

Tradition stands in the way of promotion

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Germany's outdated system for promoting postdocs frustrates the career ambitions of many promising researchers. Worse still, it is preventing universities from competing as well as they should in the international science race.

HE is a 35-year old postdoctoral researcher who has worked in highly regarded laboratories. He has a long list of publications, has taught at two universities and won excellent marks in student evaluations. So you might expect him to be one of the most promising applicants for a professorship.

Not so in Germany, because he has failed to gain the academic grade of habilitation. By awarding habilitation to a postdoc, the university faculty testifies that, according to unwritten standards, the applicant is capable of doing good research, and of teaching. The applicant has to submit a major piece of research, or his publications plus a summary of achievements and a projection of future research. He also has to give a lecture to the faculty.

When the faculty grants habilitation, the *Habilitand* becomes a member of the faculty, gaining the right to accept students and to teach. But there is considerable variation in the standards of selection since each faculty sets its own procedures.

Some east European countries are considering introducing a habilitation system to improve the professionalism of their young university scientists. They should be warned that the German system has serious drawbacks. It brings personal dependencies and subordination. And it retards young scientists' careers without improving the quantity or quality of their research. In fact, habilitation might tell you more about the faculty granting it than about the quality of the research and teaching of the scientist being considered for a vacant post.

Habilitation in Germany is, at best, a mixed blessing. Postdocs depend on the goodwill of their supervising professor and faculty as to when they should apply for habilitation. Habilitation does not guarantee tenure but only opens up the chance to be considered by a searching committee. Yet the law does not strictly demand habilitation as a precondition for elevation to professor. It is simply a rubber stamp, testifying that the faculty considers the *Habilitand* fit for a university career.

The practice was introduced early last century with the successful Prussian university reforms by Wilhelm von Humboldt. Before then, everybody who had a PhD had the right to lecture on any subject they chose. This invitation to dilettantism became intolerable. Habilitation gave faculties the right to select those they considered qualified, and to specify the subject of

qualification. Humboldt's reform resulted in a university monopoly for science and science qualifications.

Since then the way research is performed has changed tremendously. With the foundation of the Max Planck Society and other national research institutions, universities lost their science monopoly, but they have retained their monopoly on qualifications (PhDs and habilitation). Much basic research is done outside universities; there are Europe-wide research facilities, teamwork across continents is a daily occurrence, and international compe-



tion requires quick publication of results. A young scientist's international reputation, based on publications and work in internationally known labs, has become a more quantifiable and more significant feature than a habilitation certificate awarded by a faculty less familiar with the current international state of the field of research.

Today habilitation creates more problems than it solves. The average age of *Habilitands* grew from 37 in 1970 to 40 in 1995. The most important reasons for this deplorable development are that people are gaining their PhDs later (average age 33) and that postdocs are taking an increasing load of services and teaching. Habilitation has become a career trap: faculties prefer good young applicants for professorships, and give their own postdocs a chance to apply only after habilitation, at an age when their most creative period is ending. Paradoxically, habilitation keeps scientists in a long period of dependency while they are asked to prove their ability to do independent research.

Habilitation is no longer a reliable indi-

cator of excellence in research and teaching. Faculties find it difficult not to grant habilitation to somebody who has grown older while rendering important services and teaching to the faculty and thereby neglecting his own research. After reunification many young west German scientists with habilitation have found professorships with tenure in east German universities. Now faculties in the east realize that habilitation is not always a guarantee of high standards. This disillusionment is one of the reasons why Dagmar Schipanski, the head of *Wissenschaftsrat*, Germany's science council, is calling for non-tenured professorships (see *Nature* 384, 204; 1996).

Habilitation is centred on an individual's record of research and is not shaped for modern methods of teamwork. Single-author research papers have become rare, and faculties have difficulty in pinning down an individual's contribution. Habilitation does no justice to the ability of an applicant to work in a multidisciplinary team. It no longer promotes efficient and internationally accepted research methods.

Habilitation is now a questionable procedure for promoting excellence in science. The practice does little to boost the international reputation of German universities. The spectacular success in science of US and UK universities is perhaps the most convincing argument that other practices may be more effective.

There is nothing wrong in critically evaluating a postdoc career. But why not leave to the selection committees the judgement about who is best for the job on offer? In Germany an open discussion on how best to promote young scientists is confounded by two centuries of tradition and anxieties about losing one of the last strongholds of academic autonomy. After more than two years of discussions, *Wissenschaftsrat* could not agree on alternative ways of promoting postdocs for lifetime university careers. It recently recommended adhering to the status quo. After participating in these talks, a government official advised his colleagues: "whoever lays hands on habilitation will fail in university policy". If he is right, this will do nothing to enhance the competitiveness of young German researchers in the global world of science. □

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