Chapter 11 The Conflict Between "New" and "Old" Governance Following the Introduction of Performance-Based Funding in German Medical Departments

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Introduction

Science policy across Europe has been the subject of recent reforms. In general terms, these reforms aim to translate established systems of governance, which are based on oversight and departmental regulations, into new and diverse market-orientated practices (Braun and Merrien 1999). Among these new practices is the introduction of performance-based (PBF) funding to some university departments. Although many reforms are still in their introductory phases, we can already see a familiar pattern associated with institutional change. A new policy reform discourse may have emerged, but the behaviors of established actors for whom these measures are intended are not always amenable to change. How, then, can we evaluate the efficacy of "new" forms of science policy governance against the "old?"

Clearly, a distinction between "old" and "new" governance is arbitrary if it fails to point to significant change when answering questions about how to govern. Influential literature suggests that the rise of "new public management" (NPM) indicates a significant change that affects the way in which those involved in governance think about and coordinate their objectives and means (Power 1997). However, the literature on institutional change also suggests that actors who are particularly concerned with reform subvert these attempts in order to retain control (March 1981; Powell and DiMaggio 1991; Greenwood and Hinings 1996).

Discussions on the "new governance of science" draw heavily from NPM literature, which claims that science policies along with the administration of science have become increasingly influenced by private sector management

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techniques (Slaughter and Rhoades 2004; for a critical discussion of this see Whitley 2007). However, deBoer, Enders and Schimank have argued that these new governance structures result in a new "governance mix" in which different stakeholders adopt new roles, whereas some forms of (self-)governance remain stable (De Boer et al. 2007).

New governance structures do not necessarily indicate a significant change in the governance of science, however. This chapter argues that actor constellations within universities and departments must be analyzed in order to explain the effects of science policy reforms. I posit that the effects of governance reform cannot simply be explained by looking at societal and economic contexts, but they also rely largely on strategies, actions, and behaviors of department managers, administrators, and faculty members in their everyday settings—an environment aptly named the "academic trenches" by Irwin Feller (2009: 327). This assertion corresponds with Feller's observation that ingrained cultural, professional, and institutional patterns and expectations are at play when governance reforms are adapted in university departments.

The empirical research in German medical departments used in this chapter shows that popular narratives about science policy reform, such as "new governance replaces the old" or "scientists lose authority to administrators," are less suitable for the current situation than the dominant literature suggests (Schimank 2005; Muench 2007, 2009, 2011). Even if new forms of governance have had an impact on the management of medical departments in Germany, this chapter's main claim is that established intra-university collegial bodies (in German usually called Fakultaetsraete) have significantly influenced and continue to influence science policy reforms. Although NPM, in the form of performance-based funding (PBF), has given more autonomy to the department management, it has not substantially affected the autonomy of departmental academics. Despite traditional collegial bodies not having any officially sanctioned decision-making function in the development of PBF systems, their influence is clearly visible in the outcomes of the policies introduced. PBF systems operate according to special regulations that represent the authority structure of a department. In short, even though the new governance actors have wrested away some authority from those of the old system, the established actors are still capable of looking after their own interests (Martin and Whitley 2010; Huether 2010).

By employing qualitative methods and empirical data, this chapter tests both the specific case of PBF in German medical departments and the general framework of NPM as expressed most prominently by De Boer et al. (2007):

The individual academic's influence and power to defend his own status and autonomy has been weakened, as has the formal collective power of academics in intra-university collegial bodies (150).

The next section poses this study's central research question of whether German medical departments experienced a shift from professional-collegial control toward internal bureaucratic control following the introduction of PBF.

The Main Question

Although scientific endeavors rely on a global network of institutions that bestow reputation upon its practitioners, science policy differs substantially between countries (for an overview see Braun 1997). The distinction between diverse, market-oriented universities in the United States and their European counterparts with stronger governmental regulations is the most frequently cited example of policy differences (Clark 1983; Kruecken et al. 2007). Nonetheless, analyses of university governance reform claim to see a trend towards a "global model" (Baker and Lenhardt 2008) that strengthens competition and the internal hierarchies of universities while weakening the state's capacity for direct intervention, as well as the authority of academics. Irwin Feller (2009), for example, argues that in the United States the government's demand for accountability in performance, "especially in this era of evidence-based decision making" (Feller 2009: 329), has led to "increasingly formalized planning, performance management and performance measurement requirements" (329). This has led to an[...] increased use of quantitative measures alongside of and at times in lieu of collegial assessments, and the shift from collegial-professional to [internal] bureaucratic modes of decision-making (341).

Feller gives a convincing account of how decision-making processes in the American system have become increasingly bureaucratized. Following the notion of a global model, this study's main question is: Has this shift also occurred in Europe, specifically in Germany? Despite the rhetoric of increased autonomy at universities in the mainland Europe, many authors claim that bureaucratic and administrative university structures have thrived at the expense of the autonomy of European academics (Schimank 2005; De Boer et al. 2007; Kehm and Lanzendorf 2006).

In order to see if a similar shift from collegial-professional to internalbureaucratic control has occurred as an effect of reform, I will look at the example of recent reforms that have PBF in German medical departments. All medical departments in German universities are subject to inner-departmental formulas that allocate funding (and sometimes laboratory space) according to indicators unique to each department. These performance indicators, such as publications, teaching, and third-party funding, sometimes differ significantly within one federal state (*Bundesland*). All departments' formulas consider the amount of third-party funding and the "quality" of publications, which is mostly measured by using the journal impact factor. Only in one instance was "quality" measured by using the number of citations.¹ Because these performance indicators play a central role in the allocation of funding, they were accorded considerable importance when collecting and organizing this chapter's data.

¹Measuring the quality of publications like this is extremely controversial since the journal impact factor does not reflect the impact of a single article. For an introduction into the subject see Decker et al. (2004).

Data and Methods

The introduction, establishment, and reform of PBF in German medical departments illustrate how government, university administration and management, and intrauniversity collegial bodies interact with each other at different stages of the process in which a PBF system at a department is constructed. This chapter's use of PBF systems as an example allows a detailed analysis of what happens when political actors who are external to the institution disrupt internal actors by offering them incentives to which they are not accustomed, and how these disruptions affect research policy reform.

German medical departments were also chosen because they are the only departments that have been thus far subjected to inner-departmental PBF at every German university,² which allows for a comparison of different departments across the country. Additionally, PBF systems have been in place for over 10 years, so the development could be observed over a longer period of time. Finally, PBF in medical departments is not simply symbolic; it distributes large amounts of funding and can therefore be expected to have observable effects on academics' behavior.

This study's data was collected using two methods. The first involved conducting 22 key informant interviews in German with members of the departments' management—deans (*Dekane*), vice-deans of research (*Forschungsdekane*), and research coordinators (*Forschungsreferent/innen*³)—from ten medical departments in Germany, which were carried out between December 2009 and May 2010. The second methodology was an analysis of internal documents (protocols, memos, and manuals) from six medical departments. These documents span the time from which the first discussions about establishing performance-based funding emerged in the mid-1990s to current debates about reforming the established formulas.

The purpose of the interviews was to understand and record these actors' operative knowledge, particularly with regard to the establishment and implementation of performance-based funding within their department. The access to the information this provided was privileged access that would not have been possible through other sources (Meuser and Nagel 2003).

Using the critical interview method proposed by Meuser and Nagel (2005 [1991]: 83–91) and Bogner et al. (2005 [2002]) (see also Bogner and Menz 2005 [2002]), this approach considered the deans and vice-deans to be not only key informants, but also subject to performance-based funding. It therefore controlled for bias by excluding statements made in formalized language. The exclusion of formalized language inhibited the respondents from giving a normative presentation of

²Medicine seems to be the forerunner in this case because of its perceived generally poor international performance, as explained at the beginning of the next section.

³Whereas deans and vice-deans in Germany are elected from within the group of professors at a department for a limited time to fulfill this administrative office, *Forschungsreferent/innen* manage departments' research activities without being researchers themselves. Albeit this position is lower in the management's hierarchy than deans and vice-deans, there are typically no term limits.

themselves, which Goffman (1959) describes as the best self. At the same time, the analysis focused particularly on the use of detailed examples, which forced subjects to move beyond telling the official institutionally sanctioned story (Schuetze 1977).

Apart from testing the results of the key informant interviews, the purpose of the document analysis was twofold. One part of its purpose was to identify dominant actors and inner-departmental dynamics that are instrumental in establishing and reforming performance-based funding. The other was to discover patterns of explaining (and legitimizing) the established systems. A computerized collection of actors' names and topics mentioned in the protocols helped support the document analysis.

The medical departments were chosen on the basis of structural data made available by the German Association of Medical Departments (*Medizinischer Fakultaetentag* and the German Association of Medical Schools (*Verbund der Universitaetsklinika*). The selection criteria included:

- amount of funding from government and state sources
- amount of third-party funding
- number of publications
- number of research and teaching staff.

Additional criteria were:

- existence of statewide performance-based funding (in which medical departments across one state compete for funding according to a formula)
- type of connection between department and teaching hospital
- geographic location.

The data sample, which is based on a wide variety of medical departments whose selection was based on representative criteria, ensures that the results are also representative of a wide range of medical departments.

The Case of Performance-Based Funding in Germany

PBF has been comprehensively established in university medicine owing to the perception that it would help solve several problems that departments were facing prior to its introduction, which was a notion held especially among the agents of scientific self-governance, such as the German Research Foundation (*Deutsche Forschungsgemeinschaft*, DFG and the Science Council (*Wissenschaftsrat*, WR).⁴ First of all, the pre-PBF allocation of resources was considered "inadequate" (DFG 1999)

⁴In the German science system, the DFG is the dominant agency to distribute third-party funding for science. This is done through highly a competitive and highly reputable system, which relies heavily on peer review. The DFG and the WR evaluate and advise scientific institutions, give opinions on science policy, and mediate between science and politics.

because it mostly relied on counting the number of beds occupied by patients—a system considered disadvantageous to clinical research. In the eyes of the DFG and German Science Council, this was a main contributing factor to the German medical departments' poor international research performance. The Science Council therefore urged medical departments in 1999 to adopt some form of financing system that would distribute funds according to research performance commensurate with the existing performance indicators for patient care (WR 1999).

The impetus for the introduction of PBF cannot be attributed to one actor. Rather, three actors that operate at different levels have embraced the idea. First, the German Science Council recommended establishing PBF to the medical departments it evaluated in the mid-1990s. Second, the Federal Ministry for Education and Research (BMBF) aimed an initiative at eastern German universities that required medical departments seeking special funding to distribute at least 30 % of their funding based on performance. Third, some federal states introduced PBF systems at the state level. This state-level initiative froze or decreased medical departments' funding, which provided an incentive for those departments to introduce internal PBF systems as well.

The process introducing PBF is remarkable for two reasons. One is that it supports the claim that governments-in this case at both the state and the federal level—have recently been following more NPM-inspired governance techniques by not establishing complete sets of rules, despite the introduction of external requirements. Instead, they formulate goals or offer incentives that prompt departments to determine individual paths to reach those goals. This can be expected to increase the influence of those actors within the departments who decide which paths are taken. The second notable observation about the PBF process is tied to the German Science Council, which is one of the country's most important intermediaries between science and state politics. Its role as an early supporter of PBF must not be underestimated. The Science Council's peer reviewers themselves had possibly promoted PBF "initially in the name of rational management but increasingly as devices to foster reputational enhancement," in the way that Feller (2009: 323) suggests. The results from the key informant interviews support the notion that the Science Council's evaluation of several cases resulted in disparate PBF systems across Germany, which also launched reforms of the departments' managerial structures.

German medical departments started to develop internal PBF systems following the evaluations by the Science Council, the above-mentioned BMBF governmental initiatives, and the federal states. However, the evolution of these systems did not follow a uniform pattern. Many departments had already developed systems, even before important intermediaries between politics and academia, such as the Association of the Scientific Medical Societies in Germany (AWMF or the DFG, published concrete recommendations in 2004 and 2005, respectively. Departments thus developed individualized systems. And while all internal allocation formulas consider the amount of third-party funding and the "quality" of publications, evaluation criteria are not fixed, and faculty performance in many departments is also assessed according to other indicators such as teaching activity, patents, and awards. The room for differences—and thereby the need for expertise—is thus considerable: A typical PBF formula might distribute 30 % of the funds according to teaching load, that is to say, the number of hours taught per teacher, and 70 % according to research performance. Research performance might be measured 40 % by acquired third-party funding, in which different funds will most likely be ranked according to how competitive the process of acquiring the funds was. For example, funds received after a very competitive peer review process, such as those given out by the DFG, will be multiplied by one, while funds received from the pharmaceutical industry without peer review would be multiplied by 0.2, with less competitive processes located somewhere in between. The remaining 60 % of research performance might be assessed by computing journal impact factors, in the simplest case by adding all impact factors. However, many departments use more complicated methods of assessing the quality of publications, allowing for the size of medical fields, different types of publications, and the number of authors of each publication.

Results

The interviews and document analysis explain the large variety of PBF formulas as the result of negotiations between department heads, administrators, and researchers. Old and new conflicts surfaced in these negotiations, while responsibilities and authority were partly redistributed—but often remained the same.

New Responsibilities and Authority

As the interviews show, these processes of creating often-complicated PBF formulas led to new responsibilities for departmental management. This is especially true for departmental administrators, who were the typical candidates for becoming PBF experts:

Well, by now, what I do is that I calculate the performance indicators for all our clinics and institutes according to our two criteria impact points and third-party funding. Those performance indicators are then used to determine the budget (research coordinator, author's translation).

In at least one case, a research coordinator was asked to serve on an expert council to the state government:

Maybe we are a special case in that we have developed a statewide tool in which we agree which foundations really use peer review and which do not. [...] So I get together with [representatives from the state ministry for research and education] and look at the list, and the result is binding for all [statewide-PBF] reports to the ministry (research coordinator, author's translation).

Additionally, managers and administrators are relieved to have concrete numbers, which gives them bargaining power when negotiating with high-status clinic directors. A PBF system would allow department managements to "finally" be able to make decisions based on "somewhat safe information" (vice-dean of research, author's translation).

New Conflicts

Of course, this decision-making process was a source of conflicts during the debates about the appropriate PBF formula. While one dean joked that he was asked "whether I could still cross the street at night without a bodyguard" (author's translation), another dean of research explained:

There was resistance about details; for example, discussions about whether weighted or unweighted impact factors [according to subject] should be used. That was a longer discussion, which I was able to defuse by calculating the difference over 4 years [for our department], [it showed that] the results on the level of distribution are the same, no matter how it's calculated [...] My colleagues in medicine are usually pragmatic people, so the objections came to a stop [laughs]. [...] Still, we have discussions every year about which publications count or not (author's translation).

The above quote shows academics' concerns about the formula doing justice to their particular field, as well as their institutes' particular funds. One academic, who is now the dean of research in his department, explains his position at the time of the initial discussions:

At the end of the nineties [when PFB was first discussed in the department], I was told that PBF should only be applied to experimental fields. I would not need anything but pencil and paper. I would not need any funds! (author's translation).

Clearly, academics were afraid that their particular fields would be disadvantaged by PBF, and that PBF might be used to deprive their field of the funds needed to continue working. At the same time, department management teams were concerned that academics would sabotage a system aimed at solving the departments' problems:

Well, that's one of the problems with the academic system: sometimes an opinion leader stands up and says: "That's not going to happen." And then sensible ideas are destroyed out of principle (vice dean of research, author's translation).

Old Responsibility and Authority

The preceding quote provides some indication of the results of the documentary analysis: Even though it seems that performance-based funding as a form of NPM has resulted in increased internal managerial control in German medical departments, resistance from (senior) department members must be taken into account. These established senior members have been active in the departments' governing bodies since before PBF became an issue, and they have accumulated significant amounts of prestige within the department as well as within the academic community. Their authority within a department is considerable.

One might observe that most medical departments have formed special commissions to create their PBF formula, presumably bypassing established professionalcollegial governing bodies. Assuming that bureaucratic has control increased would, however, be shortsighted for two reasons. One reason is that the commissions which developed the formulas were comprised primarily of *senior faculty members*. Examining the protocols from these commissions, one can see that after departments had experienced the first year of PBF, some senior faculty members immediately became members of commissions and argued the case for their institute and medical field. They often achieved substantial adjustments to the PBF formula. Only in some cases were bibliometrics experts or junior faculty members also asked to participate. The dominant presence of senior faculty members reaffirms the established form of professional-collegial control that Feller and others (Feller 2009; Schimank 2005) consider to be losing influence.

The second ground for rejecting the actual ruling power of "new" governance is that PBF systems had to be approved by established bodies of governance, which was a course of action that gave proponents of traditional professional-collegial procedures ample opportunities to intervene. The effects of professional-collegial intervention on the (re)adjustment of reforms have been expressed in both the interviews and in the document analysis. Several years' worth of protocols from PBF commissions illustrate how, at first, only faculty members with a particular (often academic) interest in performance measurement chose to be part of the discussions about PBF development. There is no observable overrepresentation of any specific medical field among those groups. At the same time, however, large medical fields such as internal medicine or surgery are usually well represented. After the PBF system was introduced, faculty representation of smaller, more specialized fields such as the history of medicine or clinical psychiatry entered the discussion about how "quality" and "performance" should be measured. Realizing that funding, and possibly reputation, was at stake, they defended their fields' special interests, primarily to give a voice to smaller but highly influential journals in particular subfields, and also to acknowledge unorthodox monographs and work presented at specialized conferences.

Old Conflicts and New Competition

The process of creating a PBF system that most faculty members would accept was an intense topic for discussion among colleagues. One key informant recalled:

We had quite a few controversies among the professors who realized that they were not the winners in the [PBF] system, but finally they respected it because they knew they would not have anything taken away [...] That was a happy accident which helped implement the system, that it did not really affect the substance of the established [academics] (dean, author's translation and emphasis).

Those "happy accidents," in which some faculties consent to relaxed PBF standards for their established members, turn out to be rather common among current PBF systems. As one research coordinator put it:

Surely, institutes and clinics with a historically good funding pedestal will not necessarily complain. That will change in the future because newly appointed professors will start with completely different criteria (author's translation).

This suggests that some faculty members continue to abide by established internal procedures, even regarding new external initiatives such as PBF, and will continue to do so as long as established actors are active in the departments. This means, of course, that newly appointed academics in many medical departments are less comfortably financed at the outset than established department members. But even departments that do not give special treatment to established members have created special "innovation funds" or bonus payments for successful fundraising to supplement their institutes' assets:

That is why these bonuses were established. They are valued by the majority of my colleagues, even those who are net payers [in the PBF system] and do not profit from [the PBF system]. When they have raised funds, they receive a bonus. Because those [bonuses] flow immediately, they should not be underestimated (dean, author's translation).

As the above quote shows, medical departments have found different ways to sweeten their PBF systems, which otherwise would be considered bitter pills to swallow. Thus, although the introduction of PBF in German medical faculties gave some additional authority to department management and administration, these empirical findings show that faculty members—established actors in many cases who were able to make themselves heard among their colleagues, and within particular governance bodies, exercised a substantial amount of professional-collegial control and influence over the way PBF systems were developed and reformed.

Discussion and Conclusion

This chapter's data and results represent a period of 15 years, during which PBF systems in German medical departments were introduced and developed. On the one hand, the results show that some administrative changes have occurred. This is natural and to be expected after the introduction of any large-scale initiative such as PBF. On the other hand, this chapter's findings strongly suggest that the tenacity of professional and institutional cultural patterns and expectations ensure that observable and significant degrees of influence and authority remain in the hands of researchers. This means that the notion of "more influence for the administration means less power for academics" might not be applicable to every institutional arrangement. Additionally, in keeping with the literature on institutional change, the idea that "new" governance signifies a considerable change from "old" governance cannot be upheld. Instead, I argue for the necessity to differentiate between actors according to observable changes in their roles. Only then can the precise differences

between the effects of governance reform in different universities be examined. The analysis of this chapter's case suggests that at least three groups of actors and their changing roles have thus far affected governance reform:

- Governmental actors are observed to have changed their role from designers of concrete governance procedures to facilitators of new initiatives and creators of the frameworks in which they are situated. This process has been a recent development in Germany.
- 2. Management in the relevant departments has taken on a new policy-orientated role in addition to its traditional one as a mediator between governmental actors and scientists.
- 3. Scientists concurrently react to and shape science governance by employing both established and new bodies of self-governance, thereby retaining much of the professional-collegial authority that is supposedly diminishing according to research about new public management framework. However, this authority is observably restricted to the more reputable members of agencies, such as the German Science Council, and to established senior faculty members within departments.

Therefore, in the light of this chapter's case study, a new form of governance that signifies a substantial change in respect to the management-academic dynamic cannot yet be observed. This study benefits from a combination of document analysis and qualitative interviews. It would be interesting to see the results of studies which apply similar empirical research methods to university governance structures in other countries. We can expect to see management enforcing general governance policies, which would also include performance-related policies. I suggest that we would see similar cases of actors, both management and scientists, adapting to new policies, but could also expect to see an observable retention of professional-collegial control within departments.

Yet how long will this retention of control last? It is not surprising that established actors maintain significant degrees of control along with much of the financial benefit. Bourdieu (1984) would define these high-powered actors as scientists endowed with cultural and social capital who are well-connected and revered within the medical community. It is common for longevity and respect in any given professional field to be rewarded with financial gain, and a good reputation is a core value among professionals. Nevertheless, it might not be possible to uphold these established relations since they conflict with one aim of PBF: To attract top-level academics with the promise of additional funds. As I have shown, the PBF system in many German medical departments is biased against newly appointed academics in comparison to established department members. This is hardly appealing to scientists looking for new positions; in fact, some current PBF systems might even discourage mobility.

However, this could be a temporary problem of transition from one system of allocating funds to another. Having dealt with the possible conflicts between younger and older academics, the next generation of scientists will be equally affected by PBF, which raises the more fundamental question of whether PBF disrupts conventional meanings of professional respect. Possibly the conflict between new and old governance in academic departments is an indicator of changing meanings of respect and success, and PBF intensifies the equation of professional success with financial awards. Or it could be that the new policies meet the greatest resistance upon their introduction, when established actors accustomed to "old" forms of governance—based on reputation and longevity—clash with "new" meanings of success based on formulas that measure performance. We will see how this development unsettles or bolsters traditional meanings of professional success with regard to the new generation of professionals who compete for performance-based funding.

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