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Understanding Radical Change: An Examination of Management Departments in German-speaking Universities**

Can radical organizational change be better achieved through planned change measures or through change measures developed as part of an evolutionary process? Based on 20 open interviews as well as recent survey data from 236 junior faculty members and 382 senior faculty members from departments of management at German universities and other academic institutions, this study suggests that the value commitment of the relevant stakeholders is greater to evolutionarily-developed rather than planned change measures, which consequently results in the dominant influence of the evolutionary change measures. Our results support the notion that in contexts that resemble the situation of universities in Germany – namely multi-polar power distribution and demanding preference structures within the affected group – successful radical organizational change management necessitates that the organization develops suitable change measures in an evolutionary way in order to achieve its goals.

Key words: **organizational change, intra-organizational change, institutional change, planned change, evolutionary change**

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Introduction

Understanding how organizations respond to regulatory, economic, and technological change measures makes the study of organizational change an important research issue in organization science (e.g. Greenwood/Hinings 1996; North 1990; Pettigrew et al. 2001; Tushman/Romanelli 1985). The question whether and how organizational change can be managed has received great attention in both the academic and popular management literature (e.g. D'Aunno et al. 2000; Greenwood/Hinings 1996; Huy 1999, 2002; Mintzberg/Walters 1985; Taylor 1993). Some scholars have argued that organizational change is best achieved in an evolutionary way, i.e. the organizational change is brought about by competing forces in the institutional and market context without deliberately planning change measures for reaching the organizational change aims (e.g. Chakravarthy/Doz 1992; von Hayek 1978; Weeks/Galunic 2003). Others however, such as Douglass North (initially a proponent of this view), later questioned this perspective. Noting the 'lock-in' (sometimes also referred to as path-dependence) that results from transaction cost in combination with bounded rationality and thus imperfect mental representations, he indicates that, under certain circumstances, organizational change can be better achieved through deliberate and actively planned change measures than through evolutionarily-developed ones (North 1981, 1990).

The study of change is particularly interesting and important in the field of higher education, since reforms and changes in this area not only influence university and its members, but also the economy, society and politics as a whole. The current situation within the university systems in Germany offers a unique opportunity to study planned and evolutionarily-developed change measures, and to analyze their effects on radical organizational change, because both types of change measures are currently present in this environment. In response to strong pressure to change and adapt to international standards, in addition to the requirements of the Bologna Treaties (European Ministers of Education 1999), and an ever-increasing competition for students, faculty and resources, the university system in Germany has introduced a number of formally planned change measures, while simultaneously witnessing the rise of several evolutionary and formally unplanned change measures.

The most important planned change measures in Germany have been the introduction of the junior professorship, which is the rough equivalent of an assistant professorship in the U.S., and the corresponding plans for the abolition of the qualification procedure which has been mandatory for junior faculty in Germany thus far: namely, the acquisition of the '*venia legendi*' (the formal right to teach at a university) obtained by writing a monographic (based on a scholarly book) '*habilitation'* (a second Ph.D. thesis). Both planned change measures – the introduction of the junior professor and the abolishment of the *venia legendi* – were designed to increase the competitiveness of national universities with regard to international competition for qualified scholars and students. With this goal in mind, the German government planned to increase the amount of prestigious international publications and decrease the dependence of post-doctoral students and *habilitanden* (i.e. junior faculty working on their 'habilitation') on the benevolence of the director of the institute prior to obtaining their *venia legendi*. Furthermore, the German government planned to shorten the 'time

to tenure' for junior faculty, to lower the age of junior faculty at the time of their appointment to full professorship, and increase the proportion of qualified international researchers at universities in Germany (Federal Ministry of Education and Research 2000). The most prominent evolutionarily-developed change measures have been the increased focus of German scholars on the Anglo-American research design model (e.g. a shift towards a more positivistic and empirical research paradigm and an increased importance of journal publications) and the development of the cumulative *habilitation (*a second Ph.D. obtained through publications in top-tier international journals) to obtain the *venia legendi* (i.e. departments would begin to accept not only a monograph but also publications in top-tier journals as the necessary qualification for obtaining the *venia legendi*).

The envisaged aims of the organizational change of the German university system can be understood as radical, because they aim at '… busting loose from an existing 'orientation' and the transformation of the organization' (Greenwood/Hinings 1996: 1024). According to Greenwood and Hinings' (1996) framework, radical organizational change will only result if the following intra-organizational preconditions are met: the affected group is dissatisfied with the existing organizational template, and combines its dissatisfaction with a value commitment to an alternative template (Greenwood/Hinings 1996). Furthermore, the organizational change process must be supported by both power and capacity for action in order for changes to occur. Since planned and evolutionarily-developed change measures are different in their origin, they are likely to encounter different intra-organizational dynamics and thus create different change outcomes.

Against this background, we ask: can the envisaged aims of radical organizational change (more publications in top-tier journals, more autonomy for junior faculty, reduction of the entry age for full professorship, a higher percentage of qualified international researchers) be more effectively achieved by the planned or by evolutionarily-developed change measures?

An examination of the interaction between planned and evolutionarily-developed change measures in conjunction with the radical organizational change of the German university system contributes both to the change as well as to the management education literature by empirically testing some of the previously formulated conceptual models and propositions. Specifically, we contribute to the discussion of whether and when planned change measures are more efficient than evolutionary-developed ones. In addition, we also add to the discussion in the educational management literature, which examines whether research institutions worldwide will adapt to the US-based model of education, and what affect this will have on these institutions. This is of interest to international management researchers for the following two reasons: firstly, in continental Europe several other university systems have similar structures to Germany, which indicates that the analysis will partially apply to them as well; secondly, the issue of how academic work in Europe is or will be affected by the changes in the higher education system is still empirically unexamined in most instances (Danieli/Thomas 1999; Enders 2001a).

The remainder of this paper is organized as follows: section 2 begins with a pluralistic review of the change literature and develops hypotheses about the influence of planned and evolutionarily-developed change measures on the intra-organizational

dynamics and organizational outcomes at the management departments in Germany; section 3 presents the research methodology; section 4 examines the empirical results. We conclude with an analysis of the results of this case study, thus allowing policy-makers an opportunity to compare notes on factors as well as supporting radical organizational change in an educational context in Europe. In addition, we outline the implications for departments with regard to the future direction of management research and teaching in Germany. Finally, we suggest possible avenues for future research.

Theory and hypotheses

There is a rich body of theories and empirical studies explaining the antecedents, processes and implications of radical organizational change (e.g. Allmendinger/Hackman 1996; D'Aunno et al. 2000; Greenwood/Hinings 1996; Huy 1999, 2002). However, due to different epistemological and ontological assumptions (as well as different assumptions about human nature and research methods) theories and studies about radical organizational change differ significantly with respect to several factors, including: whether the result of the targeted organizational change is predictable or unpredictable, linear or discontinuous; whether it is triggered by individual or collective action; and whether radical organizational change takes place by conscious planning or the evolutionary development of change measures (e.g. Gresov et al. 1993; Hannan/Freeman 1984; Orlikowski 1996). Even though typologies, which cluster different studies of organizational change exist (e.g. Tsoukas/Chia 2002; van de Ven/Poole 2005), the multitude of methodological, epistemological and theoretical approaches and the difference in underlying assumptions (Pettigrew et al. 2001), make it impossible to offer a comprehensive review of organizational change literature within the constraints of this study.

Generally speaking, the research thus far supports the idea that radical organizational change can be managed either by planned change measures or brought about through evolutionarily-developed changes, and that both approaches, given the right circumstances, can be successful. Thus, it is our goal to contribute to an understanding about the question of when each change measure offers the greatest potential for promoting radical organizational change.

The perception that radical organizational change can be initiated by planned change measures traces its roots to political philosophers of social contract theory (Hobbes 1651; Locke 1690; Rousseau 1762). It is based on the assumption that people in a state of nature (without society) are more or less equal to one another in power. Thus, in a state of nature, there exists no power to force people to cooperate; simultaneously there is a constant fear of death through individual aggression as well as the danger of total war. However, because men are also self-interested and rational, they can realize that the laws of nature (e.g. all men must preserve themselves, as well as the rest of mankind) help them to escape the state of nature; therefore, they plan a social contract that will help them lead a better life than that available to them in the state of nature. Following this view, rationally planned change measures lead to radical organizational change, if the members affected by the changes will generally benefit from the expected results. However, in the case under examination, Germany is faced with a variety of stakeholder groups each with diverse preferences (i.e. full professors,

state governments, university bodies, junior faculty, business schools, and others). It seems unlikely that all of the actors affected by the change perceive the planned change measures as generally beneficial. Thus, it is questionable as to whether these planned change measures will succeed in bringing about the intended radical organizational change within the educational systems.

In response to criticisms directed against theories of planned change, evolutionary change concepts were formulated. For example, Mandeville, Hume, Ferguson and Smith saw change not so much as a calculable result, but rather as an unplanned by-product of individual actions and therefore not as an expression of human rationality (Ferguson 1767; Hume 1739; Mandeville 1714; Smith 1789). Von Hayek has been one of the most prominent advocates of the importance of evolutionarily-developed change measures. He posits that evolutionary and unintended changes in institutions, norms and rules are subject to a double development process, which he describes as 'the twin ideas of evolution and of the spontaneous formation of an order' (von Hayek 1978). On the one hand, they emerge as an unintended result from the mostly independent actions of members of society; on the other hand, they are subject to the social evolutionary process, during the course of which other communities imitate successful institutions, while the inefficient institutions are replaced (von Hayek 1978). He states that institutions and rules emanating from such a process of competition reflect a high level of efficiency, and that they embody more knowledge than a planning committee could possibly acquire. Von Hayek (1978) therefore doubts the possibility that rules can be planned in a rational way, which can fulfill their purpose more efficiently than rules that evolved naturally.

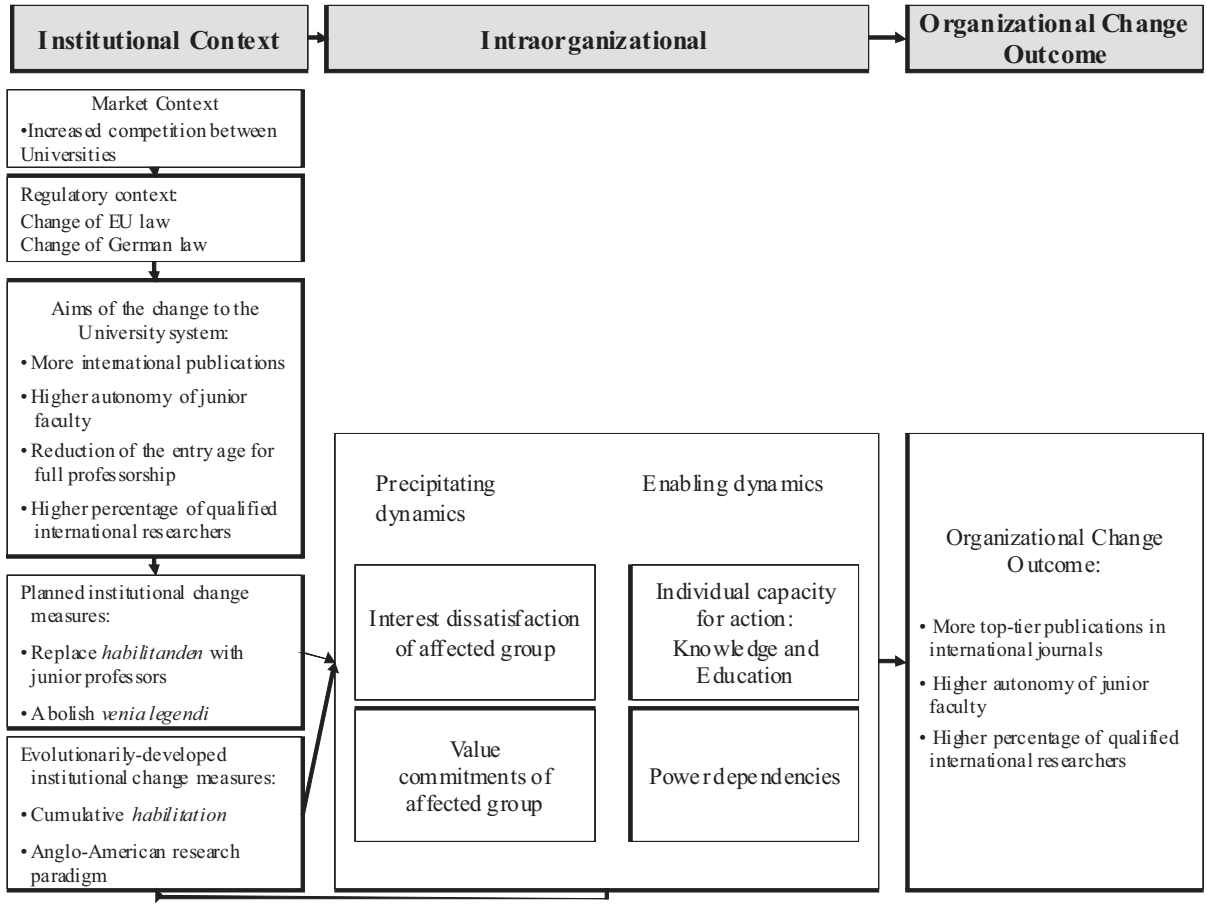
The important question therefore is whether and under what conditions radical organizational change is brought about by consciously planned or evolutionarily-developed change measures. To induce radical organizational change using evolutionarily-developed change measures, it is necessary to establish a market, in which the actors are able to decide from their own perspective consciously or unconsciously as to the most efficient measures to achieve these goals in their respective situations (Alchian 1950). The application of this line of reasoning to the research context of this study implies that it would be more efficient in the current change process for educational systems to create a market in which university employees could choose among different change measures and allow radical organizational change evolve organically out of this market.

Most theories and models in the context of change allow radical organizational change to be initiated either by planned or evolutionarily-developed measures. In an attempt to integrate the multiple conceptualizations and theories of change, Greenwood and Hinings (1996) have developed an agency-oriented framework, which suggests radical organizational change should be analyzed in terms of interaction between context (i.e. formal and informal institutions and markets) and intra-organizational factors (i.e. stakeholder satisfaction, value commitment, power dependencies, and capacity for action). They argue that radical organizational change will only occur if actors are dissatisfied with how their interests are currently being served, and if this is coupled with a value commitment to an alternative template (Greenwood/Hinings

1996). Furthermore, the organizational change process must be supported by the power to take action as well as adequate knowledge of what action to take.

Taken together, change measures seem to only lead to radical organizational change if the actors affected by the measures benefit overwhelmingly from the consequences of the changes. Evolutionary approaches suggest that planned change measures are less efficient than evolutionarily-developed ones, as measures which emerge from such a competitive process have a higher level of efficiency and embody more knowledge than can be acquired by a planning committee. To foster radical organizational change in an evolutionary way, however, a market is necessary, in which the actors are able to decide from their individual perspective (consciously or unconsciously) which measures are the most efficient ones. But path-dependency, resulting from high transaction cost and bounded rationality, contradicts the idea that evolutionary institutional change is more efficient than planned institutional change (North 1981, 1990). As the model of Greenwood and Hinings (1996) explicitly outlines, the conditions necessary for radical organizational change provide the framework in which we can test our question, namely whether planned or evolutionarily-developed change measures are better suited to the realization of radical organizational change. Furthermore, this model has already been successfully applied in a non-commercial change setting (McNulty/Ferlie 2004). Figure 1 shows a context-adapted model from Greenwood and Hinings (see figure 1).

Figure 1: Organizational Change in Higher Education



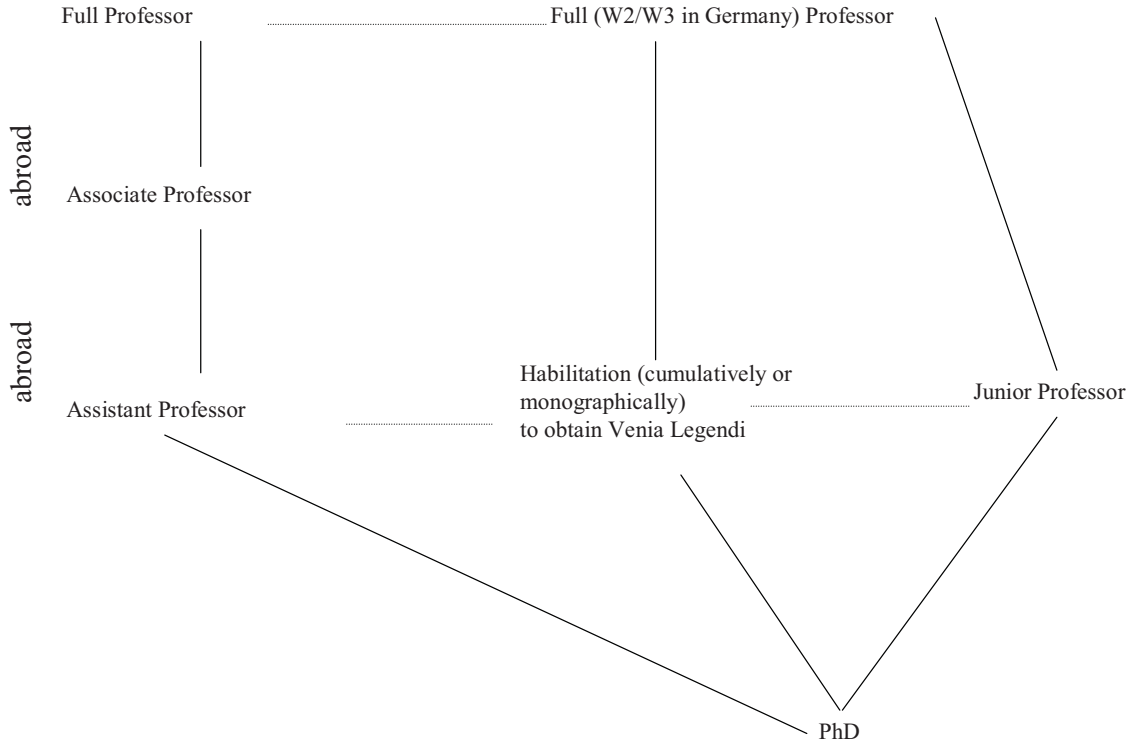
In the following section, we will describe both planned and evolutionarily-developed change measures in conjunction with their influence on the organizational educational system in Germany using the structure described in Figure 1. We will conclude this section with hypotheses regarding the expected change outcomes.

Planned institutional change measures

The German government responded to the demands of both a new regulatory context and increasing competition between universities through the establishment of two formal institutional change measures: firstly, the introduction of the junior professorship; and secondly, the abolition of the *venia legendi*. Both of these measures aim at reducing the time necessary for junior professors to qualify for tenure while simultaneously increasing the independence of junior faculty from academic advisors and creating a more international environment for teaching and research in Germany.

Prior to 2000, the precondition for applying for a tenured professorship in Germany was the completion of the *'venia legendi'* (the authority to teach at a university), which was granted by senior faculty of the qualifying department. Traditionally, in the social and management sciences, this was mainly achieved by working for approximately 4 to 5 (with a maximum of 6) years after the doctorate as a *habilitand* (assistant), which entailed research, teaching and administrative work for a senior professor acting as direct principal and academic advisor to the *habilitand*, in addition to writing an individually-authored thesis, the so-called *habilitationsschrift*, in a different research field from the original doctorate (see figure 2, Enders 2001b; Müller-Camen/Salzgeber 2005 for a detailed description of the German chair system).

Figure 2: Methods to achieve academic qualification in Germany



With the introduction of the junior professorship in 2000, the German federal government planned to end the requirement of the venia legendi to qualify for full professorship by the year 2010. Positions for junior professorships were supposed to be primarily created by rededicating the positions for *habilitanden*. Both the status of the *habilitand* and of the junior professor is officially limited to six years (Federal Ministry of Education and Research 2000).

However, unlike the *habilitand*, the junior professor is not under the formal supervision and directive of a full professor, but is formally on the same level as the tenured professors at the institution, with equal rights to work in committees of academic self-regulation (a part of the German academic system through which many administrative duties are carried out by the faculty itself). Also, in contrast to the *habilitand*, who has a weekly teaching load of 4-5 hours, junior professors have a progressive weekly teaching load of 4-8 hours. Furthermore, junior professors do not pursue the *venia legendi*, but instead qualify for tenure through an independent research and teaching program, the acquisition of third-party funds, and teaching evaluations. Junior professorship is limited to two three-year terms and should terminate by the time the junior professor reaches between 35 and 37 years of age (Federal Ministry of Education and Research 2000). After the first three-year term, an intermediate evaluation, which consists of both an internal teaching and an external research evaluation, is administered. If the evaluation is positive, the junior professorship will be extended by three years. Junior professors are to use the second three-year-term to find a position as a full professor. However, so far, due to financial constraints, only very few junior professorship positions have been converted into tenure track positions. As a result, both junior professors and *habilitanden* must apply for tenure at other universities, which constitutes a difference from the Anglo-American system, in which assistant professors usually have the opportunity to apply for tenure at the institution where the assistant professorship is completed. If the intermediate evaluation is negative, the junior professor in the German system is required to resign within a year (Federal Ministry of Education and Research 2000).

Evolutionary-developed change measures

In addition to the aforementioned formally planned measures, a number of evolutionary change measures have developed over the course of the last decade. These fall into two categories. The first is the rise of the Anglo-American research paradigm, which is changing the culture and values at business schools (Kieser 2004; Müller-Camen/Salzgeber 2005). Consequences of this increasing 'Americanization' include, on the one hand, a shift towards a more positivistic and empirical research paradigm, and on the other hand, an increased importance being placed on journal publications. The second evolutionary change measure is the introduction of the top-tier cumulative *habilitation,* which increasingly allows junior faculty to obtain the *venia legendi* by publishing a number of articles in top-tier journals instead of writing a second thesis.

In the following section we will look at the effect of both planned and evolutionary developed change measures on the intra-organizational dynamics of the university system.

Intra-organizational responses to institutional change

Precipitating dynamics: Interest dissatisfaction of the affected group prior to change measures as well as value commitment of the group affected by the change measures.

According to Greenwood and Hinings (1996), a precondition for radical organizational change is dissatisfaction of the affected groups with the existing situation and organizational template, as well as a value commitment of the affected groups to the change goals. In this case, the three groups that are mainly affected by the proposed changes are senior faculty, junior faculty and the government (both the federal government and 16 federal German states) as financiers (in Germany, 80% of the universities are financed by public funds split between the federal government and the 16 federal states (Kehm 2005)).

The federal states, in particular the ones that are governed by a party in opposition to the federal government at the time of initialization of the change answers in 2000 (i.e. Bavaria, Saxony, Thuringia), were not dissatisfied with the existing qualification process for junior faculty. Although they did not object to the introduction of the junior professorship, they saw the abolition of the *habilitation* as an undue violation of their autonomy in cultural and educational matters; as a result, these states lack a strong value commitment to this aspect of the reorganization. Hence, in 2004, the federal states filed and won a lawsuit, in which they fought for retention of the *habilitation* and the corresponding *venia legendi* as an alternative for junior faculty to qualify for full professorship. As a result, the *venia legendi* was formally retained as a possible route to tenure and a valid alternative to junior professorship in Germany.

Furthermore, we argue that the majority of senior scholars were not dissatisfied with the existing qualification process and that the abolition of the *habilitation* might conflict with their preferences for several reasons. First of all, junior professors are less dependent on the benevolence of full professors, and are thus not bound by their instructions in the same way that *habilitanden* are. Secondly, the budget of the full professor's chairs may be reduced by the conversion of former positions for *habilitanden* into positions for junior professors. Thirdly, without *habilitanden*, the required research, teaching and administration workload for full professors might have to be distributed among fewer, and in many cases, less qualified employees, such as doctoral students. Finally, because of the new requirements of the junior professorship the writing of monographs (a scholarly book on a single subject by a single author), an activity that was highly valued in the past, is no longer continued. Consequently, we believe it is justified to assume that the majority of full professors were satisfied with the *habilitation,* and that they value the junior professorship significantly less than the *habilitation*.

The cumulative *habilitation* developed shortly after the introduction of the junior professorship as an alternative to the monographic *habilitation*. The cumulative habilitation replaces the necessity of writing a second dissertation with the option of publishing articles in prestigious journals. So far, however, only about 25% of the German universities have formally implemented the option of cumulative habilitation for their junior faculty (Thom 2005). The preservation of the *venia legendi* as qualifying option for tenure also permits junior professors to acquire one, if they can find an academic advisor. We assume that established professors are likely to have a much higher value

commitment for the evolutionarily-developed cumulative *habilitation* for at least two reasons: firstly, the cumulative *habilitation* allows for a radical organizational change without taking resources away from tenured faculty. Second, it fosters the internationalization of the German management research, which has been sought by German senior faculty for many years (Simon 1993). Thus we propose the following hypotheses regarding interest dissatisfaction and value commitment of senior faculty:

Hypothesis 1a. Senior faculty were satisfied with the established structure and system of the university.

Hypothesis 1b. Senior faculty have a low value commitment to the planned institutional changes.

Hypothesis 1c. Senior faculty have a high value commitment to evolutionary changes.

The dissatisfaction of junior faculty with the existing system, as well as their value commitment to the intended changes is dependent on their position. *Habilitanden* who are satisfied working for their advisor will probably have a low value commitment to implementing junior professorship and abolition of the *habilitation*. In contrast, researchers who pursue an academic career as junior professor, and *habilitanden* who are dissatisfied with their advisor will probably have a high value commitment to the planned changes. But given the fact that most habilitanden in the management area already know their advisor from their graduate work (Müller-Camen/Salzgeber 2005) and that, so far, there are not many junior professors employed in the field of management, as well as the infrequency with which junior professorships become tenure track positions, we can assume that the majority of junior faculty members (i.e. the group of *habilitanden*) are not dissatisfied with the existing situation and will only have a low value commitment to the changes. Furthermore, the group of junior faculty is naturally subject to high fluctuations, so that resistance of an existing group may change quickly with the arrival of the next 'generation' of junior faculty.

Hypothesis 2a. Habilitanden have low value commitment to the planned institutional changes, but junior professors will have high value commitment to the planned institutional changes.

Hypothesis 2b. Habilitanden and junior professors have high value commitment to evolutionary changes.

Enabling dynamics: Individual capacity for action and power dependencies.

According to Greenwood and Hinings (1996), the enabling dynamics for change are the individual capacity for action, as well as the accompanying power to implement change. The individual capacity for action is determined by the knowledge and education of the affected group in relation to their ability to fulfill new demands. However, these capacities can only come into play if the dominant coalition recognizes the weakness of the existing template and has the ability to manage the transition between organizational templates.

As neither the implementation of the junior professorship nor the abolition of the *habilitation* demand special knowledge or education on the part of full professors and junior faculty, we can assume that no resistance to change will manifest itself be-

cause of a lack of capacity for action. However, since the implementation of the junior professor is concurrent with the increasing importance of international journal publications, substantial knowledge about this kind of publishing is necessary (i.e. which questions are discussed in international journals, which theories apply in which community, what methods are considered to be adequate within the community, how should data be represented, etc.). Since German researchers so far have been publishing primarily on a national level (Backes-Gellner/Schlinghoff 2004), significant efforts by senior and junior faculty will probably be needed in order to acquire this kind of knowledge.

It is important to note that, in comparison to Anglo-American researchers, academics in Germany must carry a heavier teaching and administration load. It is therefore at least doubtful that German academics will be able and/or willing to acquire the necessary skills and knowledge to publish internationally, which might counteract the efforts to effects of the organizational change.

With regard to the power to implement the changes, we must state that even though the affected group has the power to implement the changes, due to the reasons previously presented and as well as multipolar power structures, neither all federal states nor an overwhelming majority of senior faculty seem ready to promote the concept of junior professorship.

In sum, we conclude based on the framework from Greenwood and Hinings (1996) that the preconditions for organizational change are only partly fulfilled for the stakeholder groups of junior and senior scholars, and that the extent of the value commitment of the affected groups differs between the planned and evolutionary change measures. Consequently, we argue that the planned institutional change measures will be less successful in influencing radical organizational change of the university systems than the evolutionarily-developed change measures.

Hypothesis 3. Senior Scholars will perceive the evolutionarily-developed changes (cumulative habilitation and Anglo-American paradigm) as more important for change at the organizational level than the planned change measures (abolition of venia legendi and introduction of junior professorship).

In the following section we will build on these arguments by developing hypotheses about the actual and expected effects as well as the success of the evolutionary and planned change measures on organizational change outcomes.

Organizational change outcomes

The following paragraph will discuss the effects of the intra-organizational dynamics on the organizational change outcomes with emphasis on publications in top-tier journals, autonomy for junior faculty, reduction of the entry age for full professorship, and higher percentage of qualified international researchers.

International publications

Drawing on the aforementioned reasons for the heightened significance of the cumulative *habilitation*, i.e. the improved steering possibilities of scientific personnel in connection with the desire of junior faculty for an internationally valid recognition of their

scholarly work, we assume that German management research will become increasingly international. Internationalization signifies above all else an orientation towards the Anglo-American as well as the European market. Thus, we propose the following hypotheses:

Hypothesis 4. German researchers will increasingly publish in internationally prestigious journals.

Autonomy of junior faculty

The aim of the introduction of the junior professorship was to allow junior faculty members to achieve earlier independence from their academic advisors. Thus, junior professors are encouraged to give lectures directly after finishing their dissertation, to independently supervise master and Ph.D. theses, to build up their own research agendas and teaching programs, and to participate in the faculty committees at the same level as tenured faculty members. Accordingly, we assume that junior professors are perceived to be more autonomous with regard to research and teaching than *habilitanden*.

Hypothesis 5. Junior professors will have greater autonomy in research and teaching than habilitanden.

Entry age to full professorship

At the same time, this augmented independency also requires junior professors to take responsibility for more administrative work and teaching tasks than *habilitanden*. This will probably lead to less time for research and therefore a lower publication output per year compared to *habilitanden*. In order to be able to compete with *habilitanden* in the application for tenure positions, junior professors will need to present a comparable publication record. Since, on average, junior professors are required to carry a higher administrative and teaching workload, we assume that they will therefore be as old as *habilitanden* at tenure.

Hypothesis 6. Junior faculty will not be younger than habilitanden when they get tenure.

Percentage of qualified international researchers

Given that the venia legendi is still likely to be important in the near future, that the teaching and administration load for German-based academics is heavier than that of Anglo-American academics, and that the compensation structure is less attractive for academics in Germany, we assume that qualified social scientists, especially those at reputable institutions in the US, will not enter the German social science market in the near future. Thus, we propose the following hypothesis:

Hypothesis 7. Qualified foreign researchers will not enter the job market in Germany in the near future.

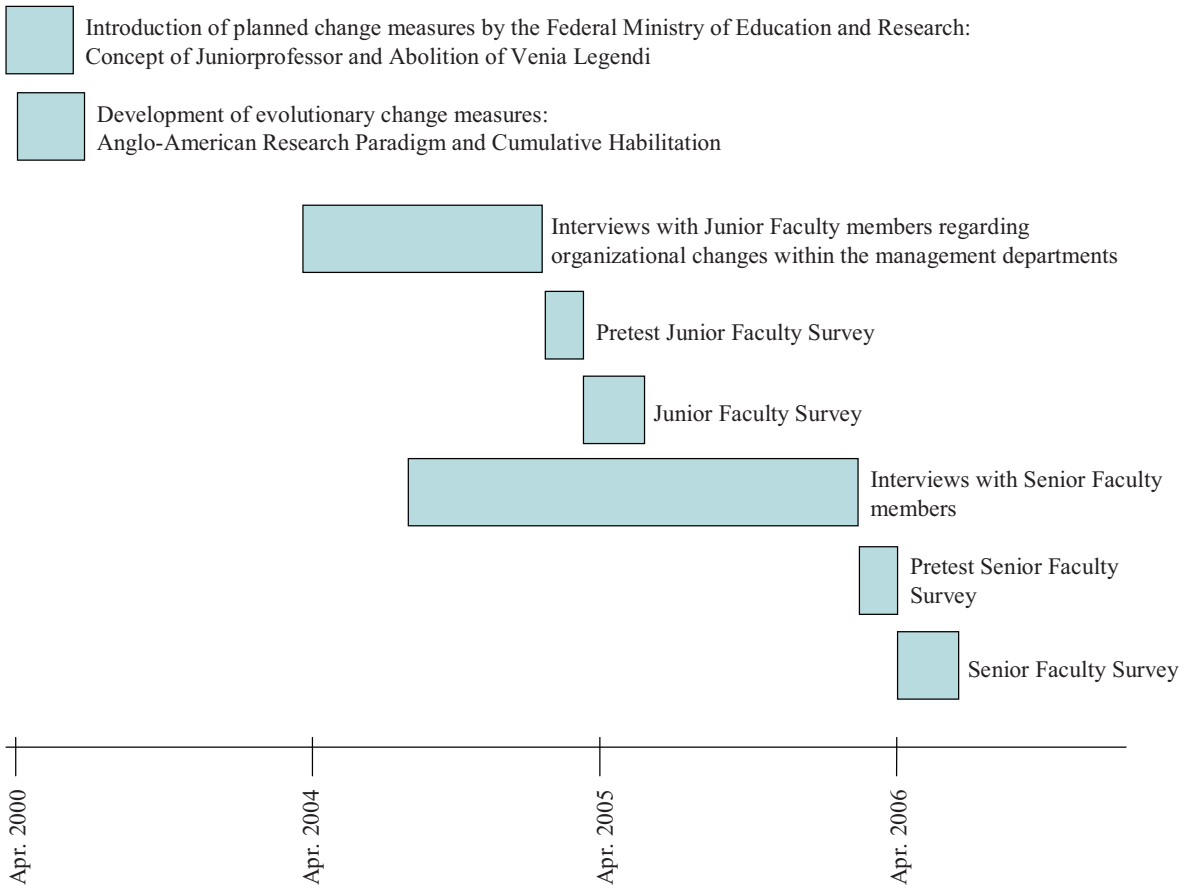
Method

Sample, survey design and data collection

The data presented in this study was obtained through 20 open interviews with members of junior and senior faculty, as well as two pre-tested surveys with 236 junior and

382 senior management scholars in Germany from April 2004 until May 2006 (see figure 3).

Figure 3: A timeline of change-related events and data collection periods



The combination of open interviews and quantitative surveys seems appropriate primarily because publicly available information does not provide the level of detail that was needed for this study, including fine-grained information regarding the educational background, interest dissatisfaction, values and preferences of faculty. Therefore, all data were self-reported, but previous research gives support to the reliability and validity of self-reported measures (Rogelberg et al. 2001), especially when other sources are unavailable. In addition, subjective measures are appropriate when objective measures do not exist (Dess/Robinson 1984). Furthermore, individual judgment provides the opportunity to gather information concerning multiple dimensions of institutional change and its effect on the respective scholars and their institutions.

To ensure that a high proportion of the answers were valid, the questionnaires were administered directly to both the junior and senior faculty members, using a key informant approach (Huber/Power 1985). Both junior and senior management faculty can be considered to be valid information sources within the context of change at universities. Senior faculty members represent the field of management and junior faculty are future senior management scholars (Williamson/Cable 2003). Junior faculty are also those who will be most affected by the ongoing changes (Müller-Camen/

Salzgeber 2005). They will therefore be more apt than other faculty members to report on the current and future effects of change measures.

Naturally, the authors are aware of the necessary trade-off between objective data collected from secondary sources at several different times and data richness derived from primary sources; given the unavailability of sufficient secondary data, this study had no choice but to opt for a survey of self-reported data (Venkataraman/Grant 1986). Since there is no comprehensive database for this population, the empirical investigation is based on a hand-collected database, which aimed at identifying all junior and senior faculty members for Business Administration in Germany. The Association of University Professors of Management (VHB) provided us with a database of management junior and senior faculty, which we reviewed, revised and updated.

To ensure additional validity, the sample was restricted in the following way: management faculty had to be associated with a university based in Germany. Junior faculty had to be in the process of pursuing a tenured academic position (e.g. habilitation, junior professorship, assistant professor). In cases of doubt, we contacted the individual faculty members personally via telephone or email to verify the aforementioned criteria. In addition, we also asked the division chairs of the Association of University Professors of Management to provide us with the names of all junior faculties in their respective divisions. The hypotheses were tested using survey data from an online-survey of 428 junior faculty and 830 senior faculty members in Germany (the entire population at the time of the survey). The authors regard the database to be sufficiently representative, as it does not contain any systematic omission errors (Hair et al. 1998). For the mailing process, the total design method as suggested by Dillman (1978) was used. The final sample of surveys consists of 236 junior faculty members, which constitutes a response rate of 55.1% and of 382 senior faculty members, which constitutes a response rate of 46%.

Survey measures

Interest dissatisfaction of senior faculty with existing template.

Interest dissatisfaction ***was*** measured on a Likert scale from 1 to 7 with the following items: to what extent they were satisfied with… 1)… the former faculty pay system, 2) … the *venia legendi* as precondition for becoming a professor, 3) … the publication paradigm that favored book publications, 4) … the close affiliation of junior faculty with one member of senior faculty, 5) … the average age of junior faculty when obtaining the first full professorship, 6) … the former share of foreign faculty in Germany.

Value commitment to planned change measures of senior faculty: the introduction of junior professorship and abolition of venia legendi.

Value commitment of senior faculty to the introduction of junior professorship and the abolition of *venia legendi* was measured on a Likert scale from 1 to 7 with the following questions: how strongly are you in favor of converting *habilitanden*-positions into junior professors–positions? How satisfied were you with the *venia legendi* as default qualification for becoming a professor in management?

Value commitment to evolutionarily-developed change measures of senior faculty: Anglo-American research paradigm and cumulative habilitation.

We used the following proxy for measuring value commitment of senior faculty for the evolutionarily-developed change measures: how strongly are you in favor of an increase of international top-tier journal publications by German management scholars? Since top-tier journals are in many cases equal to Anglo-American journals (Harzing 2006), we believe this measure incorporates both types of evolutionarily-developed change measures, namely, the Anglo-American research paradigm as well as the cumulative *habilitation* that requires the publication in top-tier journals.

Value commitment to planned change measures of habilitanden and junior professors: The introduction of the junior professorship and abolition of the venia legendi.

Value commitment of *habilitanden* and junior professors to the introduction of junior professorship was measured on a rating scale from 1 to 7 with the following question: how strongly are you in favor of the introduction of junior professorships? How strong do you support the abolition of the venia legend?

Value commitment to evolutionarily-developed change measures of habilitanden and junior professors: the Anglo-American research paradigm and cumulative habilitation.

Value commitment of habilitanden and junior professors was measured on a rating scale from 1 to 7 with the following question: is top-tier publishing essential to demonstrate ones research excellence? Since publishing in the best ranked journals means in many cases to publish in Anglo-American journals (Harzing 2006), we think this measure incorporates both types of evolutionarily-developed change measures, namely, the Anglo-American research paradigm as well as the cumulative *habilitation* that requires publication in top-tier journals.

Importance of evolutionary and planned change measures to senior faculty.

Importance was measured on a Likert scale from 1 to 7 with the following items: how important were the following change measures for achieving the envisaged aims of radical organizational change:
planned change measures: 1) … introduction of junior professorship, 2) … decreased importance of *venia legendi*, 3) … new salary structure. The evolutionary change measures include: 4) … cumulative *habilitation*, 5) … paradigm change towards Anglo-American research paradigm.

International journal publications.

The future prominence of international prestigious publications by management scholars from Germany was measured by asking senior and junior faculty members for their assessment measured as a number 1 and 7 on a rating scale.

Autonomy of junior faculty perceived by habilitanden and junior professors.

Autonomy was measured on a Likert scale from 1 to 7 with the following items: to what extent can you make determinations regarding financial resources? To what extent can you make determinations regarding human resources (i.e. doctoral students)?

To what extent can you make determinations regarding human resources (i.e. student assistants)?

Tenure Age.

Tenure age of management scholars from Germany was measured by asking senior faculty members for their assessment measured as a number between 1 and 7 on a rating scale.

Appointment of qualified foreign scholars.

The appointment of qualified foreign management scholars was measured by asking senior faculty members for their assessment measured as a number between 1 and 7 on a rating scale.

Results

The following table 1 shows age and gender distributions of our two samples:

Table 1: Age and gender distributions in our samples

	Junior Faculty	**Senior Faculty**
Age	36.5 years	50.1 years
Gender	74% male, 26% female	91% male, 9% female

An examination of table 2 indicates that senior faculty were on average satisfied with the previous system. In our interviews, tenured professors often pointed out that they were especially satisfied with the diversity in research, teaching, and practice-transfer activities that had been fostered in the German system thus far. As a result, hypothesis 1a is supported.

Table 2: One Sample T-Test: interest dissatisfaction of senior faculty

H1a Interest dissatisfaction of senior faculty with previous system	
Mean	Test Value
4.54 (1.1)	4
t(289) = 8.72, p < .001	

Hypothesis 1b was tested using a one-sample t-test and was also confirmed. Table 3a shows that senior faculty on average have a low value commitment for the abolition of the *venia legendi,* and table 3b shows that senior faculty also have a low value commitment for the introduction of a junior professorship. In our interviews with senior faculty, some member of this community expressed the belief that junior professors act only as low cost substitutes for tenured professors, thus enabling the state to reduce funding for universities.

Table 3a: One Sample T-Test: value commitment to planned change measures - abolition of *venia legendi*

H1b Value commitment to planned change measures – abolition of *venia legendi*	
Mean	Test Value
5.33 (1.7)	4
t(341) = 14.85, p < .001	

Table 3b: One Sample T-Test: value commitment to planned change measures - introduction of junior professorship

H1b Value commitment to planned change measures: introduction of junior professorship	
Mean	Test Value
3.24 (1.8)	4
t(351) = 8.01, p < .001	

Table 4 reveals that, as expected, senior faculty has a high value commitment to the evolutionary changes, providing support for hypothesis 1c.

Table 4: One Sample T-Test: value commitment to evolutionarily-developed change measures

H1c Value commitment to evolutionarily-developed change measures	
Mean	Test Value
5.29 (1.5)	4
t(353) = 16.00, p < .001	

Hypothesis 2a was tested using one sample t-tests and was also confirmed. Tables 5a-5d show the results of both *habillitanden's* and junior professors' value commitment to the planned institutional changes, namely the abolition of the *venia legendi* and introduction of a junior professorship. As we demonstrate, junior professors have a high commitment to the planned institutional changes and *habilitanden* have a low value commitment to these institutional changes, confirming hypothesis 2a.

Table 5a: One Sample T-Test: value commitment to planned change measures - introduction of junior professorship (habilitanden)

H2a Value commitment to planned change measures - introduction of junior professorship	
Mean	Test Value
3.63 (1.8)	4
t(183) = 2.73, p < .01	

Table 5b: One Sample T-Test: value commitment to planned change measures - abolition of *venia legend* (habilitanden)

H2a Value commitment to planned change measures – abolition of *venia legendi*	
Mean	Test Value
3.57 (2.0)	4
t(183) = 3.00, p < .01	

Table 5c: One Sample T-Test: value commitment to planned change measures - introduction of junior professorship (junior professors)

H2a Value Commitment for planned change measures – introduction of junior professorship	
Mean	Test Value
6.50 (1.1)	4
t(7) = 6.6, p < .001	

Table 5d: One Sample T-Test: value commitment to planned change measures – abolition of *venia legend* (junior professors)

H2a Value commitment to planned change measures – abolition of *venia legendi*	
Mean	Test Value
5.50 (1.8)	4
t(7) = 2.39, p < .05	

Hypothesis 2b is also confirmed, as demonstrated in table 6. Junior faculty generally indicate a high value commitment to evolutionary changes.

Table 6: One Sample T-Test: value commitment to evolutionarily-developed change measures – *habilitanden* and junior professors

H2b Value commitment to evolutionary developed change measures	
Mean	Test Value
5.10 (1.6)	4
t(235) = 9.90, p < .001	

Tables 7a and 7b demonstrate that hypothesis 3 (stating that senior scholars will perceive the evolutionary developed change measures (cumulative habilitation and Anglo-American paradigm) as more important for change at the organizational level than the planned change measures (abolition of venia legendi and introduction of a junior professorship) is confirmed.

Table 7a: One Sample T-Test: evolutionary and planned change measures – senior faculty

Variables	**Mean (Standard Deviation)**
H3: Introduction of Junior Professor	3.21 (1.7)
H3: Abolition of *venia legendi*	3.41 (1.7)
H3: Cumulative habilitation	5.03 (1.6)
H3: Anglo-American paradigm	4.61 (1.7)

Table 7b: Paired T-Test: comparing evolutionary and planned change measures

H3 Comparing evolutionary and planned change measures	
Planned change measure: Abolition of *venia legendi*	Evolutionarily-developed change measure: Anglo-American paradigm change
3.41 (1.7)	4.6 (1.7)
t(339) = -11.14, p < .001	

Moreover, hypothesis 4 is confirmed, as demonstrated in tables 8a and 8b, which show that both junior and senior faculty expect an increase in international prestigious publications by German researchers.

Table 8a: Paired T-Test: researchers will increasingly publish in international journals – senior faculty

H4 Researchers will increasingly publish in international journals – senior faculty	
Mean	Test Value
5.08 (1.4)	4
t(351) = 14.16, p < .001	

Table 8b: Paired T-Test: researchers will increasingly publish in international journals - junior faculty

H4 Researchers will increasingly publish in international journals – junior faculty	
Mean	Test Value
5.73 (1.5)	4
t(242) = 17.60, p < .001	

Table 9 reveals that, as expected, junior professors have greater autonomy than *habilitanden,* providing support for hypothesis 5.

Table 9: Paired T-Test: junior professors will have greater autonomy in research and teaching than *habilitanden* – junior faculty

H5 Junior professors will have greater autonomy in research and teaching than habilitanden – junior faculty	
Junior Professors	Habilitanden
5.2 (1.5)	4.0 (1.3)
t(247) = 3.4, p < .001	

Hypothesis 6 was tested and confirmed using a one-sample t-test. Table 10 indicates that senior faculty do not expect tenure age to be lower for junior professors at the time of full professorship.

Table 10: Paired T-Test: tenure age will not be lower – senior faculty

H6 Tenure age will not be lower – senior faculty	
Mean	Test Value
3.8 (1.5)	4
t(341) = 2.1, p < .05	

Lastly, gypothesis 7 is confirmed as demonstrated by the results in table 11.

Table 11: Paired T-Test: foreign researchers will not enter the job market: senior faculty

H7 Foreign researchers will not enter the job market – senior faculty	
Mean	Test Value
3.3 (1.6)	4
t(338) = 8.0, p < .001	

Discussion

In this study we set out to understand the effects of planned and evolutionarily-developed change measures on radical change in organizations. The current transformation of the management education systems in Germany gave us the opportunity to study an ongoing change process that contains elements of both planned and evolutionarily-developed change measures. Using Greenwood and Hining's (1996) framework, we considered the context as well as intra-organizational factors in looking at the change outcomes in the educational system.

Our results indicate that the preconditions of successful change, as formulated by Greenwood and Hinings (1996), are not completely met by either the planned or the evolutionary institutional change measures instigated at German management schools. The first precondition, that senior faculty were dissatisfied with the existing organizational template, was not met. Their satisfaction is clearly indicated in the statistical results as well as the answers given in the interviews we conducted. The second precondition that senior and junior faculty (with the exception of junior professors) have a value commitment the planned institutional change measures, also failed to be met. Again, we have obtained congruent results from both the statistical analyses and the open interviews. However, our results indicate that there was value commitment among junior and senior faculty to the evolutionary change measures. Furthermore, our data implies that three out of the four organizational change outcomes that the German government had hoped to achieve through the planned change measures will not be reached.

Interestingly, our results suggest that planned and evolutionarily-developed change measures have different influences on the organizational change outcomes, due to differences in the value commitment of senior and junior faculty to these outcomes. According to our data, evolutionarily-developed change measures have been the primary measure of influence in organizational changes at the management schools. Our data supports the view that the evolutionarily-developed change measures have directly contributed to the most radical organizational change outcome, namely the heightened importance of international prestigious journal publications for tenure. Whereas former generations of junior faculty were expected to have two monographs and a couple of prestigious domestic journal publications, they are now expected to have a portfolio of journal publications in prestigious international journals. While the planned change measures have only had a modest direct effect on the organization (i.e. the educational system), they have nevertheless contributed to the creation of evolutionarily-developed change measures in the institutional context, in turn contributed to radical organizational change.

From a theoretical perspective this study makes several contributions. First of all, our results reflect the basic premise of general institutional theory, i.e. that organizations not only respond to market pressures but also to institutional pressures. German universities, similarly to most educational institutions, are subject to a wide range of expectations from professional organizations as well as society in general. Our results are in line with DiMaggio and Powell (1991), who argue that organizations conform to contextual expectations of appropriate organizational forms in order to gain legitima-

cy, and with Greenwood and Hinings (1996), who indicate that organizations often accommodate institutional expectations even though these expectations may have little to do with technical notions of performance. Both archetypes and templates for successful universities exist, and well-established professional organizations, such as the European Quality Improvement System (EQUIS), which accredits universities, are already present. Based on our results, we argue that strong mimetic, normative, and coercive processes are presently at work in Germany, and that they manifest themselves in the evolutionary change measures, the goals of which are to gain legitimacy and secure survival of German universities in the global educational market. By studying the ongoing institutional changes, we add to the understanding of how organizations adopt legitimate templates and change them, thereby answering the call for research put forth by Greenwood and Hinings (1996).

Secondly, we also extend earlier research on institutional and organizational change by applying and building on the model put forth by Greenwood and Hinings (1996). Our results are in line with Greenwood and Hinings (1996), who state that '…the external processes of deinstitutionalisation have to be understood together with the internal dynamics of interpretation, adoption, and rejection by the individual organizations'. Furthermore, Greenwood and Hinings (1996) argue that understanding radical change requires more than an analysis of the institutional arena or sector, and that there must be a concern with patterns of value commitments, power dependencies, interests and capacities. As our study reveals, to understand the incidence and pacing of organizational change, in particular the differences between organizations as they respond to apparently similar contextual pressures, it is necessary to understand the interplay of intra-organizational dynamics. All in all, our results show that neo-institutional theory can provide a useful model for understanding institutional change and its effect on the organizational level by linking organizational context, inter-organizational dynamics and organizational action.

Thirdly, our study contributes to the discussion of the worldwide Americanization of educational systems, and offers insight into how existing templates adapt to the institutional influence of Anglo-American research. It is one of the first to examine this on-going change process from the perspective of those stakeholders that are most affected by it.

Finally, we adapt the framework by Greenwood and Hinings (1996) to the context of educational systems. We believe that the context of this study is important with regard to the interpretation of the results. German universities are characterized by high autonomy, high agency risks (Tosi/Gomez-Mejia 1989), and high knowledge intensity, as well as multi-polar power distribution and demanding preference structures for the main stakeholders. Additionally, there were few viable methods to sanction those universities that did not follow through with the planned institutional change measures. Against this background, our results suggest that institutional prescriptions, such as the planned change measures, will not be as successful as evolutionary institutional change measures, because the latter have been developed in coordination with the relevant actors. How context affects the interplay of these aspects would be a worthwhile topic for future studies.

As articles on change in the fields of management and organization studies must face the double hurdle of scholarly quality and practical relevance (Pettigrew 1997), we believe that this study also has implications for both public policy makers and management faculties. For public policy makers, the findings indicate that planned change measures in the context of educational systems have had questionable success, which should be helpful for public policy makers in designing organizational transformation. In situations such as the one analyzed (in which actors can choose between various change measures), it seems necessary to link planned change measures with incentives. For management faculties, the findings provide indications of the future development of educational and research institutions in Germany. For university administrators, our results contain potential insights on how changes can be successfully achieved, given the unique characteristics of the university environment. Since the reformation and adaptation of educational systems is a world-wide phenomenon, this case study of the German university system holds important lessons on potential pitfalls inherent in this process.

While our study may not provide definitive evidence on precisely how and why changes occurred, we believe that our theory and findings offer, at minimum, ample reason for further investigation. Although there has been some empirical research on the effects of the kind of institutional change measures on radical organizational change (Lawrence et al. 1999; Townley 2002), issues of the interaction between planned and evolutionary change measures would represent an interesting line of inquiry. Such a perspective might contribute to an understanding of the complex dynamics of change processes, and thus answering of the call for research on linking process to outcome, as put forward by Pettigrew et al. (2001).

However, our results should be viewed in the light of their limitations, which have to be taken into account for the interpretation and generalizability of the results. First, results from non-experimental and non-longitudinal research design can only be interpreted causally with great caution. Second, all our analyses and tests are based on mean comparisons. Analyzing the data with multivariate methods might be more appropriate in respect of considering the fit between situation and preferences. This suggests that in future studies, researchers might want to include additional dimensions such as sociodemographica and the field of specialization into their analyses.

In conclusion, this study represents an early attempt to explain the dynamics of planned and evolutionarily-developed change measures in the context of radical organizational change in educational institutions. We demonstrate that, in this context, planned change measures can serve as a catalyst for evolutionarily-developed change measures. Our results support the usefulness of the change model by Greenwood and Hinings (1996) in understanding radical organizational change and the arguments brought forth by Greenwood and Hinings (1996) regarding the importance of the intra-organizational dynamics as a moderator in the relationship between institutional context and organizational change. Our results imply that organizational change does indeed require certain preconditions to be fulfilled, as suggested by Greenwood and Hinings (1996). More broadly, our results contribute to the literature on organizational change by demonstrating that integrated frameworks like the one by Greenwood and Hinings (1996) are well suited to study radical organizational change processes. The authors hope that future research will build on these results.

References

Alchian, A.A. (1950): Uncertainty, evolution and economic theory. In: Journal of Political Economy, 58: 211-221.

Allmendinger, J./Hackman, J.R. (1996): Organizations in Changing Environments: The Case of East German Symphony Orchestras. In: Administrative Science Quarterly, 41: 337-369.

Backes-Gellner, U./Schlinghoff, A. (2004): Careers, Incentives, and Publication Patterns of US and German (Business) Economists. Working paper. Zürich, Switzerland.

Chakravarthy, B.S./Doz, Y. (1992): Strategy Process Research: Focusing on Corporate Self-Renewal. In: Strategic Management Journal, 13(5): 5-14.

D'Aunno, T.A./Succi, M./Alexander, J.A. (2000): The Role of Institutional and Market Forces in Divergent Organizational Change. In: Administrative Science Quarterly, 45(4): 679-703.

Danieli, A./Thomas, A.B. (1999): What about the workers? Studying the work of management educators and their orientations to management education. In: Management Learning, 30(4): 449-471.

Dess, G.G./Robinson, R.B. Jr. (1984): Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. In: Strategic Management Journal, 5: 265-273.

DiMaggio, P.J./Powell, W.W. (1991): Introduction. In: W.W. Powell/P.J. DiMaggio (Eds.), The New Institutionalism in Organizational Analysis. Chicago: Chicago University Press: 1-38.

Dillman, D.A. (1978): Mail and telephone surveys: the total design method. New York: John Wiley & Sons.

Enders, J. (Ed.) (2001a): Academic staff in Europe: Changing contexts and conditions. Westport: Greenwood Press.

Enders, J. (2001b): A Chair System in Transition: Appointments, Promotions, and Gate-keeping in German Higher Education. In: Higher Education, 41/H. 1-2: 3-25.

European Ministers of Education (1999): The Bologna declaration of 19 June 1999. http://www.bolognaberlin2003.de/pdf/bologna_declaration.pdf.

Federal Ministry of Education and Research (2000): Hochschuldienstrecht für das 21. Jahrhundert - Das Konzept des BMBF.

Ferguson, A. (1767): An essay on the history of civil society. 8th edn. 2001. Boston: IndyPublish.com.

Greenwood, R./Hinings, C.R. (1996): Understanding radical organizational change: Bringing together the old and the new institutionalism. In: Academy of Management Review, 21(4): 1022-1054.

Gresov, C./Haveman, H.A./Oliva, T.A. (1993): Organizational design, inertia and the dynamics of the competitive response. In: Organization Science, 4(2) May: 181-209.

Hair, J.F./Anderson, R.E./Tatham, R.L./Black, W.C. (1998): Multivariate data analysis. Prentice Hall: Upper Saddle River.

Hannan, M.T./Freeman, J. (1984): Structural inertia and organizational change. In: American Sociological Review, 49(2): 149-164.

Harzing, A.-W. (2006): Journal Quality List. 23rd edn. http://www.harzing.com/resources.htm.

Hayek von, F. A. (1978): New Studies in Philosophy, Politics, Economics and the History of Ideas. London: Routledge & Kegan Paul.

Hobbes, T. (1651): Leviathan or the matter, form and power of a commonwealth ecclesiastical and civil. Edn. 1960. Oxford: Blackwell.

Huber, G.P./Power, D.J. (1985): Retrospective reports of strategic managers: guidelines for increasing their accuracy. In: Strategic Management Journal, 6: 171-180.

Hume, D. (1739): A treatise of human nature. Edn. 1967. Oxford: Clarendon Press.

Huy, Q.N. (1999): Emotional Capability, Emotional Intelligence, and Radical Change. In: Academy of Management Review, 24(2): 325.

Huy, Q.N. (2002): Emotional Balancing of Organizational Continuity and Radical Change: The Contribution of Middle Managers. In: Administrative Science Quarterly, 47(1): 31.

Kehm, B.M. (2005): Developing Doctorial Degrees and Qualifications in Europe. Good Practice and Issues of Concern. In: Beiträge zur Hochschulforschung, 1(27): 10-33.

Kieser, A. (2004): The Americanization of Academic Management Education in Germany. In: Journal of Management Inquiry, 13(2): 90-97.

Lawrence, T./Phillips, N./Hardy, C. (1999): Watching whale watching: a relational theory of organizational collaboration. In: Journal of Applied Behavioral Science, 35: 479-502.

Locke, J. (1690): Zwei Abhandlungen über die Regierung. Edn. 1967. Frankfurt a. M.: Europäische Verlagsanstalt

Mandeville, B.D. (1714): Die Bienenfabel oder Private Laster, öffentliche Vorteile. Edn. 1980. Frankfurt a. M: Suhrkamp.

McNulty, T./Ferlie, E. (2004): Process transformation: Limitations to radical organizational change within public service organizations. In: Organization Studies, 25(8): 1389-1412.

Mintzberg, H./Waters, J. (1985): Of Strategies, Deliberate and Emergent. In: Strategic Management Journal, 6(3): 257-272.

Müller-Camen, M./Salzgeber, S. (2005): Changes in academic work and the chair regime: the case of German business administration academics. In: Organization Studies, 26(2): 271-290.

North, D.C. (1981): Structure and Change in Economic History. New York: W.W. Norton.

North, D.C. (1990): Institutions, institutional change and economic performance. New York: Cambridge University Press.

Orlikowski, W.J. (1996): Improvising Organizational Transformation Over Time: A Situated Change Perspective. In: Information Systems Research, 7(1): 63.

Pettigrew, A.M. (1997): The double hurdles for management research. In: T. Clarke (Ed.), Advancement in organizational behaviour: Essays in honour of D.S. Pugh. London: Dartmouth Press: 271-289.

Pettigrew, A.M./Woodman, R.W./Cameron, K.S. (2001): Studying organizational change and development: challenges for future research. In: Academy of Management Journal, 44(4): 697-713.

Rogelberg, S.G./Fisher, G./Maynard, D./Hakel, M./Horvath, M. (2001): Attitudes Towards Surveys: Development of a Measure and its Relationship to Respondent Behavior. In: Organizational Research Methods, 4(1): 3-25.

Rousseau, J.-J. (1762): Der Gesellschaftsvertrag oder Die Grundsätze des Staatsrechts. Edn. 1971. Stuttgart: Reclam.

Simon, H. (1993): Die deutsche Betriebswirtschaftslehre im internationalen Wettbewerb – ein schwarzes Loch? In: Zeitschrift für Betriebswirtschaft 63/supplement: 73–84.

Smith, A. (1789): An inquiry into the nature and causes of the wealth of nations. 5th edn. London: Strahan and Cadell.

Taylor, J.R. (1993): Rethinking the Theory of Organizational Communication. Norwood: Ablex.

Thom, N. (2005): Umfrage zur kumulativen Habilitation im Fach Betriebswirtschaftslehre. In: Untersuchung im Auftrag des Verbandes der Hochschullehrer für Betriebswirtschaft.

Tosi H.L. Jr./Gomez-Mejia, L.R. (1989): The Decoupling of CEO Pay and Performance: An Agency Theory Perspective. In: Journal of Management, 34(2): 169-190.

Townley, B. (2002): The role of competing rationalities in institutional change. In: Academy of Management Journal, 45**:** 163-179.

Tsoukas, H./Chia, R. (2002): On Organizational Becoming: Rethinking Organizational Change. In: Organization Science, 13: 567-582.

Tushman, M.L./Romanelli, E. (1985): Organizational evolution: A metamorphosis model of convergence and reorientation. In: L.L. Cummings/B.M. Staw (Eds.), Research in organizational behavior. Greenwich: JAI Press, 7: 171-222.

Van de Ven, A./Poole, M.S. (2005): Alternative approaches for studying organizational change. In: Organization Studies, 26(9): 1377-1404.

Venkatraman, N./Grant, J.H. (1986): Construct measurement in organizational strategy research: A critique and proposal. In: Academy of Management Review, 11: 71-87.

Weeks, J.R./Galunic, D.C. (2003): A Theory of the Cultural Evolution of the Firm: The Intra-Organizational Ecology of Memes. In: Organization Studies, 24(8): 1309-1352.

Williamson, I.O./Cable, D.M. (2003): Predicting early career research productivity: the case of management faculty. In: Journal of Organizational Behavior, 24: 25-44.