

Institutional Change of European Higher Education: The Case of Post-War Germany

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1 Introduction

Institutional changes of higher education systems in Western industrialized countries are remarkable. Within the last 60 years, the system of professional dominance inspired by the Humboldtian model of a rule-governed community of scholars (Olsen 2007; Scott 2006) based on values of free inquiry, academic autonomy, and self-regulation has gradually transformed to a new regime of managed education, sometimes referred to as academic capitalism (Münch 2014; Slaughter and Leslie 1997; Slaughter and Rhoades 2004). The general pattern of change appears most pronounced in the Anglo-American education systems and continental Europe with its more humanistic legacy is either following the Anglo-American footsteps or developing its own, more unique path to the emerging challenges of managed education. We chose to investigate the case of Germany as a reference case of a continental European education system that traditionally emphasized the Humboldtian ideal of education through science (Burtscheidt 2010; Lenzen 2015), though this ideal has also been criticized as a myth (Ash 2006).

The existing literature on the German higher education system deals with a number of detailed developments on the macro-level such as the impact of Bologna reforms on German universities (Bührmann 2008; Hanft and Müskens 2005; Kellermann 2006; Nickel 2007), the Excellence Initiatives by the federal government (Bloch et al. 2008; Hartmann 2006; Hornbostel et al. 2008; Kehm and Pasternack 2008; Leibfried 2010; Münch 2006, 2007; Sieweke 2010), the emergence of New Public Management (Lange 2008; Lanzendorf and Pasternack 2009; Löffler

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2003; Meier 2009; Meier and Schimank 2009; Nickel 2007; Schmoch and Schubert 2010), or the change of governance of universities and research (Dobbins and Knill 2014; Jansen 2009; Schimank 2015; von Lüde 2010; Welpé et al. 2015).

There are some historical (Burtscheidt 2010; Oehler 1989; Pasternack and Wissel 2010) and discourse analytical studies (Ash 2008; Krücken and Meier 2006; Meier 2009), but very little research exists that synthesizes these existing findings into a broader, longitudinal analysis of the institutional changes that have unfolded during the postwar period. We argue that taking a historical-analytical perspective on institutional change is crucial for explaining the nature of the unique setting of the German higher education system, which has created a path-dependency with distinctive institutional pressures.

We present a chronological and historical analysis of the German higher education field, starting with the postwar period and going right up to the more recent changes in the institutional environment. The purpose of this research and our contribution is to develop a better understanding of the societal and managerial issues associated with the transition and change on the macro-level from an era of professional dominance to managed education affecting the micro-level, with its transition from the Humboldtian towards the entrepreneurial university.

The paper is structured as follows: first, we outline our theoretical orientation based on organizational institutionalism. The framework structures our analysis according to institutional logics, institutional actors, and governance systems. In the next section, we analyze and identify three eras of institutional change in the German system of higher education: we refer to the era of professional dominance, the era of federal involvement and democratization, and more recently the era of managed education. We conclude the paper by summarizing our main findings and outlining directions for future research.

2 Theoretical Orientation

2.1 *Organizational Field of Higher Education: An Institutionalist Approach*

Institutionalist approaches have increasingly been applied to analyze the educational field and have demonstrated their usefulness in understanding patterns of restructuring reflecting diverse institutional pressures (Gumport and Sporn 1999; Krücken and Rübken 2009; Leisyte and Dee 2012; Meyer and Rowan 2006; Meyer et al. 2007; Oplatka and Hemsley-Brown 2010; Tolbert 1985; Townley 1997). Since its foundations (DiMaggio and Powell 1983; Meyer and Rowan 1977; Zucker 1977), modern institutionalism has advanced to become a dominant approach to understanding organizations (Greenwood et al. 2008). A major theme in institutional theory is that organizations are influenced by their institutional environment. Following DiMaggio and Powell (1991: 2), institutional theory is concerned with

understanding “how social choices are shaped, mediated, and channelled by institutional arrangements”. Institutionalists conceptualize the relevant social environment in which organizations compete and the appropriateness of organizational actions is evaluated as *organizational fields* (e.g., DiMaggio and Powell 1983; Scott 1991; Scott and Meyer 1983). Fields represent a mid-level social sphere that connects concrete organizational action with broader normative and social structures.

In order to explain the institutional change from the era of professional dominance to managed education and the transition from the Humboldtian to an entrepreneurial university, we build on earlier work by Scott et al. (2000) and adapt their framework to the organizational field of higher education. It is composed of three main components of particular importance for understanding institutional change: institutional logics, institutional actors, and governance systems.

2.2 *Institutional Logics*

The behavior of institutional actors like universities or the state is shaped by an institutional logic. By this we mean “the belief systems and associated practices that predominate in an organizational field” (Scott et al. 2000: 170). Institutional logics influence individual and organizational behavior by various mechanisms such as socialization and identity formation, social classification and categorization, or struggles for status and power (Thornton and Ocasio 2008). The identification of dominant logics in organizational fields and their shifts became an important topic of institutionalist empirical research (Lounsbury 2002; Scott et al. 2000; Suddaby and Greenwood 2005; Thornton 2002).

In the literature on professions, it has been widely suggested that more fundamental changes in institutional logics have taken place. A change from the traditional professional values of a “social trustee” to more business-oriented, “commercial” values has been observed along with organizational change in professional organizations to more “corporate” forms of governance (e.g., Cooper et al. 1996; Suddaby et al. 2009). This was accompanied by a changing definition of professionalism. Commercial professional values are based on the notion of expertise, rather than public service (Brint 1994; Greenwood 2007).

These changes in institutional logics are also reflected in the higher education field. Gumport (2000) argues that the idea of higher education as a social institution has gradually been replaced by the image of higher education as an industry. While the former logic sees the purpose of higher education in educating and socializing society as well as advancing knowledge through free inquiry, the latter logic perceives the education field from a market logic. Universities become opportunity-seeking service providers that compete for students, funding, top faculty, and legitimacy in contested markets and students become consumers who seek for the best human capital investments (Münch 2014). As Thornton and Ocasio (2008) stress, institutional logics can co-exist or compete and then become drivers of either change or inertia.

2.3 *Institutional Actors*

Academic knowledge constitutes the central “issue” (Hoffman 1999) of the higher education field. Its creation, dissemination, and application connect institutional actors like universities as producers of academic knowledge with the state as the main architect of the educational system, professional associations, publishing firms, funding agencies, private corporations, and the public, and outline a collective enterprise around which they can coalesce. Together, they form a “recognized area of institutional life” in the sense of DiMaggio and Powell’s (1983: 148) field concept. Institutional actors, whether individual or collective, are involved in the creation and reproduction of specific institutional logics structuring the interactions of an organizational field (Scott et al. 2000). The emergence of new actors and changes in authority relations among the actors involve changes in institutional logics as well as governance systems.

2.4 *Governance Systems*

The third component comprises governance systems that are concerned with the formal and informal relationships between the organization (e.g. the university) and its constituents (e.g. academic and non-academic staff, the state, students), as well as the relationships between these constituent groups (see Fiss 2008). In particular, an institutionalist perspective of governance draws attention to “how coalitions of actors constitute ‘moral orders’ that determine the power structure of” an organization (Greenwood et al. 2008: 25). While many different models of governance have been proposed (for an overview see Harlacher and Reihlen 2014), we build on earlier work by Olsen (2007) that offers a useful typology of different governance regimes in the university setting. In brief, they are described as follows:

The Collegial Model Collegial governance is founded on the idea of professional autonomy and self-governance. Professional autonomy for research and teaching is protected by law and supported by proper funding from the state. Instead of being a servant of political agendas, this ensures that “scientific research is driven mainly by curiosity and the desire for peer recognition, and ... is controlled by truth tests” (Bunge 1998: 253). Self-governance, on the other hand, is accomplished through elected leaders and a meritocratic culture that favors academic scholarship.

The Democratic Model Democratic governance is based on principles of political equality, competition for leadership, and effective participation in the struggle for power (Bunge 2008; Dahl 1998). While in the collegial model self-regulation is restricted to an elite group (academic scholars only), the democratic model includes all other interest groups in the democratic process as well, such as students, research and administrative staff. Power and interests are more dispersed in the democratic model, as all groups are represented on governing boards and councils. Decision-making is a political bargaining process with shifting coalitions and alliances.

The State Model In the state model, universities are viewed as instruments that reflect the political agenda of the day with educational objectives and policies of current political leaders. Research and education are contributions to national wealth creation and become instrumental for achieving national political ends. In contrast to the democratic model, leaders are not elected, but appointed by the state as servants of state interests, and their work is supported by a tighter system of authority, bureaucratic rules, and performance targets. Decision-making power is delegated to the university's executive board, and funding depends on achieving specific performance targets (Olsen 2007).

The Market Model Market governance differs profoundly from the previous types. This model of governance is founded on the attempt to maximize the entrepreneurialism of universities and their professional staff by creating incentives to capture the benefits of market opportunities, whether in research, teaching, or for the commercialization of academic knowledge. Viewing education and science from a market perspective shifts attention to a model of governance as a trading place, in which universities compete for students and funds and researchers produce commodities to be "sold" on scientific markets (Bunge 1998). The market model is reflected internally by replacing principles of professional autonomy and self-governance with managerial control and a more hierarchical decision-making style. The managerial structure should match the continuous need for change in search for market opportunities.

In practice, these ideal types (Weber 1922) are mixed into different forms of hybrid governance. Especially in the German case, in which higher education is a major political remit of the state, governance, whether following a collegial, democratic or market regime, has always been influenced by a degree of state intervention for the achievement of political objectives.

3 Institutional Change of the German Higher Education System

Institutional theory helps to identify and distinguish different institutional eras. The idea of an era is that the composition of actors, their interaction, and governance system is given coherence and orientation by an underlying institutional logic, which allows the production and reproduction of stable patterns of actions over time. We distinguish three eras of higher education systems in postwar Germany: professional dominance (1945–1968); federal involvement and democratization (1968–1998); managed education (from 1998) (see Oehler 1989; Webler 1983 for similar conceptions of German postwar eras until the 1980s) (see Fig. 1). Indeed universities have a far more ancient history in Germany, and historical ideals may still rule nowadays to some extent. Nevertheless in 1945 the governmental and higher education system reconstituted itself and therefore provides an adequate

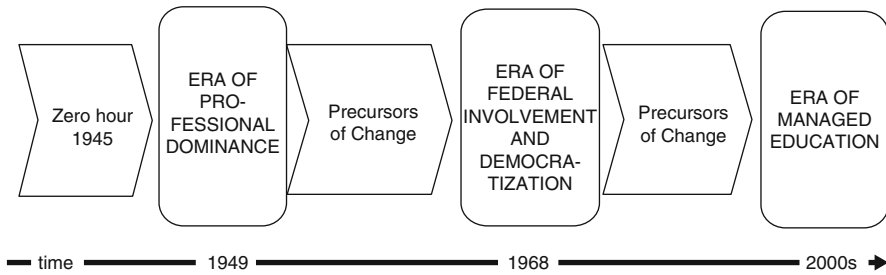


Fig. 1 Eras of the German higher education system

starting point for our analysis. For the three eras, we will not only describe the manifestations of the three elements (actors, logics, and governance systems), but also explain the institutional change from one era to another by identifying the main events or drivers of change.

3.1 *The Era of Professional Dominance*

3.1.1 “Zero Hour”

The German constitution organized the German Republic as a federation and responsibility for culture and education was transferred to the states. The victorious allies connected the emergence of the Nazi regime to the authoritarian education system and wanted to allow a re-education based on freedom and democracy by means of a decentralized higher education system (Burtscheidt 2010). In principle, universities were designed according to the Humboldtian ideal (Jessen 2010), and the higher education system of the Weimar Republic era preceding the Nazi regime was restored.

The centralization, politicization, and bureaucratization of higher education was avoided at the price of missing the opportunity to coordinate institutions across states and “two decades of non-reform” (Robinsohn and Kuhlmann 1967). A minimum coordination of educational policies was conducted voluntarily through the Conference of (State) Education Ministers (Kultusministerkonferenz) founded in 1949.

3.1.2 Institutional Logic

Following institutional theory we argue that each era has a distinct logic that organizes the interaction of institutional actors. The institutional logic of professional dominance is based on two general, but important ideas associated with the concept of professionalism (Freidson 1970, 2001) and the republic of science (Polanyi 1962). Professionalism means that academics enjoy a large degree of autonomy and

feel loyal to their discipline rather than to their university (Baldrige and Deal 1983; Clark 1983). The republic of science is based on the belief that scientific work is so specialized that it is inaccessible to those lacking the required training and experience. In addition, it is built upon the belief that this work involves fresh judgment and discretion that cannot be standardized, rationalized or commodified. Scientific expertise depends on a stock of academic knowledge, which accomplishes two basic functions (Abbott 1988). First, the academic stock of knowledge is subject to a considerable amount of research activity. It was Wilhelm von Humboldt's basic idea "to appoint the best intellects available, and to give them the freedom to carry on their research wherever it leads" (Scott 2006 op. cit. Fallon 1980: 19). The logic of professional dominance is modeled around the Humboldtian principles of (a) the unity of research and teaching, and (b) academic freedom involving *Lernfreiheit* (freedom to learn) and *Lehrfreiheit* (freedom to teach) (Scott 2006). Higher education was perceived as an activity of "human and personality building". In order to offer them choices for general education, students were given study programs that were less dense (Rektorenkonferenz 1961: 44). Finally, academic knowledge is a source of legitimacy of the scholar/scientist's claim of having esoteric knowledge (Veblen 1918) that goes beyond the ordinary and is, in a fundamental sense, the basis of scientific authority. In the service of free inquiry and scholarly based education, scientists should be autonomous; they should have full control over their work, and scientific ethics claims to be independent of any particular interest groups such as the state, private enterprise, or the general public (Freidson 2001; Polanyi 1962). As a consequence, the primary logic associated with professional dominance, corresponding to Brint's (1994) idea of the professionals as "social trustees", implies that research and teaching standards are exclusively determined by scholarly rules and norms.

3.1.3 Important Institutional Actors

Universities were organized according to the "ordinaria" system, where the ordinarius (full professor) constituted the "germ cell" of the university and enjoyed academic freedom and autonomy on a scale never reached before (Teichler and Bode 1990; see Pasternack and Wissel 2010 for a brief characterization and further references), but also reflected an elitism and personality cult (Burtscher and Pasqualoni 2004). He (there were hardly any female professors at the time) was in charge of a specific knowledge field, directed an "institute", and was supported by a number of academic and non-academic staff. Furthermore, the institute was directly funded by the ministry (Scott 2006).

State ministries of education were the main source of funding for science and scholarship. Academic associations determined scholarly standards and norms in various research fields; journals and books were the dominant outlets of scholarly work disseminated by academic publishers who perceived their work less as a business than as a profession (Thornton and Ocasio 1999).

In order to coordinate higher education, several actors emerged. Already in 1949 the Rectors' Conference (Westdeutsche Rektorenkonferenz) as a voluntary associa-

tion of universities was founded (Teichler 1990). On the federal level, in 1955 the Nuclear Ministry was established and in 1962 transformed into the Science Ministry (since 1998 Ministry of Science and Education). In 1957 the Science Council (Wissenschaftsrat) with representatives from politics, academia, and the public was founded as a advisory body in addition to the Conference of Education Ministers. The motive was to overcome the failures of decentralized planning and to enable coordination between governmental bodies and the universities across different states (Burtscheidt 2010; Scott 2006; Teichler 1990).

3.1.4 Governance System

After 1945, academics demanded the highest possible independence in order to avoid political instrumentalization. The autonomy and freedom of science and scholarship was codified in the new German constitution. Academics claimed a corporate autonomy through the legal form of the university as a public body, financial autonomy through having the senate drafting the budget (Haushaltsplan), as well as academic freedom in the sense of the power to make appointments (Burtscheidt 2010). To a great extent, the state embraced these demands and professors gained a degree of power never reached before (Teichler 1990). This was reflected in the governing structure, in which decision-making power was largely decentralized to the ordinaria who controlled each other's work through academic self-regulation basically following the collegial model. But the governance system remained a hybrid of autonomy and state control, since higher education was dependent on public funding (Burtscheidt 2010; Scott 2006; Teichler 1990).

3.1.5 Precursors of Change

Through the reconstitution of the principle of the ordinaria of the nineteenth century, the chance to restructure at "zero hour" was missed (Burtscheidt 2010). The emerging demands for democratization of society in general and university structures in particular led to student revolts in the late 1960s, with demands for equal access to higher education, the abolition of elites, and wide-ranging participation in academic matters (Teichler 1990). The movement reflected an extension of the social-democratic concept of a social state, in which capitalist interests were held in check by a democratic order, to the higher education field (Nitsch 1983).

A second driver for change was the continuously increasing number of student enrollments. A growing middle class was sending students to universities and industry demanded highly skilled labor (Oehler 1989). The rise of mass education itself was a phenomenon across developed countries at the time (Schofer and Meyer 2005). In Germany, the rise of mass education was encountered with regional expansion and hiring in existing universities, but funding was not sufficient, leading to a perceived decline in academic quality (Binswanger 2010; Burtscheidt 2010; Hödl and Zegelin 1999; Teichler 1990). Already in the late 1950s, the ideal of

universal education (“Bildung”) had to give way to the idea of specialized academic training (“Ausbildung”) in order to facilitate the “second industrial revolution” (Brandt 1957 cit. op. Jessen 2010: 263). The Humboldtian ideal of the unity of teaching and research could not be practiced with masses of students to be trained in highly specialized fields (Jarausch 1999). Students also became less interested in general education, but developed an “instrumental orientation” in search of an academic qualification that would raise their value on the labor market (Lullies 1996; Oehler 1989). It became more apparent that the existing logic of professional dominance with decentralization and academic self-organization could neither deal with the increasing “professional utilitarianism” (Jessen 2010) and massification, nor serve the new demands for democratic reforms. A new institutional logic surfaced in which the federal government stepped in and took an active role as planner and regulator of higher education at the cost of an emerging regime that coupled the university more tightly to the interests of the state, precisely what was feared by the victorious allies and academics when the system was first set up. Yet, this increasing role of the state was coupled with wide-ranging reforms for the democratization of universities.

3.2 The Era of Federal Involvement and Democratization

3.2.1 Institutional Logic

In the section on precursors of change we indicated two major forces of change, which correspond to two interacting logics characterizing the era of federal involvement and democratization. The first underlying institutional logic of this era was marked by a massive expansion in higher education financed by the government, equality of access to higher education was stressed, and the state played an increased regulatory role (Teichler 1990). This *logic of democratization* of higher education won over the incompatible logic of academic self-regulation and professorial collegiality, as now non-professorial academic staff and students took part in defining the quality of higher education. The second logic was guided by the idea of making higher education for the masses more effective by central coordination and planned development (Teichler 1990) and can be labeled as the *institutional logic of central planning or bureaucratic control*. Professional self-regulation seemed to be incompatible with democracy as well as with massification and was thus replaced by this new double-logic.

3.2.2 New Actors

The growing need to manage higher education for the masses in Germany was accompanied by a rapid proliferation of new federal and state agencies and commissions engaged in coordinating, planning, and controlling various aspects of the

higher education system. For instance, the Education Council (Bildungsrat 1966–1975), the Joint Commission of the States and the Federal Government for Education Planning (Bund-Länder-Kommission für Bildungsplanung 1970), and the Federal Ministry of Education and Science (1970) all served the primary purpose of a centrally coordinated system of higher education (Jessen 2010).

As a consequence of mass education, financial problems of the states, and pressures of the 68 movement, the federal government gained influence on state legislation by establishing framework legislative powers for itself in the field of higher education (Rahmengesetzgebungskompetenz) in 1969. Since then coordination in higher education has been anchored in the constitution and the transfer of far-reaching responsibilities to the federal level was legalized. The peak of centralized federal involvement was reached with the Higher Education Framework Law (Hochschulrahmengesetz) of 1976. The idea was to homogenize the diversity in the German higher education system by regulating in detail the structure of university personnel and committees as well as academic domains (study programs, course contents, exams).

In addition, new agencies were created to deal with the rising number of students. For instance, already in the 1960s the Rectors' Conference founded a central registry (Zentrale Registrierstelle) for allocating study places at medical schools based on school-leaving grades. In 1972 the successor agency (ZVS) of the registry was founded, which centrally distributed students, mainly on the basis of school-leaving grades, to universities for several subject areas including medicine, business administration, psychology, and law. With such a federal control agency, the supply of higher education programs was centrally coordinated with the demand for places. This marriage of federal control with mass education initiated the period of supply-oriented study programs (Witte and Stuckrad 2007).

Student associations have a long tradition in Europe, but the student movement that emerged in the late 1960s (for the history see Bauß 1977; Becker and Schröder 2000; Habermas 1969; Koch 2008; Schmitthenner 1986) was highly politicized, aiming at influencing university governance and thus becoming an important actor within the field. However the student revolts were not the cause of the higher education reform but an important catalyst of an existing societal consensus for a necessary reform of the ordinaria system (Rohstock 2009).

As a response to the massification of higher education and the increasing need of more practically trained graduates, in the 1960s and 1970s many Western European countries differentiated higher education institutions into universities (*Universitäten*) and universities of applied sciences (*Fachhochschulen*). Fachhochschulen were created to focus on training requirements of professional occupations, applied research, and regional development. Yet, the higher teaching loads of professors and the lower research profile accompanied with the missing right to award doctorate degrees lead to a status deprivation of Fachhochschulen (Enders 2010).

3.2.3 Governance System

The governance system had an internal and an external dimension. Internally, democratization as well as homogenization was reflected by the following main structural changes (Teichler 1990). Despite objections to university democratization and fears of a negative impact on the freedom of teaching and research by professors (Schmidt and Thelen 1969), the *ordinaria* university was replaced by a new organizational type, the committee or group university (Gremien- or Gruppenuniversität) (see Pasternack and Wissel 2010 for a brief characterization and further references); academic careers were condensed and autonomous research was facilitated for academic staff that had not reached professorial rank; the rector's period of office was extended from 1–2 to 4–8 years; without strengthening the position of the dean of the faculty, some decision areas that addressed the interests of professors were transferred from ministerial to faculty level.

Besides the reorganization of the university's internal governance, the relationship to the state changed in the direction of more intensive financial and educational regulation and control. The reasoning behind this was to provide equal opportunities for university applicants and to cap costs. The newly created cost-containment regimes of the early 1970s were supply-driven. This is well represented by the capacity regulation (KapVO), which was a follow-up to a contract between the states and the federal government of 1972 (Seeliger 2005). The idea of the capacity regulation regime was to balance conflicting interests between university applicants and the scarcity of teaching capacity (Seeliger 2005). As a consequence, the number of admissions to a study program under the capacity regulation regime was standardized on the basis of the available teaching capacity. Universities were not allowed to set any admission restrictions or university-specific student-selection criteria. Since they were required to exhaust their capacity, which “froze” the number of incoming students, universities operated permanently at their limit and this weakened the position of state universities in an emerging higher-education market which now included domestic private and foreign public and private competitors (Kluth 2001). Furthermore, study programs/curricula (Witte and Stuckrad 2007) as well as budgeting were highly regulated and subject to a control philosophy (Nickel et al. 2009).

In this era, the state model of governance was strengthened by the new role of the state and especially by the federal role in regulating and coordinating higher education. At the same time, the call for more democracy shifted internal university governance from a collegial to a democratic model.

3.2.4 Precursors of Change

In 1977 the state launched a policy of “Opening Universities” (Öffnung der Hochschulen) as a response to the predicted baby boomer generation. This policy aimed at ensuring equal chances for higher education, albeit without committing the financial resources needed for an expansion in educational infrastructure. As a

result, universities had to overstretch their capacities, at least until the baby boomer generation graduated (Teichler 1990). The “crisis” of the German higher education system was driven by the burden of mass education coupled with chronically under-financed universities and ineffective regulation and administration, resulting in a considerable decline in education quality (Hödl and Zegelin 1999).

Furthermore, study duration in Germany was considered excessive, and graduates were perceived as too old in comparison with other EU countries. Probably unparalleled in any other country, extension of studies beyond their regular duration had a long tradition and was regarded as an academic freedom. In 1986, the average graduate was 28 years old, and had been a student for more than 7 years, while for most study programs the regular study duration was 4–5 years, and dropout rates at that time were about 15 % (Teichler 1990). Additionally, due to long schooling, military service, and not least to rising unemployment, which motivated graduates to complete an apprenticeship before enrolling for a university program, the average entry age also rose considerably (Teichler 1990).

In addition, the bureaucratic governance relation between the state and the university and the “organized irresponsibility” (as the rector of Frankfurt University once described the committee governance regime within universities (Herrmann and Steinberg 2008)) became barriers for a progressive development of the higher education system. The often politicized internal governance accompanied by time and resource consuming struggles in committees, and the detailed regulation of academic and financial affairs by the state meant that universities stagnated, and were unable to improve the quality of research and teaching (Burtscheidt 2010; Hödl and Zegelin 1999).

The first amendment of the Higher Education Framework Law in 1985 initiated the first reforms aiming at deregulation. Nevertheless, reforms in the 1980s remained cautious and far less drastic than in earlier decades (Teichler 1990).

In addition, initiatives were launched that concentrated on the improvement of research. Until the early 1980s approximately only 20 % of all research activities were directly funded by external sources such as governmental funding programs (Förderprogramme) and funding agencies. Universities were required to compete for external funding for their research activities and engage in entrepreneurial activities in order to improve the quality, efficiency as well as the social and economic relevance of research (Teichler 1990).

In 1983 the Federal Ministry of Education and Science labeled the emerging changes in higher education with the slogan “Differentiation and Competition”. In the following years, an increasing consensus emerged, namely that the competitiveness of educational institutions would be assessed based on rankings, reputation, and performance indicators of universities and their faculties (Teichler 1990).

In the mid-1990s an OECD study brought to light the deficits of the German higher education system, and the pressure for change rose. The OECD agenda was regarded as a main driver for the new definition of the role of universities as promoters of innovation and economic growth; accordingly, universities were elevated to the status of entrepreneurial actors in the worldwide competition for innovation (Münch 2014). These emerging trends made the contradictions of the era of federal

involvement and democratization more obvious. Universities that were considered as the central actors in the global competition for innovation had very little strategic choices to improve their own competitiveness. Attracting highly talented students was confined by the state-controlled supply plans, which made it difficult to develop a differentiated and attractive educational profile (for an overview of the discussion at the ending era of federal involvement see Meyer and Müller-Böling 1996). The situation was similar for attracting qualified academics who would contribute to a specific research and teaching profile; universities lacked the required financial autonomy to pay competitive and flexible salaries for highly qualified professors. In summary, the demand for competition and differentiation as new policy measures in the higher education field was incompatible with the centralized state control model of the era of federal involvement and democratization. Expected benefits of competition can only be harvested if universities are given greater autonomy in matters of resource allocation, student selection, hiring policies, educational program development, and strategic positioning. As the turning point into the new era of managed education, we chose the federal parliament's adoption of the amendment to the Framework Act in 1998, which abolishes the previous "immunity" of professors to external evaluation by providing the legal basis of deregulation, performance orientation, and incentive creation. Although some pilot projects of global budgets were launched in the early 1990s (Jensen and Neuvians 1994), the deregulation and autonomy of universities on a large scale had been mainly put in place by 1998.

3.3 The Era of Managed Education

3.3.1 The Global Context of Managed Education

Globalization, shifting demographics, the changes in the production regime towards knowledge-intensive work, growing competition from the private higher-education sector, and ongoing fiscal constraints have been drivers for the world-wide institutional change in higher education (Høstaker and Vabø 2005; Sporn 2001; Subotzky 1999). Since Europe intends to become the "most competitive and dynamic knowledge-based economy" (European Council 2000), Germany's higher education system was demanded to become more effective in producing useful knowledge and skilled labor to support the necessary innovations at company, regional, and national level (Warning 2007). Additionally, a more effective and efficient utilization of resources was requested that would allow cutting costs in higher education in order to meet fiscal constraints (Kluth 2001). What we recognize is an emerging world-wide structure of higher education which unfolds isomorphic forces. As an effect, academics, universities, and even countries are becoming more alike in the way they encourage, incentivize, and manage higher education.

The main properties of this global structure are at the same time the infusers of a different logic for managing education: global competition in science follows increasingly an economic rationale in which countries, universities, and researchers

compete on a global education market for reputation and market share. Germany was a late-mover in the use of indicators, evaluations and rankings (Weingart and Maasen 2007). The Anglo-American practices serve as an intellectual source for a market model of higher education by the German government and educational experts (Kühler 2006) in their attempts to gain stronger visibility by scoring higher in global benchmarks and moving up in global rankings. Reforms derive their legitimacy from the successful positions of Anglo-American universities in global rankings, despite the articulated critique of how these rankings are constructed (Münch 2014). In the search for a more competitive educational regime, the market model unfolds strong legitimacy for the restructuring of higher education. Interestingly, the marketization of the US higher education system was incremental and led by non-governmental initiatives, while in the case of the EU, the model is engineered by governments and the supranational organizations (Slaughter and Cantwell 2011).

Notably, the transformation of the system from professional dominance to democratization and federal involvement was carried out in the glare of publicity, whereas the institutional change to managed education was hardly noticed, at least in the early stages (Küpper 2009).

3.3.2 Institutional Logic

With the rise of managed education a new interpretive scheme based on three main pillars emerged. Firstly, the centralized planning approach to higher education invented in the 1970s was gradually replaced by a *market logic*. This move required new policy measures such as the increasing deregulation of higher education, especially granting universities greater autonomy in selecting their own students, hiring their own academic staff, and allocating their own financial resources for the development of a strategic profile in competitive educational markets. The role of students also changed gradually from socialized and cultivated learners to sovereign consumers in search of a human investment (Gumport 2000; Ritzer 2004). As Gumport (2000: 79) points out: “The conceptual shift elevates consumer interests as paramount considerations in the restructuring of academic programs and the reengineering of academic services.”

The application of the market logic to research was facilitated by the emergence of research productivity indicators such as the social sciences citation index and various research rankings (Adler and Harzing 2009; Frey and Osterloh 2010; Münch 2007) that gradually formed the belief among university administrators and some educational experts that research output can be measured and reasonably quantified. This created the impression that even non-experts can access the quality and productivity of research by simply counting the number of publications, weighted, for instance, by the quality of the journal. The market logic turns the highly uncertain venture of research into a commodity. As Bunge (1998: 253) writes: from a market perspective “scientists produce commodities namely problems, concepts, hypotheses, data, and methods – that can be imputed shadow prices; that they trade these commodities among themselves; that they sell them to universities, business

firms, or governments; that every scientist attempts to maximize his utilities by producing the largest possible quantity of papers ...; that scientific creativity is market-driven ...”.

Secondly, new *auditing practices* (Moldaschl 2005; Power 1997) became a prerequisite and a reinforcing mechanism of the new competitive regime of managed education. In order to organize higher education as a competition within quasi-markets (Bartlett and Le Grand 1993; Binswanger 2010), audits and evaluations serve as a substitute for purchase decisions in private goods markets (Meier and Schimank 2009). Audits and evaluations, whether of teaching or research, establish feedback mechanisms that aim to raise quality, but at the same time create “... a measure of uniformity and homogeneity” (Larson 1977: 40). As Power (1997: 14) argues, with the rise of the audit society auditing becomes a ritualized practice of verification whose technical efficacy is less clear than its role in the creation of organizational legitimacy.

Thirdly, the market model is combined with a *managerialist ideology* based on the belief that the external university relation to the state can best be managed by a New Public Management (NPM) approach. NPM was developed in the 1980s and became the dominant managerial model for public organizations (Gruening 2001; Lane 2000) based on the perceived lack of accountability and declining trust in the quality and efficiency of public services (Nixon 2004). The German version of NPM was formalized as the New Control Model (Neues Steuerungsmodell) by the newly founded institution of Municipal Association for Administration Management (KGSt 2012). A guiding idea of NPM is that decentralized decisions with organizational and financial freedom result in more effective outcomes and more efficient use of scarce resources than the former centralized planning approach of public administrations (Ziegele 2002). Instead of regulating processes, a main characteristic of the era of federal involvement, NPM defines educational policy missions and derives specific objectives for research and teaching that are further broken down to individual universities, faculties, and departments. The financial support of the state then depends largely on the attainment of negotiated objectives (Nickel 2007).

The internal dimension of the managerialist ideology is reflected in new roles and practices of academic managers. Principles of academic autonomy and self-governance have been perceived as less effective for adapting the academic enterprise to changing market needs (Wissema 2009). As in many other professions, more corporate models based on managerial authority and corporate control have attracted interest and have been legitimized as superior for the enterprising university (Clark 1998). The hallmarks of this new institutional logic are well summarized by Osterloh and Frey (2010: 3): “‘More market’ and ‘strong leadership’”.

3.3.3 New Actors

Besides the emergence of new actors, the new logic of centrally orchestrated competition, auditing and evaluation demands a transformation of existing actors. The new initiatives from federal and state agencies as well as the emerging global

competition in higher education showed that institutional actors “not only do things differently, but also increasingly do different things” (Scott et al. 2000: 349).

For all participating European countries, the Confederation of EU Rectors’ Conferences became an influential actor after the Bologna Declaration in 2000. This new actor initiated restructuring processes for the development of higher education (Hanft and Müskens 2005; Nickel 2007). The general idea of the “action program” of the Confederation of EU Rectors’ Conferences can be summarized as convergence, competition and international competitiveness, higher quality, and efficiency (Confederation of EU Rectors’ Conferences 2000). The restructuring of higher education aims to “enhance the employability and mobility of citizens” and “to compete more resolutely than in the past for students, influence, prestige and money in the worldwide competition of universities” (Confederation of EU Rectors’ Conferences 2000).

In 1994, the Centre for Higher Education (Centrum für Hochschulentwicklung CHE) was founded with a yearly budget of 3 million euros, funded half by the Bertelsmann Foundation (private) and half by the Foundation for the Promotion of the Rector’s Conference (Stiftung zur Förderung der Hochschulrektorenkonferenz). The CHE was designed as a partner for ministries and higher education institutions to support restructuring projects and to offer training programs. The CHE is free from directives of its funding organizations, publishes ongoing studies, and since 1999 has developed a national university ranking.

Throughout all eras, publications, associations, and conferences have been the institutions of communication, exchange, and networking for academics. In the past, communication and quality control of publications were more or less decentralized in the hands of academics. Managed education is characterized by the emergence of central organizations as intermediaries between the state and academics to govern science and scholarship by allocating resources and reputation as well as controlling research agendas (Meier and Schimank 2010). The most important authorities are citation indices such as the Social Sciences Citation Index, the hegemony of American high-impact journals, and university rankings such as the Shanghai or Times Higher Education Ranking (Frey and Osterloh 2010; Münch 2014). The narrowing of publication preferences results in a devaluation of monographs, book chapters, research reports, policy recommendations, and so on. Consequently, academics are increasingly focusing on the journal article as the preferred publication type, and hunt for placements in high-impact journals, sometimes at the cost of originality, resulting from the limitations of the peer review process (Münch 2014).

Since study programs are no longer approved by ministries, a new type of actor has appeared in the German educational field: national and international accreditation agencies supervised by a national accreditation council founded in 1998 (Meyer 2010). These new actors became important players in the quality control of the university’s teaching programs and may improve quality assurance and reduce the inefficiency of “traditional” state bureaucracy (Schwarz and Westerheijden 2004); however, the auditing practices of accreditation agencies may involve new problems such as a new bureaucratization of universities and an increasing standardization

and homogenization of teaching programs, as well as ignorance of non-measurable quality properties (Münch 2014). With the establishment of the European Consortium for Accreditation (ECA) in order to mutually recognize accreditation decisions, it seems that governmental bureaucratization is being reintroduced on a higher level.

The logic of managed education demands a division of labor on the lines of teaching, research, and management of academic affairs, and results in new groups or actors. In Germany this trend is becoming visible, even though Germany is still lagging behind in hiring professional full-time presidents or deans (Kirchgeßner 2011), and some academics are critical about the division of teaching and research, since it contradicts the Humboldtian ideal of their unity (Meier and Schimank 2009; Münch 2009).

While we recognize different responses to managed education by German universities, the most wide-ranging response is the emergence of a new archetype – the entrepreneurial university. Entrepreneurial universities are opportunity-seeking and opportunity-exploiting regimes that respond strategically to challenges in their core domains of research, teaching, and commercialization of academic knowledge in order to fulfill their mission. The entrepreneurial university (Bronstein and Reihlen 2014; Guerrero-Cano and Urbano 2010) strives for the “capitalization and commercialization of knowledge” (Slaughter and Leslie 1997), the “contribution to local economic development” (Röpke 1998), and the “development of an entrepreneurial culture”, both within and around the university (Clark 1998; Kirby 2005).

Moreover, the institutional differentiation into universities and universities of applied sciences which were established during the era of federal involvement and democratization is becoming blurred and politically contested (Science Council 2010a, b). Especially the Bologna Process accelerates the institutional assimilation and convergence between universities and universities of applied science (Reymann 2010; van Vught 2009: 29; Witte et al. 2008). Outside Germany, the debate of an “academic drift” already started in the late 1970s in the U.K. (Neave 1979). In Australia, the binary system has been formally abolished at the end of the 1980s (Meek 1991); similarly, in the U.K. former polytechnics were given university status based on the *Further and Higher Education Act* from 1992 (Williams 1997). However, most Western European countries maintain an institutional differentiation. Nevertheless, the logic of managed education fosters stratification of the higher education field beyond formal institutional differentiation.

3.3.4 Governance System

The changes in institutional logics were accompanied by a move from the state to the market model of governance. The new system of governance is reflected in an internal reorganization and managerialization (Blümel et al. 2011) of the university and new external relationships to the state and other actors in the field, such as intermediaries.

The internal governance system of universities has been changed by strengthening the rights of university administrators while reducing the participation rights of academic and non-academic members. The withdrawal of democratic rules was manifested in the following structures:

Shifting Power Structure: From a Rectoral to a Presidential Constitution The introduction of councils goes hand in hand – at least ideally – with a strengthening of the executive committee and a weakening of the senate by reducing the latter's competencies in academic matters (Kluth 2001; Meyer-Guckel et al. 2010).

Emergence of University Councils (Boards of Trustees) Behind the diversity of state laws of higher education, three commonalities can be identified: the council is an additional managing body to the traditional organs of rectorate and senate; in most states, the majority of its members or all of the trustees are to be non-university members, the idea being to make university leadership more sensitive and responsive to the broader demands of society; inspired by NPM, councils are taking over supervision and control functions, which had previously been performed by state bureaucrats; university managers should be more professionalized and take the managerial practices from the corporate world as an important reference point (Bogumil et al. 2007; Burtscheidt 2010; Kluth 2001; Meyer-Guckel et al. 2010).

Shifting Incentives In the past, professors could negotiate initial endowments and resources were fixed for the duration of their tenure (Burtscheidt 2010). In managed education, academics increasingly are paid for their performance in research, teaching, and other university-relevant domains, as measured by such indicators as the acquisition of external funding, number and quality of journal publications, as well as specific objectives that bring academics into line with the university's strategy (Osterloh and Frey 2008).

Mergers of Higher Education Institutions for Cost Efficiency and Strategic Profile Development Whereas mergers in higher education have been widespread in the U.S., U.K., Australia, and the Netherlands since the 1970s (Goedegebuure 1992; Harman and Harman 2003; Harman and Meek 1988; Skodvin 1999), in Germany mergers are a fairly new phenomenon. Motives for these mergers are profile development, quality improvement, raising visibility, economies of scale, and synergy effects to improve the position in competitive education markets (Battke and Cremer-Renz 2006; Pruiskens 2012; Weber 2009). Empirically, the majority of the few mergers in Germany still reflect state-decreed cost-reduction policies (Pruiskens 2012). The reforms of external governance were designed to increase the autonomy of universities and encourage competition among them.

Ambivalent Autonomy The fourth amendment to the HRG of 1998 was an important legal step towards achieving the universal desire for increased university autonomy by deregulating internal and external organization, administration, and the

budgeting process. Following NPM, input control was replaced by output control, i.e. funding was now related to outputs through goal attainments as well as controlling, reporting, and auditing systems based on performance indicators (Nickel 2007). However, the extent of the use of performance indicators and goal attainments varies by state (Leszczensky et al. 2004). Cameralism in the era of managed education was disappearing, to be replaced by global budgets, where the state only provides a few aggregated titles (in the extreme case two titles: investments and current expenditures). In practice, the degree of financial autonomy of universities varies by state law, and in most cases a “minimal cameralism” remains (Ziegele 2002). Generally, universities have gained a new degree of autonomy over their resources, especially financial resources, and they can allocate inputs themselves in order to accomplish specific outputs. These changes have brought universities an increasing autonomy, which is the necessary condition for creating profiles and striving for excellence by becoming entrepreneurial (Meier and Schimank 2010; Weingart 2010). However, in practice it has not stopped the states from cutting university funding (Behrens et al. 2006) and maintaining influence (Knobloch 2010).

Substitution of Basic Funding Through Competitive Funding Programs Funding agencies in the form of transnational organizations such as the World Bank or the European Union, national research foundations such as the Deutsche Forschungsgemeinschaft (DFG), Volkswagenstiftung, and programs offered by federal, state, and local government agencies are important actors in shaping research. In Germany, the percentage of total funding accounted for by so-called third-party funds is increasing continually (DESTATIS 2009). Funding agencies develop research programs ranging from the future of production (BMBF¹) to Joint Ventures for Caucasian railways (EU). More recently, the most prominent of these competitive funding programs is the federal Excellence Initiative, which is having a considerable impact in restructuring the German higher education system into a competitive, incentive-driven, and demand-oriented service system (Bloch et al. 2008; Hartmann 2006; Kehm and Pasternack 2008; Münch 2006, 2007). Typically, these programs initiate interaction within the academic community and, depending on the program, even facilitate inter-disciplinary discourse. The institutional function of these programs is at least twofold. Firstly, they offer specific research services for the beneficiaries. Secondly, programs trigger innovations in the scientific system. As studies on the innovation problems of research groups show, research teams have a tendency to stabilize the status quo, and therefore demonstrate conservative behavior patterns (Krohn and Küppers 1989). Krohn and Küppers (1989: 89) argue that this situation leads to an interesting paradox. In those areas where science can be practiced autonomously, we can recognize a tendency of research groups to do the same thing over and over again; while in areas where they have to attract external funding, substantially greater innovation can be recognized. In this respect, funding agencies perform an important cognitive function for the scientific

¹ BMBF: Bundesministerium für Bildung und Forschung (German federal ministry of education and research).

community. These programs are constructions of future knowledge and considerably affect the cognitive orientation of researchers (Braun 1998). Competitive funding is also subject to criticism, for it restricts knowledge creation, especially in times when basic funding for independent research by professors is being reduced, leads to a stratification of universities (Münch 2009), and creates inefficient resource allocation because of declining economies of scale (Binswanger 2010; Münch 2014).

4 Conclusion

The key motivation for writing this chapter was the growing awareness that the higher education system in Germany and in most other Western countries is undergoing a fundamental institutional change. This change is redefining the rules of the game of science and scholarship; and hence the roles played by universities and scholars as well as the state within this emerging institutional context of managed education. While managed education is a far more tangible reality in the Anglo-Saxon world, it has also become the key reconfiguring force for the German system of higher education (Burtscheidt 2010; Münch 2007, 2014; Rhoades and Sporn 2002). However, the German version of managed education is not simply a transfer of practices that have been implemented elsewhere, especially in the U.K. and the U. S. It turns out to be a locally adapted form with substantial variations in actors and governance systems. Since all education systems have a history creating a path-dependency, our aim was not simply to reconstruct the current state of affairs of the German system of higher education. Rather, we wanted to understand how the institutional changes have unfolded over time and emerged into systems of beliefs, norms, and practices in the postwar period. As a result, we developed a typology of institutional eras composed of a unique interplay of logics, actors, and governance systems. The German system of higher education, we argue, departed in the postwar period from an era of professional dominance (1945–1968), which was replaced by an era of federal involvement and democratization (1968–1998) until more recently managerialism and marketization became guiding principles for the new archetype of managed education (since 1998). With managed education a new type of university – the entrepreneurial university – emerged as a strategic response to the new institutional pressures.

We argue that the evolution of the institutional system of higher education not only in Germany, but also in many other Western countries, swung like a pendulum between the two extreme system's designs: one fostering individual freedom of scientific autonomy and one emphasizing the instrumental character of science for national educational agendas. Both extremes describe a fundamental tension: Is the role of the education system geared towards the values and norms of the republic of science (Polanyi 1962) or is higher education designed to serve predetermined educational interests and goals of the state. As Olsen (2007) points out, "institutional change is often seen as driven by perceived failure" (p. 52), which undermines the legitimacy of institutions and is followed by processes of de-institutionalization

(Greenwood et al. 2002). The rise of the student movement and the desire of the federal government for central planning of the education system had led the higher education system to swing from one that emphasized scientific autonomy to the other extreme. Only during the third era of managed education the higher education system has started to return to a more balanced position. Yet, this new balance is a highly contested political battlefield, and we recognize movements in some German states like North-Rhine Westphalia to fall back to a regime of state controlled higher education (Frost et al. 2015).

In managed education policymakers orchestrate autonomy of research and teaching with the need to coordinate these decentralized policies by promoting cooperation and competition at different levels within and across universities and regions. Orchestrating the higher education system becomes a balancing act for policymakers. New public management and wide-ranging auditing and control practices can be applied to over-manage the system. The faith of policymakers in the use of quantitative goal attainments, evaluations, and rankings as control instruments of the higher education system can undermine professional self-regulation (Freidson 2001) and may even foster professional disintegration (Broadbent et al. 1997). On the contrary, fostering too much competition and relying predominantly on market forces facilitate the commodification of science (Bunge 1998). Some of the dysfunctional effects of the marketization of science, such as rising student consumerism (Gumport 2000; Riesmann 1998), intellectual prostitution (Frey 2003), the undermining of scientific creativity (Heinze et al. 2009), and a loss of intrinsic motivation (Binswanger 2010; Osterloh and Frey 2008) are well documented. Furthermore, under the regime of managed education we witness the tendencies towards a new bureaucratization (Binswanger 2003, 2010; Langfeldt et al. 2012; Münch 2007), the discouragement of transdisciplinary research and other forms of theory-praxis exchange (Münch 2014), and towards the institutional decoupling of teaching and research (Meier and Schimank 2009) are to be evaluated critically.

Still, the critics partly overlook that the precursor of managed education – the era of federal involvement – already created the seeds for the decline of higher education in the Humboldtian sense. Mass-education in largely underfunded universities combined with a centralized planning approach to higher education from the state, and the managerial problems associated with the committee governance system of universities made it more difficult to commit the education system to high scholarly standards. Despite the drawbacks of managed education as reported by its critics, universities have regained a degree of autonomy, which they lost during the era of federal involvement (Burtscheidt 2010). However, returning to the hierarchical culture of the *Ordinaria* system, which was rightly attacked by the 68 movement, is antiquated and demonstrates no attractive and sustainable alternative.

Managed education also has clear managerial implications. In response to competition and differentiation of the higher education system, universities have become more visible actors searching for a unique profile and have turned from collegially or politically administered organizations to strategically managed universities. Strategic management of universities is the continuous creation and exploitation of entrepreneurial opportunities for profile development in research, teaching, and

industry-university relations. As Münch (2011: 82, translation by authors) points out, the quintessence of strategic profile development is “the perpetual search for uniqueness, for the niche in which one does not compete with any other university in the world.” Strategic profile development is translated into three types of strategies that emphasize different sources of uniqueness and competitive advantage (see Frost et al. 2015): (a) *institutional strategies* that represent the willingness and ability of an organization to actively shape the framework conditions under which universities operate (e.g., creation of the Lüneburg Innovation Incubator; OECD 2015); (b) *market strategies* that aim to position the university as a unique player in the higher education field, including the segmentation and differentiation of markets (e.g., student recruitment); and (c) *resource strategies* that guide the attraction, development, and bonding of strategic resources such as reputation, intellectual talents, cooperation partners, and funding streams.

Future research should therefore investigate in depth the consequences of managed education and different policy approaches. To this end we propose a multi-level analysis (Reihlen et al. 2007; Reihlen and Werr 2012, 2015). Such an analysis entails first the level of the higher education field, involving actors, logics, and governing systems, as well as processes of change; second the level of the university and its transformation processes; and third the level of the individual scholar, socialized and embedded in this new institutional setting. The guiding research question is: How does managed education affect the reconfiguration of the higher-education field, the strategic choices and structures especially of universities, and the motivation and behavior of scholars? Shedding more light on these issues and developing sustainable policy measures are crucial for the future governing practices of academia and consequently for its usefulness and relevance to society.

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