

Adaptations of National Degree Structures in the Context of the Bologna Process: An Analysis of Policy Change in German, Dutch, French and English Higher Education (1998-2004)

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Background

When the four ministers in charge of higher education (HE) of France, Germany, Italy, and the United Kingdom met at the Sorbonne university in Paris in May 1998 to sign a joint declaration on what they called “harmonisation of the architecture of the European higher education system” (Sorbonne declaration, 1998), nobody anticipated that they would trigger one of the most far-reaching European HE reforms, which has since come to be known as the ‘Bologna process’.

By June 1999, only a year later, as many as 29 European ministers in charge of HE had subscribed to similar aims. As signatories to the ‘Bologna declaration’ they expressed their intention to build a “European area of higher education” and to achieve “greater compatibility and comparability of the systems of higher education” in order to “promote citizens’ mobility and employability” and increase “the international competitiveness of the European system of higher education” vis-à-vis the rest of the world (Bologna declaration, 1999).

By 2006, 45 European countries inside and outside the European Union (EU) had joined the process. Reforms of national HE systems in this context are underway all over Europe.

The Bologna process is remarkable for several factors; above all its speed, its geographic scale, and the amount and depth of national HE reforms bundled under its flag. While European integration had been progressing continuously during the last decades in many areas, most notably the economic sphere, education policy had for a long time largely remained the domain of nation states. European national governments had decidedly and successfully defended their education systems against EU influence, as well as against any attempt at ‘harmonisation’ as expressed in Article 126 (149) of the Maastricht (Amsterdam) treaty. Against this backdrop, the ‘sudden’ willingness and interest of European ministers in charge of HE to increase cooperation and take initiatives to render their HE systems more similar is a historic step.

The process is interesting from a research perspective as its many ambiguities render its dynamics particularly complex: while it was consciously initiated outside of the EU context

and soon covered HE systems inside and outside of the EU, it strongly resonates with aims and activities of the EU and is also increasingly interwoven with EU processes. Additionally, as it is a non-binding declaration of intent of national ministers in charge of HE, its ‘implementation’ is far from trivial: it depends on the interaction of national actors in HE policy for its translation into policies, and is thus subject to a diversity of national interests, priorities, policy processes etc.

Research focus and approach

To reach the ambitious aims of the Bologna declaration, the ministers agreed on six so-called ‘action lines’. Among the most far-reaching is action line two, which calls for the “adoption of a system essentially based on two main cycles, undergraduate and graduate” (Bologna declaration, 1999). The translation of this goal into national policy formulation constitutes the research topic of this study.

A two-cycle system was novel to most European HE systems, which have historically shown a wide variety of degree structures. Most had traditionally organised their university studies in one long cycle leading directly to a Masters-level degree, and many had created a parallel non-university type of HE that led to a degree below that level. Moving to a two-cycle structure meant transforming these diverse systems into what is interchangeably referred to as ‘Bachelor and Masters’, ‘undergraduate and graduate studies’, ‘first and second degree’, or a ‘two-tier’ structure.

The reform of national degree structures is not only so far-reaching because it touches on deeply-enshrined educational traditions, but also because it is impossible to adjust degree structures without triggering important adaptations in related dimensions of national HE systems, as I show in this study. The goal also had consequences for those few European countries that traditionally had organised their national degree structures in two main cycles and were faced with the question of their “compatibility and comparability” (Bologna declaration, 1999) with those of other countries.

While not all of the reforms of national degree structures can be attributed exclusively to the Bologna process and were in some countries initiated prior to the Sorbonne and Bologna declarations, a great deal of reform in European HE has since been coordinated in the framework of the Bologna process. Consequently this study looks at the adaptation of national degree structures regarded in this context.

Beyond mapping these adaptations and the concomitant changes in relevant dimensions of the national HE systems, this study is interested in whether these changes lead to convergence between national HE systems. While the term ‘convergence’ is not mentioned in the Sorbonne and Bologna declarations, it is clearly the declarations’ and the ensuing Bologna processes’ leitmotif. The degree of convergence and the dimensions to which it shall extend remain, however, ambiguous. In terms of the adoption of a system of two cycles, it states only that the first cycle should last “a minimum of three years”, be “relevant to the European labour market”, and that “the second cycle should lead to the master and/or doctorate degree as in many European countries” (Bologna declaration, 1999). As this shall happen taking “full re-

spect of the diversity of cultures, languages, national education systems and of university autonomy” (Bologna declaration, 1999; see also De Wit & Verhoeven, 2001; Verbruggen, 2002), this study is interested in how the resulting tension between convergence and diversity (see Meek, Goedegebuure, Kivinen, & Rinnen, 1996; Teichler, 1988) plays out when it comes to translating the Bologna declaration into national policies.

Research questions

Based on these initial considerations, I focused this study on national level reforms in an internationally comparative approach that regards national degree structures in the context of other relevant dimensions of national HE systems and analyses their convergence among countries. This study addresses three research questions:

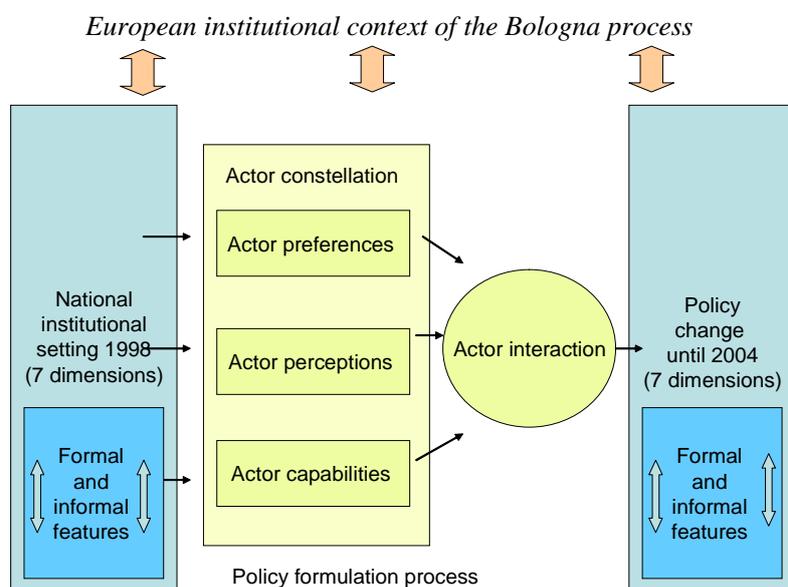
- (1) How are the national degree structures adapted in the context of the Bologna process and what changes does this imply for other relevant dimensions of the respective HE systems?
- (2) What explains the nature and degree of change in the respective HE systems and the similarities and differences between them?
- (3) Do the adaptations of national degree structures in the context of the Bologna process contribute to the convergence of the respective HE systems?

Theoretical framework

Based on a review of the relevant literature from HE research, implementation research, policy research, and new institutionalism, I made the following defining choices: to define convergence as a process rather than an absolute state; not to use implementation analysis but a combination of actor- and institutional-oriented perspectives; and to account for the multi-actor, multi-level nature of modern HE governance. Finally, I sought to develop a framework that allows analysis of both forms of path dependence covered in the literature—one stressing continuity, persistence, and inertia (Goodin, 1996; Pierson, 1993, 2000b; Weir & Skocpol, 1985)—and one focusing on critical junctures, feedback loops, and lock-in (Arthur, 1994; Mahoney, 2000; Pierson, 2000a, 2000b, 2000c).

In light of these considerations, I developed a theoretical framework that draws on elements of Douglass North’s (1990) model of institutional change, the perspective of actor-centred institutionalism (ACI) developed by Renate Mayntz and Fritz Scharpf (1995; Scharpf 1997), and HE research. The framework captures two main elements and their interaction: institutions—here: the institutional setting of national HE systems—and actors—here: the organisational actors in national HE policy. Actors are influenced by the institutional context in which they operate and in turn bring about institutional change. While North was instrumental in developing the general causal relationships, ACI helped obtain a more detailed representation of the dynamics of the policy formulation phase that results from the interaction of the various actors. The theoretical framework is depicted in Figure 1.

Figure 1: Theoretical framework



The framework provides the analytical lenses to examine the institutional setting of national HE systems in 1998 and policy change until 2004, as well as the participants and dynamics of the policy formulation process that help explain developments that caused the changes in this period. The key elements of the framework are:

- (1) The institutional side i.e., the national institutional setting in 1998, policy change until 2004, and their formal and informal features, analysed in seven dimensions.
- (2) The actor side i.e., the actor constellation (preferences, perceptions, capabilities) and their interaction in the policy formulation process. These actors are organisational rather than individual actors.

INSTITUTIONAL SIDE. In line with North (1990: 3), I adopt a broad understanding of institutions as “the rules of the game in a society or, more formally, (...) the humanly devised constraints that shape human action”. Following North, I distinguish two types of institutions: formal constraints such as legal provision, statues and contracts, and informal constraints such as “socially sanctioned norms of behaviour”, “internally enforced standards of conduct”, and “conventions” (ibid: 40). Informal constraints “come from socially transmitted information and are part of the heritage that we call culture” (ibid: 36); cultural features of societies such as traditions and inherited norms and values are thus included in this concept of institutions. Formal and informal constraints condition each other; laws for instance, often reflect generally accepted informal norms of behaviour or values, and if they are altered, create pressure on informal constraints to adjust accordingly. While this adjustment takes time and often results in inertia, radical change can occur provided a “representational redescription” of actors’ mental maps—and thus an adjustment of informal constraints—takes place (Denzau & North, 1994) (22-23). In North’s writings, the only occasions for this are wars and revolutions; I extend the model to include exposure of actors to the international context as a factor fostering representational redescription and thus informal institutional change. Furthermore, I also consider the possibility that the

national institutional context itself provides incentives for institutional change. Applied to the Bologna process, this raises the empirical question of which forces will prevail: inertia stemming from the interlocking of formal and informal constraints or radical change stemming from exposure to the international context, or from national incentives for change.

As it is too early to assess the implementation of Bologna reforms at the level of individual HEIs, I concentrate on the analysis of policy change as one aspect and form of institutional change. Policy change also requires overcoming both informal constraints—such as by convincing national actors to adjust norms, values, and modes of conduct attached to the inherited institutional setting—and formal constraints—such as by adjusting legal provision.

I define seven analytical dimensions to structure the analysis of national institutional contexts. In addition to national degree structures, these include the relationship between different types of HEIs, curricular governance, curricula, access, transition from HE to employment, and funding. Each dimension includes formal and informal features. For example, while degree structures are laid down in HE laws and institutional statutes, they are simultaneously a reflection of widely-shared perceptions of what it takes to assume a certain role in society or perform a certain profession. The following table lists the sub-dimensions covered in the analysis.

Under ‘national degree structures’, I cover degree levels, types, and titles. The dimension ‘institutional types’ includes degree levels, types, and titles in relation to institutional types, their cooperation, and the permeability between them. By ‘curricular governance’ I refer to the nature of the quality assurance system, the degree of curricular diversity, and national capacity planning. The term ‘curricula’ refers to the internal structure of studies, the organisation of the academic year including credits and modularisation, the curricular culture, the stress on general education versus skills, and the discrepancy between the *de jure* and *de facto* length of studies. Under ‘access’, I cover relevant aspects of upper secondary education, entry rates to HE and an eventual increasing-participation agenda, and access to undergraduate education and to the Masters level. ‘Transition to employment’ includes what is seen as the first degree qualifying for the labour market and the relationship between HE and the public and private sectors. Finally, ‘funding’ denotes the level of spending on HE, the funding of the teaching function in particular, and tuition fees and student support.

ACTOR SIDE. From Mayntz and Scharpf I take the concepts for a more detailed analysis of the actor-side of the framework, namely actor constellation and actor interaction. The actor constellation is composed of the capabilities, perceptions, and preferences of all relevant actors, and is in turn influenced by the institutional setting.

The concept of *capabilities* denotes “all action resources that allow an actor to influence an outcome in certain respects and to a certain degree” (Scharpf 1997: 43) i.e., the competencies and roles of actors as defined by laws, statutes, and inherited relationships as well as their financial and personnel resources. *Perceptions* refer to actors’ cognitive orientations i.e., their subjective perceptions of reality—including both facts and causal relationships—that may, but need not be correct. *Preferences* circumscribe a wide range of types of actor interests and goals, including their pure self-interest, preferences derived from organisational goals, missions or the

normative limitations defined by the purpose of an organisation, and the *specific* interests and norms that a particular actor chooses on the basis of its ‘corporate identity’ or ‘culture’.

While the actor constellation depicts the static picture of actors’ relations regarding a proposed policy, the *mode of interaction* is concerned with the dynamics of actor interaction. It specifies how “that conflict is going to be resolved—through unilateral action, negotiation, voting, or hierarchical determination” (Scharpf, 1998: 72). The most frequent interaction modes in HE policy are negotiation, hierarchical determination, or a combination of both. “Negotiation in the shadow of hierarchy” (Mayntz & Scharpf, 1995), a frequent interaction mode in HE policy, describes a situation where the conditions for negotiating a consensus are improved by the threat of the unilateral imposition of a decision by state actors such as the ministry in charge of HE.

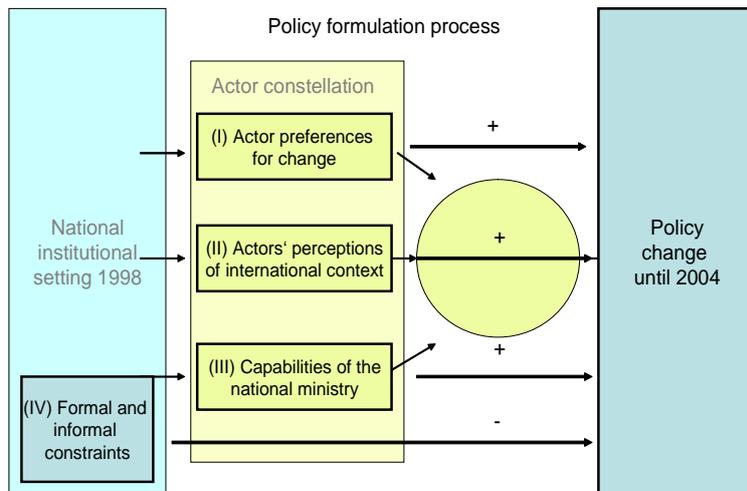
I use the theoretical framework in two major ways: (1) to guide the national case studies and the comparative analysis, and (2) to shed light on a selected number of specific causal relationships by means of a set of *hypotheses*.

Hypotheses

While the case studies provide a qualitative analysis of the nature of reforms, the hypotheses seek to explain the *degree* of policy change in HE systems brought about in the context of adaptations of national degree structures. The first three hypotheses focus on key aspects of the actor constellation to explain the degree of policy change, namely actor preferences (I), perceptions (II), and capabilities (III). The fourth hypothesis captures the effect of the benevolence of the initial institutional setting on the degree of policy change:

- (I) The more the national institutional setting supports *actor preferences* for change...
- (II) The more *actor perceptions* in an HE system are influenced by the international context...
- (III) The stronger the *capabilities of the national ministries responsible for HE* in the respective HE system...
- (IV) The less persistent *informal and formal constraints* of national HE systems...
...the more policy change takes place.

Figure 2: Graphical depiction of the hypotheses



Methodology

At the heart of the empirical part are four national case studies of the HE systems of Germany, the Netherlands, France, and England between 1998 and 2004. Germany, France, and England were chosen to represent the three major historical reference models for European HE—namely the Humboldtian, the Napoleonic, and the Anglo-Saxon (Neave, 2001). The English case plays a dual role both as a participant in the Bologna process and as a reference case for the two-cycle degree structure. While the Dutch HE system combines Humboldtian, Anglo-Saxon, and to some degree Napoleonic influences, its inclusion is largely justified by its importance as a champion of HE reform in Europe. Theoretical considerations such as yielding sufficient variation and practical considerations such as my mastery of the languages also played a role. The period covered starts one year prior to the Bologna declaration, the year of the Sorbonne conference, and ends six years later in autumn 2004 with the conclusion of data collection.

The research design deals with the research questions in a three-step process that proceeds in ascending levels of abstraction. First, the understanding of adaptations of degree structures in each of the four HE systems through in-depth national case studies is an empirical research objective in itself (research question 1). Second, the cross-case comparison of the four cases analyses differences and similarities in change between HE systems (research question 2) and identifies the degree of convergence (research question 3). Third and finally, key elements of the underlying theoretical framework are ‘tested’ for their ability to answer one aspect of research question 2, namely the degree of change. These purposes are combined in a comparative case-study design (Yin, 1984) that consists of three steps: individual case studies, cross-case comparison, and review of hypotheses.

The national case studies are structured in three parts: the first portrays “actors and their capabilities” and “the institutional setting in 1998”, the second the “policy formulation” proc-

ess and the last “policy change until 2004”. The seven dimensions are used to structure both the initial institutional setting and policy change until 2004. In the comparative chapter, the dimensions are also used for systematic comparisons of initial settings and policy change. Given the profound methodological issues about the approximation of quasi-statistical methods by means of a case-study design (Lijphart, 1971; Mayntz, 2002; Peters, 1998; Scharpf, 1997, 2000), step three, the ‘testing’ of hypotheses, is done in all modesty, serving as a stylised summary of my qualitative findings rather than a statistical test. Based on the complexity of the matter outlined in the case studies and their comparison, I expect that the hypotheses can help shed a focused light on a limited number of selected causal relationships, but cannot replace the much richer and more nuanced preceding analysis.

Data from primary sources as well as secondary data was analysed for this study, most of which was of a qualitative nature. At the core were about 95 expert and actor interviews in the four countries and the analysis of original policy documents. HE literature, quantitative data, and participant observation were other important sources.

Case studies

EUROPEAN CONTEXT. The European context for the ensuing national case studies was provided by a series of intergovernmental conferences of European ministers in charge of HE at which programmatic declarations and communiqués were passed, beginning with the Sorbonne conference (1998) and continuing through the conferences in Bologna (1999), Prague (2001), Berlin (2003), and Bergen (2005). As national and European policy formulation proceeded in parallel, they influenced each other both ways. At the same time, the analysis of the official conference texts reveals that the decisive features of the European framework for two-cycle degree structures were developed at an early point in time and remained remarkably loose, leaving national actors ample scope for unique designs. If one looks at the accompanying European-level policy discourse however—at seminars, conferences, and particularly at the EUA reports—the picture looks different (Haug, Kirstein, & Knudsen, 1999; Haug & Tauch, 2001; Reichert & Tauch, 2003, 2005; Tauch & Rauhvargers, 2002). Here the 3+2-model for the undergraduate and graduate phase played an important role; if only as a reference model to divert from. In the national debates, this discourse was often confused with the official texts, and misunderstandings influenced national decisions.

GERMANY. In Germany, a diverse set of objectives motivated the move to a two-cycle degree structure: using the reform for curricular renewal, reducing drop-out rates, increasing international attractiveness, rendering HE more relevant for the labour market, strengthening non-university HE (*Fachhochschulen*), and more generally dealing with the massification of HE. While decisive amendment of the HE Act at the federal level was passed in autumn 1998 permitting the introduction of Bachelor and Masters programmes alongside the traditional degrees on a trial basis, no binding decision for the comprehensive and complete transition to the two-cycle degree structure had been reached by autumn 2004. One reason for this can be found in the federal nature of the German HE system, which led to fragmented policy formulation and decision making, and complicated the development of a national consensus and its implementa-

tion into policies. Moreover, the competencies of the federal ministry in charge of HE became increasingly disputed by the *Länder* between 1998 and 2004. This meant that policy formulation was largely dependent on agreement by the 16 *Länder*. While this slowed implementation, decisions were far-reaching as far as the content of policies was concerned: in line with federal legislation, the Standing Conference of the *Länder* ministries stressed that all Bachelor degrees had to ‘qualify for a profession’ (*berufsqualifizierend*). Access to the Masters level was generally made selective. *Fachhochschulen* were entitled to offer Masters degrees and to grant the same degree titles as universities. State authorisation of degree programmes was successively replaced by ‘accreditation’ through agencies in a decentralised structure. These ambitious policies increased the hurdle for a transition to the new model. The overall picture by autumn 1998 can be summarised as a combination of radical policy formulation, low political consensus, and hesitant implementation policy.

THE NETHERLANDS. In the Netherlands the dominant motivation for moving to the ‘Bachelor-Master-system’, as it was referred to there, was to increase the international transparency and attractiveness of the Dutch degree structure. It was also seen as an opportunity for curricular renewal, but exclusively upon voluntary initiative of HEIs. Dutch non-university HEIs (*hogescholen*) saw the transition as an opportunity for raising their status vis-à-vis the universities, but with limited success. The reform was pushed by the Dutch HEIs, and an intense policy dialogue began in 1998 which culminated in an amendment of the national HE Act in summer 2002. Given the strong interest of HEIs in the reform and the high degree of consensus on the policies passed, implementation was swift and nearly all Dutch HEIs made the transition to the new structure in autumn 2002. The content of policies was not overly ambitious: university Bachelor degrees were not seen as qualifying for the labour market but as transition points to a Masters degree, each university Bachelor graduate was guaranteed a place in at least one Masters programme, *hogescholen* were not publicly funded for Masters programmes, and degree titles for ‘academic’ and ‘higher professional’ were kept distinct—though both universities and *hogescholen* were in principle entitled to grant both. The existing peer-review based evaluation system was transformed into an accreditation regime with a central organisation taking a yes/no-decision. Overall, the Dutch situation in autumn 1998 was characterised by moderate to highly ambitious policies, a high degree of political consensus, and swift implementation policy.

FRANCE. Similar to Germany, problem pressure was a strong motivator for the degree reform of the French HE system. A problem perceived as particularly acute by universities and the ministry in charge of HE was the traditional divide between a non-selective university sector and the selective *grandes écoles*. The research-oriented universities were responsible for educating the vast majority of secondary school graduates, while the political and economic elites were trained in the professionally-oriented *grandes écoles*. A major reform aim was to bridge the gap between these sectors. In addition to curricular renewal, fighting dropout, coping with massification, increasing labour-market relevance of university studies, and increasing the international attractiveness of French HE were also important motives. The relevant legal provision was passed in two waves in 1999 and 2002. Given the traditionally strong political resistance to amending the French HE Act, this was done through a series of decrees (*décrets* and

arrêtés), the first in 1999 supporting initial pioneering adjustments, the second in 2002 providing the regulatory basis for a comprehensive new degree architecture referred to as ‘LMD’ (*licence, master, doctorat*) including a Bachelor, Masters, and doctoral level. The process was led by the national ministry in charge of HE in close consultation with stakeholders, particularly universities. While resistance from academic staff and student unions was high in international comparison, it was only moderate compared to other French HE reforms. Implementation followed the rhythm of the contract policy between universities and the state, starting with pioneering HEIs in 2002 and reaching nearly complete implementation by autumn 2004. The content of policies was moderately far-reaching: the labour-market orientation of the mainstream Bachelor-level degree at universities (*licence*) was not significantly increased, access to the Masters level was not rendered selective, legal provision promoted a range of curricular reform measures, the reform was largely confined to the university sector and hardly touched the *grandes écoles*, and the existing state authorisation system of degree programmes (*habilitation*) was adjusted to give universities more leeway in designing their own curricula. Overall, the French situation can be characterised by a combination of low to moderately ambitious policies, a moderate level of political consensus, and an implementation policy leading to a high to moderate speed of implementation.

ENGLAND. The English case is special in that its degree system was traditionally organised in a two-cycle structure. When the responsible English minister of state signed the Bologna declaration, she did not expect any major consequences and the event went largely unnoticed by the HE sector. It was only in 2002 that awareness of the Bologna process began to increase. This process was not led by the English ministry in charge of HE however, but by actors such as the university rectors’ conference and the funding council. In spring 2003 they created the UK-wide ‘High Level Policy Forum’ to facilitate the exchange of key sector organisations on European issues, and in January the ‘UK HE Europe Unit’ which soon became key for coordinating the response of British HE to the Bologna process. While the English HE sector had long been complacent about the Bologna process given that the two-cycle structure was traditional in England, actors now became concerned that Continental European trends would put their system under adjustment pressure. A particular worry derived from the fact that most English Masters programmes had traditionally taken one year, while many of the new European Masters programmes were two years in length. Another concern was the trend towards ‘programme accreditation’ in Continental Europe as opposed to the English system of institutional audit. At the same time, English actors worked actively at the European level to shape the future course of the Bologna process. While not triggered by European developments, many English reforms between 1998 and 2004 strongly resonated with efforts of other countries in the context of the Bologna process such as increasing participation, raising the labour-market relevance of HE (among others by the introduction of a new, two-year ‘foundation degree’), and developing a national framework for HE qualifications. Overall, the English HE system underwent significant reform in the period between 1998 and 2004, but only marginal adjustments took place in the context of the Bologna process, with no mentionable change of degree structure.

Comparative analysis

RELATIVE DEGREE OF POLICY CHANGE. Based on a detailed qualitative comparison of institutional starting points for the reforms and policy change until 2004 along the seven dimensions of HE systems, I develop a relative order of the degree of policy change, distinguishing (1) policy formulation on adaptations of national degree structures along the individual dimensions, and (2) national implementation policies in the four countries. The results are summarised in the following table.

Table 1: Overall degree of policy change until 2004

	Germany	The Netherlands	France	England
Dimensional analysis				
Institutional types	1 st (H)	2 nd (HM)	3 rd (ML)	4 ^t (L)/(HM*)
Degree structures	1 st (H)	2 nd (HM)	3 rd (HM-ML)	4 th (L)/(ML*)
Curricular governance	1 st (H)	2 nd (HM)	1 st (H)	3 rd (L)/(H*)
Curricula	1 st (H)	2 nd (HM)	1 st (H)	3 rd (ML)/(ML*)
Access	1 st (H)	2 nd (HM)	3 rd (ML)	4 th (L)/(HM*)
Transition to employment	1 st (HM)	3 rd (L)	2 nd (ML)	4 th (L)/(ML*)
Funding	2 nd (ML)	1 st (HM)	3 rd (L)	4 th (L)/(H*)
Overall I	1 st (H)	2 nd (HM)	3 rd (HM-ML)	4 th (L)/(HM*)
Implementation policy	3 rd (ML)	1 st (H)	2 nd (HM)	does not apply
Overall II ^a	2 nd (HM)	1 st (H-HM)	2 nd (HM)	3 rd (L)/(HM*)

^a Generally, this refers to policy change in relation to adaptations of national degree structures in the context of the Bologna process. For England, both policy change within and outside of the context of the Bologna process is reported, the latter denoted by an asterisk (*). The rank order is based only on policy change within the context of the Bologna process (see also methodological chapter, section 4.4.1). The summative judgement is based on equal weightings of individual dimensions. Similarly, 'Overall I' and 'Implementation policy' received equal weight to arrive at 'Overall II'. The rank order does not include a judgement of whether these changes are good or bad. The information in brackets describes the degree of change in qualitative terms: (H) = high, (HM) = high to moderate, (ML) = moderate to low (L) = low.

From the comparison of policy formulation along the seven dimensions, Germany comes out first, followed by the Netherlands, France, and England. The picture looks very different for implementation policies, which were most advanced in the Netherlands, followed by France and Germany (this aspect does not apply to England as there were no policies on adapting degree structures that could have been implemented). If policy formulation along the seven dimensions and implementation policy are combined into a single overall measure, the Netherlands comes out as the country with the highest overall degree of policy change in the context of the Bologna process; Germany and France share a middle position, and England comes last.

CONVERGENCE. The above analysis also allows me to identify the overall degree of convergence brought about by adaptations of national degree structures in the context of the Bologna process. The German, Dutch, and French HE systems weakly moved in the direction of the English system, leading to slight convergence.

CAUSAL RECONSTRUCTION. The comparative analysis also includes a detailed analysis of the causal factors behind these reforms that can only be summarised here at a high level of abstraction: indeed all five major explanatory factors put forth in the theoretical framework—(1) actor preferences, (2) perceptions, (3) capabilities, (4) constellations and interaction, and (5) the formal and informal features of the institutional setting—deliver partial explanations. This analysis yielded a complex and nuanced understanding of the nature and degree of policy change, differentiated by dimension. It was also possible to determine cross-dimensional patterns of effect, though it was neither possible nor intended to determine the relative weight of these factors in causing the overall result. The analysis confirmed my approach of combining institutional and actor perspectives in a single framework. It showed both the importance of the dynamics of actor interaction in the policy formulation and the overwhelming influence of the inherited institutional frameworks on the ultimate result.

Review of hypotheses

As a complement to the detailed qualitative comparative analysis, a review of the four hypotheses serves to check the explanatory power of selected causal relationships implied in the theoretical framework. While the comparative analysis covered both the nature and degree of policy change, the hypotheses focus only on the latter. The review of hypotheses also serves as a stylised summary of the empirical findings.

The separate testing of each hypothesis in isolation reveals that—while hypothesis IV is broadly in line with the empirical result—no single factor can fully explain the observed policy change. Therefore, I also reviewed how the explanatory factors work in concert for each HE system. For the sake of brevity, only this holistic assessment is summarised here.

The **German** situation is characterised by a high degree of polarisation: on the one hand, strong national preferences for change based on acute problem pressure as well as a strong but disputed influence of the international context support a high degree of change. On the other hand, it is restrained by weak capabilities of the national ministry and highly persistent informal and formal constraints. Examples for the latter are widespread attachment to the ‘Humboldtian’ model of HE, professional entry regulations from the public and the private sector that do not match the new degree structure, and the layered legal provision that follows from the federalist structure. This situation is well reflected in the extreme gap between far-reaching policy change along the seven dimensions and hesitant national decision-making on implementation: the preferences for change fully translate into radical policy formulation justified with reference to international role models. At the same time, the weak national ministry cannot overcome the informal and formal constraints and leaves the implementation question to the *Länder* and HEIs. The *Länder* in turn do not have the capability to substitute the role of the national ministry and only agree on vague formulations regarding implementation. Interestingly, the avoidance of national-decision making on implementation not only slows down change, it also facilitates radical policy formulation in the seven dimensions *per se* because it helps to blur the potential conflict. To sum up, the polarisation between the different causal factors translates into a divided picture of different aspects of policy change, and an intermedi-

ate overall position. When seen in conjunction, the four explanatory factors explain the degree of policy change in German HE remarkably well.

In **France**, the situation is polarised in a different way. Strong preferences for change based on severe national problem pressure and strong capabilities of the national ministry (which does however not extend to the *grandes écoles*) support change in the university sector. At the same time informal and formal constraints—such as egalitarian values deeply enshrined in French society, and as close linkages between HE degrees and employment prospects in Germany—make it difficult. The informal constraints translate into a high degree of resistance from several national actors in HE policy. International role models are an important argument of the ministry, and the belief that the transition to two-cycle degree structures (referred to as LMD in France) is needed to remain internationally competitive is an important motive for the universities to engage in the reform. But these international perceptions do not influence the logic of national reforms very deeply. It is the confrontation of strong problem pressure in France—and consequently high preferences for change of the ministry and the representative organisation of universities—as well as strong government capabilities faced with strong formal and informal constraints, that constitutes the main polarity. The degree of policy change in France can indeed be largely explained by the interplay of these forces. In some dimensions, the national ministry manages to overcome informal barriers to change—such as the egalitarian values behind the system of national curriculum frameworks in the case of curricular governance—so that its preferences are translated into far-reaching policy formulation. In others—such as the relationship of universities and *grandes écoles*—it achieves little. In the case of the *grandes écoles*, it is also weak capabilities of the ministry that consistently translate into a low degree of change. Regarding implementation policy, the fact that the entire reform is formalised in terms of decrees rather than change of law is a tribute by the ministry to the strong formal barriers to change. The sequenced implementation policy relies on a mixture of persuasion, public pressure, and voluntarism, which was consciously chosen by the ministry to maximise the degree of informal change possible under these difficult conditions. It thus reflects both the strong capabilities of the ministry and its concessions to informal constraints. Overall, it is mainly the persistence of formal *and* informal constraints—such as the deeply enshrined gap between universities and *grandes écoles*, the attachment to egalitarian values in the university sector, and the important role of regulations in the public and private sector tying employment opportunities to degrees—that prevent more policy change in the case of France. To conclude, the four explanatory factors in concert explain a great deal of the policy change in the French HE system.

In the case of **the Netherlands**, the fairly high adaptations brought about in most dimensions can also be explained by a combination of the four factors. The national ministry's relatively strong capabilities to steer national policy formulation, a widespread readiness to accept international role models, and a relatively low persistence of formal constraints—as exemplified by the relative ease to adapt the National HE Act and the low importance of professional entry regulations—provide very favourable conditions for policy change. But as national problem pressure is small, so are the predominant preferences for change derived from the national context. Also, informal constraints—notably the quite deeply established gap between

universities and *hogescholen* as well as attachment to egalitarian values in education—show a certain degree of persistence that cannot be ‘negotiated away’ by the ministry. The latter two factors—low national problem pressure and persistence of informal constraints—slightly reduce the degree of possible change, but the overall degree of policy change is nevertheless quite high. The constellation also allows for a high degree of congruence between policy formulation along the seven dimensions and implementation policy. Compared with Germany and France, the Dutch situation is much less conflict-ridden and polarised, as pressure for change and capability for change coincide to a much higher degree than in the other two countries. Overall, the four explanatory factors in conjunction capture the Dutch policy change well; although the high overall degree of policy change remains somewhat surprising given the low national problem pressure.

The verdict on the **English** case is more nuanced. Generally speaking, moderate preferences for change derived from the national institutional context and a high influence of the international context on actor perceptions were supportive of policy change. The same holds for strong informal capabilities of the ministry to organise the national policy formulation process, low persistence of formal constraints exemplified by the low importance of legal regulation for many areas of HE, and the relative ease of changing law in a majoritarian democracy. This explains the high to moderate level of overall policy change in the English HE system quite well. However, things are different with respect to policy change in the context of the Bologna process. As England already had a two-cycle degree structure, the option to use the introduction of such structures as a lever for policy change in other dimensions was not available. Smaller adjustments of the two-cycle degree structure with a view to European compatibility, such as the length of the Masters phase, the use of modularisation and credits etc., as well as adjustments in dimensions such as curricular governance, would nevertheless have been imaginable. Here, another factor comes into play: although the general influence of the international context on actor perceptions is high, the readiness to accept European role models is low and most actors perceive the Bologna process as a threat rather than an opportunity. In a nutshell, actors do not conceptualise their preferences for change in the context of the Bologna process, and change takes place outside of that context. International perceptions thus play a fundamentally different role in English policy formulation on the Bologna process than they do in other countries. English actors generally do not use the Bologna process as a lever for national change. Rather than fostering change, the widespread Euro-scepticism among English actors in HE policy thus constitutes an informal constraint to change in the context of the Bologna process. As a compounding factor, the English ministry in charge of HE has not taken the lead in organising the response to the Bologna process, although it did so in other policy areas during the same period. This translates into weak capabilities of the ministry with regard to Bologna in practice. The unique institutional starting point of the English HE system in conjunction with the different role of international perceptions in English policy formulation on the Bologna process and the weak capabilities of the ministry in this regard, explain the low degree of change in this context. For the English case, the four factors in conjunction also explain the policy output with respect to Bologna, but only if a positive attitude to European cooperation is added to strong perceptions of the international context as a moderating variable.

When analysed simultaneously, the four explanatory factors captured in the individual hypotheses can explain a great deal of the observed policy change in the four HE systems. While the individual hypotheses are only partially supported on the basis of bivariate correlations, the overall model is useful to summarise and explain national outcomes and international differences in policy change. For an overview, the analysis of this section is summarised in the following table.

Table 2: Effect of four explanatory factors on policy change^a

	Germany	Netherlands	France	England
National preferences and problem pressure	++	+	++	- (+*)
Formal constraints / informal constraints	--/--	++/-	--/--	++/-- (++/-*)
Perceptions of international context	++	++	+	-- (+*)
Capabilities of the national ministry	--	++	++	-- (+*)
Policy change along seven dimensions	H	HM	HM-ML	L (HM*)
Implementation policy	ML	H	HM	does not apply
Overall policy change	HM	H-HM	HM	L (HM*)

^a This refers to policy change in the context of adaptations of degree structures in the course of the Bologna process. For England, the results with respect to general policy change i.e., independent of the Bologna process, are added in parentheses and denoted with an asterisk (*). The judgements on the degree of policy change are drawn from Table 10.1. 7. ++ = positive effect, + = weakly positive effect, -- = negative effect, - = weakly negative effect. H = high, HM = high to moderate, ML = moderate to low, L = low.

Discussion of results

I would like to highlight two overarching findings in relation to the explanatory factors that seem of particular relevance for policy. The first concerns the relationship between actor preferences derived from the national institutional setting and actor perceptions of the international context (hypotheses I and II). The second is about the role of capabilities of the national ministry in charge of HE in overcoming informal constraints (hypotheses III and IV).

NATIONAL PREFERENCES AND INTERNATIONAL PERCEPTIONS. In the theoretical framework I assigned a key role to the perception of the international context as the factor that could potentially overcome national informal constraints and thus allow for a higher degree of policy change than predicted by North's original model. The analysis has shown that actor perceptions of the international context did indeed support national policy change, but only in conjunction with national preferences. Perceptions of the international context were often used to legitimate and support national preferences; they occasionally also provided their base. Their legitimating power—e.g., in the form of role models derived from other HE systems—was extremely high and they were rarely questioned. Perceptions of the international context had a strong reinforcing effect on national change through these mechanisms. Preferences and perceptions conditioned and reinforced each other mutually. In the terms of path dependence theory, international perceptions did indeed lead to positive feedback loops and lock-in, and help explain

why such a high degree of change in HE systems could be achieved in a relatively short period of time. But national preferences remain the *conditio sine qua non* for national change. I also found that the perceptions of the international context were often selective and therefore biased, sometimes wrong, and strongly differed between national HE systems. While the subjectivity of these perceptions is fully in line with the new institutionalist assumptions and therefore not surprising, the finding is nevertheless highly relevant in the context of the Bologna process. In conjunction with the voluntary nature of the entire process and the strong degree to which it was driven by national interest, it helps to explain why national HE systems did not converge more clearly to a common model.

CAPABILITIES OF THE NATIONAL MINISTRY AND INFORMAL CONSTRAINTS. Another important result concerns the role of the national ministries responsible for HE in overcoming informal constraints. My analysis revealed that—whether the respective national ministry had the formal capability to do so—new regulation was never passed without prior consultation of stakeholders in each of the four countries. Where it was formally possible it was still politically unfeasible, and where it was politically feasible the respective ministries still chose to consult stakeholders. National policy formulation on the Bologna process in all the countries could be described as a variety of “negotiation in the shadow of hierarchy”. The hierarchical element was strongest in France, followed by the Netherlands, Germany, and lastly England. I also found that the quality of national policy formulation—in terms of its chances for successful implementation—crucially depended on the ability of the national ministry to organise and lead a national reform dialogue. This in turn hinged on its strategic leadership, which was more important than its formal ability to initiate and pass regulation.

Linking this to the discussion on the gap between policy formulation in the seven dimensions and implementation policy, the latter can largely be explained by the different capabilities of national ministries to effectively organise the national coordination and negotiation of interests. In France and the Netherlands, this capability was of a different nature, but similarly high. As a result, the regulatory change ultimately enacted in both countries was based on a high degree of consensus among the national actors, meaning that formal and informal policy change largely went hand in hand—in the Netherlands even more than in France. The English and German national ministries did not possess a similarly unquestioned authority. In Germany this was due to the federalist system and in England to the tradition of university autonomy particularly in the area of degrees. Moreover, for a long time the English ministry did not assume a leadership role in the Bologna process even to the extent it could have. As a result, the organisation of a systematic national debate was impeded in both countries. In Germany, this resulted in the described implementation gap, in England in the slow response to the Bologna process.

Concluding reflections

THEORETICAL AND EMPIRICAL CONTRIBUTIONS. This study makes three major contributions to the advancement of the theoretical understanding of HE policy and policy analysis in general. First, it integrates elements from North’s theory of institutional change and Scharpf and

Mayntz' actor-centred institutionalism into a common framework suited to explain policy change in the course of the Bologna process. Second, it is one of the few that consistently applies actor-centred institutionalism to a policy field. Finally, it links the scholarly analysis of the Bologna process back to the existing tradition in comparative HE research by demonstrating how it relates to the perennial issues of HE research and reform

Empirically, the national case studies give the first in-depth reconstruction of the respective policy formulation processes in Germany, the Netherlands, France, and England. This study is also the first to systematically make the content of the original policy documents and the national debates in the four HE systems internationally accessible. By guiding the analysis with a common theoretical framework, it is one of the few studies of the Bologna process that allows for systematic comparison. The analysis also helps to contextualise the reforms and provides the basis for understanding the further development of the Bologna process in the next few years. Finally, the study could be of interest to HE researchers studying other reforms in cross-national perspective as it provides general insights into how national policy formulation in HE is conditioned by the national institutional setting and actor capabilities.

REFLECTION OF THEORY AND METHODOLOGY. Overall, combining the institution-and actor-centred perspectives turned out to be indispensable for capturing the nature of the Bologna process, and the frameworks of North and Scharpf proved compatible and complementary. Challenges arose from the overlap between some concepts from the two frameworks and the complexity of the analytical toolkit. Moreover, the choice to focus on the interaction of organisational rather than individual actors was a limitation, as it did not always allow me to do justice to the important contribution of certain individuals in the process. However, from a birds-eye view, this research perspective captures the main actor positions and the dynamics of national policy formulation processes remarkably well. The timing of the study can also be seen as a limitation, as it was too early to evaluate policy implementation and policy change is still ongoing. However, the study illuminates important driving forces and trends that will retain their validity even if the concrete details of policy outputs are still subject to modification.

AVENUES FOR FURTHER RESEARCH. Some of the theoretical perspectives combined in the framework of this study could be individually pursued in more depth in further studies. Examples include the interaction of formal and informal institutions in the change process, national actor constellations and interaction in selected policy arenas, and the different forms of path dependence. Similarly, some of the thematic dimensions included in this study merit more detailed analysis. Future case studies or cross-country comparisons could focus on the implications of adaptations of degree structures for selected dimensions of HE systems, such as access to the Masters level or the relationship between different types of HEIs. Another set of research ideas relates to ways to expand or shift the scope of this study, especially to the Nordic countries, Central and Eastern Europe, and the Mediterranean. To complement the theoretical perspective assumed in this study, it would be worthwhile to focus on the role of individuals and personal networks in the policy formulation processes at national and European levels. In a few years' time, the study could be complemented thematically by additional lenses on the Bologna process, such as the effect of adaptations of degree structures on the nexus between teaching and research, and the mutual recognition of credits and degrees, and student mobility. Particu-

larly recognition and mobility are highly relevant from a political perspective as they are the core rationale for seeking the convergence of HE systems. Finally, with the groundwork of an understanding of policy change laid by this study, a number of implementation studies are the way forward in a few years time.

POLICY IMPLICATIONS. This study has deliberately not assumed a normative stance, and has taken a policy-analysis perspective rather than undertaking implementation research. Nevertheless, at this point a few normative thoughts seem merited. The following lessons could be relevant for policy makers in making the Bologna process work at the system level, as well as for staff at the level of HEIs.

The first lesson is the need to deepen the mutual understanding between policy makers from different national backgrounds on how Bologna reforms in their partner countries are bound by the respective national context. Failure to understand the institutional heritage of partner countries can lead to misunderstandings and misguided national policies—assuming that European convergence is aimed at. The next implication is that European policy dialogue in HE needs to be intensified and the according networks extended. Also at the highest political level, re-establishing international dialogue and maintaining its continuity is needed for the shared aims of the Bologna process to remain in focus.

The international policy dialogue can most fruitfully be intensified in areas where national differences are strong and potentially hinder the attainment of the shared Bologna goals. There are five areas in which such intensified dialogue and coordination is particularly needed: the transition from secondary school to HE, the nature of the first degree, the research base of Masters programmes, doctoral education, and the art of policy-making in HE itself.

In the absence of clear recipes for significantly increasing the degree of convergence between European HE systems in the near future, I propose an alternative perspective on the question of recognition and mobility, namely to think afresh about targeted measures to improve recognition and mobility in the face of a certain degree of persistent diversity of national HE systems. Such efforts could forestall the looming danger of ‘provincialisation’ of the Bologna reforms and give fresh impetus to the worthwhile vision that our children will one day move more freely and more easily within Europe—both as students and as knowledge workers—than has so far been possible for us.