

Gender Inequality in German Academia and Strategies for Change

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Abstract

Historically, women were excluded from higher education and academia. Nowadays they constitute half or often the majority of students in most European countries. Nevertheless women are still under-represented in scientific careers and leadership positions. Against this background the purpose of this article is twofold: Firstly, we want to examine the position of women in German academia and to identify those obstacles, which may affect the advancement of women in the academic hierarchy, based on the research being carried out within the WEU project framework¹. Secondly, we will give an overview of positive action measures, which are inaugurated in Germany in order to achieve equality in academia.

Women's entry into German academia

The history of the German universities dates back to the Middle Ages. During this period, universities were not only the place where new ideas were generated, but also the place where the "servants" of the Church and the State were trained – for those positions from which women were banned. The Renaissance and Reformation gave a new impetus to the university development and a few new institutions were founded. However, this did not change the situation with regard to women. In the modern era the process of secularization started with the universities being the place where civil servants

were to be trained by professors who themselves had become civil servants in 1794. (Baus 1994: 14) .

The major change came at the beginning of the 19th century with the reorganization of German academia by Wilhelm von Humboldt. The reform, which later became an inspiration for reformers in many other countries, was rooted in the German Enlightenment movement laying its emphasis on **Bildung** – the idea of self-cultivation. The university was to preserve the tradition of humanistic knowledge and to play an important role in shaping German national identity. Moreover, the new concept of the university expressed the priority of “knowledge, which is still to be discovered” as put by Wilhelm von Humboldt. (Turner 2001: 13). The scholars were given enormous freedom and autonomy in their work and the concept ignored any vocational aspect of university education with professional knowledge of graduates being a kind of by-product of years spent at the university.

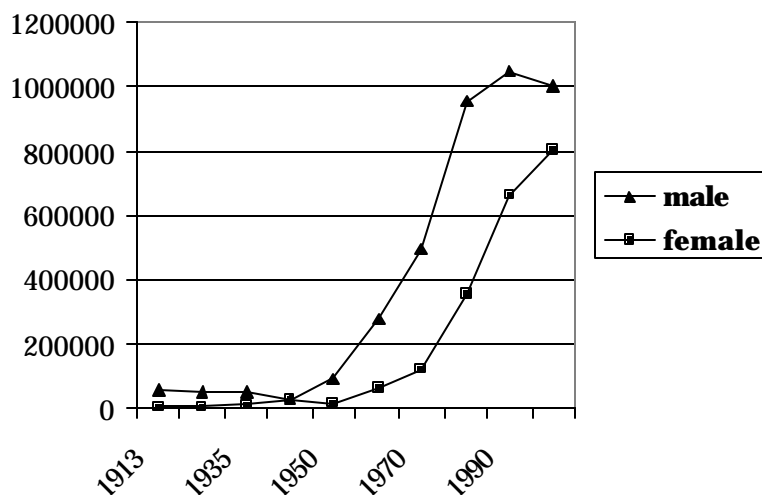
In the second half of the 20th century, universities faced another kind of challenge. Demographic boom, economical development and social transformation created a huge demand for higher education. Old concepts of an elitist university could hardly cope with these pressures. In the 1960s and 1970s the system witnessed an enormous expansion, with an increasingly significant part of new entrants being women and students from lower classes. To accommodate these growing numbers of students and to allow wider access to higher education, the dual system was introduced in the 1970s with the creation of the *Fachhochschulen* (Universities of Applied Science). As the alternative to the university they were

to provide shorter and more vocationally oriented courses in limited fields of study. The trend to stress the relevance of university education for the demands of the labor market and professional life has been firmly established since then.

The social status of women and their access to education began to change only by the end of 19th century. In 1886 they were allowed to sit the Abitur (secondary school final examinations) and at the beginning of the 20th century (in Prussia in 1908) they were allowed to enter university. At the beginning of the 1960s when the expansion of higher education started, women constituted no more than 24 % (BMBF 2000) of the student population. Their number started to rise constantly, but they have not caught up with men, yet. (Fig.1).

Women's entry into the academic profession took even longer. Although there were no legal bars, the social norms kept women from pursuing academic careers. Women were allowed habilitation in Prussia in 1920 and the first woman obtained a Chair in 1923. (Baus 1994: 18-19). However, they were discriminated against in various ways, e.g. married women could not hold the civil servant position, which traditionally characterizes German professorship (Baus 1994: 13-22).

Figure 1. Development of male and female students numbers 1913-1998



Source: Statistisches Bundesamt, Statistisches Jahrbuch Deutschland, different volumes.

1. The numbers of students in 1960, 1970, and 1980 include only German nationals.

2. The data for 1960, 1970, and 1980 are for the Western Laender only.

3. The data for 1950 are for all Laender excluding Saarland and Berlin.

Expansion of higher education in the 1960s and 1970s offered chairs only to a few women, as the number of women pursuing doctorates and habilitations was traditionally very low. There were only 404 women compared to 2338 men among the new doctors in 1960 i.e. 14,7%, or even 8% (136) if we exclude medicine². Only a few women succeeded to be awarded habilitation – the traditional prerequisite for an academic career and a kind of *rite de passage* in

academia. Within 50 years (1920-1970) only 456 women earned an habilitation (Boedeker, Meyer-Plath 1974). In comparison, a similar number of men were awarded habilitation every two years throughout 1960s. However, those admitted into the academic community by the virtue of habilitation did not get easily promoted to the senior positions, i.e. they were not given a Chair (Hampe, 1963). With the expansion of higher education, the traditional organization of academic hierarchy has started to change, challenging the Chair system and integrating junior staff into the decision-making process.

Until 1977 the absolute number of women professors increased from 93 in 1963 (0,8%) to 1414 (5,5%). Additionally, the status of some academic women (some of them non-habilitated) was somehow artificially upgraded to the status of university professors by integrating the pedagogical colleges into the university sector where women were in greater numbers (11% of female professors in pedagogical colleges vs. 4,9 % overall in 1977, Mohr 1987: 209).

Furthermore, since the mid 1970s and the end of the expansion phase the number of junior staff positions and professorships has remained stable and the career perspectives have inevitably deteriorated. The female junior staff, on the contrary, has been constantly increasing, filling the continually expanding sector of fix-term, part time and externally funded academic jobs.

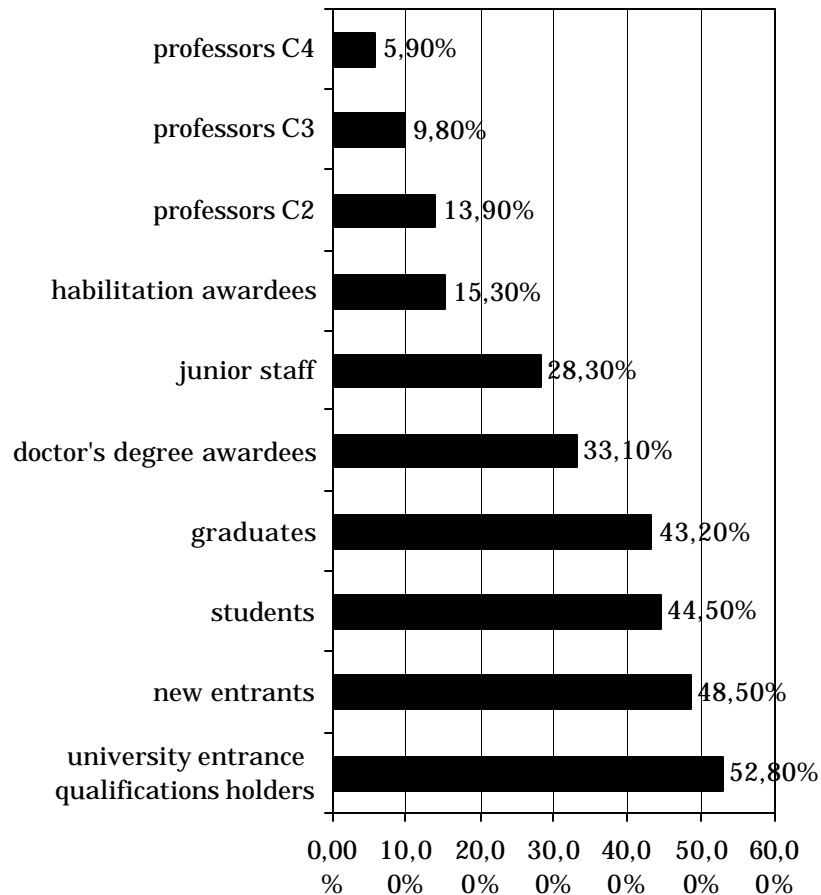
In the 1990's we observed another expansion of the German academic labor market due to the incorporation of the former GDR academia, but which did not lead to a real opening of the sector. The increase in proportion of female staff in the same

period is partially affected by this fact, as East German academia had a greater proportion of women especially at junior level. The increase in the women's share among professors is also linked to a generational shift as many professors appointed in the 1970s currently retire and their positions are left vacant. With the rise of the number of well-qualified women, stagnating numbers of men entering the sector and perhaps the effects of positive action, women as a group nowadays have better chances of becoming professors.

Despite all these positive changes the picture is still more or less the same - women are dropping out all the way long to the top rank positions in academia and their share decreases rapidly at higher levels, even if we take into account the cohort effect (i.e. women in academia having a younger age structure, as the number of female newcomers is growing much faster than the number of male students found at junior level Fig.2).

In fact, Germany has one of the lowest levels of female participation in higher education and on the academic labor market in Europe. Women make up only for 44,5% of the German students. Only one-third of the new doctor's degree awardees and 15,3 % of the new habilitation awardees are women. Merely 5,9% of the C4 professors and 9,8% of C3 professors – the top rank positions in German academia - are women (BLK 2000).

Figure 2. Percentage of women at different levels in higher education in 1998



Source: BLK 2000 „Frauen in der Wissenschaft – Entwicklung und Perspektiven auf dem Weg zur Chancengleichheit“ Materialien zur Bildungsplanung und zur Forschungsfoerderung. www.blk-bonn.de (15.03.2001).

Women also rarely reach the top management positions, e.g. in 1998 only 11 out of 222 rectors were female (5,0%), similarly only 4 out of 75 presidents (5,3%) and 30 out of 277 chancellors (10,8%) were female (BLK 2000). These ratios are of special

importance – the women tend to be absent in the debates shaping institutional policies and the system lacks new female role models challenging the status quo. Similarly, the ratio of women to men in all the important bodies in higher education politics is often unsatisfactory. The ratio of women to men at the Conference of Rectors and Presidents of Higher Education Institutions (*Hochschulrektorenkonferenz*) mirrors the ratio of female rectors and presidents to men holding these offices indicated above. In the Commission of Science Council there are 20 men and 7 women (26%). There are also 7 female Laender ministers responsible for higher education and science out of 16 (43%). The Federal Ministry of Education and Research is directed by a woman – Edelgard Bulmahn. The participation of women in other research grants providing institutions (e.g. German Research Society/DFG) is again disappointingly low. There were 6 women among 38 Senate members of the DFG (16%) in 1998, and the percentage of women among the peer reviewers (the essential gate –keepers) has reached only 7,7% in 2001 (50 out of 650)³.

Structure of the higher education system

In 1998 there were 344 institutions of higher education, both public and private: 92 universities, 7 comprehensive universities, 6 pedagogical colleges, 16 theological colleges, 46 art colleges and 183 *Fachhochschulen* with about 1.800.000 students.

The sector of higher education in Germany can best be described as a dual system. On the one hand there are universities and equivalent institutions¹ being in charge of teaching and scientific research

(particularly basic research) and the training of the next generation of academics, on the other hand there are the more vocationally oriented *Fachhochschulen*. What universities and equivalent institutions have in common is the right to award a doctorate and a post-doctoral lecturing qualification (habilitation). Apart from the difference between universities and *Fachhochschulen* concerning their prestige, all the universities and equivalent institutions enjoy a similar status, though there may be an informal prestige-difference between the individual universities and faculties.

The selection process in the education system starts early, at the level of choosing the lower secondary school (more vocationally or generally oriented) at the age of around 10 and later the upper secondary school (a vocational school - *Berufsschule* or a general school - *Gymnasium*). The prerequisite for starting a course of study at the university or at an equivalent institution is the university entrance qualification (*Allgemeine Hochschulreife* or the *Fachgebundene Hochschulreife* - depending on the kind of secondary school courses attended). Its holders have the right to enter any university and any course of their choice without any special admission procedures. There is no room left for a university to choose its own students. For the majority of courses of study, there do not exist any nation-wide restrictions on the number of applicants admitted. However, in some highly demanded or elitist courses (e.g. medicine, veterinary medicine, dentistry, architecture, business management and psychology - this may vary from semester to semester), there are nation-wide quotas due to the large numbers of applicants and the

insufficient number of equivalent places available (*Numerus clausus*).

Since 1960 the female proportion in academically oriented tracks of secondary education has been rising, as has the proportion of female students. The fields of study however tend to be highly gender-segregated. Women, more often than men, choose courses in humanities, art, medicine, agriculture, forestry and nutritional sciences. Men outnumber women in engineering and natural sciences. Also women, more often than men, tend to work towards teaching qualifications (*Lehramt*) – 69,7% of all *Lehramt* candidates are women (BMBF 2000). Due to disciplinary gender segregation women are more likely to enter universities and equivalent institutions than *Fachhochschulen*, which offer less courses in feminized fields of study.

All professional degrees are conferred on the basis of examinations, be it academic, state or ecclesiastical examinations. These first degrees, *Diplom*, *Magister* and *Staatsprüfung* are equivalent degrees. Bachelor and Master degrees have only been recently introduced in some institutions. The following higher academic qualifications, and usually the necessary steps of an academic career, are the doctoral and post-doctoral (habilitation) qualifications.

The promotion process (leading to a doctorate) is open to all successful graduates from universities and equivalent institutions. The holders of the *Fachhochschule* degree are usually required to complete preparatory academic studies in the subjects to be studied at doctorate level and/or a supplementary period of study at the university in question.

Alternatively there are aptitude tests for *Fachhochschule* graduates.

Habilitation is a post-doctoral qualification and is awarded by the universities and equivalent institutions, usually on the basis of a post-doctoral thesis and a public lecture followed by discussion. It opens the way to professorship and only the scholar with habilitation is considered as an independent researcher and teacher. In the 1970s, for a short period of time, habilitation lost much of its importance as a prerequisite to be appointed professor. With the expanding university system (there were 5 200 professorship positions in 1960, 13 300 in 1970 and 22 200 in 1975 (Bultmann/Weitkamp 1999: 26) many academics without habilitation were appointed, among them many women (Onnen-Iseman/Osswald 92: 77). The latest draft of the HRG (The Amendment to the Higher Education Act in 1998) following the Science Council's recommendations waives the habilitation as a precondition to be appointed as a professor (BLK 2000). Explicit concern was expressed that the habilitation renders a university career less attractive and squanders the potential of young academics by lengthening the preparatory period. It is also considered a structural barrier for women who often complete their habilitation at an even later point in their careers than men, if ever. However, most of the staff remain skeptical towards the abrogation of the habilitation. For some, habilitation is an essential proof of academic excellence, which can not be replaced. Others doubt if German academia as a whole will accept abandonment of habilitation and professors without this qualification.

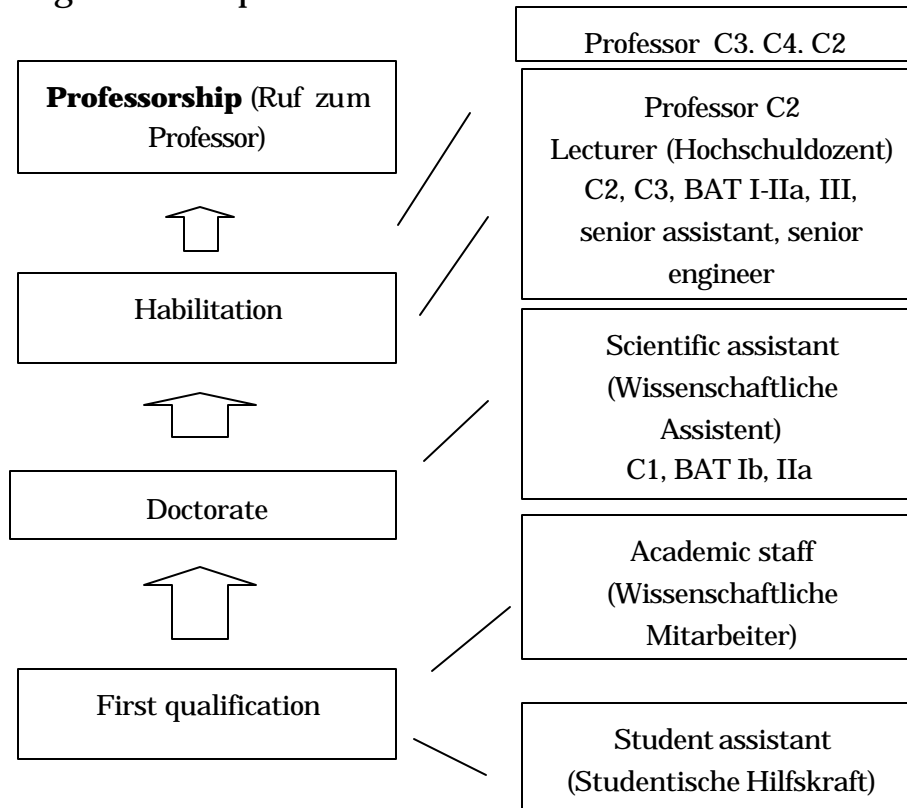
Academic careers and their gendered outcomes

As a result of various efforts undertaken in the post-war period and other developments not aimed by policymakers, at the moment we witness highly differentiated and obscure staff structures and striking internal inequalities between junior staff and professors. We observe an increasingly casual pattern of the career track dating back to the mid 1970s, which is linked to the expansion of the academic labor market, growing deprofessionalization and which results in low job satisfaction among junior staff (Enders 2001: 13). Most of the jobs and positions offered in academia are not directly aimed at further qualification of the staff, and often only fixed-term and part-time contracts are available. Nowadays, it coincides with a shrinking number of chairs and efforts to limit the unprecedented freedom and privileges of the German professors.

The rough scheme describing the standard academic career – a normative career pattern (on the left side) with positions corresponding to the achieved level of academic progress is presented below (Fig.3).

To become a professor is an assumed goal of all junior academics, whereas staying in a junior position is seen as failure. Professorship appointment is the most important moment in a career. As a professor (C4 and C3) one enjoys all the privileges – life-long job security, autonomy and freedom in research and teaching, and (up to now) is exempted from any formal evaluation, except when applying for another professorship position or a grant.

Fig.3. Career pattern.



Recruitment requirements for professors are normally doctorate, habilitation and teaching ability. The professors are usually life-long civil servants appointed by a ministry responsible for science in the respective Land. They cannot be appointed at their own university, but must be "called" by another institution (*Verbot der Hausberufung*). Vacant professorships are announced publicly and only outside candidates are considered. The whole procedure is highly formalized (with the peer-reviews and personal interviews) and can last up to 2 years. Only at the moment when the candidate is offered the professorship can they negotiate work conditions, staff

and material resources etc. in the new place or the old one if they decide to stay there. The partner in these negotiations is the relevant Laender ministry. The Laender minister also makes the final decision whom to appoint. The minister is given a list with three candidates selected by the university boards/commissions to choose one of them. The ministry can entirely reject the list, but has to give its reason for this decision. In this case the call for a new search has to be announced.

There is a certain difference between C4 and C3 professors in prestige and income, but there is no direct hierarchical relationship between them (with the exception of the faculty of medicine). The chair, i.e. the C4 professorship, is a remnant of the traditional structure of the German University with its departments (disciplines) organized around a professor. Professors at *Fachhochschulen* (usually rated C2) must hold a Doctor's degree and possess professional experience gained outside higher education. Their teaching load is higher than that of university professors, but they are not obliged to do research (Teichler, 1990/KMK, 2000).

If one passes smoothly through all stages of an academic career, the top of the career ladder is reached at the age of about 40. However, not all academics reach this stage and there are many intermediate posts for researchers, language and other teachers etc. besides the described career ladder within academia. Additionally, the natural cohort replacement in Germany follows a specific pattern, with periods of many new openings or vacancies (like the one being experienced now) and periods of relatively small room

for advancement. Finally, career paths have certain disciplinary and gender dimensions.

Women's position in academia could best be described in terms of subordination, marginalization and segregation. Women's career paths and career outcomes differ from men's. This is related to women's life cycle (motherhood), segmentation of the academic labor market, institutional context (availability of childcare, organization of work, inclusion or exclusion from informal networks) and finally, gender discrimination.

Women are more likely to be found in junior positions (with fixed-time contracts and higher turn-out ratios), tend to fill positions of support character in teaching and research and often work part-time. They constitute between 30-40% of support staff in teaching and research (*Nebenberufliches Personal*), where only part-time contracts are available, and constitute one quarter of the regular teaching staff - thus, they are not on a career track (Tab.4). Where full and part time contracts are available, women are more likely to have part-time contracts. They are also more likely to rely on external financial support (stipends, grants etc.) while working on their doctorates and habilitations. All this may affect their career chances negatively as it renders their situation more precarious and makes it more difficult for them to be integrated into informal networks - even if the expansion of alternatives to regular employment coincides with a situation where more and more women qualify for top rank positions.

Tab.4. Percentage of female academic staff according to their type of position in 1998

Position				
		total	women	%
Regular positions (full-time and part time contracts available)				
Professors	C4	12 370	736	5,9
	C3	15 918	1564	9,8
	Total C4+C3	28 288	2300	8,1
	Total*	37 626	3592	9,5
Lecturers and assistants (Dozenten und Assistenten)		14445	3431	23,7
Academic staff (Wissenschaftliche Mitarbeiter)		97542	28225	28,9
Teaching staff for special tasks		155760	37723	24,2
Support positions (only part-time contracts available)				
Visiting professors and emeriti		1474	136	9,2
Privatdozenten and Apl.Professoren		2298	231	9,3
Honorary professors		909	49	5,4
Support Lecturers (Lehrbeauftragte)		39350	11912	30,3
Academic support staff (Wissenschaftliche Hilfskräfte)		12100	4717	40
Tutors		12100	4717	41,6

Source: Own calculation based on BMBF 2000, Grund- und Strukturdaten.

*The numbers of professors – total - encompass also other professorship positions (C2 and professors in former GDR).

Higher drop-out ratios of women have been traditionally related to their different career motivations. They may however be linked to overall worse employment conditions for women and difficulties with securing enough support from the rest of the faculty and institution. Problems to successfully

reconcile work and family are a barrier as well, especially if childcare facilities are scarce or of low quality. Additionally, working part-time is widely accepted as the best solution to combine career and family, but it may have a negative influence on career chances and motivation.

Women are segregated, not only vertically, but also horizontally. The highest proportion of women professors is to be found in art, followed by the humanities. The lowest proportion of women is seen in engineering, mathematics and natural sciences (Tab.5).

Tab.5. Percentage of female full-time professors C4 and C3 at universities and equivalent institutions according to the fields of study and research in 1999.

Fields of study and research	Total	Women	%
Humanities	5017	780	15,5
Sport	201	18	8,9
Law, Economics and Social Sciences	5243	502	9,6
Mathematics and Natural sciences	6084	289	4,7
Medicine	2973	173	5,8
Veterinary	174	18	10,3
Agriculture, Forestry and Nutritional Sciences	798	78	9,8
Engineering	6183	192	3,1
Art	2066	408	19.7

Source: Own calculation based on Statistisches Bundesamt, Fachserie 11 Bildung und Kultur, Reihe 4.4., Personal an Hochschulen 1999.

This reflects the gender segregation at student level. However, such a pattern can not be seen in the medical sciences, although women constitute the majority of human and veterinary medicine students. Such segregation at all levels has serious implications. It renders the position of women more vulnerable, lowers their bargaining power and excludes them from development of science and technology, which are crucial for modern societies and offer additional benefits (funding etc.).

Scarcity of women in top-rank positions constitutes the phenomenon often called the “glass-ceiling”. This phenomenon is usually approached with either person-centered explanations (gender difference in skills, behaviors or motivations) or situation-centered explanations (promotion discrimination, exclusion from informal networks, lack of opportunity for mentoring etc.) (Powell 1999, Kanter 1977). The latter approach draws more attention, however the empirical evidence is contradictory. The difficulties with the “glass-ceiling” hypothesis arise from the ambiguity of the concept, the ways in which it is used, and finally, the type of data available.

In our research we looked at the differences in the rate men and women are promoted to the top-rank academic positions. We found that the success rate for male and female applicants for professorship positions at universities is virtually equal. German professorship appointment procedure – highly formalized, based on open competition and forbidding endogamy, suits also well controlled and monitoring mechanisms. These findings (of an absence of discrimination) are generally quite puzzling, in

particular because it is widely believed (not without reason) that informal connections are frequently used in securing a position for a pre-chosen candidate, and women are supposed to lack those connections and networks and, in addition, suffer from prejudices. However, we lack data allowing us to examine application patterns (who applies and where) and the “quality” of applicants. It is impossible to trace whether women and men are equally likely to apply for a post, because the pool of candidates is obscure. We may only suggest that men are more prone to apply even if they are less qualified, or that they are more persistent in applying.

Structural barriers and strategies for change

There are some structural mechanisms in German academia, which may work negatively for women. First of all, there is a horizontal gender segregation and segmentation of the academic labor market. Women tend to occupy sectors with lower career chances and worse work and employment conditions. Apart from that, there is a lack of formalized promotion structures in favor of highly individualized doctorate and habilitation phases. The candidate is totally dependent on her/his mentor and normally starts academic career as his/her assistant, if invited to do so. There is no systematic documentation of a student's performance, the mentor may or may not, will be or will be not able to introduce his/her protégé into informal networks, which seem to be a precondition for a successful career. Women may encounter more problems in getting into the system, and as “newcomers” in science, negative experiences may discourage them more easily.

The issue of combining work and family life is another problem, which hinders women's integration into academia. It concerns men's and women's career motivations and culturally embedded perceptions of gender roles. Furthermore, available infrastructure and institutional context influence people's actual choices. West Germany, in contrast to e.g. France, developed a welfare regime based on a conservative male-breadwinner family model, strongly supported by value systems and traditional gender roles. As a result, German welfare regulations used to offer little incentives for an egalitarian family model. At the time, the promotion of women on the labor market and childcare facilities was hardly a social policy priority.

The activity rate in Germany for women aged 15-64 has risen to 61,8% in 1997 and always used to be lower in the past. This rate falls under the female activity rates in Scandinavia (70-80%) and the UK and equals the rates in the Netherlands, Austria, France and Portugal (Eurostat Yearbook 98/99). Furthermore, German women tended and tend to work part-time more often and interrupt their careers for child bearing and rearing (Fagnani 1994: 130-131). The women with the highest qualifications, willing to make a career for themselves, have chosen either not to have children at all or to limit their number. As found in the case of German professors in the late 1980s, 60,9% of the women did not have any children (and this is valid only for 18,6% of the men) or had them later in life (after doctorate or even habilitation). Also, a lot more women professors than their male colleagues are single or divorced. (Onnen-Isemann/ Osswald 1992: 110). Such a wide discrepancy is not found in the case of American academics (Sonnert 1995: 158), but it is valid also for German women in high positions in private

business, when compared to their Swedish counterparts (Theobald 1998: 1).

The lack of possibilities to combine work and family may discourage women from pursuing their career (in academia or in any sector) or just render it difficult, especially if the younger cohorts of women academics tend to choose having both career and children (Baus 1994: 132). However, the problems combining career and family cannot be the only reason for women's under-representation in higher rank positions. The participation of women in the workforce in the former German Democratic Republic in 1980s was of over 80% (Schmude 1994: 171) with a well organized system of childcare facilities. However, the percentage of women among the professors was not much higher than in West Germany. Providing childcare facilities does not represent one of the targets of women's promotion agenda. However, the actual situation is different at each university site; the childcare establishments may be located far away from the university, they may offer too little care possibilities for younger children (under 3 years old) and may be open only half a day (Schweighoefer 2001).

To promote women in academia effectively is a rather difficult task due to the fact that it encompasses many different measures such as the introduction of an information and monitoring system, the encouragement of women to enter the male-dominated professions and fields of study, the inauguration of mentoring and network structures, the development of promotion schemes, the lobbying for the introduction of legal initiatives and financial incentives, the improvement of overall working conditions, and finally the establishment of "women and gender studies".

Tab. 6. Positive action measures and instruments.

Decision-making level	Instruments of Control	Financial instruments
Laender Provide legal framework Produce reports	Women's Committees in Laender Parliaments and Ministries	Promotion of women as a performance indicator, Women's promotion rewards, Women's Studies programs
Universities and Fachhochschulen Women's promotion guidelines, Women's promotion plans, Evaluation	Commissioner on Women's issues	Women's promotion rewards, Incentives system, Financial support of Commissioners on Women's Issues, Positions for future female academics Financial support of Women's Studies
Departments Women's promotion plans, Evaluation	Commissioner on Women's Issues	Incentives system, Financial support of innovative didactical measures in regard to women's promotion, Promotion of future-academics

Source: Based on **Faerber, Christine**, 2000. Frauenfoerderung an Hochschulen. Neue Steuerungsinstrumente zur Gleichstellung, Frankfurt/New York: Campus, p.27.

There are supposedly two kinds of actors involved in this process, i.e. institutions (the State, universities, departments etc.) and individuals. Equally, two forms of intervention are necessary: improvement of the situation of women when accepting

existing “rules of game” (e.g. providing habilitation stipends) or attempts to change these rules (voting for habilitation abolishment). All of these are currently being tried, with a strong development of institutional framework even if this approach may be criticised as overstressing the role of institutional actors and generally relying on labeling the promotion of women in academia as a “special issue”. An institutional model of women’s promotion and its instruments are presented above.

Legal measures

Since the 1980s the under-representation of women in higher education has become a highly political issue and various measures have been taken to actively promote the enforcement of the equality of men and women, granted in the Federal Constitution. Adequate amendments have been put down in the Federal Constitution (1994) (Art.3 II GG): “The State shall promote the actual implementation of equal rights for women and men and takes steps to eliminate disadvantages that now exist”.

It follows the EU regulations in these matters. Since the entry of the Treaty of Amsterdam, the promotion of gender equality has been one of the Community tasks (Article 2), Article 13 entitles the Commission to take initiative to combat the gender inequality (and inequality based on other grounds as well). The whole set of directives and other Community acts addresses the promotion of the gender equality and Germany follows these policy lines and tries to implement gender mainstreaming in its policies and programmes.

The Amendments to the Higher Education Framework Act in 1998 recognise the office of Commissioners on Women's Issues or Equal Opportunities Officers (existing at the universities since the beginning of 1990s), secure the performance-oriented funding of the universities (enforcement of gender equality is recognized as an achievement together with performance in teaching, research, and promotion of young scientists) and waive the habilitation as a precondition for an appointment as a professor.

According to German federalism, Laender governments are in charge of legislation in the field of culture and education. Although they have all passed amendments to their higher education laws, institutionalization of affirmative action, women's studies etc. may not be equally advanced in all Laender.

The post of Commissioner on Women's Issues (Frauenbeauftragte) or Equal Opportunities Officer (Gleichstellungsbeauftragte) has been established on both institutional and department level in most higher education institutions. Nevertheless, their prerogatives differ between the Laender. Normally, the latter include the right to participate and speak at meetings, to be informed, to make proposals, petitions and statements in all matters related to women's issue. Furthermore, the Commissioner is guaranteed participation in recruitment and appointments procedures in all Laender, even when the available post is sponsored by external funds. However, their competencies in this context are limited as they do not have a right to vote. Additionally, the Commissioners' on Women's Issues Conference at Laender and

national levels (*Frauenbeauftragtelandeskonferenz* and *Frauenbeauftragtebundeskonzferenz*) are relevant bodies, which allow the Commissioners on Women's Issues to discuss their experiences. Finally, universities and *Fachhochschulen* followed the example by reforming their institutional bylaws. The institutions and faculties may also set Action Plans for the Promotion of Women (*Frauenfoerderungspläne*) as well as time specific recruitment targets and introduce incentives or specific sanctions.

Financial incentives and other initiatives

Another important set of measures taken to promote gender equality are financial incentives, namely appropriating of government funding according to universities' performance in the enforcement of gender equality (this is valid also for departments within an institution). The additional financial support may be offered via financing Women's Studies, special positions for future academics, etc. This proved to be quite a successful device, though particularly controversial as it defined promotion of women as an extra activity and not a day-to-day priority.

The Higher Education Special Program (*Hochschulsonderprogramm III*) running from 1996 till 2000 was the most important program, with one of the aims being promotion of women in academia and science. Special promotion procedures (i.e. doctoral studies and habilitation) suiting women's needs were developed, in particular stipends helping re-entry after career breaks and contact fellowship for women on parental leave for instance. The Program sponsored other initiatives as well (e.g. networking, new

professorships and research programs in women's and gender studies). Another special program – Program to Support Equal Chances for Women in Research and Education started in 2001 (running first till 2003 and then prolonged till 2006) with the budget of 60 million DM (75% will be earmarked for women who currently are trying to get an academic qualification, 15% to women's and gender studies and 10% will be used to strengthen the participation of women in natural sciences and engineering). All other programs, not directly promoting women but targeted at academics have to strive for a participation of women of at least 40% (BLK "Nachfolgeaktivitaeten fuer das Hochschulsonderprogramm III" 25.10.1999).

Since 1990s various initiatives to promote women have emerged. The Competence Center "Women in Information Society and Technology", the "Center of Excellence Women and Science"(CEWS) were recently established. In 2001 the "Total E-Quality Science Award" was launched which will be given to the institution most successful in the promotion of women. All these initiatives along with the established women's networks at national and Laender level, the Women's Studies Networks (in North Rhine-Westphalia) and the "International Women's University Technology and Culture (IFU) at the EXPO 2000 are aimed at bringing women together. They are essential for successful lobbying and provide opportunities for effective networking.

Effectiveness of positive action measures

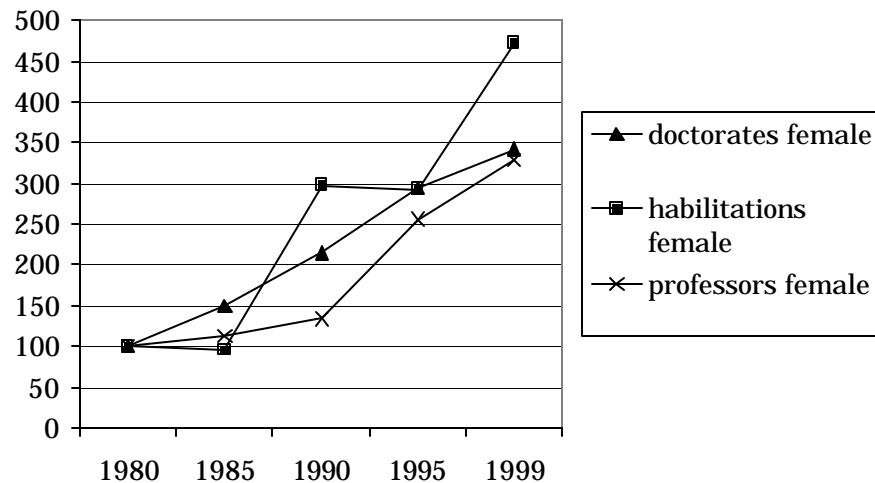
All these measures were undertaken to meet several goals with one of the most important being to

raise the proportion of women at all career levels and notably in top-rank positions, and to achieve this goal in the shortest possible time span. While statements about how much gender mainstreaming has changed science and challenged androcentric bias are risky, the percentage of female professors indeed went up from 6,5% in 1992 to 9,5% in 1998 (BLK 2000). Similarly, the proportion of female graduates, doctorates and habilitations also grew.

This increase of women's participation in academia is even more pronounced if we look at this process in a longer time span and compare men's and women's participation growth ratios. The following table shows a significant increase in the number of female doctorates, habilitations and professors between 1980-1999 (Fig.6). The number of female doctorates is growing steadily in the studied period and increased in the last 20 years by 3 times, while the number of female habilitations grew almost fivefold. The number of female professors rose sharply in 1990s due to generational shift in academia and increase of vacancies. Additionally, aggregated level conceals the fact that in some traditionally male domains the growth of female habilitations was particularly significant (e.g. in mathematics and natural sciences where only 31 women habilitated in 1992, in 1998 there were already 73 of them (i.e. the number has doubled) (BLK 2000). However, we have to keep in mind that the remarkable increase in women's participation in academia in Germany is partially explained by very low absolute numbers of women at a given career level in the previous period. No numerical increase in male doctorates, habilitations and professors has been observed, and the number of men undertaking academic careers and being promoted is

fairly stable. Nevertheless, the absolute numbers of men involved would still justify a conclusion of a reproduction of male dominance in German academia.

Tab.6. Development of female participation in HE (by qualification levels and professorship) in 1980-1999. 1980=100



Source: Own calculation based on Statistisches Bundesamt, Fachserie 11 Bildung und Kultur, Reihe 4.4., Statistisches Jahrbuch Deutschland, different volumes. The absolute numbers in year 1980 are the basis for the index. 1980=100

Conclusions

In the article we wanted to present an overview of the situation of women in German academia. The general conclusion is pessimistic, as women who enter universities as students are less likely to become university professors one day. Furthermore, they tend not only to be mainly in lower, junior positions, but they are also more likely to hold various teaching

positions with no career perspectives or rely on external funding while earning their degrees. It takes them more time to advance professionally and part-time work, which has been praised as a best solution for women to combine work and family life additionally marginalize them.

Researchers usually offer various alternative explanation models for such a picture. They draw often on gender division of labor and the problem of combining work and family, different socialization patterns and/or gender discrimination in organizations. We did not aim here at providing a systematic explanatory model as the issue is very complex and the exclusion processes which take place in academia are difficult to grasp quantitatively with the data available.

This brings us to the next point. Monitoring procedures, improved statistical reporting and increasingly sophisticated indicators of gender (in)equality are an important part of a “positive action”. In the article we gave a short overview of efforts, which have been undertaken in Germany to promote gender equality, including legal initiatives and financial incentives. It is however still difficult and still too early to evaluate its outcomes.

Certainly women are making progress and their proportion at all career levels have been recently rising sharply. Nevertheless, one should not get the impression that women overtake German academia. In fact, academia is still dominated by men and the remarkable increase of women in positions of authority at German universities is partially a statistical artifact. For the time being, men compete for positions,

funds, recognition and power predominantly with other men. A major breakthrough is still to be witnessed.

Notes

¹ Research and Training Network "Women in European Universities" (WEU) is both a research and training project funded by the European Commission within the 5th Framework Program. The network gathers researchers from seven European countries, coordinated by the University of Muenster, Germany. Its aim is to assess the professional status of women in European academia and to analyze the reasons for their underrepresentation in positions of authority. Additionally, special emphasis is put on the training of doctoral students.

² When there is no source indicated in brackets, the data comes from publications of Statistisches Bundesamt for a given year.

³ All numbers reflect the situation in March 2001 (Information found on the web sites of the respective bodies).

⁴ Such as the Max Planck Institute or the Fraunhofer Gesellschaft

⁵ Habilitation awardees from many different years and not habilitated academics may apply together, the same person usually applying for different vacancies and those already holding a professorship position may be competing as well.

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