

# Chapter 7

## Who is Leading Whom, Where to, What for: And How? Governance and Empowerment in the University of the Twenty-First Century

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### 7.1 Introduction

The question of the autonomy of the universities is now back on the agenda everywhere. A case in point is the recent manifesto on the subject of European university policy published in June 2010 (The manifesto “Empower European Universities” 2010). Clearly the subject of the university as an organisation, of university autonomy based on adequate governance structures, and above all the need to constantly redefine the balance between control and participation is not yet history. At the same time, one is tempted to point out that we have now spent some 20 years working with new management and decision-making structures, quality assurance and accreditation procedures, and strengths and weaknesses analyses, and that the time has therefore come—as I pointed out last year on the occasion of Leipzig University’s sixth centenary celebrations (Krull et al. 2009, pp.207–220)—to finally address the challenges of content and especially the vital question of curricular reform.

On the same occasion, that is in Leipzig in mid-May 2009, Christoph Markschie as President of Berlin’s Humboldt University suggested that we should neither succumb to the temptation of a “notorious doomsday pessimism” nor indulge in “institutionally calculated optimism” but that we should embrace a “decisive yes-but” approach or, to be more precise, embark on a “via media” and also take a look at the history of the universities (Markschie 2009, pp.89–116). That is precisely what I would like to do here—albeit not from the eleventh

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century to the present, nor even from 1810 until today (in spite of a few inevitable references to the *genius loci*), but primarily with regard to the last two decades in the history of the German university—with its galloping pace of change and far-reaching reforms, its many inadequacies, the still unresolved deficits and future action requirements. In short, I wish to take stock and open up avenues for new ideas and activities.

## 7.2 Challenges, Chances and Risks for the German University System

Given the problem-solving capacity that is doubtlessly present in the university system, one asks oneself why it is that the intelligent people that are typically to be found there should be operating within dysfunctional structures. Is it because of the often lamented legal or fiscal restraints? Is this due to a lack of moral courage? Or is it simply a result, as many would say, of a dearth of interest on the part of the individual members of the institution concerned in the latter's wellbeing (all the more so as their careers depend not so much on the institution as on recognition within the scientific community)? Whatever the explanation, the standard response—"Intelligence is no protection against foolishness"—can hardly be the whole answer.

Before we come to the German universities, I should like to present an example from the recent history of European research policy, which illustrates some of the above dilemmas: the governance structure of the European Research Council (ERC). From 2002 to 2004 I was a member of two expert groups charged with the task of defining the objectives and tasks of the ERC and developing a suitable organisational structure (European Science Foundation 2003). In the first commission, which was created by the European Science Foundation, I drew up an organisational chart with a clear proposal for a Max-Planck or DFG (German Research Foundation) type of structure (European Science Foundation 2003, p.17): Members nominated to the Senate by the big European scientific organisations and confirmed by the Commission would elect a Board, which would in turn have the authority to appoint technical committees and be responsible for running the central office. What was finally created, however, was no such autonomous organisation but a new programme within the 7th Framework Programme and a combination of a research-driven Scientific Council and an Executive Agency of the Commission, all headed by two different persons, namely a Secretary General to run the Scientific Council and a Director from the ranks of the civil servants at the Commission to manage the Executive Agency. The fact that such a structure was doomed to fail was clear to many from the start. That makes it all the more pleasing that the panel headed by Professor Freyberga clearly confirmed that assessment in an initial review of the ERC's activities. In the report published in July 2009 Professor Freyberga says:

The review panel is deeply concerned that the present governance structure of the ERC is complex and a source of great frustration and ongoing low level conflict. A more coherent organisation is needed and the roles of the Secretary General and the Director of the Executive Agency should be amalgamated into one post and that a high level and recognized scientist with administrative experience be recruited for the post and made a member of the Civil Service of the Commission as necessary and eliminate the current and artificial division of authority and responsibilities between programme design and implementation (Vike-Freiberga 2009, p.4).

That is still a far cry from the autonomous, science-driven structure suggested in my proposal for the European Research Council, but the decision to combine the two offices is at least a step in the right direction. Now all the big science organisations must have the courage to keep pouring oil on the fire and insist on the science-based Research Council that was originally planned. Instead of a mere programme, which has not been immune to the usual inroads of Brussels bureaucracy either, an independent institution must be the goal in the medium term if we are to maintain and strengthen the trust of the European scientific community in the ERC as an effective science-driven body.

In many respects the ERC, with its transnational commitment to excellence, should be Europe's answer to the fast growing challenges of global competition in education and research to which the universities are increasingly exposed, because global networking and participation in such networks require not only platforms for competition, with their powerful steering mechanisms and forces for behavioural change, but also a much more focussed bundling of the local and regional actors than hitherto.

In many ways, of course, Europe's universities and research institutions compare favourably with the rest of the world: The European Union is by far the biggest scientific space on earth: The largest number of academics and also post-graduate students are trained there. European universities confer almost twice as many doctorates as the USA. Europe also produces the highest number of scientific publications. In this context Europe has been ahead of the USA since 1995 (although for the future we must also consider the fast growing contribution of the Asian-Pacific region, which is expected to overtake the USA and Europe some time between 2015 and 2020 to become the world's leading research area) (European Commission 2008).

If we look at Europe's share of the world's most frequently cited publications, however, and above all the numbers of benchmark science awards, including the Nobel prizes, etc., significant weaknesses emerge: Basically, too few fundamental scientific breakthroughs are made in Europe. In the last few decades a far greater number of Nobel prizes and similarly prestigious international science awards have gone to US scientists. Europe's ability to market basic innovations is also comparatively underdeveloped, a situation that has not changed significantly with the recently increased focus on linkage between research and industry or the Nobel prizes awarded to European scientists in 2007 and 2008.

Without wishing to go into the objectives and relevance of international university rankings, to a certain extent it can also be said that—for the natural

sciences and engineering disciplines, at least—the 2009 Shanghai Academic Ranking of World Universities confirmed the global dominance of the Anglo-Saxon language and research area. With eight of the top 10, 36 of the top 50, and 55 of the top 100 universities ranked, the USA's leading position in the world of science remains unchallenged. In the Shanghai results and other rankings, the UK plays the role of the little but also very successful brother of the USA, with Oxford and Cambridge up amongst the best. German universities only make it to the top 100. On the other hand, if we look at the world's top 500 universities, the latest rankings actually put Germany ahead of the UK and, relative to the size of the population, roughly on a par with the USA. The fact that a considerable number of German universities are to be found among the top 500 in several rankings (out of an estimated total of 20,000 universities worldwide) but are nowhere up among the best reflects the approach to university policy adopted since the foundation of the Federal Republic of Germany, with its focus on broad-based and regionally distributed support for a large number of universities offering high quality standards and very good study programmes rather than funding for a few elite universities enjoying international visibility.

The speed of change in the international division of labour from a world of hands, tools and machines to one of heads, computers and laboratories is matched by the pace of development in the conditions to be met to run successful universities. If we are not to be left behind by the world's elite, Germany and Europe must provide first-class conditions for teaching, research and innovation. We have to develop a culture of creativity and trigger more innovation through the funds invested in research. The university as an institution is confronted more urgently than ever using the global race for the most creative minds. Their traditional self-image as a “central bank of knowledge” must be transformed into that of an autonomous, self-responsible facility devoted to knowledge and research management as well as to international quality standards. At the same time, we must revive the principles of “learning by researching” and “researching through inquiry”. In this context, the publicly financed university and research system is being increasingly challenged by private initiatives. Multiple actor constellations call for new forms of governance and interaction, which in turn result in more intensive efforts for integration within the respective institution and location.

It will not be easy to confront these challenges; compared with other countries, German universities are clearly underfunded. On the whole, it can be said that the additional capacities created since 1974 have not been matched by similar increases in funding and staffing. From 1972 to 2004, the number of students grew by a factor of three compared with a factor of only 1.8 for the number of professors. In 2008, the student/professor ratio (on a full time basis) was 60.4 at German universities and 38.5 at the country's universities of applied science (Wissenschaftsrat 2008, pp.22–23).

Ultimately, the difference in funding between German universities and the world's elite universities is not a matter of percentages but of magnitudes. The difference between Germany's most generously financed Technical University (TU Munich) and ETH Zurich is one of a factor three, and between TU Munich

and the Massachusetts Institute of Technology (MIT) factor ten. For years Germany's universities have found themselves in a downward economising spiral; as soon as the—often significant—savings had been made, the next round of cuts was announced. The decision to shorten secondary schooling by 1 year in Germany with a resulting doubling of the university intake in 2011/2012 is a further challenge imposed on the country's universities without taking adequate staffing measures to equip them to cope. In such circumstances, it cannot be said often enough that it is astonishing to see what Germany's universities nevertheless achieve and how high the quality of the output can be in terms of both graduates and research. On the whole, the quality of both teaching and research can still be considered very good.

Whilst the old problems primarily involve the university teaching situation, i.e. inadequate funding, catastrophic staff/student ratios and high dropout rates, the new challenges mainly relate to the Bologna process and the need to find convincing solutions in terms of curricula and content for implementation of the original objectives, and to make the universities still more attractive for young researchers from home and abroad. At this level, a forward-looking university policy must include not only solutions to the problem of large student year groups, but also ideas for the race for the most innovative minds and for the goal of life-long learning. In addition to its teaching role, this means the university must itself develop into a learning organisation.

### **7.3 A Retrospect: Performance Through Self-Empowerment**

The question of the functions of the rectors or presidents and reform of the management and decision-making structures of Germany's universities was first raised in the 1980s. At the end of the phase of university expansion, i.e. at the end of the 1970s or beginning of the 1980s, depending on the state involved, when the approach to steering the university system shifted from input-based to output-based, it became increasingly clear that the relationship between the state and the university and also the university's internal management and decision-making structures were in need of fundamental reform. In this context, the Volkswagen Foundation formulated the following diagnosis in 1987 already:

In decisive aspects the universities are not independent; for important offices they elect amateurs in the positive sense of the word, who have no time to develop the necessary expertise for their offices and are dependent on well-meaning civil servants in the ministries and politicians in the parliaments who again lack experience in specific matters. This situation requires redress. (Board of Trustees of Stiftung Volkswagenwerk 1987).

In this context it was generally agreed that there was a need for support from private foundations. Finally, in 1988, a report on the management and decision-making structures of German universities was commissioned to Professor Karl Alewell, a business administration expert and former President of the University of

Giessen. Because of Professor Alewell's committed involvement in the process of German reunification, however, completion of the report was delayed until 1993 (Alewell 1993). On the basis of his review, assessment and recommendations, the Volkswagen Foundation finally invited contributions on the subject of "Performance through Empowerment" in 1994. The objective was not a university reform in the general and comprehensive sense of the word but more specifically a change in the realities of the universities, i.e. enabling them to review their structures, methods and processes and to develop proposals for a more meaningful definition and organisation of the individual fields of authority and responsibility, and to test new regimes and implement them on a sustainable basis. More specifically, the aim was to ensure that:

- responsibilities are no longer vaguely distributed but are clearly assigned on an identifiable basis,
- responsibility involves consequences for those who exercise it,
- decision-making powers and duties are assigned to people who face the consequences of their decisions,
- communications are intensified at all levels and between the various authorities, bodies, groups and individuals, and that
- university staff become aware that it is their university they are working for (Volkswagen-Stiftung 1998, p.6).

In the light of these goals, it was also clear that competition between the participating institutions should create opportunities for them to find their individual paths to improved performance rather than search for a universal structure to be imposed—possibly on the basis of university legislation—on all of them, whether they like it or not.

In spite of the many differences between the concepts submitted and procedures proposed, a series of problems emerged in all cases at the ten participating universities, e.g.:

- conflict between strategic top-down and participatory bottom-up approaches in the development of new management and decision-making structures,
- interaction and counteraction between the authorities and university self-government,
- coordination between organisational and human resources development,
- the threat to project continuity posed by rapid staff turnover,
- the problems of performance-based funding as an instrument of resource management (including self-blockades),
- additional workload and over-organisation deriving from the unintentional consequences of decentralisation, and finally
- redefinition of the relationship between universities and the state, and between university autonomy and ministerial supervision (Volkswagen-Stiftung 1998, pp.8–9).

Implementation of the reforms made enormous demands in terms of communication skills at the level of university management, particularly in matters requiring the acceptance, participation and powers of conviction of the university

members. Often enough, the management teams themselves could not foresee the consequences of the changes they were introducing. In many cases, they placed their trust in the optimistic words of Göttingen's experimental physicist, philosopher and aphorist Georg Christoph Lichtenberg: "I cannot say whether things will get better if we change them; what I can say, however, is that they must change if they are to get well" (Lichtenberg 1825, P.293). In the course of the implementation process, however, it became clear that the measures introduced were essential for clear university profiling and priority setting, convincing quality assurance and optimum use of the individual universities' specific potential.

If we look back at the Volkswagen Foundation's programme today, it is clear—thanks above all to the successful outcome of the Excellence Initiative for many of the participating universities—that the measures taken at the time had positive effects on at least some of the universities, such as the Free University of Berlin, Göttingen University and Heidelberg University, and on the reform of the new University of Bremen.

However, the Volkswagen Foundation was not alone with its programme. The German Stifterverband pursued similar goals with two action programmes for University Reform and Faculty Reform. The Bertelsmann Foundation also delivered an input with the establishment of its Centre for University Development in 1994. On the other hand, a number of other foundations decided not to wait for the public universities to become capable of reform and established their own—relatively small—universities, like the Bucerius Law School in Hamburg, the Hertie School of Governance in Berlin, and International University of Bremen taken over in 2006 by the Jacobs Foundation. And it is no coincidence that most of the private institutions that satisfied university accreditation requirements were financed by foundations; significant third-party funding is essential in order to combine university structures with socially acceptable levels of student fees.

## 7.4 New Rules, More Freedom: Selected State Legislation

If universities are to fulfil their tasks in the production, processing and communication of knowledge—which also means training excellent young minds for leading functions in research, business and society in general—they must have the capabilities to cope with today's science- and technology-driven dynamic of change. Above all they must be able to

- respond to new challenges in continuous interaction with their environment and develop innovative fields of research,
- adapt their teaching and study programmes to future-oriented fields of knowledge,
- overcome rigid structures and develop interdisciplinary forms of knowledge-building and communication,

- provide a recognised standard of training for person to person knowledge transfer,
- network their teaching, study programmes and research and achieve top-class performance.

Around the turn of the millennium it became increasingly clear that reform was also required at the level of legislation. It had become essential for the universities to mobilise new forces on their part in order to implement the fundamental reforms needed to modernise, but at the same time the state had to help the universities, who were sailing hard on the wind of change, by eliminating legal obstacles. The first of the German Länder to do so was Lower Saxony with the 2002 amendment to its Universities Act (Oppermann 2002), followed 2 years later by Baden-Württemberg with its reformed University Law, although the latter was based on a company analogy rather than the foundation approach.

Since then many German states have moved in the same direction, like North Rhine-Westphalia with its University Freedom Act, but I should like to concentrate on Lower Saxony and Baden-Württemberg, especially against the background of my own experience as chairman of the Foundation Council of the Georg-August University of Göttingen and the University Council of Constance University (until February 2009). Although theoretically the universities had long been granted self-government in state university legislation, it was significantly curtailed in fact by the supervisory powers of the ministries. Important decisions, such as appointments to university chairs, were mostly taken by the latter; the universities were able to participate in the appointment of their top-level academic staffs, but the ministries had a statutory right to the final decision.

It was not until the new Lower Saxony Universities Act came into force at the beginning of the 2002/2003 academic year that responsibility was largely assigned to the universities themselves in that state. As a result, the universities have also been able to develop greater flexibility in terms of their management structures. The Lower Saxon authorities have since withdrawn from the operative business of the foundation universities. They limit their activities to legal supervision and also negotiate with the universities their strategic development and performance goals, which are defined in written agreements on objectives. For Thomas Oppermann, who was the Minister at the time, one of the objectives was also to achieve enhanced social integration for the foundation universities. He saw the foundation as “the most suitable legal form to eliminate the basic shortcoming of German universities, namely inadequate integration in society. German universities see only the poor state and ignore our rich society. The foundation is the institution of civil society. It enables the German universities’ fixation on the state to be overcome and the university-state dualism to be replaced by the trinity of university, state and society” (Oppermann 2002, p.22).

The new Lower Saxony Universities Act also strengthened the position of the university management. Whereas the Senates had previously been able to build up significant powers of decision, the Presidential Committees now became responsible not only for signing the agreements on objectives but also for the creation,



modification and dissolution of faculties, the introduction, amendment and termination of study programmes, and the approval of examination regulations. This permits the universities to react faster in teaching and research to the challenges imposed by the dynamic processes of change.

In their decisions, the Presidential Committees are counselled and supervised by the newly created Foundation Councils. The latter have seven members: five appointed by the Ministry in consultation with the Senate, one representing the Ministry of Science and one delegated by the Senate. With the exception of responsibility for the agreements on objectives, the Ministry has transferred its powers over the universities—including appointments to university chairs—to the Foundation Councils. That has involved a huge process of decentralisation at the level of the university, all the more so as the foundations are also in the role of employer and have control over university assets.

On the model of American universities, German foundation universities can build up capital on a long-term basis and employ the earnings to make a relevant contribution to funding for teaching and research. Fundraising and alumni programmes permit private finance to be acquired as an addition to basic assets, which further increases the foundation's revenues. Of course, German universities will nevertheless remain financially dependent on their respective state authorities in the foreseeable future, and the public law foundation and the university corporation are interconnected in a variety of ways. The Board of the foundation, for example, is also the Board of the corporation. The members of the Foundation Council are jointly appointed by the university and the ministry. One of the main tasks of the Foundation Council for its part is to appoint and dismiss the Presidents and Vice-Presidents on the basis of nominations put forward by the Senate. This is again a product of linkage between the foundation and the corporation. Legal and academic supervision of the universities is exercised by the Foundation Council. At the same time, the Lower Saxon authority is responsible for legal supervision of the foundation. The authority steers the activities of the foundation through its funding decisions together with the agreements on objectives for the further development of the university. To that extent it cannot be said that the universities have been completely "denationalised". Nevertheless, their freedom of action—especially in one matter that is decisive for the quality of the universities, namely appointments to chairs—has been significantly extended insofar as the influence of the state has been mediated in so many respects.

As mentioned above, for the amendment to the Baden-Württemberg Universities Act, Minister Frankenberg's approach is based on the analogy between universities and commercial enterprises. He explained his decision in an essay as follows: "The principle must be for the universities to act wherever possible with entrepreneurial freedom and responsibility, while the state handles coordination as required. The state and the universities are linked in a strategic partnership" (Frankenberg 2003, p.423). The central goal of the university reform in Baden-Württemberg was to increase university efficiency by implementing new management structures borrowed from the world of business. This involved the following main changes:

The Rector (Chairman of the Board) and the full time members of the university's Executive Board are elected by the Supervisory Board and confirmed by the Senate.

The Supervisory Board is composed primarily or even exclusively of external members, and its central supervisory role vis-à-vis the University Council significantly strengthened.

The authority to appoint new professors and decide their position on the salary scale was transferred from the ministry to the Executive Board.

Numerous ministerial reporting requirements and rights of approval were terminated.

As in the case of the Lower Saxony Universities Act, the new law in Baden-Württemberg also provided for a significant shift of power from the Senate to the Rector and the University Council. The reform met with considerable criticism on the grounds of the inadequacy of the commercial enterprise analogy and fears of excessive external influence on the part of the Supervisory Board. On the other hand, the resulting steering model corresponded in almost all respects to the process developed for the University of Constance and already implemented there on the strength of an experimental clause (Modell 1998). In the company model, too, there is much interlinking between the corporation and the supervisory bodies, especially with regard to the election of the Rector, and the structure and development plans. The Senate, the Rector and the university together have greater freedom of action, and at the same time more responsibility is assigned to the Rector and his/her team. The strategic power of decision is clearly vested in the Rector/Executive Board. It is limited by the need to convince the University Council as the supervisory body of the desirability of the measures proposed.

## **7.5 The Initiative on Excellence as a Governance Competition**

All three funding lines of the Excellence Initiative launched by the German federal and state authorities are primarily targeted at research performance and strategies. The application processes stimulated by the offer of additional financing and hope of enhanced prestige also facilitated a whole series of reform measures which otherwise would hardly have been possible and certainly not in such a short time. To that extent, the excellence race—especially with regard to the third funding line for institutional strategies—was above all a governance competition, too. The commission I chaired on “The cornerstones of a sustainable German research system: twelve recommendations” had already made the following recommendation for the independent university of the future:

The universities must be given the freedom to participate and succeed in national and international competition in their respective fields of strength. This requires the appropriate decision-making, management and administrative structures for setting priorities in the competitive situation. The university of the future bases its actions on standards

deriving from science and research but also has an obligation towards society with regard to its activities and with regard to the return on funds invested in it (Krull 2005, p.12).

Many universities have since developed their institutional strategies in such a way that they do justice to the need to open the universities to other research and innovation actors, and facilitate internal processes for the allocation of start-up funds and the creation of new internal research units, e.g. Centres or Institutes of Advanced Study. When the experts—invited mainly from abroad—came to inspect the various universities, one major criterion in their assessment of the proposed institutional strategies was whether the universities had a clear understanding of their weaknesses and whether the proposed measures constituted an adequate response to them. In many of the successful concepts, the universities also reacted to the sixth recommendation of the “cornerstones”, relating to universities and non-university research, with its central—and at the time highly controversial—postulate: “In the interest of their ability to compete at the international level, the universities must be strengthened through close cooperation or even structural integration with non-university research institutions” (Krull 2005, p.14).

This recommendation for the fall of institutional walls was applied most stringently in the Karlsruhe plan for a merger of the Technical University and the Forschungszentrum Karlsruhe to form the Karlsruhe Institute of Technology. This institutional strategy, which was accepted for funding in the first round of the Excellence Initiative already, is designed to combine two extremely different research cultures, namely that of a primarily tied research facility and that of an autonomous university. With an annual budget of about 700 million Euros, a total of 8,000 employees are now working under the single roof of this alliance between a university and research centre.

Similar goals, but with a different institutional structure, are being pursued by the Jülich-Aachen Research Alliance. What is particularly interesting in the case of Aachen’s institutional strategy “RWTH 2020—Meeting Global Challenges” is that it also constitutes an attempt to make a real improvement to internal corporate governance, in particular through the introduction of a Strategy Board with the following mandate:

- implementation of an internal culture of competition,
- development of flexible funding for innovative ideas and projects,
- creation of incentives for the development and use of temporary structures,
- generation of synergies through consolidation of inadequately coordinated activities,
- strengthening cooperation beyond faculty limits through new institutional rules (RWTH Aachen University).

These new strategic departures are designed to promote interdisciplinary collaboration outside of the faculty with a minimum of bureaucracy.

At the University of Göttingen—following the feedback autonomy projects funded through the “Performance through Empowerment” programme and the

creation of the foundation university at the beginning of 2003—the next step is also to introduce a new element of governance to permit the closest possible degree of cooperation with non-university actors in the interest of research and the future of Göttingen as a research location. The Göttingen Research Council (GRC) is the decisive platform for this purpose ([Georg-August University of Göttingen](#)).

Apart from that, Göttingen's institutional strategy also provides for other internal bodies, some with external participation, which are designed to improve the conditions for creative research, namely a university Research Committee which also includes external members, Courant Centres with three or four junior research groups each, and—last but not least—the Lichtenberg-Kolleg as a kind of Institute of Advanced Study with a focus on the humanities and social sciences.

There are no non-university research facilities in the Constance area. For this medium-size university (with approx. 180 faculty members and 10,000 students), it was therefore felt necessary to develop an independent strategy under the motto “Towards a Culture of Creativity” with the objective of helping the university, which was already considered one of Germany's leading research institutions, to make still further progress ([University of Constance](#)). A decisive step had already been taken in Constance at the end of the 1990s, when a commission comprising mainly external members and chaired by Professor Jürgen Mittelstrass was mandated to more or less reinvent the university. With a section model instead of faculties and the development of an integrated interdisciplinary concept for the creation of centres and a Centre of Advanced Study, the commission already laid the structural foundations for the development of an institutional strategy for the future. The key elements of the new structure for an enhanced culture of creativity were and are the creativity cells, which are designed to develop new scope for action, the Future College as a springboard for junior research groups and assistant professors in particular, and other concepts for infrastructural platforms to further improve the research situation at the university.

One thing these successful models have in common is the fact that university management acting in collaboration with key actors in the main fields of research has not only developed concepts but also created the structures needed to significantly enhance international visibility for the local and regional research capacities. At the same time, new structural elements—like the Constance Future College, the various Institutes of Advanced Study and the interdisciplinary and interfaculty centres—have initiated a new and exciting process of priority setting and career development. With the help of numerous inter- and transdisciplinary centres, clusters and other organisational structures, it has been possible to bundle top-level research at the various locations and offer new opportunities for career development based on the tenure track process for junior researchers (who still have to prove themselves, however, within the faculty-oriented university appointments system).

## 7.6 Where do we Stand: And Where do we Go from Here?

The Excellence Initiative has finally put paid to the widely nourished illusion of the equality and comparability of German universities. In the meantime, the German Research Foundation (DFG) and the German Council of Science and Humanities (WR) have presented an initial review, (Deutsche Forschungsgemeinschaft/Wissenschaftsrat 2008) in which the authors show that, through the Excellence Initiative, effective progress has been made in improving career prospects for young researchers and in encouraging researchers working abroad to return to Germany. In addition, German universities have increasingly succeeded in making appointments to chairs in the face of fierce competition from elite universities abroad and in encouraging professors to remain in Germany in spite of offers received from leading American universities. Another important aspect is the fact that the stronger links between universities and non-university research institutions called for in the Twelve Recommendations in “The cornerstones of a sustainable German research system” are now being vigorously introduced by the participating universities. That opens up wholly new joint career planning perspectives and opportunities for the shared involvement of university and non-university institutes in long-term research planning for the location involved. Given the fact that the system evaluations of the DFG and the Max-Planck-Gesellschaft (MPG) are only ten years old, (Forschungsförderung Deutschland 1999) this means we have achieved a level of confidence building and established a new architecture of collaboration for profile building for the respective locations and regions that was unheard of only a few years ago.

In view of the ever widening lacunae in the country’s finances, it is clear that in addition to public funding, personal involvement is called for if we are not to fall even further behind in comparison with the rest of the world. In the OECD education spending statistics, Germany now comes a poor 25th (OECD 2009, pp.203–205). Of course, it is not just the political framework but the universities themselves that have to make a new start. In my view, foundations offer a more suitable platform for universities than a company-based structure or other legal form, in particular because of their focus on the common good in the given cause and their credibility in the acquisition of donations and endowments. Admittedly, we still have a long way to go before the truly autonomous university becomes reality. In order to achieve higher levels of performance in research, the universities must improve in terms of resource development, including access to new fields of finance, make more effective and efficient use of available funds, simplify and accelerate their procedures and administrative processes, strengthen communications at all levels, and above all ensure that all university members identify with their university. With regard to the governance structures, it is important to strike a new balance between the necessary degree of control and the equally essential involvement of all university members.

Ultimately all these reform measures can be evaluated by the degree to which creativity is achieved in research and research management alike. Really

productive creativity is comprised of many components (Krull 2010), including the willingness to take risks, communication skills, fault tolerance and the ability to respond to the unexpected. And the questioning role of a critical colleague continues to be essential for the advancement of knowledge (unless we prefer to hope for epistemological miracles).

I should like to stress two aspects that can also serve as guidelines for the development of internal structures. I am referring to the relationship between the diversity of scientific disciplines and organisational units on the one hand, and the intensity of communication, i.e. the interdisciplinary exchange between members of the university involved, on the other. If it is too broad-based, diversity always runs the risk of slipping into heterogeneity. Conversely we find that, where the structure of the disciplines is too homogeneous, there is too little potential for stimulus from neighbouring fields (Hollingsworth 2001, pp.17–63). For that reason it is important to continually create new researcher-based opportunities for exchange and to modify the structures accordingly.

In other words, it is all about developing patience and trust in an institution so that flexibility and the willingness to take risks are just as assured as reliable career paths. Once taken, decisions must remain valid in the medium term at least, i.e. for 5–7 years. The actors in such contexts need this degree of certainty if they are really to explore new avenues in research. This is confirmed by such highly successful institutions as the Wellcome Trust and the MRC in the UK, and the Howard Hughes Medical Institute and Janelia Farm Campus in the USA.

With regard to the title of this paper, I should like to come back to three key concepts that are highly relevant in the context of autonomy, management and control: competition, governance and steering instruments. It is presumably now clear to what extent competition also has steering effects. That also applies on a smaller scale to the programmes for the reformation of management and decision-making structures initiated by the Volkswagen Foundation and the Stifterverband in the 1990s. It applies all the more to the Excellence Initiative. This has stimulated a series of long overdue reforms (e.g. postgraduate schools and structured doctoral programmes, and the opening of universities to non-university research), which had previously been a frequent subject of discussion but rarely a cause for action.

The second round of the Excellence Initiative is now approaching, offering new opportunities, for example for Berlin's Humboldt University. Admittedly the air at the top will be relatively thin for newcomers; funding can presumably only be extended to include another three or four institutional strategies and eight to ten postgraduate schools and excellence clusters (assuming that 10 to 20 % of current recipients will not be reselected). But these are still real opportunities for the advancement of the best, and the Excellence Initiative—as I have insisted from the very start—will be an open, living system and not a club for the establishment.

For the universities' internal organisational structures and decision-making processes, this naturally also means that a widespread redistribution of resources will be necessary. At the same time the recipients of funding to date will have to find a new internal balance of power; the “parallel structures” largely established

by the universities' top performers and management actors—comprising new clusters, centres and Institutes of Advanced Study—must be given a platform for interaction with the faculties. Universities depend on the active involvement of all their members (including students); they are not enterprises that can be run by top-down management alone but institutions operated for the common good with the support of all their members. For that reason they require a continuous process of redefining the balance between participation and control. That also means they need an active management capable of driving things forward. An institution directed at the common good otherwise lacks the ability to remain vibrant.

The aspect of governance also includes the new supervisory bodies created in the last 10 to 15 years. Whatever the name—Board of Trustees, University Council or Foundation Council—a satisfactory solution to the question of role definition and the necessary learning process at the interface of supervisory body and the university's internal bodies has yet to be found, and use must be made of the opportunities for learning. In the meantime, as reflected in the lively debate in the relevant forums, there is a need to share experience and optimise the situation both in the national framework via the German Centre for Higher Education Development (CHE) and the Stifterverband and in an international context through the European Association of University Governing Boards. The many mishaps in the co-decision processes for the election of Presidents and Rectors have shown that too much arrogance can still be involved in the case of appointments to senior management positions in German universities involving cooperation between the Senate or Council on the one hand, and the Foundation Council or Curatorium on the other. There are too many loose ends here, but they can still be tied to form a knot.

A more serious steering problem at German universities is to be seen in the use of conflicting steering instruments. On the one hand, a consensus is reached on many items in agreements on objectives that are well documented in both qualitative and quantitative terms and seem to have the potential to help the universities move ahead, and at the same time steering instruments are employed—like indicator-based funding or finance allocation according to the cost of a university place or the number of graduates who complete their courses within the standard time—which are diametrically opposed to the agreement on objectives. This is where I see the most urgent need for corrective action. One cannot expect a university to develop into a top-class institution with international visibility (and correspondingly expensive faculty) while operating with state-wide funding categories based on average prices covering all types of university places. That is anathema to the higher level goal of excellence.

In Germany, we have long applied a policy of regionalisation to the university system, and it has generated good—albeit not outstanding—results. What has been on the agenda for a number of years now and will become much more important in the future is a process of further differentiation within the university spectrum. It will not be possible to develop all one hundred or so degree-conferring universities into top-class universities with an international presence. Many universities have already responded by rooting themselves more strongly at the regional level and finding a new identity under the label “Regional University”. For traditional, high-performing

universities like the University of Bonn, the Humboldt University in Berlin, the University of Kiel, the University of Tübingen or the University of Erlangen (to mention just a few), however, it will be necessary to make use of the Excellence Initiative to make effective progress on the path to international visibility.

Ultimately there can be no guarantee of success. In the sphere of university and research policy we have little choice but to accept Albert Camus' dictum: "We must conceive of Sisyphos as a lucky man." (Camus 1942, pp.50–51). Unlike the Sisyphos of Antiquity, however, at today's universities we need the courage and strength to keep pushing new stones up the mountain. Some of them will remain there!

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## **Additional Materials**

Georg-August University of Göttingen: [www.uni-goettingen.de/de/56424.html](http://www.uni-goettingen.de/de/56424.html)

RWTH Aachen University: [www.exzellenz.rwth-aachen.de](http://www.exzellenz.rwth-aachen.de)

University of Constance: [www.exzellenz.uni-konstanz.de/zukunftskonzept-modell-konstanz-towards-a-culture-of-creativity](http://www.exzellenz.uni-konstanz.de/zukunftskonzept-modell-konstanz-towards-a-culture-of-creativity)