (Question: ‘Have you told them that?’) ‘Yes. [. . .] The older of the two is, I think, at the stage where she could make her application – she is a bit hesitant herself – I recently mentioned that there was a job advertised in [. . .], the job was pretty much cut out for her, so I said: Go ahead and apply. You fulfil all the requirements and you’ve got a good chance, as far as I can see. And her answer was, yes, I saw that, but they’re looking for someone who can start next summer, and I’m having the baby in February. So I said, that’s no reason not to apply. They’ll just have to wait for six months when you’ve had the baby.’ (Fritz T., natural scientist, director)

This excerpt also illustrates the second prerequisite for women academics to build successful careers: temporal flexibility. The fact that Fiona R., the scientist in question, will not be (fully) engaged in her professional life for a limited period of time is not regarded as a problem by her superior and mentor – ‘they’ll just have to wait for six months’ – although she herself first hesitated to apply for this very reason. Her mentor, however, made it clear that the decisive issue is her performance, not her gender. Fiona R. was also provided a degree of security from the outset: her job was defined as a *Habilitation* position from the start, meaning that the expected career track was clearly marked out for all involved.

Male mentors are also of enormous importance to young women. Women who have built a career in academia are integrated into the social field of academia; that is, they are not only integrated into the institute, but into the scientific community as a whole. These women,

in the same way as their male colleagues, were nurtured and encouraged to pursue an academic career by their mentors. They were actively mentored in the institutes or universities, and their mentors took them seriously as academics – they were encouraged to collaborate in publications, to represent the institute at conferences, and so on. In sum, these women had mentors who took them seriously as academics, who valued their achievements. With the recognition of the women's academic achievements, their gender and the 'problem' of child-bearing were relegated to the background, clear regulations for a degree of temporal flexibility were drawn up, and a level of security for career development was provided.

### **Starting points for change**

If more women are to hold top-level academic positions in the future, more attention must be paid to the structural conditions which determine the transition from junior to senior positions. The academic career path is currently characterised by the wide gap between junior and high-ranking positions, and by the fact that the route cannot be planned out in advance. Of course, the same conditions prevail for both young women and young men, but young women are particularly affected. Measures which promote the early independence of junior women academics also constitute affirmative action, in that they make the organisation of women's career paths more transparent and predictable. Young women who can tell what is in store for them and who can take control of the organisation of their life – prospectively! – no longer see life as an academic and life with a family as mutually exclusive goals.

Such measures also constitute affirmative action because they increase the 'visibility' of junior women academics in the scientific community. Women have to rely more on their academic achievements than their male colleagues, as less attention is paid to women, and they are generally not as well integrated into informal networks as men are. Women must be afforded the opportunity to make a name for themselves on the basis of their independent academic achievements, to make themselves 'visible'.

Both the biographies of outstanding women academics and our interviews demonstrate that the strengths of women academics lie in their high levels of commitment to their work and in the way they pursue study programmes with determination, even in the face of external resistance and academic 'fashions'. Their sense of aggressive self-presentation and of the mechanisms of mutual recognition, which are inherent

in competitive situations, are, however, often less developed than those of men; they often express aversion to situations which they perceive as ‘cockfights’. This should not obscure the view of their academic achievements, however, nor should it negate their qualities of leadership and assertiveness. Women must have the opportunity to demonstrate their abilities and to make these visible – this can be fostered by early independence and supportive mentors.

### Notes

1. German equivalent of a full professorship.
2. ‘Proof of academic achievement and qualification prerequisite for future professors at universities’ (Nicolescu, 1993).
3. Derived from the term for a dramatic conflict between the chief characters in Greek games or in a literary work (from the Greek *agōn*).
4. German professorships below C4 rank.

### References

- Nicolescu, A. (ed.) (1993). *Multilingual Lexicon of Higher Education*. Vol. 1. München: K. G. Sauer.
- Nüsslein-Volhard, C. as cited in *Max Planck Society – Spiegel* 3/1991.