Svein Kyvik

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The Dynamics of Change in Higher Education

Expansion and Contraction in an Organisational Field

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The Dynamics of Change in Higher Education

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Svein Kyvik
NIFU STEP Norwegian
Institute for Studies in Innovation,
Research and Education
Norway

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Preface

In most Western European countries, higher education has to an increasing extent been developing outside universities, partly through the establishment of new institutions, and partly through the upgrading of professional and vocational schools into higher education colleges. The main trend in countries with a binary system has been that student numbers have increased more in the college sector than in the university sector. Yet, there is a shortage of in-depth studies on the changes that have taken place in this part of the educational system, and on the processes that have driven this development. The aim of this book is to improve our understanding of these processes, through developing concepts and theoretical perspectives which might offer new insights of complex phenomena.

This book is based upon a large number of studies on college education in Norway and in other Western European countries. I have studied change processes in this field over a period stretching back to the late 1970s (Kyvik 1981), and this book synthesises my former publications, as well as updates the development until August 2008, and presents new analyses based on my gradual attainment of deeper insight into the processes that have taken place.

While doing a major evaluation of nearly all aspects of a comprehensive reform of college education in Norway in the last part of the 1990s (Kyvik 1999, 2002a), I felt a need to relate governmental policies and system changes to international trends. I therefore undertook an analysis of structural changes of higher education systems in Western Europe with an emphasis on the college sector as a basis for the analysis of change in the Norwegian system. That analysis was later updated and published as a contribution to the literature on the transformation of higher education systems (Kyvik 2004).

While preparing that study, it struck me that most Western European countries seemed to have gone through more or less similar phases, and that many of the same change processes had taken place, although at different times and in different ways. How could these more or less parallel transformation processes be explained? A comparative study encompassing a large number of countries and a large number of change processes over a period of more than 40 years would have been beyond my capacity. Another way of undertaking such an analysis, however, would be to study the transformation of a single national system in order to enlighten the driving forces behind international trends.

The idea for this book was conceived by Peter Maassen, the editor of this book series, who was convinced that an analysis of the transformation of a single national system would also have much to offer in an international context. The writing of the book has been enabled by a sabbatical from my regular duties at NIFU STEP in Oslo. Research stays at two centres for higher education studies: CSET, the Department of Educational Research, University of Lancaster, Autumn 2003, and CIRSIS, Centre for Study and Research on Higher Education Systems, University of Pavia, Spring, 2005, put me in the position to start working on the book.

The intellectual inspiration for my theoretical and analytical approaches draws upon the work of a large number of scholars, but some have been more important than others. Scholarly contributions by Burton R. Clark (1983), Ulrich Teichler (1988), and Peter Scott (1995) on higher education systems, by Guy Neave (1979) on academic drift, and by Paul J. DiMaggio and Walter W. Powell (1983) on organisational fields have each in their special way contributed to the formation of my own thinking and analysis of the dynamics of change in higher education.

I would like to thank Ian Dobson, Per Hetland, Peter Maassen, Ingvild Marheim Larsen, and Bjørn Stensaker for helpful comments on a previous version of this book, and Arnaud Allanic, Jón Torfi Jónasson, and John G. Taylor for valuable assistance in the preparation of individual chapters.

Finally, I would like to thank NIFU STEP (Norwegian Institute for Studies in Innovation, Research and Education) for giving me the opportunity to pursue my research interests, and the Research Council of Norway for economic support.

Oslo, August 2008 Svein Kyvik

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Introduction

This book deals with the development and transformation of the part of the educational system that, in the absence of better concepts, alternatively has been called 'the non-university higher education sector', 'the polytechnic sector', and 'the college sector'. The aim is to analyse the dynamics of change in this sector by using Norway as a national case for in-depth analyses, while at the same time comparing it with parallel developments in Western Europe. Many of the changes that have taken place in the various countries are more or less similar, and a detailed account and analysis of the development in Norway may lead to a better understanding of the mechanisms behind these processes also in other countries.

This introductory part of the book has two chapters – one which describes the major changes, and one which presents a theoretical framework aimed at explaining the change processes.

Chapter 1 gives an overview of the stepwise transformation of higher education systems in Western Europe – from university-dominated systems via dual systems to binary systems as the major model – and to unified systems in a few countries. These changes have undoubtedly affected the organisation of higher education outside the universities the most. This part of the education system, which in this book will be named 'the college sector', has been exposed to comprehensive reorganisation processes and large curriculum changes in the various study programmes.

In Chapter 2, a theoretical and analytical framework aimed at improving our understanding of the various change processes is developed. Structural, cultural, and interest-group explanations are used as complementary approaches. The college sector is viewed as an organisational field constituted by a hierarchy of levels each with their organisations and individual actors.

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Chapter 1
The Transformation of the College Sector

Introduction

Higher education systems vary across countries and each has undergone a large number of changes over time. Prior to the 1960s, post-secondary education in Western Europe can be described as *university-dominated* (Scott 1995). Higher education was by and large the province of the universities and university-level specialised colleges. Study programmes such as general teacher training and nursing were normally offered by separate professional schools outside the universities and were not regarded as higher education. The main purpose of post-secondary schools was to offer a wide spectrum of vocational education, either to qualify for a specific occupation or to prepare for a profession. In particular, they were designed to be more practically oriented, thus fulfilling specific needs of the local economy and the welfare state not adequately met by universities (Geiger 1992).

As a response to the strong growth in student numbers in the 1960s and changing needs for skilled labour, the university system expanded considerably and in many countries new, higher education institutions were established outside universities in addition to the upgrading of existing post-secondary schools to colleges of higher education. Gradually, most countries expanded this latter part of the education system while developing a *dual system* consisting of two separate sectors; a university sector and a college sector.[1] This latter sector typically encompasses institutions that today offer professional and vocational

[1] The fact that this part of the educational system has not had a commonly accepted name, but in English language terminology has been called 'the non-university higher education sector', alternatively 'the polytechnic sector', or 'the college sector', which for semantic reasons is a problematic and confusing notion in comparative research, underscores the problematic status of this sector. In some countries, these institutions add the university label to their name when they operate in an international context. In Norway, Sweden, and Belgium, these institutions are called 'university colleges', while German and Swiss *fachhochschulen*, Dutch *hogescholen* as well as Finnish *ammatikorkeakoulu* are entitled to translate their names into 'universities of applied sciences', adding to the confusion across countries on the status of these institutions in the education system. In this book, we have chosen to use the term 'college sector' since this label is close to the Norwegian term (*høgskolesektor*).

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study programmes at a bachelor's level, but are not part of the university sector as this is defined in the various countries. These institutions offer programmes which in many countries include engineering, nursing and other health education programmes, social work, teacher training, economics and business administration, information technology, and other non-academic vocationally oriented programmes. But these institutions might also offer academic courses, although on a much smaller scale.

At different points in time, the majority of countries turned their dual systems into more formal *binary systems* in order to create a true vocational alternative to traditional university studies. Functional organisation in many small and specialised institutions was replaced by regional integration of study programmes through large-scale mergers of geographically close colleges. In a few countries, the binary divide was substituted by a *unified system* with a diversity of university institutions, but most countries still have two distinct sectors.

The Norwegian case enables a rich analysis of the various processes embedded in the development and transformation of this part of the education system. In this country, the post-secondary education system gradually changed from a university-dominated system via a dual system to a binary system and finally to a partly unified system. In 2008, a committee set up by the government recommended that Norway should establish a true unified system through granting university status to large colleges and through integrating small colleges and specialised university institutions into existing universities. The government, however, turned down this proposal.

In the discussion of the processes driving these changes, the book distinguishes between three different, though overlapping phases, coined *fragmented expansion*, *horizontal integration*, and *vertical integration* to capture the transformation of this sector. While university-dominated and dual systems were characterised by fragmented expansion of the college sector, the creation of binary systems was marked by horizontal integration of professional and vocational colleges at the regional level. The functional organisation principle with one school for each profession and vocation was left for an ordering according to geographic criteria. Finally, unified systems have gone through a process of vertical integration of the two sectors.

In the first phase, in addition to an immense growth in the number of students and staff, the general trend across countries – be they large or small – was a *differentiation* of programmes and courses, a *diversification* of organisational forms, procedures, curricula, and qualifications of staff, and the establishment of a *decentralised* pattern of institutions and programmes. In the second phase, the college sector underwent a process of horizontal integration of professional and vocational programmes through several sub-processes subsumed under the notion of *field contraction*, and a *regionalisation* process through institutional mergers. In the third phase, the college sector and the university sector started to drift towards each other through processes of *field coupling*, *academic drift* in the former sector and *vocational drift* in the latter sector. The first two phases are common in most Western European countries, while processes of vertical integration have come disproportionately far in other countries.

A major challenge of this study is to explain the dynamics of each of these phases and the logic of each of the processes which characterise the various phases. Another challenge is to explain why the long period of fragmented expansion was replaced by a period of horizontal integration, and why in some countries there is a pressure towards vertical integration. This is no easy task. The many educational establishments and programmes which are included in the college sector and the many changes that have occurred over a very long period of time have created a complex picture which does not immediately yield itself to a simple interpretation. When, in addition, a sequential and detailed presentation of the historical development of the individual study programmes and their institutional associations is largely lacking, the analysis of change in this organisational field has been even more challenging. To put it in the words of Neave (1996: 26): 'One of the most ticklish problems that face the analyst of higher education is the dynamic of systems – how they move from one state to another and indeed, in which direction they are moving.'

This task is not made easier by the fact that within the field of comparative education, the college sector is an understudied area in contrast to the attention devoted to school systems and university systems. Several reasons may account for this disparity. First, scholars in the field of education have traditionally been most concerned with primary and secondary school levels, and academics in other disciplines who have undertaken comparative research in higher education have predominantly had a university position and for the most part found their own sector the most interesting and rewarding for cross-national studies. In fact, it is the OECD that has been the prime initiator of comparative studies in this field (OECD 1973, 1991, 1998), although comparative analyses of the college sector now seem to attract the interest of a growing number of higher education researchers (see Taylor et al. 2008). Second, the heterogeneity of this sector with its many different professional and vocational schools and programmes has made painstaking comparative studies of the many national particularities enormously difficult and time-consuming. Third, professional and vocational programmes have evolved from 1-year and 2-year secondary and post-secondary courses to 3-year and even 4-year higher education programmes, in some cases with the opportunity to take a higher degree. They have been upgraded to higher education at different times in different countries, making historical comparison across countries difficult to undertake. Finally, boundary problems and different national policies and definitions of which programmes and institutions constitute this sector have added to the complexity of comparative research undertakings. In some countries, the boundaries between university programmes and college programmes are blurred because universities also offer professional programmes traditionally given in independent schools.

In addition, boundaries between the college sector and the vocational school sector in that part of the education system that the OECD (1998) now terms as 'tertiary education' are not always clear-cut. The vocational school sector embeds institutions in the border area between upper secondary schools and the college sector, and offer short, strictly vocationally oriented education programmes.

In Norway, vocational education at the post-secondary level is regulated by a separate act of 2003 and is provided by a wide variety of institutions in domains such as technical education, maritime education, arts and crafts, economics and administration, computer technology, and health education, lasting from 6 months up to 2 years of full-time studies (Brandt 2007). A large share of the courses available has the character of further education and is offered as internal training in large companies or in cooperation with public agencies, but frequently without a governmental overall perspective of the need and use of this supplement to the public education system (see also Cantor 1992). This market-oriented sector is not really visible in the majority of countries, though it is nevertheless relatively large, and the OECD has suggested that the vocational school sector could eventually develop as a real competitor to the established institutions of higher education. The reason for this is that new and non-traditional educational establishments have captured contemporary requirements in the labour market more quickly and more effectively than the polytechnics and universities, and frequently in niches which were not regarded as being of interest by the established institutions (Pinheiro & Kyvik 2008).

Shifting and blurring boundaries between universities and other higher education institutions on the one hand, and between the latter and vocational schools below the level of higher education on the other hand, has caused difficulties for those undertaking international comparisons. Currently there is no cross-national agreement about the type of institutions that belong to the higher education sector outside the universities. Many of the courses that today are taught by colleges or polytechnics have been upgraded from 'third-sector' level courses, or are in fact at this level. Thus, it is the institutional context in which these courses are taught that matters in this study, not the type of course itself. In this book, higher education outside universities is accordingly defined to be programmes and courses offered by colleges and polytechnics classified as institutions between the university sector and the vocational school sector.

Much of the change that has taken place in the college sector has been highly visible – like the large-scale mergers of professional and vocational schools and colleges into polytechnic institutions. But many important change processes have been more or less invisible to outsiders and hardly noticeable to insiders at the time they occur – like the gradual internalisation of new ways of thinking rooted in general cultural changes. For analytical purposes it might therefore be fruitful to distinguish between various types of change on a continuum from major structural reforms (revolutionary change) to incremental change not easily visible to those affected by the changes (evolutionary change). In this respect, Becher and Kogan (1992: 133–134) have distinguished between *radical change* and *organic change* to capture the span of transformation. The latter notion refers to those minor incremental modifications that have little or no impact on the prevailing value configuration or the overall operating pattern. They argue that organic changes 'are frequent and numerous, causing the fabric of academic life to be subject to continuous, but not easily visible, incremental adjustment.' Clark (1983: 234–237) likewise states that incremental adjustment is the characteristic form of change in

higher education, not far-reaching reforms. To exemplify: much curricula change is routine and taken for granted, and socially of little visibility (McEneaney & Meyer 2000).

But in-between the two extremes, a large number of minor reforms and changes have taken place that over time have led to substantial changes in the organisation of higher education outside universities. Thus, it is not necessarily the most visible reforms that have led to the most far-reaching changes. The combined effects of many minor reforms and changes might have been more important for particular developments than large-scale structural reforms. Moreover, reforms might not only be a cause of change but also a result of change (Bleiklie, Høstaker, & Vabø 2000). The enactment of a reform in higher education may constitute the formalisation of long-term developments rather than the starting point of a change process.

In addition to analysing the major structural changes and reforms in this sector, it has therefore been an important task to come to grip with the many small changes that have taken place over a very long period of time, and which have led higher education outside universities in some directions and not in others.

Structural Models of Higher Education Systems

Several attempts have been made to classify the different post-secondary educational systems (OECD 1973; Teichler 1988; Geiger 1992; Kogan 1997). In this book, we have applied and further developed a useful typology introduced by Scott (1995), who has distinguished between five main models: (a) university-dominated systems, (b) dual systems, (c) binary systems, (d) unified systems, and (e) stratified systems. Our description of the various models is, however, a bit different from that of Scott, although clearly inspired by his way of reasoning about structure and organisation of systems of higher education.

University-Dominated Systems

In this model, universities and university-level specialised institutions are the only higher education institutions. Schools offering short-cycle[2] professional programmes such as teacher training, engineering, nursing, and social work are not considered as higher education establishments. This was the normal model

[2] We have chosen to adopt the term 'short-cycle' as it was used in the OECD report: 'Short-Cycle Higher Education. A Search for Identity' (1973). This level was defined as 'post-secondary education of a mainly terminal character designed to train students for middle-level manpower positions', while short-cycle higher education institutions were defined as 'all types of post-secondary schools established outside universities' (p. 41).

throughout much of Europe until the beginning of the 1960s. *Italy* is the only country in Western Europe that may be said to still have a university-dominated system, even though some short-cycle professional programmes were integrated within the framework of universities in 1990. However, such programmes were implemented in limited numbers, and were not regarded as attractive by students or academic staff (Vaira 2003).

Dual Systems

In the dual system, universities and other post-secondary education institutions are regarded as entirely separate and treated differently, although the majority of short-cycle vocational programmes are recognised as higher education. A distinction is made between the university and college sectors, where the former clearly dominate. The college sector is split into a large number of professional schools with distinct cultures and subject to different public regulations. This model, with many small and specialised institutions that offer 2- or 3-year vocational courses in a limited number of subjects, was common during the 1960s and 1970s. Links with working life are relatively strong through practice periods during the study period, and there are few links with the universities. Education is considered complete after the specified 2 or 3 years, with few possibilities for transferring to higher studies at a university. Similarly, links between the specialised colleges are poorly developed at the regional level. Nationally, however, similar vocational programmes are linked and share a common professional identity and set of regulations. Dual systems such as this superseded the university-dominated model in many countries.

There are many reasons why most Western European countries gradually developed a dual system. At the beginning of the 1960s, there was a marked growth in the student population, and in the ensuing years a strong increase was to take place in the numbers of pupils graduating from upper secondary schools and seeking higher education. Considerable doubt was raised as to whether traditional university programmes would be able to absorb such growth, and whether they would be able to satisfy the requirements of the younger generation and an increasingly knowledge-based economy. Under the pressure of growth and the need for structural reforms, diversification became the guiding principle and strategy of higher education policy (Furth 1992). A diversified higher education system with a combination of academic and vocational studies as well as long and short programmes thus became the objective in many countries.

In 2008, one country – Austria – might still be classified as having a dual system, although it had taken repeated steps towards a binary model. Austria has traditionally had a higher education system dominated by the university, and this system prevailed considerably longer than elsewhere in the region. In 1993 it was thus resolved to establish *fachhochschulen* with new programmes mainly in engineering and economics (Pratt & Hackl 1999). This occurred, not as in other countries

through an upgrading of existing institutions, but by setting up new establishments. However, neither teacher training schools nor health and social schools were integrated into the *fachhochschulen* and these continued not to be regarded as higher education. Still, only a small percentage of first-year students enrol in higher education programmes outside the universities (Hackl 2008).

Binary Systems

Binary systems for higher education were first established in the UK and Australia in the mid-1960s (Davies 1992), and the binary system can be said to be a more formalised version of a dual system. One important difference is that in the binary model the college sector is normally subject to a common system of regulations. Another important difference is the organisation of this sector. In the dual system the college sector normally consists of many small and specialised schools, based on the functional organisation principle; in the binary model this sector is normally organised in comprehensive colleges. A third difference is that, in contrast to specialised schools, polytechnic colleges frequently also have an objective of strengthening the regional economy.

The UK proceeded from a dual to a binary system as early as 1965, before its subsequent transition to a unified approach. A number of circumstances contributed to this development, particularly the fact that traditional universities were not able to meet the demands of society for professional vocational training. In addition, a significant increase in the number of students was expected and where the college sector expressed considerably more interest in expansion than the majority of universities. The government thus recognised a clear requirement for the consideration of an alternative educational sector (Pratt 1997). One of the means available was to establish *polytechnics*, mainly through the merger of small and/or specialised institutions. The aim was to establish the structural conditions for raised academic standards, improve the possibilities for establishing new educational programmes, and simultaneously to attain economies of scale.

Most Western European countries later adopted the binary model, though in various ways and at different points in time (Huisman & Kaiser 2001; Kyvik 2004). The Netherlands (Goedegebuure 1992; Huisman 2008), Germany (Teichler 1996; Klumpp & Teichler 2008), Ireland (Clancy 2008), Sweden (Bauer 2000), Portugal (Ferreira, Machado & Santiago 2008), Belgium (Verhoeven 2008), Finland (Välimaa & Neuvonen-Rauhala 2008), Switzerland (Perellon 2003; Lepori 2007), Greece (OECD 1997), Denmark, and Norway (Kyvik 2002b, 2008) belong to this category. The reasons for the creation of a binary system in these countries were much the same as in the UK; governments wanted to create a clear and distinct alternative to the universities to meet the needs of the labour market and to strengthen regional economies. Comprehensive colleges, established through mergers of small and specialised institutions would offer a broad range of educational programmes and be more attractive to young people. A more cost-effective and

manageable system could be created through drastic reductions in the number of institutions and a standardisation of rules and regulations.

Unified Systems

In unified systems, the vast majority of higher education programmes – traditional academic studies as well as vocational programmes – are offered within universities. Unified systems have been created in one of the following three ways; by upgrading polytechnics and colleges of higher education to universities (UK and Iceland), by merging traditional universities and other higher education institutions (Australia), or by incorporating professional schools into universities (Spain). Obviously, the consequences for individual colleges are different – either they continue to exist as an autonomous institution designated as a university, or they are amalgamated with, or integrated into, an existing university.

During the 1960s, a much discussed dilemma was whether diversification in study programmes was to be developed within the framework of existing and newly established universities, or whether it would be more appropriate to found new institutions with a less academic and more vocational profile. There were many advocates for integrating academic and vocational programmes within universities. Among other reasons, it was maintained that this organisational model would reduce the risk of rivalry and status hierarchy (Furth 1992). Equally as important, possibly, was the worry on the part of the universities that the development of a separate college sector would reallocate resources away from university budgets. However, the only Western European country that at that time established a truly integrated higher education system was Spain. In the 1970s, specialised institutions for teacher training, social work, engineering, nursing, and so forth were integrated with the universities within the framework of *escuelas universitarias* (Bricall & Parellada 2008). The UK followed in 1992 (Pratt 1997), and Iceland in 1998 (Jónasson 2004a).

Although the rationale for introducing a binary system in the UK was the need to create an alternative higher education sector to supplement the universities, the two sectors developed a strongly competitive relationship, ultimately destroying the binary system. This was primarily due to the comprehensive establishment of master's and doctoral studies in the polytechnics, and the strong involvement by their staff in research activities. For many critics of the 1965 reform, this was not an unexpected consequence (Pratt 1997). In certain areas the universities began to emulate the colleges by initiating a modular course structure, developing vocational master's degrees, and recruiting part-time students. In addition, both the universities and the polytechnics incorporated certain specialised colleges, particularly in teacher training and nursing, in order to strengthen their competitive position (Fulton 1996). The differences between the two sectors diminished gradually, and in 1992 and the following years all the polytechnics and several of the colleges of higher education were designated universities. The

clear academic drift of the polytechnics, combined with the stronger vocational orientation of traditional universities, finally resulted in the establishment of a unified system with marked status differences between the institutions. The unified university system is strongly characterised by competition, particularly in research, and the majority of polytechnics have had considerable problems in securing research funding. In the meantime, remnants exist both of the polytechnic system and of the specialised college system (Brennan & Williams 2008). Consequently, it could be suggested that the UK is developing a stratified system where a few universities acquire elite status, several others are characterised as commendable, and the remaining institutions rank in correspondingly lower divisions (Tight 1998).

Stratified Systems

In this model there are no clearly defined educational sectors, but rather a hierarchy of higher educational establishments. This approach is first and foremost characteristic of the American system, where a distinction is made between universities (with their own status hierarchy), *liberal arts colleges* (and other colleges of corresponding level), and *community colleges* at the base of the hierarchy. The stratified model in its American form thus has a pyramidal structure with a small number of elite universities at the summit, and a large number of vocationally oriented colleges at the base. The college sector may be said to comprise two clearly contrasting forms of education; the 4-year *liberal arts colleges* frequently offer the same education as *undergraduate colleges* within the universities, and provide both complete graduate courses as well as preparatory education for further graduate studies. The 2-year *community colleges* essentially offer a broad range of vocational courses, but also the first 2 years of a bachelor's degree programme. The establishment of the latter institutions was a direct consequence of the transition from elite to mass higher education, and the changes in the student population structure this represented (Trow 1974). The comprehensive college model was subsequently adopted by a number of European countries through, among other things, the integration of different specialised vocational institutions.

The division of higher education systems into five organisational models is, of course, a simplification of the heterogeneous patterns of these systems. Nevertheless, these models offer a fruitful approach to the diversity of higher education systems in Western Europe. France is the only country in Western Europe that is impossible to place within any of the five models above. In different contexts this system has been described as 'fragmented' (Jallade 1992), or 'multi-type' (Teichler 1998).

In Eastern and Central Europe, higher education systems have also been subject to substantial reforms. During the 1990s, many countries made efforts to create dual or binary systems; in some countries by upgrading professional schools to higher education institutions, in other countries by merging specialised higher education institutions into multi-faculty colleges (Scott 2006). Thus, most

European countries today have two distinct higher education sectors, although there is large variation between countries with respect to the relationship between the two sectors.

Commonalities and Particularities in Transformation Processes

The large increase in student numbers is the most visible sign of change in higher education. Schofer and Meyer (2005) have shown that growth patterns are similar in higher education systems in all countries, are especially high in countries more linked to world society, and that they accelerated sharply in virtually all countries after 1960. For the Nordic countries, Jónasson (2004b) has demonstrated that the general growth pattern in higher education over the last 80 years corresponds closely to exponential growth. The main trend in countries with a dual and later binary system has been that student numbers have increased more in the college sector than in the university sector. Moreover, the former sector has expanded more than anticipated (OECD 1998).

There is, however, considerable variation in the proportion of students in the college sector between countries, ranging from 15% to 70% (Kyvik 2004). The percentage of first-year students in higher education outside universities is by far the largest in binary systems, and in particular in the Dutch-speaking part of Europe. Germany is the only country with a long established binary system that has a relatively low proportion (30%) of first-year students in the college sector.

As the above overview of developments in the various Western European countries shows, with the growth in student numbers the organisation of the higher education system has been radically transformed. The main trend has proceeded in the direction of upgrading vocational programmes to higher education, of integrating professional colleges through the merger of small specialised institutions into larger polytechnic colleges, and to develop a homogeneous college sector within a binary higher education system. In some countries, the transformation process has resulted in integration of the two sectors, while in other countries there is a strong pressure to break down the binary divide.

On this background, the natural question is why the college sector has developed the way it has. And furthermore, why have developments been so similar in most Western European countries? Is it due to common technological, economic, and social changes in the various countries, which produce similar needs and demands for short-cycle vocational and professional education, and in turn generate similar organisational solutions across countries? Have those countries which have lagged behind in this transformation process simply copied organisational models introduced in other countries because they have appeared to be appropriate and modern solutions to similar problems? Or do important actors in higher education behave more or less in the same way irrespective of national affiliation?

These questions have no evident answers. It is obviously true that socio-economic developments in Western European countries largely have resembled each other, but it is less clear that this convergence of socio-economic environments has in fact led to the convergence of structural models for the organisation of higher education systems (Scott 1995; Teichler 2007).

It is also true that the various countries have compared their post-secondary education system with that of other countries. It is for example well documented that in the 1960s, the participation by national educational experts in the OECD was of importance for the transmittance of ideas on how countries should handle the large expansion in student numbers (OECD 1973, 1974, 1991; Eide 1995). Many countries chose to strengthen the role of short-cycle vocational institutions and to establish a dual system. The OECD was also a central meeting place for those discussions that preceded the introduction of binary systems in most countries. In addition, the EU and its 1988 guidelines for recognition of short-cycle professional education across member states created a pressure on many countries to upgrade those programmes which were shorter than 3 years (Teichler 1998). These guidelines were in fact a basic premise for the establishment of dual and binary systems in Austria and Finland.

However, as Teichler (2008) has argued, it is difficult to determine clearly the extent to which social and economic pressures caused a similar problem-awareness and common structural models, and the extent to which similar policy emerged as an epidemic spread by international organisations and national experts familiar with developments in other countries.

A final question is related to the behaviour of important actors in the field of higher education. In this respect, Bleiklie (2003) has suggested a useful distinction between two essentially different ways in which the relationship between the university and college sectors can be interpreted: (a) as a horizontal relationship between non-competing institutions where the various universities, colleges, and professional schools have different tasks or functions that cannot be measured against a common denominator (the functional model), and (b) as a vertical and hierarchical relationship where universities and colleges occupy different positions on a rank order (the hierarchical model). While the functional model predominated in most Western European countries until the 1970s and 1980s, the hierarchical model gradually gained ground. The functional model, which was characteristic of university-dominated systems and dual systems, with different professional schools for different occupations and a more or less non-existing relationship to other institutions, was replaced by a binary system according to a geographical organisation principle. It soon became clear that the slogan ‘equal, but different’ did not fit a relationship between the two sectors which turned out to be hierarchical in nature. The hierarchy is organised according to the level of degrees conferred by the institutions and according to research excellence. Those institutions that offer doctoral degrees and rank high on a given set of research excellence indicators are on top of the hierarchy, while those that only offer bachelor-level education and have a limited engagement in research form the bottom. A hierarchical interpretation of the relationship between the two sectors has important consequences for the behaviour

of those institutions that regard themselves to be at the bottom of this ranking order. A natural outcome would be to work towards advancement in the hierarchy. Thus, Neave (1983) has argued that all systems of higher education display a dynamic towards integration, even if government policy may be aimed at sustaining a non-integrated system.

Although there are clear similarities across countries in the way higher education outside universities has evolved, it is however important to note that no countries have identical systems. Particular developments in the various countries have largely been a reflection of different national cultures, traditions, and geopolitical conditions. Such circumstances have frequently been of greater significance than the imitation of organisational models of other countries. This is also why short-cycle vocational programmes such as teacher training and nursing have not been regarded as higher education in certain countries although they are in others, and in yet others as university programmes. Further, in some countries these two programmes may be found in both colleges and universities.

A theoretical explanation for this variation is that reforms and organisational models imported from other countries are modified and adapted to suit national circumstances (Sahlin-Andersson 1996; Sahlin-Andersson & Sevón 2003), either by state authorities to secure the implementation of the reform, or as a result of bargaining between different interest groups. Thus, the diffusion of organisational models from the international to the national level rarely results in identical copies, but rather in modified versions, creating or sustaining a certain degree of diversity in national solutions.

Nevertheless, commonalities in the transformation of higher education outside universities in Western Europe have been more visible than national particularities. The reasons for this empirical fact and the processes that have driven this development will be explored in the following chapters.

Norway as a Case for Studying Change in Higher Education

As indicated above, the transformation of the Norwegian higher education system offers a rich case for studying change processes in the higher education system outside the universities. In this country, a long period of fragmented expansion of short-cycle professional education was crowned by the establishment in 1968 of a new type of higher education institutions called district colleges. In the 1970s and 1980s, a large number of small professional schools for teacher training, engineering, health education, social work, and other specialised schools were upgraded to higher education institutions. In 1976, regional college boards were established in order to coordinate higher education outside universities in each of 17 regions; a strategy to implement horizontal integration of this sector that proved to be unsuccessful, and in 1994 the then dual model was replaced by a binary system through the merging of 98 professional and vocational colleges into 26 state colleges (*statlige høgskoler*). The binary system gradually came under pressure from

colleges with university ambitions, and at the turn of the millennium it was discussed whether the binary divide should be abolished. In 2004, the government decided that colleges which fulfilled certain minimum standards could apply for accreditation to university status, a decision which generated a lot of initiative and creativity. In 2005–2007, two state colleges and one specialised university institution were awarded university status. In 2008, higher education in Norway was provided by 7 universities, 7 specialised university institutions (economics and business administration, veterinary science, sport and physical education, theology, music, architecture), 24 state colleges, and about 25 small private institutions, mainly with religious affiliations.[3]

The simple observation that the development of post-secondary education in Norway has taken place in a field of tensions and conflicts between various actors, aims, values, and interests can serve as a starting point for a comparison with other

[3] The correct translation of non-English names and titles into standard British or American terminology is a common problem in comparative higher education studies. It is easy to confuse or mislead the reader because translations of names and titles done in various countries do not always correspond to their Anglo-American counterparts. It is therefore necessary to give a brief overview of how some central Norwegian terms have been translated into English.

The Ministry of Education: The ministry responsible for higher education matters has had several different names and tasks during the period that is covered by this book. In order not to confuse foreign readers, we have therefore chosen to apply the name *Ministry of Education* consistently throughout the book.

Universities and specialised university institutions: With universities we shall refer to the four comprehensive universities Norway had during the major part of the last 4 decades, although two of them were not fully established until the beginning of the 1970s. With specialised university institutions, we refer to those institutions which in Norwegian are named *vitenskapelige høgskoler* and which have university status. These institutions were, however, not officially translated into *specialised university institutions* until 2000. In order to be consistent over time, we have chosen to apply this term for the whole period.

District colleges and regional colleges: The use of the names district colleges and regional colleges has unfortunately not been consistent in the English language literature on Norwegian higher education. In 1968, Norway established *distriktshøgskoler*, which were officially translated into regional colleges, a name that have been applied in various English language publications. However, in 1971, the Norwegian government started to use the name *regionale høgskoler* as a common Norwegian denominator for nearly all state-run institutions in the college sector. In this book, we have therefore chosen to translate *distriktshøgskoler* into district colleges and *regionale høgskoler* into regional colleges in order to obtain a larger degree of clarity in the English terminology.

State colleges, state university colleges, and university colleges: In 1994, Norway created *statlige høgskoler* through the merger of regional colleges. The official translation of these new institutions was state colleges. However, as will be shown in Chapter 7, these colleges managed to get parliamentary approval of changing their names into state university colleges. Now the official translation is university colleges. In order to keep a certain consistency throughout the book, we have chosen to use the name state colleges, also because the concept university college usually is applied to a section of a university in the English language and hence may be misinterpreted. The discussion on how *statlige høgskoler* should be translated into English is thoroughly covered in Chapter 7 because it illuminates an interesting aspect of the academisation process in a Norwegian context.

Western European countries. In the development of the college sector in Norway, we can distinguish between conflicts and tensions related to the system level, the institutional level, the programme level, and the individual level. More specifically, there has been debate with respect to (a) the expansion of the higher education system, (b) the organisation of the higher education system, (c) the status of the institutions, (d) the organisational structure of the college sector, (e) external control of the institutions, (f) the structure and content of teaching programmes, (g) the rights and duties of academic staff, and (h) the rights of students.

The Expansion of the Higher Education System

The main questions have been as follows:

- *Expansion of universities or professional schools and colleges?* Where should the growth in student numbers take place – in the universities, or in the professional schools, colleges, and other vocational institutions? The largest expansion took place in the college sector.
- *New schools or expansion of existing institutions?* With the increasing differentiation of post-secondary education outside the universities and the establishment of new programmes for new vocations, questions were raised whether these programmes should have their own schools or whether they should be integrated with existing institutions. In most cases, new institutions were established.
- *Societal needs or student demands?* Should the perceived needs of industry and the public sector for a trained labour force direct the expansion in the number of student places, or should the demands of young people for higher education be the guiding principle? For most of the period, *numerus clausus* was practised in the college sector, and very strongly in certain professional programmes in the universities (medicine, technology, etc.), while open access was common in most university courses within the fields of the natural sciences, the social sciences, and the humanities.

The Organisation of the Higher Education System

The discussion has moved between the following issues:

- *A university-dominated system or a dual system?* In the 1960s, a debate took place as to whether Norway should concentrate higher education within the universities and the specialised university institutions, or establish an alternative sector to provide for the increasing numbers of upper-secondary school-leavers seeking higher education. The latter alternative was eventually supported.
- *A dual system or a binary system?* In the late 1980s, the question was raised whether Norway should transform the diversified dual system into a more formal

and homogeneous binary system. The latter alternative was realised through the comprehensive reform of the college sector in 1994.

- *A binary system or a unified system?* At the turn of the millennium, various state colleges started actively to work towards the achievement of university status and the question was raised whether Norway should introduce a unified system. In 2008, a commission set up by the government to scrutinise the organisation of higher education proposed that all state colleges should attain university status, either through mergers with other colleges to form new entities, or through mergers with existing universities. However, the government turned down this proposal.

The Status of the Institutions

The formal status of the various post-secondary educational establishments was discussed at regular intervals:

- *Professional schools, colleges of higher education, specialised university institutions, or universities?* In the 1960s and 1970s the main issue was whether the professional and vocational schools (or which of them) should be upgraded to higher education colleges. The upgrading took place from 1973 to 1981. At the turn of the millennium a new reform allowed these institutions to apply for the status as specialised university institutions or full universities. In the period 2005–2007, two state colleges and one specialised university institution were awarded full university status.

The Organisational Structure of the College Sector

From the mid-1960s until the beginning of the 1990s, the question of how the college sector should be organised was high on the agenda. We can distinguish between two interrelated, though different issues:

- *Specialised institutions or comprehensive colleges?* Should the education of teachers, engineers, nurses, social workers, and other professional groups be undertaken within many small specialised institutions or within fewer and larger multi-purpose colleges? In 1994, the latter types of colleges were created through mergers of specialist institutions.
- *Scattered localisation or concentration in regional centres?* The geographical localisation of these institutions was a very important policy question; involving local politicians as well as Parliament. Through the establishment of state colleges in 1994 the former decentralisation policy was formally turned into a regionalisation policy, although most of the formerly independent schools were retained as geographically separate faculties within new network colleges.

External Control of the Institutions

The issue of how this sector should be managed were conflict-ridden in four respects:

- *Central or regional control?* Should the control of the various institutions be undertaken at a state level in order to comply with the need for national coordination of similar teaching programmes, or at a regional level in order to comply with the need for coordination across programmes and institutions in each region? The regional level eventually got the stronger position.
- *Internal education in public services or integration in the national educational system?* An important issue in the 1970s and the 1980s was which governmental ministries the various institutions should be subordinate to; the respective sector ministries or the Ministry of Education? This discussion finally ended in the early 1990s with the inclusion of the remaining institutions in the common national educational system subject to the authority of the Ministry of Education.
- *Public or private institutions?* Private initiatives and private educational institutions have played an important role in the establishment of short-cycle professional and vocational post-secondary education. The question of private versus public responsibility in this field was much discussed. Many privately established institutions were gradually taken over by the state.
- *State institutions, county institutions, or municipal institutions?* A related discussion was whether some of the study programmes should be the responsibility of the municipal or county council, or the governmental state administration. All post-secondary municipal and county institutions were gradually transferred to the state.

The Structure and Content of Study Programmes

In addition to the above issues, discussions on the structure and content of study programmes took place over a long period of time. We can distinguish between four related questions:

- *Common programme structures or diversified structures*? Should the study period of all or most programmes be similar or different? Should entry qualifications and practice requirements be similar or different? The trend went in the direction of harmonisation of structures and less diversity.
- *Practical skills vs. theoretical knowledge*. This issue is related to the former, but still different. The controversial question is how the attainment of practical skills and theoretical knowledge should be balanced in the vocationally oriented study programmes. Practice requirements were reduced gradually and the theoretical parts of the curriculum enlarged.
- *Regional relevant curricula vs. national curricula*. An important purpose of the professional colleges was to meet local needs for higher vocationally oriented

education. The study programmes should be relevant for the particular social and economic conditions in the various regions, and this aim should be reflected in the curriculum. On the other hand, the colleges should also educate people for the national labour market. Over time, the need for joint national courses entailed greater emphasis on common elements in the curriculum and put less weight on regional relevance.

The Rights and Duties of Academic Staff

Academic staff in the college sector have traditionally had rights and duties that were different from those of their colleagues in the universities. However, over time differences diminished in two respects:

- *Teaching vs. research*. The role of research in the colleges was a controversial issue. Gradually, the staff took up research as an ordinary activity, but the direction and volume of their research were much debated.
- *Different or similar career structures across sectors?* As a consequence of the upgrading of professional schools to higher education colleges the issue was raised whether the career structure in the colleges should be similar to that of the universities. This demand of the colleges was achieved in 1995.

The Rights of Students

Finally, the possibilities and rights of students to transfer from professional colleges to universities were regularly debated:

- *Terminal degree vs. qualification for further study at the universities*. To what extent should the vocationally oriented study programmes give a terminal degree qualifying directly for the labour market, and to what extent should they qualify students for further studies at a university? All programmes qualify for direct entry into the labour market, but over time, curricula were changed to qualify students for transfer to the universities.

This brief introduction to conflict dimensions and trends in the higher education sector outside the universities shows that Norway has experienced many of the same developments as most other Western European countries. The long period of fragmented expansion of this sector with an ever-increasing differentiation of educational establishments and programmes as well as a diversification of organisational forms and curricula, intertwined with geographical and institutional decentralisation of post-secondary education, was followed by attempts at horizontal integration of college education to counteract the fragmented institutional and educational pattern, and later by a trend towards vertical integration of the college and university sectors.

The Plan of this Book

In Chapter 2, we have developed an analytical and theoretical framework for the study of change in higher education, especially designed to analyse the transformation process in the college sector.

The major part of this book – the analyses of the transformation of higher education outside universities in Norway – is organised within three sections:

Phase 1: *Fragmented expansion* – encompasses Chapter 3 (Differentiation and Diversification) and Chapter 4 (Geographical and Institutional Decentralisation). This section aims at explaining the processes that shaped a diverse and heterogeneous college sector with a large number of small and autonomous professional and vocationally oriented schools and colleges dispersed throughout the country.

Phase 2: *Horizontal integration* – includes Chapter 5 (Field Contraction) and Chapter 6 (Regionalisation). The aim of this section is to explain why the long period of fragmented expansion of higher education outside universities was replaced by measures of integration of programmes and institutions to reduce complexity in this part of the higher education system.

Phase 3: *Vertical integration* – includes Chapter 7 (Academisation) and Chapter 8 (Field Coupling) and aims at explaining the principal processes that have worked to bring the university and college sectors closer to each other.

Finally, Chapter 9 (The Dynamics of Change) is an attempt at bringing the pieces together. The dynamics of the three main phases in the development of the college sector – fragmented expansion, horizontal integration, and vertical integration – as well as the many processes driving this development will be recapitulated, and the transformation process spanning the three phases will be further analysed.

Chapter 2
Explaining Change in the College Sector

Introduction

The aim of this chapter is to develop a theoretical and analytical framework in order to improve our understanding of change in the higher education system outside universities. Explaining change in higher education would have been a rather simple exercise if a grand theory of social system change was readily available as an analytical tool, and if such a theory could convincingly explain all the processes embedded in the transformation of the college sector. Grand theories of course exist, but their explanatory power would have been limited if only one of them were applied. Such theories are attractive because they offer simple explanations to complex problems, but they can hardly be generalised to account for all change processes. The causes for each of the many changes that have taken place in higher education outside universities are too many and too complex to be explained by a single theory. In this respect, this study follows the general advice of Merton (1968: 39) on the fruitfulness of applying a diversity of theories of 'the middle range' to investigate and explain human behaviour, social processes, and social structure instead of using or developing a unified theory that aims to explain all observed phenomena. In line with this recommendation, this study employs a plurality of theories and analytical approaches to illuminate each of the change processes.

First, we apply the notion of organisational field to the college sector, and show how this field can be regarded as a hierarchy of levels, each with their organisations and individual actors. Second, we distinguish between three types of approach to change: structural, cultural, and interest-group explanations, which are viewed as complementary perspectives that combined can improve our understanding of the many change processes. Third, we develop a dynamic change model combining our elaboration of the field concept and the structural, cultural, and interest-group approaches to change.

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

The College Sector as an Organisational Field

In their seminal paper on institutional isomorphism, DiMaggio and Powell (1983) use the term organisational field to characterise those organisations and actors that in the aggregate constitute a recognised area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organisations that produce similar services or products. By this definition, DiMaggio and Powell refer not only to the primary organisations in a given field, but to the totality of relevant actors. The notion of organisational field is a fruitful construct in the analysis of the college sector, which is constituted by organisations that have the same type of task (to train people for various semi-professions and vocations), and that are typically subject to state authority.

According to DiMaggio and Powell, organisational fields only exist to the extent that they are institutionally defined. The process of institutional definition, which they call 'structuration' according to Giddens (1979), consists of four parts: an increase in the extent of interaction among organisations in the field, the emergence of sharply defined inter-organisational structures of domination and patterns of coalition, an increase in the information load with which organisations in a field must contend, and the development of a mutual awareness among participants in a set of organisations that they are involved in a common enterprise. The central thesis is that in the initial stages of their life cycle, organisational fields display considerable diversity in approach and form. Once a field becomes well established, however, there is an inexorable push towards homogenisation.

However, several questions remain unanswered with respect to the first phase in the life of an organisational field:

1. DiMaggio and Powell do not discuss at what time in its development an organisational field might be regarded as institutionalised as a distinct field of its own.
2. It is not clear at what stage in the development of an organisational field it 'becomes well established'.
3. It is not clear at what stage in the development of an organisational field the processes of differentiation and diversification turns to a process of homogenisation.

Still, DiMaggio and Powell's thesis, that an organisational field which in its initial stages appears as fragmented and diversified, will gradually become more homogeneous, obviously applies to the college sector and is a process that will be dealt with extensively in this book.

The organisational field of college education can be regarded as a hierarchy of levels, each with their organisations and individual actors: (a) supranational organisations, (b) state authorities, (c) intermediary bodies, (d) educational institutions, (e) study programmes, (f) staff, and (g) students. These organisations and individuals can be viewed as first-order actors, either because they constitute the field, or because they have the legal status or power to implement change in the field. In addition, society with its relevant external stakeholders (e.g. industry) and the academic community at large (e.g. universities) should be included in the organisational field as second-order actors, because they have impact on change processes in the field.

Supranational Organisations

Some decades ago, one might have questioned whether the supranational level should be included as part of the organisational field of college education in a single country. Today, the analysis of domestic change processes would have been regarded as incomplete without taking into account the strong influence on national policies of international organisations like the OECD and the European Union.

State Authorities

The state is not a single entity but a common notion for several power centres. Two political bodies are particularly important in relation to the formation of public policies for the college sector: Parliament and the government. In Parliament, the Committee on Education is an important body in the policymaking process. The Committee, which is constituted by members of the various political parties, seeks to compromise on a given policy based on proposals made by the government. In this process the Committee and its members frequently meet with lobbyists from various educational institutions and their associations, local and regional authorities, and trade unions. Within the governmental apparatus, the Ministry of Education is the most important body for the formulation of a policy for higher education. In addition, the Ministry of Finance has an important role as the keeper of the purse, but many other ministries also have relationships with the college sector, e.g. in issues related to graduates' qualifications, labour market needs, and contract research in their authority areas. The governmental bureaucracy and its political leadership prepare proposals for Parliament, but also have decision-making authority in a wide range of issues. In particular, the administrative bureaucracy in the Ministry of Education is an important power centre within the state administration.

Intermediary Bodies

Organisational bodies between the regular state bureaucracy and the colleges constitute an important part of the organisational field. We may distinguish between five different types; (a) ad hoc committees with representatives and experts from the state, society, and the higher education sector set-up to suggest reforms in the educational system, (b) national advisory councils for various professional programmes, (c) evaluation and accreditation bodies, (d) research councils, and (e) sector associations like conferences of rectors, trade unions, and associations of students. The former four types of body are set up by the state, while the latter is established by the higher education institutions, their staff, and students. Such intermediary bodies have also been called buffer institutions,

since they are not usually part of the state bureaucracy, but are placed somewhere between the state and the higher education institutions. Their main purpose is to perform an important mediating or intermediary role that is not otherwise met by the basic structures of government and of the higher education institutions (El-Khawas 1993).

Educational Institutions

Over time, the institutions within this field have included a diversity of professional schools, vocational schools, colleges of higher education, and polytechnic colleges. Their size in terms of student numbers has varied from fewer than 100 to more than 10,000 students. The naming of the various types of institution has shifted over time, and many of them were not regarded as higher educations institutions until the end of the twentieth century.

Study Programmes

The college sector is constituted by major programmes or subfields for teacher training, engineering and maritime education, health and social studies, economics and business administration, as well as many other small and specialised courses. Moreover, each of the major subfields consists of a number of specialities. Until the college mergers, the many different professional and vocational study programmes with their specific and different purposes, cultures, teaching methods, and relations to the labour market and their professions usually had their own schools. Now they typically constitute the building blocks of comprehensive colleges.

Staff

Institutions and programmes are populated by individual staff members with different qualifications, beliefs, and values. Most academic staff have traditionally performed their teacher role according to the expectations of the institution and the profession, but have increasingly taken up research as a more or less regular work task. A common feature in all countries, however, is that academic staff in the college sector have had a considerably higher teaching load than their colleagues in the universities. They have also possessed lower theoretical qualifications, but more practical experience in those fields in which they were teaching. Most academic staff identify with the profession in which they educate their students, but many also retain a strong identification with the discipline in which they were trained. Most staff members are ‘locals’ in the sense that they

concentrate on fulfilling the primary demands of the institution, while others are 'cosmopolitans', influenced by the norms of proper conduct for members of the academic profession.

Students

Students have been an often neglected group of individuals within studies of the higher education system (Becher & Kogan 1992). However, it is the behaviour of students that has the greatest impact on the system, be it the total expansion of the system, or the priority given to the various programmes. With the introduction of market and quasi-market management models in higher education, decisions by individual students have increasingly become an important parameter in institutional strategy.

Societal and Academic Stakeholders

The social environment comprises important stakeholders like industry, employers, and regional and local political authorities, which all have vital interests in what these institutions have to offer. Society demands a return on its investment in education in the sense that programmes and courses offered by colleges should be relevant to students and employers, and that staff should offer services to the community. The academic environment is constituted primarily by the universities which have a disciplinary hegemony in teaching and research. In addition, universities compete with colleges for political attention and funding.

This brief overview of the organisational field of higher education outside universities demonstrates that this sector is highly complex and constituted by a large number of first- and second-order organisations and individual actors. As shown in Chapter 1, the field and its actors have changed much over time, and a major challenge for this book will be to improve our understanding of the processes that have driven these changes. In the following, three perspectives on change will be discussed and developed as analytical tools.

Three Perspectives on Change

As an overarching theoretical and analytical framework to structure and guide the analyses of change processes, we have found it useful to distinguish between three types of approaches: *structural*, *cultural*, and *interest-group* explanations. These three explanatory models can be regarded as competing paradigms, but are here viewed as complementary approaches which combined can improve our

understanding of complex change processes. Depending on the circumstances, each of these three theoretical approaches may have a stronger explanatory power than the other two, but generally it is the dynamic relationship between them that should be explored.

Structural Explanations

One type of structural theory is concerned with the impact of technological, economic, and social change in society on the organisation of human activity. Structural changes in society of relevance to the college sector are of different kinds. First, technological change has had a fundamental impact on the development of this part of the educational system. Technological advances are prime factors for societal growth and development, but in order for society to make use of new technology, a skilled workforce is necessary to develop, produce, and maintain technological products and systems. The basic training of this workforce takes place within the education system, in which the technical schools have played an important role. Thus, the invention of new technologies in the nineteenth and twentieth centuries led to a demand for skilled workers and managers and to a subsequent need for vocational training programmes for new occupations. To exemplify: the invention of electrical power created a demand for the training of electro-engineers that could apply the new technology. The invention of electronic data processing led to the establishment of special training programmes in order to introduce and apply this new technology in the private and public sectors. Moreover, the increasing complexity of technologies has led to great changes in programme curricula with extensions of the duration of studies and more emphasis on theoretical knowledge. Second, the accumulation of wealth in society has been a basic condition for the development of an educational system to cater for the needs of the welfare society. The increasing surplus in the public and private economy has enabled the establishment of a large college sector. Third, the development of a large middle class in society with aspirations for their children, and the up-building of a welfare state with new demands for public services have had a strong impact on the transformation of the college sector. The needs and demands of young people entering higher education, combined with the needs and demands of an expanding health and social sector for trained personnel in the growing number of new vocations, have effectively contributed to the large growth in study programmes and student numbers.

Structural explanations of educational change are however not confined to basic changes in society external to the educational system, but also to internal changes in this system itself. It is a common observation that when a social system is changing or is reorganised as a response to external or internal problems and demands, new and often unforeseen problems arise that in turn may require modification or even reorganisation of relatively newly established structures. Organisational solutions

initiated to improve a malfunctioning system may create new problems that will generate new organisational solutions. To exemplify: The development of a dual higher education system in the Western European countries with a large expansion in the number of different professional and vocational schools over time created a need for reducing the number of institutions through regional mergers and to harmonise organisational structures, rules, and regulations in order to reduce the complexity of the system. This means that change as a solution to structural problems may create other problems that in turn may entail new changes in the educational system.

A basic theoretical device for explaining the impact of technological, economic, and social change in society on the development of college education is structural functionalism. This theoretical tradition draws on many intellectual sources and comes in many versions, dating back to Comte, Spencer, and Durkheim (Ritzer 1992). Its influence on sociology as a discipline peaked in the mid-twentieth century with theoretical advances made by scholars like Parsons (1951) and Merton (1968). However, in the 1960s structural functionalism lost its appeal as a theoretical paradigm for sociological analysis to other (at that time) more promising approaches. A major critique of structural-functional theory is its shortcoming in satisfactorily explaining the mechanisms which entail change (Ritzer 1992). In particular, structural functionalism was criticised for being unable to deal effectively with conflict.

Still, the ideas by Durkheim on the relationship between needs of society, structures, and functions have much to offer in macro-sociological analyses. To put it in the words of Ritzer (1992: 95): 'The study of social causes is concerned with why a given structure exists as well as why it takes a certain form. In contrast, the study of social functions is concerned with the needs of the larger system met by a given structure.' One version of this theoretical tradition thus tells us that system changes take place because they are functional responses to organisational inefficiency. Accordingly, the transition from fragmented expansion of post-secondary education to horizontal integration of the institutions concerned might be explained as a shift from a dysfunctional organisational structure to a more functional or effective way of organising this part of the educational system.

Cultural Explanations

Another type of theoretical paradigm in the study of change processes includes a variety of approaches which can be subsumed under the notion of cultural explanations. One theoretical tradition is concerned with the role of norms and values on the higher education system (Clark 1972). In this context, it can be useful to distinguish between four basic values that have had an impact on the development of the higher education system: *social utility*, *equality of opportunity*, *efficiency*, and *quality*. The raison d'être of higher education is its social

utility, be it the advancement of knowledge, contributions to economic growth, or the education of a qualified workforce for the occupations of the welfare state. The introduction of the human capital perspective in economics in the 1950s led to an increased interest by policymakers in expanding the higher education system (Schultz 1977). In the period after 1970, in addition to maintaining their role as educational institutions, universities and colleges have increasingly been expected to contribute more directly to economic growth through cooperation with industry, and to create knowledge which can be used to improve public services. In addition, democratic values have been important guiding principles in decision-making within the field of higher education, especially the contributions of education for equality of opportunity independent of class, gender, or geographical residence. This value particularly came to the fore in the 1960s, and was an important premise for the expansion of higher education outside universities (OECD 1973). Moreover, in the 1980s, increasing pressure upon higher education institutions to become more efficient was evident in many Western European countries (Neave & van Vught 1991; Goedegebuure et al. 1993). Universities and colleges burdened public budgets with their need for large resources and there was a growing interest in the extent to which they used these resources efficiently. Higher education institutions were expected to become more efficient with regard to running costs and production of graduates. Finally, higher education institutions are supposed to promote and guarantee quality in teaching and research, and rigorous rules for examination and peer review have been institutionalised as norms of conduct. Nevertheless, during the 1980s, the quality of higher education was questioned by state authorities in many Western European countries. It was often argued that quality standards were too low compared to the most advanced nations, and governments took measures to improve the quality of education and research. Evaluation, accreditation, quality assessment, and performance measurement were introduced as instruments to improve teaching and research (Goedegebuure et al. 1993).

Another type of cultural approach is concerned with the drift of ideas and the subsequent institutionalisation of similar organisational forms and values across countries. In the field of education, John Meyer in particular has been a proponent of explaining change as the outcome of pressures of global ideologies and highly rationalised world models of how education systems should be organised, which values should be dominating, and which curricula they should teach. An implication of this theory is that countries respond to the pressures of global ideologies more than to their own cultural and social history (Schofer & Meyer 2005; Meyer et al. 2007). Change in higher education takes the form of imitation of organisational solutions, values, and curricula in nations possessing a cultural hegemony, and which are regarded as appropriate and modern. Another version of this theoretical approach is that ideas on how human activity should be organised drift between different sectors in society. Thus, organisational solutions which have been specifically developed for a particular sector and purpose and which have proved to be efficient might be adopted as appropriate

solutions to recognised or non-recognised problems in other sectors (Sahlin-Andersson 1996; Sahlin-Andersson & Sévon 2003).

Interest Group Explanations

Structural and cultural factors obviously constitute important parts of a theoretical framework for the study of change in higher education. Still, there is no direct relationship between technical, economic, and social change in society, cultural trends, and how the educational system reacts to these changes. Structural developments and cultural trends do not make decisions. Actual responses have to be undertaken by actors within and outside the system, be it state authorities, the educational institutions themselves, staff, students, or important stakeholders. These actors are influenced by the structural and cultural context within which they live and operate, and which affects their interpretation of, and response to, changes in the environment. Since change in organisational practice and form requires actions by people, mechanical explanations emphasising structural and cultural change leave unanswered most of the questions about why and how the actual decision to change practice or form is taken. Environmental pressure and trends can be of different kinds, be contradictory, and be open to interpretation, giving leeway for decision-makers to choose between different strategies (Sahlin-Andersson 1996).

But actors often disagree over which actions should be taken. This simple fact is incorporated in a theoretical tradition which considers change as the outcome of interplay and power struggles among different actors in the organisational field. In this perspective, change is the outcome of conflicting interests between all important actors in the field. In such a perspective the college sector can be regarded as an organisational field in which supranational organisations, the nation state, various higher education institutions, professions, staff, students, and external interest groups and stakeholders struggle for their particular interests and values. The state in its various organisational forms is not a unitary actor, but consists of different institutions like parliament, government, and various ministries. In some instances different state agencies have a common policy towards the college sector, in other cases they disagree. Similarly, tensions exist between various educational institutions and between different professional groups and individuals in the institutions.

This analytical approach is often named a conflict perspective, and is as old as the first attempts to describe societal and historical events. A conflict perspective will emphasise opposing interests and values between different groups and not the interests and values that keep a social system together. It has been an important part of historical, political, and sociological analysis at least since Marx and Weber, and in modern times has been further developed by scholars like Coser (1956), Schelling (1960), and Collins (1975). In the 1980s and 1990s, the conflict perspective became less fashionable due to the strong interest in neo-institutional

analyses in the fields of organisation theory, political science, and to some extent in sociology, focusing less on change caused by powerful actors and more on persistence of organisational practices and diffusion of agreed-upon and appropriate solutions (March & Olsen 1989; DiMaggio & Powell 1991). However, later studies within the neo-institutional theoretical paradigm have increasingly revitalised an interest in power and conflict to understand change. A recent example can be drawn from the field of higher education. A study by Kim et al. (2007: 317) argues that 'institutional change does not occur simply through cumulative increases in the intersubjectively shared cognitive legitimacy of a new institutional model at the field level but through fierce political interactions among contesting groups of institutional agents who are willing to engage in explicit conflicts against one another and strategically use power and resources to pursue their goals and interests.'

The conflict perspective has been explicitly applied by several scholars in the field of higher education (Baldridge 1971; Archer 1979; Rhoades 1983), while other authors have used conflicting interests more implicitly as a basis for, or as an integrated part of, studies of change processes (e.g. Clark 1983; Meek 1991). In their analysis of the transformation of American 2-year community colleges from predominantly liberal arts to predominantly vocational training institutions, Brint and Karabel (1991) viewed organisational fields as arenas of power relations, with some actors – generally those possessing superior material and/or symbolic resources – occupying more advantaged positions than others. The community colleges thus were structurally subordinated to three important power centres: governmental bodies, business organisations, and the leading 4-year colleges. The community colleges pursued their own distinctive interests, but they did so under conditions of powerful constraint.

Conflicts are common in the stages of interest articulation and policy formulation, often ending with a legislative decision, but are also visible in the stage of policy implementation. Even in the evaluation phase, tension is common because the effects of policy measures are often ambiguous, and because the outcome often generates efforts to reformulate policy goals. Conflicts and tensions between different interests and values are a normal and natural part of societal life in this perspective. The study of change is a central feature of the conflict approach, because change is to be expected if the social system is fragmented by divergent values and conflicting interest groups. Change in the field of college education is thus a function of change in power relations between state authorities, the institutions, and stakeholders in society and the academic system.

A strong version of the conflict perspective, however, has weaknesses as an analytical approach. First, it is important to note that much change goes on seemingly without any involvement by those affected, either because they are not aware of the changes, because they agree or do not care, or because they regard resistance as useless. Second, people and organisations do not only compete for resources and values, they also cooperate to find solutions. In modern western civilisations, conflict handling is institutionalised through a comprehensive set of rules and regulations for how to deal with opposing interests. Obviously, a pure conflict perspective

underestimates possibilities for dialogue and cooperation across interest groups. Members in most modern social systems are also dependent on collaboration, even though they might disagree on goals, values, and solutions. In addition, groups with opposing interests have also a common interest in avoiding continuous open conflict, both because it is time- and resource-consuming, and because both parts can risk the loss of support from other groups.

In his analysis of conflict in the university, Baldridge (1971) refers to Schelling (1960) and his concept of *strategic conflict*. Schelling argues that conflict is best understood as a complex interaction somewhere between complete conflict and complete cooperation. This interaction includes elements of both conflict and cooperation, a relation that he calls strategic conflict and which involves negotiation. Conflict in higher education institutions is essentially strategic because interest groups in the academic community are struggling with each other and at the same time cooperating. The essence of their conflict is therefore negotiation because at the same time, different groups have both common interests and points of conflict. As formulated by Clark (1983: 252) in his analysis of the higher education system: 'In higher education, any major enterprise is a compromise of conflicting values.' Archer (1979: 3) in her seminal study of the development of state educational systems likewise states that 'most of the time most of the forms that education takes are the political products of power struggles. They bear the marks of concession to allies and compromise with opponents'. On the other hand, compromises are not forever. Systems and organisations are coalitions of individuals and interest groups. And because they are coalitions, they inevitably have multiple, conflicting goals, which change as the balance of power shifts.

The discussion whether change can be best explained by structure, culture, or the role of different interest groups within the organisational field is not very fruitful with respect to the transformation of the college sector. All these factors are obviously important, but some are more important than others at different times and under different circumstances. Structural explanations link change in the field of college education to technological, economic, and social change in society as well as to self-generating system change. Cultural explanations focus on changes in global and national value systems as well as on changes in values and identities of the educational institutions themselves. Technical, economic, and social change in society, as well as structural change within the educational system itself, and change in value systems and ideas condition and constrain the transformation of the college sector, but the particular adaptations to these changes are the outcome of interactions between actors in this field, be they individuals, groups, organisations, or institutions.

Interest Groups as Change Agents

As suggested above, the actors in the organisational field of college education can be grouped at many levels within the educational system.

Supranational Organisations

Since the 1960s, the OECD has played an important role as a forum for exchange of information, debate, and transmission of ideas on issues related to post-secondary education outside the universities, forming the thinking and acting of national experts and politicians (Eide 1995). In addition, the OECD national and thematic reviews of post-secondary and higher education have been important impetuses for change (Gornitzka & Langfeldt 2008). More recently, the European Union and the organised efforts to create a common European Higher Education Area have had a strong impact on national policies (Maassen & Olsen 2007; Gornitzka & Langfeldt 2008; Witte, van der Wende & Huisman 2008). Moreover, international associations for various study programmes have been of importance for the development of these programmes in the various national settings.

Supranational organisations have thus functioned as change agents in the development of college education in the various nation states. The major mechanisms by which national policies in this field are influenced by international organisations can be of different kinds. The *diffusion of ideas* mediated by national members in these organisations obviously has been of importance (Eide 1995; Gornitzka & Langfeldt 2008). The thematic reviews undertaken by the OECD have had a more direct impact on policy decisions, either as documents *legitimising change* in accordance with the interests of the government, or as *convincing arguments* for change not necessarily wanted by central interests. Another mechanism can be described as *coercive isomorphism* (DiMaggio & Powell 1983), which are of two kinds; informal pressure to adapt to important trends (the Bologna process), and formal pressure to conform to rules and regulations to obtain legal recognition (e.g. joint European curriculum guidelines for engineering programmes).

State Authorities

All Western European countries have a public and state-run higher education system even though many countries also have private higher education institutions. The role of the state in the development of this system has accordingly drawn a lot of attention in policy analyses and in studies of the implementation of public policy. The state transforms changing social needs and demands, as well as values such as equality of opportunity, into higher education policy, leading to change in the educational system. The increasing needs of the labour market for a skilled workforce have coincided with the policies of state authorities for the modernisation of society through the development of the higher education system. In such a top-down perspective, reforms in higher education are initiated and driven by state authorities and the success of these reforms is regarded as a matter of effective implementation of their objectives in the various parts of the system.

The first wave of implementation studies in public policy analyses stressed the importance of formulating clear and consistent policy objectives for a successful outcome of a reform. This argument was however criticised on the ground that the lack of clear and consistent goals is more the rule than the exception in public policy. Goals may be clear, but they may be unclear and vague as well. Goals may be unitary, but also multiple and conflicting. However, this fact does not preclude the possibility of implementing public policy reforms. There are numerous examples of successful reforms whose initial goals were manifold and non-consistent (Gornitzka, Kyvik, & Stensaker 2002).

Another criticism of the top-down perspective on public policy implementation was the unrealistic belief in rational planning, decision-making, management, and control for the possibility of enforcing reforms in institutions opposing change. Better management and control does not necessarily mean successful accomplishment, considering the political power of decentralised units to resist any move to reform (Hanf & Scharpf 1978). The early attempts at building theories on effective implementation largely ignored the problems that might emerge in cases where local level implementers and those affected by the reform opposed the directives (Gornitzka, Kyvik, & Stensaker 2002). They also ignored the complex relationship between Parliament, the governmental apparatus, and the target groups for public policy initiatives, missing the point that interest groups often appeal directly to Parliament for support, bypassing the governmental level in their struggle for their interests.

In spite of this criticism, the top-down implementation perspective on policy change cannot be overlooked in analyses of public reforms in higher education. State-planned change of higher education systems and organisational structures is an empirical fact, although there are numerous examples of reform attempts that have not lived up to expectations of policymakers, or have resulted in a series of unanticipated consequences. Intentions have been good, but the outcome has been unsatisfactory or quite different from what was initially intended. The culture and traditions in organisations that are the target of a reform often represent conservative elements. Thus, Olsen (1991) has argued that comprehensive reforms are more likely to succeed if reformers understand the interrelatedness of intentions, established institutions, and environmental changes, and that reforms are more likely to be accomplished if they try to change institutions in ways consistent with long-term trends in international or national society than if they try to go against the tide.

Intermediary Bodies

Various intermediary bodies like national advisory councils for professional programmes, evaluation and accreditation agencies, and ad hoc commissions all play a central role in the organisational field as meeting places for various interest groups and in consensus-building on policy issues (El-Khawas 1993). They are important

bodies for initiating change (or resisting change) in the field of college education. In particular, special commissions set up by the government to evaluate the state-of-the-art within post-secondary and higher education and to propose educational reforms have had great impact on the further development of the educational system.

Educational Institutions

Higher education institutions are dependent upon societal legitimacy to attain the necessary funding, and hence have to respond to public policy and to needs and demands in society. Thus, as a reaction to the attempts to develop instrumental theories on top-down implementation of public policy, several scholars argued that a bottom-up approach would provide more realistic analyses of change processes, especially in market-oriented systems where the role of the state is downplayed (Hjern & Hull 1982). In such systems, central state control over processes at local level is not necessarily desirable. Instead, local-level institutions are encouraged to show initiative and to respond to changes in their environment without too much interference by state authorities. In the 1980s, the general trend in public policy towards decentralisation of decision-making authority and the introduction of market models enhanced the relevance of the bottom-up perspective in analyses of change processes (Sabatier 1986).

Within the field of higher education studies, a similar change of focus took place. Analyses of the adaptive and innovative capacity of universities and colleges became increasingly an important field of investigation (Gornitzka, Kyvik, & Stensaker 2002). Change in higher education came largely to be viewed as a function of what took place within these institutions themselves. Theoretical approaches such as resource-dependence (Pfeffer & Salancik 1978), population ecology (Hannan & Freeman 1977), and institutional isomorphism (DiMaggio & Powell 1983) were applied to understand the organisational adaptation to changes in the environment. These theories share two basic assumptions. Organisations must be responsive to their environments in order to survive, and external pressures and demands limit the range of possible organisational responses (Gornitzka & Maassen 2000). These approaches, however, have been criticised for their emphasis on organisations as rather passive actors which try to adapt to changes in public policy and the market. Sahlin-Andersson (1996) has argued that because organisations consist of thinking and acting persons, organisations do not only passively adapt to changes in the environment, but also actively try to make their own course irrespective of trends, signals, or pressure.

Much of the strategy of colleges has aimed at enhancing their social recognition in society. In this respect, the concept of *organisational identity* is useful to describe the self-perception of educational institutions as organisations, and to characterise symbolic and mythological aspects of their activities (Albert & Whetten 1985; Stensaker 2004a). The argument is that symbols, myths, and

language are used by organisational leaders to create a common perception among staff members of what kind of values should be embedded in the organisation, and also to tell the environment what kind of organisation this is or aims to become. In our context, the concept of organisational identity is useful in the analysis of the symbolic language used by college leaders to characterise their institutions.

Study Programmes

The college sector is constituted by a large number of professional and vocational programmes which were established to serve the needs of industry and the public sector. Over time, most of these study programmes have undergone a professionalization process characterised by the scientification of the knowledge core, while sustaining strong ties to the professions for which they train their future members. The various programmes have developed strong professional identities different from each other in most respects. Thus, norms, values, and traditions of the workplace are important to understand the potential for change in study programmes. Such units have a history, and over time an opinion is formed as to which core knowledge should be reflected in the curriculum and which values and attitudes should be conveyed to the students. In these programmes, culture and traditions are institutionalised and represent stabilising and conservative elements which members strive to preserve. This unique set of norms and values is embedded in the thoughts and actions of individual members and thereby resists rapid changes in attitudes (Clark 1972; Brunsson & Olsen 1993; McInnis 1995). On the other hand, changes in the composition of staff through recruitment, growth, and turnover may influence organisational identity and behaviour (Pfeffer 1982). A large influx of new people in a study programme, with training and values different from those who have been members for a long time, may accordingly lead to change in norms and attitudes towards what kind of knowledge and values should constitute the curriculum. In such cases, history and traditions may not be strong-enough socialisation factors to prevent new beliefs and values to spread. In our context this would suggest that over time, demographic changes in the composition of staff will lead to changes in the prevailing value systems in the various study programmes.

Staff

The central role of supranational organisations, state authorities, regional stakeholders, intermediary bodies, institutions, and programmes as change agents (and resisters to change) has been acknowledged. However, many will argue that in this respect, academic staff have a key position, both as individuals and as a group. In particular, the role of academic staff in academic drift processes has

been emphasised (Jenniskens & Morphew 1999; Morphew & Huisman 2002). Much of the driving force behind what academics do is concerned with building up a professional reputation. In most instances this means creating oneself a name as a creative and productive scientist or scholar in his or her discipline or speciality (Becher & Trowler 2001). In the college sector, professional reputation was not a dominant driving force as an important value guiding the activities and priorities of individual staff members among the large majority, even though many of them were trained in universities. However, this has changed with the introduction of a university-like career system in many countries (Enders & de Weert 2004).

The concept of *identity* has been used in higher education research also to relate individuals to disciplines, professions, and institutions (Clark 1983; Välimaa 1995; Henkel 2000). As noted by Clark (1983), the discipline rather than the institution tends to be the dominant force in the working life of academic staff in universities. It is the discipline that is the major provider of values, attitudes, norms of conduct, and intellectual standard. According to this theoretical tradition, in the college sector with its various professional programmes, it is the profession (engineers, teachers, nurses, social workers, etc.) rather than the discipline or the institution that is the major provider of those values that constitute the self-esteem and identity of the staff members. In reality, however, the picture is more complicated. From an analytical point of view it is more fruitful to talk about multiple identities. Staff members may very well identify most with the profession for which they educate people. Still, their identity is also linked to the discipline in which they were trained. Their disciplinary identity may even be stronger than their professional identity if they continue to do disciplinary research and thus try to enhance their reputation in a disciplinary context. In the same way, the identity of staff is linked to the institution in which they work. For many people it would matter whether they are employed in a professional school or in an institution with university status. Thus, identities within colleges are unlikely to be uniform. Most institutions have multiple sets of values, and members of an institution may act in accordance with different interpretations of institutional norms and values, and also be able to choose those that suit their own purposes or aims (Peters 1999). This also means that identities are not necessarily stable properties with a person, but may change over time.

Students

With the expansion of upper secondary school in the various Western European countries, the number of qualified potential applicants to college programmes increased enormously in the 1960s and 1970s, and this growth was in itself an important premise for the expansion of short-cycle vocationally oriented higher education. The demand for higher education among young people is increasingly a way to social mobility and to rewarding positions in society (Collins 1979;

Brown 1995, 2001; Jónasson 2004a). There has been an increase in aspirations among parents and children facilitated by improved financial conditions. In addition, the general attitudes to the social value of being a student and getting a degree have changed. Thus, the preferences and social aspirations of young people seeking higher education have become increasingly important for the development of the college sector. The actual and anticipated behaviours of students thus have become a major parameter in the strategy of state authorities, institutions, and programmes with the push of these institutions towards the market.

A Dynamic Change Model

An important purpose of this study will be to analyse the dynamic relationship between the various levels in this particular organisational field (first-order actors) as well as societal and academic stakeholders (second-order actors) in order to grasp the change processes. The relationship between the various actors is visualised in Fig. 2.1. In the figure, the state level is split into two: Parliament and the government, because of the central role of Parliament in the formation of a policy for the college sector, and its preferential treatment of this sector, repeatedly neglecting propositions by the Ministry of Education.

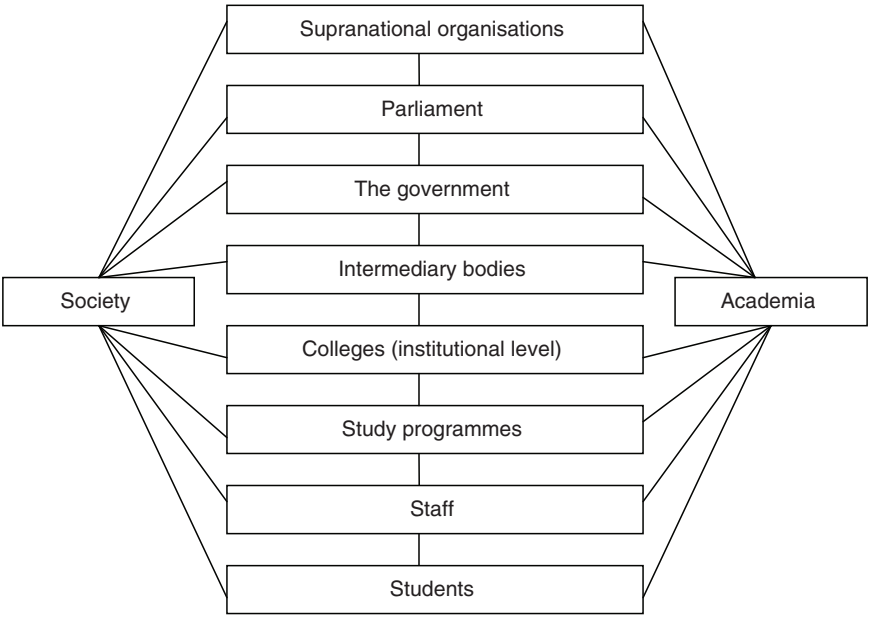

Fig. 2.1 The organisational field of college education

It is important to note that this relationship can be hierarchical, such as when the Bologna process entails change in the degree structure, adopted by Parliament, implemented by the government, adapted to by the higher education institutions and the various study programmes, and finally leading to changes in teaching and study conditions for staff and students. This relationship can also be reverse, like when the needs of students who wish to continue at a university entail curriculum changes in college programmes in order to adapt to university requirements, and to the engagement of colleges and their sector organisations in negotiating with universities and intermediary professional bodies on the introduction of a credit transfer system. However, the relationship between the various levels does not need to take the character of chain reactions, but rather the form of mutual interaction between two or more of them, like between students and staff, between institutions and the Ministry of Education, or between study programmes and Parliament, bypassing the institutional level and the government.

The Influence of Society

Local and regional political interests have been particularly important for the development of the post-secondary education system, not least in questions related to the establishment and localisation of new institutions. Municipalities, counties, and local political party organisations have been active lobbyists in government and parliament, and have also tried to influence the educational profile of colleges. In the period after 1970, in addition to maintaining their role as educational institutions, colleges have increasingly been expected to contribute more directly to economic growth and social development through cooperation with industry and the public sector, and to create knowledge which can be used to improve public services. The general debate on the need for stronger collaboration between public authorities, industry, and higher education institutions – often referred to as 'triple helix' (Etzkowitz & Leydesdorff 1997) – has enhanced the influence of external stakeholders on the role of these institutions, in particular in regional innovation processes (Fritsch & Stephan 2005).

In addition, the behaviour of various actors and the relationship between them are affected by economic and social change as well as cultural trends. Social change affects public policy, e.g. when increased demands for higher education among young people might bring forth larger state appropriations to the college sector. The large increase in student numbers in the 1960s entailed capacity problems in the traditional universities, leading to changes in educational policy and to recommendations by the OECD for the expansion of vocational post-secondary education as an alternative to academic studies. Social change also affects the dispositions of these institutions more directly, e.g. through changes in the pattern of applications to various study programmes. The dispositions of the colleges may in turn affect changes in student demands for education through the establishment of new courses which prove to be attractive.

The Influence of Academia

The behaviour of various actors in the field of college education and the relationship between them is also affected by the disciplinary hegemony of universities and the academic community at large. First, universities compete with colleges for students, funding, and political attention. Second, the development of the college sector has been influenced more indirectly by the dynamics of the knowledge production in universities, as well as by the attitudes of universities and professions to the colleges. Academic knowledge production takes place predominantly within disciplinary communities and in the intersection between related disciplines (Clark 1983; Becher & Trowler 2001). Because universities are the host institutions of disciplinary research, teaching, and education, and as such are centres of academic authority and power, universities have influenced curricula and teaching and research practices in the professional and vocational colleges, e.g. through the training of graduates who start working in the college sector and through collaboration in teaching and research.

Due to the scope of this book and the long period of time that is covered, it is not possible to present microanalyses of each and every change process according to this model. It is, however, an implicit assumption that individual actors and interest groups on the various levels of the organisational field interact with each other in the various change processes, while simultaneously being influenced by structural and cultural change in society as well as by the professional and cultural hegemony of the academic community. In the various change processes, each of these three theoretical approaches may have a stronger explanatory power than the other two, but generally it is the dynamic relationship between them that has been explored.

Phase 1
Fragmented Expansion

Until the end of the twentieth century, the development of post-secondary education in Western Europe can be described as a continuous growth period characterised by differentiation of study programmes and diversification of organisational forms and curricula, and by geographic and institutional decentralisation of institutions and study places. In this book, the term fragmented expansion has been used to illustrate this phase in the development of the college sector.

Chapter 3 analyses the processes of differentiation and diversification in a Norwegian context, and Chapter 4 explains the processes of geographic and institutional decentralisation. These processes are analytically distinct, but strongly intertwined and the fragmented expansion of college education can only be well understood by analysing their internal relationships, which will be done in Chapter 9.

Chapter 4
Geographical and Institutional Decentralisation

Introduction

In Western Europe, the expansion of the organisational field of post-secondary education outside universities has been characterised by the establishment of a large number of schools in cities, towns, and local communities throughout each country. This development can be described as two interrelated decentralisation processes: *geographical decentralisation*, which means that higher education spreads to regions and local communities outside the traditional university cities, and *institutional decentralisation*, which means that higher education spreads to institutions outside the traditional universities (Kyvik 1983). These processes were enhanced in the 1960s, when regional political issues acquired increased attention in many countries, and the mapping of higher education institutions and programmes was drawn into this debate.

On the basis of the general literature on this subject, we may distinguish between three principal reasons for *geographical decentralisation*. First, in all countries, and at least up to the 1980s, strong arguments were raised in favour of establishing a dispersed pattern of post-secondary educational institutions in order to improve opportunities for access to higher education through geographic proximity to schools and colleges. Second, many pointed to the need for skilled labour in the various regions and that this need could be covered partly by setting up more educational institutions in each region. Finally, the establishment of post-secondary schools and colleges throughout the country has been regarded as a means of improving economic, social, and cultural conditions in local communities and non-urban regions (Furth 1992).

We may also distinguish between three reasons for *institutional decentralisation* of higher education. First, in the 1960s, many countries assumed that new institutions would be more innovative than the traditional universities concerning educational programmes, curriculum structures, and with regard to the needs of the local community (OECD 1973). It was argued that there was a need for qualifications other than those traditionally conferred by the universities, and that it would be easier to develop new vocational programmes within other types of educational institution than within existing universities. Second, there was a general wish

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

to relieve the universities of some of their teaching burden in order to retain the universities as centres for higher learning and research (OECD 1973). Third, there was a need to reduce expenditure on higher education. In the 1960s and 1970s, many countries desired to reduce costs by channelling a larger proportion of students into short-cycle programmes (OECD 1973; Teichler 1988).

The processes of geographical and institutional decentralisation eventually led to a highly dispersed pattern of many small professional and vocational schools and colleges in the various countries, and also to a larger growth in student numbers in the college sector than in the university sector.

The purpose of this chapter is to go beyond the above-mentioned explanations for geographical and institutional decentralisation of post-secondary and higher education. Why were not the various professional schools established in regional centres at the outset, and why were few new and vocationally oriented higher education programmes developed within the organisational framework of the established universities? Why did the college sector expand more than the university sector?

Geographical and Institutional Decentralisation: A Theoretical Approach

In line with our research strategy outlined in Chapter 1, three different explanations for these decentralisation processes are put forward – structural, cultural, and interest group explanations. Structural and cultural changes in society are important variables in such an analysis, although the many decisions that have led to this development have been taken by actors often in strategic conflict with other actors. In the following, for theoretical reasons, it is necessary to distinguish analytically between geographical and institutional decentralisation.

Geographical Decentralisation

Structural–functional theory suggests that geographical decentralisation of post-secondary education institutions took place simply because there was a need in society for dispersion of such institutions to different parts of the country. Two of the above-mentioned reasons for this development, the need for skilled labour in the regions, and educational institutions as regional development agents, are functional explanations. Due to structural changes in the economy, the nation needed the talent of young people to develop society and its industries. Geographic proximity to educational institutions was regarded as a precondition for enabling young people to seek post-secondary education and resulted in a geographically decentralised pattern of post-secondary schools.

Within the frames of a cultural perspective on geographic decentralisation of post-secondary education we should focus on prevailing ideologies on distributive

justice in public policymaking, and on what might be regarded as an appropriate localisation pattern of various professional and vocational schools and colleges. In this respect, post-secondary and higher education should not be looked upon as a distinct policy area, but as a sub-field of overall public policy. Decentralisation of educational institutions and student places would accordingly be part of a general policy to strengthen regional development and local communities as well as equality of educational opportunities among young people. A cultural perspective would also stress the drift of ideas across national borders and trends in educational policy in other countries. If other countries had started to decentralise higher education, educational bureaucrats and policymakers might be affected and try to develop a national policy in line with international currents.

In contrast to explanations favouring structural developments or ideological trends, an interest group theory on geographical decentralisation of higher education would stress power relations in society. In such a perspective, the geographical dispersion of programmes and institutions can be explained theoretically by the use of a power perspective within the framework of representative democracy. Parliaments are made up of representatives from various regions and local communities, and in many countries representatives from non-urban regions have been in a majority and in a position to establish new educational institutions in these regions.

Institutional Decentralisation

Turning to processes of institutional decentralisation, structural-functional theory suggests that there was a societal need for building up new higher education programmes and institutions outside the traditional universities. The above-mentioned reasons for this development are all-functional explanations: new institutions would be more innovative and more adaptive to changing needs of society and the labour market, the universities should be relieved of some of their teaching burden to be retained as viable research institutions, and expenditures on higher education would be lower in the college sector. Eventually, the policy of institutional decentralisation would lead to a larger growth of students in the college sector than in the university sector.

Rather than looking at needs of society as explanations for institutional decentralisation of higher education, a cultural perspective on change processes would examine change in societal ideology and the diffusion of ideas of how a higher education system should look like. Thus, the large growth in higher education can be interpreted less as a result of rational political choice as a response to structural change, and more as a result of the global diffusion of a preferred model of society. Since growth patterns are more or less similar in all types of country, institutional processes are involved in the making of societies in which schooled knowledge is seen as appropriate for a wide variety of social positions and as a driving force for economic, social, and cultural progress. This means that access policies of other countries may be used as a guide for governmental decisions on the number of available study places. An implication of a strong version of this theory is that

countries respond to the pressures of world models more than to their own histories, resulting in more or less similar access policies across different countries (Schofer & Meyer 2005). According to this perspective, the reason why student numbers have increased more in the college sector than in the university sector is simply that national authorities have a common conception of the importance of giving priority to short-cycle professional and vocational programmes.

An interest group perspective on the reasons for institutional decentralisation of higher education would include actions by many participants and members of the organisational field. However, needless to say, decisions made by Parliament as a result of local political pressure are of particular importance. As stated above, the power in Parliament is generally held by representatives of the various regions, and they have often been in a position to support their local constituencies in their demands for dispersion of higher education places. Another explanation why the college sector has grown faster than the university sector is simply student preference. Of those who have sought higher education, a larger share has been interested in studying at a professional or vocational college than at a university. There might be several conventional reasons for this choice: a preference for a more direct work-related education, geographic proximity to the educational institution, a wish to study in an environment smaller than a university, an assessment of future job prospects, or simply that short-cycle professional or vocational education is a faster and easier way of earning a degree than studying at a university.

In conclusion, the reasons for geographical and institutional decentralisation of professional and vocational education are multiple, and they can be explained by using a blend of different theoretical approaches. In the following, these developments will be illuminated by an analysis of Norwegian trends.

Geographical Localisation of Professional Schools

Professional schools have been established over a very long time period. Because it is impossible to give a detailed overview of localisation issues within the context of this chapter, the analysis will be limited to some important principles that have been discussed within each of the major sub-fields.

Teacher Training

In Norway, *general teacher education* has traditionally had a decentralised structure, partly due to the requirements of The General Schooling Law of 1827 which stated that each region should have its own teacher seminary, and partly due to the establishment of private schools (Dahl 1959). The location of these schools, however, has been an issue at regular intervals, e.g. in 1951, when the majority in the Coordination Committee for the School System proposed that

teacher training should be based on upper secondary school and concentrated in three or four colleges (Dahl 1975). The idea of upgrading teacher training schools to colleges or specialised university institutions by changing admissions requirements and by centralising them within a few larger institutions had begun to resonate in the training school system. This hope was also linked to demands of the trade union for better wages and working conditions. However, arguments for maintaining the geographically decentralised system proved to be stronger. Geographic proximity to teacher training schools was regarded as a precondition to enable young people to seek education and to provide the various regions with school teachers.

In localisation matters, the power in Parliament was with the majority of representatives from the non-urban regions, more than with the dominating political parties. The predominant policy was that the location of general teacher training schools should *primarily* be based on geographical criteria, so that each region or county should have its own training school, and *secondarily* be based on population density (Kyvik 2002a). This policy, with its emphasis placed firmly on a decentralised development of teacher training schools, was unsuccessfully challenged by the Ottosen Committee, and by 1975, the number of teacher training colleges had reached 19.

Until 1970, *pre-school teacher training* was only taught in five schools. However, the need for kindergartens increased strongly in the 1960s, and it fell to the state to provide qualified staff. In fact, kindergarten coverage in Norway was at that time one of the lowest in Europe, and it was widely agreed that training capacity should be increased significantly. The time then came to decide whether preschool teacher training should continue within its own institutions, or whether it should be more closely linked to the existing general teacher training programmes. Contrary to the wishes of the pre-school teacher associations, the Ministry of Education opted for a coordinated approach and secured Parliament's approval on this matter. In 1971 and 1972, a 2-year course in pre-school teacher education was introduced in nine of the teacher training schools. By affiliating pre-school teacher training programmes with the general teacher training schools, rather than increasing the student capacity of its existing few schools, a geographical spreading of pre-school teacher training would take place.

Engineering and Maritime Education

Until the Second World War, engineering education was provided by one technical university institution and only four technical schools. Technical education gradually took off in the period from 1950 to 1972, with nine new schools being founded in different parts of the country. Some were created initially to satisfy local demands or interests, while others were established as elements of a national strategy for technical education and the modernisation of the country. In both cases the need for geographic proximity to technical schools was part of the argumentation for this

policy. This way of reasoning was also the major basis for the establishment of a large number of small maritime schools in the 1960s.

Health and Social Education

Over time, a large number of small nursing schools were established within the organisational structure of regional and local hospitals – public as well as private – in order to cover their own need for qualified nurses. Of course, there had been discussions on which of the hospitals and how many should train nurses, but with the establishment and extension of hospitals in various parts of the country, the number of nursing schools increased more or less as a logical consequence of the decentralised localisation pattern of health services.

While nurse training expanded through the establishment of an increasing number of specialist schools, social worker education is an interesting example of how geographical decentralisation of a professional programme through the integration into existing district colleges eventually was regarded as more important than retaining this programme within a few specialist institutions. When the Ottosen Committee proposed that all post-secondary vocational training should be integrated within regional study centres, it was faced with strong opposition from the schools of social work. Programmes in social work had undergone a process of professionalisation, and it was felt preferable to maintain the schools of social work as autonomous institutions offering an overall education to social workers. Therefore, a lot of controversy arose following the decision by Bodø District College to open a course in social work in 1975 (Erichsen 2002). Boycott action taken by the Norwegian Social Workers' Union made it difficult to secure trainee places and to recruit teachers qualified in social-welfare-related subjects. This resulted in the course coming into operation later than had been planned (Rasmussen 1991).

Initially, there was a strong opposition by the professional groups involved to any integration of social worker training within the district colleges. Instead, they wished just as strongly to secure their own specialised colleges. But this attitude changed during the 1980s, when the union of social workers started to support the creation of social work courses not only in Bodø but also in other district colleges in order to increase the number of student places and to spread this training opportunity to more locations throughout the country (Askjem 1996). When Finnmark District College launched its course in social work in 1988, everyone agreed that this part of the country badly needed this particular educational opportunity, and that being able to base it in the existing district college was an advantage. Two years earlier, the same college had set up a course in child welfare education. The only issue that was raised was that part of the course was taught in common to both social work and child welfare students (Rasmussen 1991). Another programme in social work training opened in 1988 in Sogn og Fjordane District College, and eventually, several more colleges offered this course. Geographical decentralisation

of social worker education through integration of its course in the existing district colleges thus was regarded as more important than offering it through only a few specialist professional colleges.

The geographical decentralisation of professional schools and programmes thus proved to be stronger than those processes that worked for fewer and larger schools for individual study programmes. Geographic dispersion of short-cycle professional education was regarded as more important for educational as well as for economic, social, and cultural reasons than building larger and presumably better specialised educational institutions.

Geographical Localisation of District Colleges

In 1965, the Committee on Post-Secondary Education (the Ottosen Committee) was established by the government to assess, among other things, the future need for educational capacity at the university level in addition to that which would naturally develop in Oslo, Bergen, Trondheim, and Tromsø. Furthermore, the Committee should suggest the location of possible new institutions.

At that time, post-secondary education in Norway was offered by essentially three types of institution: the universities of Oslo and Bergen; several specialised university institutions mainly located in Oslo, Bergen, and Trondheim in fields like agriculture, engineering, upper secondary school teacher education, veterinary medicine, music, business administration, and theology; and finally, a large number of small short-cycle professional schools in the various regions. In 1966, about 75% of the places in post-secondary institutions were concentrated in the three largest cities (Kyvik 1980).

In this period, the political climate changed remarkably in favour of geographic decentralisation of public goods. While only 9% of the Norwegian population considered regional policy to be one of the three most important political issues in 1957; this percentage increased to 27% in 1965 and to 59% in 1969 (Valen & Martinussen 1972). The importance of viable local communities was stressed as a reaction against the tendency of centralisation in the past years. Although most of the professional schools were dispersed throughout the country, this situation made people concerned with educational policy want to create new institutions at college and university level outside the three urban centres. A decentralisation of higher education of this nature was considered as a means to regional development which would be of major economic, social, and cultural significance. Rural Norway had difficulties in attracting highly qualified labour, and it was assumed that a broader range of local courses would increase access to higher education and result in future graduates remaining in their county of domicile following graduation. Further, new workplaces would be established in connection with the construction and running of these institutions, and the educational activity would have social and cultural ring-growth effects. The first result of this policy change was the creation of the University of Tromsø in Northern Norway in 1968. Higher education was not only

considered on its own merits, but it was also seen as part of the general regional policy (Bie 1981).

An important objective of this policy was to stimulate social, cultural, and economic life in the regions, and thus function as a counterweight to the great urban centres. Through participation and involvement in local community life, the colleges would constitute an important factor of innovation. In this respect, Parliament emphasised the role of research on areas of particular relevance to the regions. Second, the establishment of district colleges was supposed to have economic side-effects in the respective regions. New jobs would be created in direct connection with the colleges and in the service sector. Third, the colleges should meet local needs for higher vocationally oriented education. The subjects taught should be relevant for the particular social and economic conditions in the various regions. It was intended that the respective regions should have influence on the development of the various courses. Regional relevant study programmes were thus regarded as important in order to stop the brain drain from rural areas to urban centres.

In addition, there was a growing demand for a more just social recruitment to post-secondary education. A report documented that among those completing upper secondary education, children of academics were disproportionately represented in higher education in contrast to children of farmers, fishermen, and industrial workers (Vangsnes 1967). The remedy was to locate new educational opportunities in the rural districts in order to extend both geographical and social access to higher education. A key person in this process was the Minister of Education who represented the Christian Democratic Party, a political party that gained its strongest support in the rural regions, and which was part of a liberal/conservative government coalition. This party was working actively to stop the centralisation tendencies in the elementary school system and to establish study places in post-secondary education outside the university cities.

The Ottosen Committee had proposed that a district college should be established within each of 12 regions for higher education, preferably in the regional centre. However, choosing locations turned out to draw a lot of interest and to become conflict-filled processes. There were conflicts between regions and within regions and between rural and urban interests (Jerdal 2002). In the trial period, colleges would be established in only some of the regions. Several municipalities and counties thus activated themselves by preparing reports arguing for the need for a district college. They sent deputations to meet with the Ministry of Education and the education committee in Parliament. An ad hoc committee was set up by various organisations to work for the location of district colleges in rural areas. Both locally and centrally, it was discussed whether the colleges should be concentrated in one location in the region or divided into two or more campuses in different parts of the region. The localisation issue involved and activated important political and social interest groups, and in Parliament it was noted that over the years, no other political issue had received so much interest from outsiders (Stava 1976). In Parliament, representatives from all parts of Norway took part in the debate and argued for the need for a district college in their respective counties. On local initiative, some new courses were started on an experimental

basis at existing institutions and several planning committees were established. The first proposals on the future location of district colleges had already been submitted to the Ministry of Education in 1966. This local enthusiasm was obviously a main reason for the active planning process in the Ministry and the agreement in Parliament (Sandvand 1976).

The conflicting interests did not, however, lead to any serious delay in the decision-making process, and the result of the localisation processes became a compromise between different regional and local interests. The first three colleges were located in the counties of Rogaland, Vest-Agder, and Møre og Romsdal. In Rogaland and Vest-Agder the district colleges were established in the largest cities – Stavanger and Kristiansand. These two cities already had some professional schools and had done a great deal of preparatory work. Moreover, they had competed with Tromsø and lost in an attempt to get the fourth university in Norway (Rommetveit 1971). There was thus general agreement in Parliament on this matter. Another solution was chosen in Møre og Romsdal County, where traditionally there were conflicts of interest between districts (Melle 1999). As an experiment, the college was divided into two parts, one located in a town (Molde) and one in a rural district (Volda).

In 1970, three more institutions (Nordland District College, Oppland and Hedmark District College, and Telemark District College) were established. In the counties of Oppland/Hedmark and Nordland the colleges were located in towns. In Oppland/Hedmark, the college was located in Lillehamar and not in Hamar with its long-established teacher training college. In Nordland, the largest town (Bodø) was chosen. In Telemark there was a bitter debate over where the college should be situated, within a town or in the countryside. It was eventually established in a rural district and the village of Bø won the fight with the towns of Skien and Porsgrunn (Nymoen 1973).

In the course of the next 20 years, five more colleges were established (Sogn og Fjordane District College in 1975, Finnmark District College in 1976, Østfold District College in 1977, Hedmark District College in 1979, and Nord-Trøndelag District College in 1980), and during the succeeding decade four existing institutions achieved status as district colleges (Agder Engineering and District College, Harstad College, Trondheim Economic College, and Economic College, Oslo).

Institutional Decentralisation of Higher Education

In its mandate, the Ottosen Committee also was requested to consider the possibility of relieving universities of their elementary teaching burden. There were several reasons for this request.

First, the relative number of young people seeking post-secondary education had increased considerably. In 1945, 9.5% of the 19-year-old youths graduated from upper secondary school. This proportion increased to 19.5% in 1965, and about 90% of them sought some type of post-secondary education. In the universities, the student population showed an unforeseen growth. From 1960 to 1965 enrolment

increased from nearly 10,000 to 20,000, and the universities lacked the capacity to absorb the growing number of students in a satisfactory way. An increasing number of young people were refused admittance to universities and other post-secondary education institutions, and in 1965 some 3,000 students were studying abroad.

Second, there seemed to be a lack of balance between university education and vocationally oriented short-cycle education. In 1965, the universities enrolled 20,000 students. In contrast, there were fewer than 10,000 students in other post-secondary institutions. While the university courses in the natural sciences, the social sciences, and the humanities were open to all candidates with a university entrance examination, institutions for teacher training, nursing, social work, and engineering admitted only a limited number of applicants. A degree at the universities was stipulated to take 4–7 years of study, while the other institutions were offering 2-year courses. This situation resulted in some unforeseen and unfortunate consequences. For young people who were refused access to the short-cycle vocationally oriented institutions, the university was virtually the only alternative within the post-secondary education system. There were strong indications that the universities represented a second choice for many upper secondary school graduates, and it was argued that lack of motivation among many of these students contributed to the large number of students who left the university before graduation (Sørheim 1973). In that respect, Norway differed from other European countries. Professional schools had historically never been subject to the 'noble/less noble' syndrome as frequently was the case in other countries. On the contrary, they had always been very popular and, in a sense, prestigious (Cerych 1981). A curious side-effect of this situation frequently mentioned at that time was that a person who was not admitted entrance at a teacher training college might enrol as a student in a university, take a higher degree, and eventually return as a teacher at the teacher training college where he or she was originally refused access as a student (Sørheim 1973).

Third, the economic circumstances were a basic though less explicit premise. A redoubling of the total number of university students over a 5-year period had resulted in public expenditure in higher education increasing far more than anticipated. The Ministry of Education therefore asked the Ottosen Committee to assess alternatives to traditional long-term university studies.

As shown, this process ended with the establishment of district colleges. In addition to giving an alternative, i.e. vocationally oriented education, the district colleges were to relieve the universities of some of their teaching burden. The Ottosen Committee suggested that the new colleges could teach some first year university courses. However, university courses should only constitute a small part of their total teaching. The Ministry of Education and Parliament agreed to this proposal and regarded it as a decentralisation of higher education. It was stressed that basic university courses could be an educational offer to students from the rural districts who wanted to continue at a university. However, the number and type of university courses which eventually could be decentralised to the district colleges were not decided upon.

There were several reasons for this early pressure for university courses. Some first-year university courses were, at that time, already being taught in some of the

regions where the first colleges were established. A university was responsible for the courses and for the final examinations, but they were administrated by local organisations. An incorporation of these activities into the district colleges was regarded as natural. Besides, the universities were in favour of these courses being taken over by the colleges. Even though certain university environments expressed the notion that a decentralisation of university subjects could result in a lowering of standards, the district colleges were hardly opposed by the universities in this matter (Sandvand 1976). Another explanation for the preference for university courses inside the district colleges could be found in the ambitions to grow fast. The planning and realisation of true educational innovations would require more time and resources than simply copying existing subjects, and university courses would attract local students. Finally, university ambitions in the cities of Stavanger and Kristiansand played an important role. Both cities had competed with Tromsø to be the location for the fourth university in Norway. Tromsø won and got its university in 1968. However, neither of the other two cities gave up the hopes and plans for a university.

In order to explain the institutional decentralisation process, the role of young people seeking higher education should be strongly emphasised. In the 1960s, a period with strong economic growth, the number of university students increased dramatically. The government was therefore of the opinion that a higher proportion of students should be channelled into shorter courses and into institutions that for various reasons were less expensive to run due to little or no research activity and lower teacher salaries. Such considerations were common for many Western European countries (Jallade 1992), and the advice of the OECD was particularly important in this respect. In Norway, this policy led to the establishment of district colleges. However, in the mid-1970s, economic growth was replaced by stagnation, a situation which also influenced the view on higher education. The demand for university education decreased while vocationally oriented studies in the college sector attained increased popularity. The district colleges still had wide political support, owing to the fact that the development of these institutions was regarded as much a question of regional policy as a matter of educational policy. The development of non-urban regions was an important political issue and in the 1980s, the district colleges and the professional colleges were given priority over the universities.

By the end of the 1980s, a further expansion in student numbers was no longer expected, mainly because of demographic trends and a subsequent decrease in secondary school-leavers. However, as visualised in Fig. 4.1, the number of students increased very strongly in the first half of the 1990s, particularly in the college sector. (The figure includes private colleges, but the large majority of students in the college sector have been enrolled in the state colleges.)

One reason for the unexpected growth in student numbers was increased unemployment, and enrolment in higher education became an alternative to work to improve one's position in the competition for future jobs. Another reason was the increased aspiration for entering higher education especially among the children of those parents who had graduated from universities and colleges during the first wave of expansion in the 1960s. A third reason was that higher education had

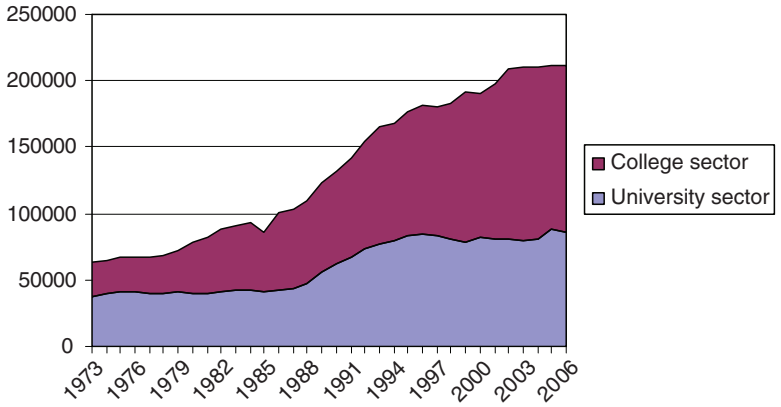

Fig. 4.1 Number of students in the university and college sectors in Norway, 1973–2006 (Statistics Norway. Educational statistics)

become more accessible because of the establishment and expansion of many institutions in the various regions. Finally, the demand for higher education increased particularly among women because of general changes in women's role in society and increased female labour-market participation (Aamodt & Kyvik 2005).

The emphasis on economic rationales in education policy has been modest in comparison to other principles, such as individual rights to personal development and equal rights to higher education regardless of gender, social, and regional background. The main driving force behind the large expansion of the higher education system thus has clearly been the steadily increasing demand by young people for higher education, in particular in the college sector (Aamodt & Kyvik 2005).

Failed Attempts at Regionalisation

An important part of the Ottosen Committee's proposal was an organisational and administrative coordination of all short-cycle post-secondary education in each region. Existing institutions and new study programmes were to be integrated in a common regional organisation of higher education, called district colleges. Twelve regions were proposed, four of them with a university. Norway has 19 counties; only six of these were to form a region of their own. The core of each college was to be located in a study centre. However, existing professional schools located elsewhere in the region were also to be included in the college. The main arguments for this integration were that a study centre would offer students a broader choice of courses; a broader and better milieu for the teaching staff; and a better utilisation of buildings, libraries, and welfare installations.

The Committee defined a district college as an organisational superstructure of short-cycle post-secondary education in a region. This meant that a district college

did not necessarily have to be situated in one place, but could be located in different parts of the region. However, the Committee recommended that a college should be concentrated in one place in order to obtain an integration of the various institutions. The Committee employed professional, financial, and social arguments to justify their views. From a *professional* standpoint, the co-location of several types of educational establishment in a single study centre would have advantages for contacts between students beyond the boundaries of their own field of study, and also provide them with the possibility to transfer between courses. *Financially*, the committee considered that centralisation would result in a more effective use of buildings and capital. The *social* aspect was also accorded much attention. A much broader spectrum of interest would be represented within a study centre and the college would be able to function as a cultural centre of considerable importance to the population throughout the entire region.

The proposal to integrate existing institutions and new study programmes in each region met with immediate resistance from some of the colleges concerned and their affiliated professional organisations. The resistance was particularly strong in the schools of teacher training and the colleges of social work (Sørheim 1979). They wanted no integration in a common organisation that could limit their autonomous position. In addition, they claimed that administrative and organisational integration of the various institutions in a region would lead to practical difficulties. Different professional and administrative traditions and different teaching methods would impede an integration process. Due to this resistance, the question of integration was postponed, and the district colleges were established as autonomous institutions for new types of short-cycle higher education course without any formal ties to the professional schools in the region. However, the issue of integrated regional institutions was to be discussed on several occasions in the years to come.

The integration of post-secondary education at the regional level was initially a Labour Party idea, and the resistance to integration was supported by the other political parties in Parliament. The Ministry of Education, however, continued to work with the question of integration after the establishment of the first colleges. It was decided to establish regular consulting meetings of the rectors of the various colleges in each region, but both the Ministry and Parliament emphasised that these meetings were not to assume a managerial role in relation to the various institutions. These initiatives still met with opposition. The Norwegian Teachers Association stressed that the district colleges ought to remain independent institutions and that no superstructure over existing schools was needed. The Norwegian Social Workers Association emphasised that an integration of social work education into a regional college system would not satisfy the requirements for this programme. In addition, the development of a professional identity was regarded as essential, and this identity was best acquired in autonomous social work colleges. The rectors of the technical colleges expressed approval for cooperation between the various professional and vocational schools in each region, but stated that this cooperation ought to be carried out between autonomous institutions (Kyvik 1981).

In addition to resistance on a professional basis, it was argued that organisational integration of the various institutions would lead to practical difficulties (Sandvand 1976).

The colleges operated under different conditions, different administrative traditions, and different teaching methods. Moreover, they were located in different parts of the regions. The speed of the introduction of the reform therefore made it easier to establish the district colleges as separate institutions. But the fact that the question of integration was postponed also complicated the further integration process. During the trial period, the district colleges appeared as autonomous institutions with distinctive professional and administrative characteristics different from those of the colleges of teacher training, engineering, and social work. In addition, the district colleges soon sought to be compared with the universities and not with the professional schools. The reference groups of most of the new study programmes were university disciplines rather than professional courses. Integration of all short-cycle post-secondary education in each region and establishment of study centres therefore seemed more problematic than ever before.

Still, the Central Advisory Board on District Colleges supported the idea of an integrated college system. In a report to the Ministry of Education in 1972, the Board stated that short-cycle higher education in each region ought to be located in a common study centre. Only under special circumstances should this pattern be deviated from. On the other hand, the Board emphasised that the future pattern of location ought not to be tied to the 12 regions proposed by the Ottosen Committee (Kyvik 1981).

In 1972, the Labour Party government was replaced by a new liberal/conservative government coalition. This government submitted a white paper to Parliament on the future structure of higher education. In this paper, where the Ottosen Committee's report was subjected to a political scrutiny for the first time, a broad range of post-secondary professional schools were referred to as higher education in addition to the district colleges (Kyvik 2002a). However, many years were to pass before these schools formally achieved the status of a higher education institution. This was essentially the result of the proposal for regional study centres being rejected.

Contrary to the Labour Party government, the new coalition did not agree to the proposal of the Ottosen Committee for an integrated college system, but suggested that the various institutions should keep their autonomous position and be located in different parts of each region. This proposal must not only be regarded as recognition of the individual institutions and their distinctive character; the emphasis on a decentralised location pattern was as much an expression of the general regional policy carried out by this government as of its educational policy. While it was the policy of the Labour Party government to build up centres of a certain population size in each region, the coalition was more inclined to support a dispersed location pattern. Two reasons were given for this: one based on regional policy, the other on educational policy (Kyvik 2002a). The *regional policy* arguments can be summarised in the following quotation from the report to Parliament (p. 84):

> *From an economic and an environmental viewpoint such regional centres would represent an inefficient utilisation of society's resources and would otherwise integrate poorly into regional development policy. Rather than regional centralism, one should therefore focus on a broader distribution of higher education establishments at various locations throughout the regions. For example, one might have a teacher training institution at one location,*

> *a technical college at another, and a college of health and social studies at a third location within the region. A concentrated development in regional study centres would result in large institutions and professional environments. This could result in the educational institution becoming self-sufficient and consequently isolated from the local community such as seen to some extent with the universities. There is reason to believe that smaller institutions would be able to develop closer relations to the local community.*

The *educational policy* arguments were as follows (p. 84):

> *The vocational value of various courses must not be set at variance. This would result in a distortion of the vocational courses currently existing at this level. Splitting up vocationally oriented courses into shorter courses directed towards the scientific disciplines would result in an undesired academic drift in educational courses. In vocational training it is essential to aspire towards the integration of theory and practice. The aim is a stronger application of a professional/scientific approach to the vocation, also in the curriculum. For example, both teachers and social workers will have their identity associated with a particular vocational training.*

In line with its policy of decentralisation, the liberal/conservative coalition also changed the number of regions from 12 to 17. It stated that each of the 19 counties should constitute a region for post-secondary education, with two exceptions: the counties of Vest-Agder and Aust-Agder should form a common region, and likewise the Oslo and Akershus counties. The government was thus more interested in a broader geographical dispersion than that outlined by the Ottosen Committee. This was to occur by designating the counties as educational regions throughout which the various educational establishments would be dispersed. But the proposal for a joint regional board did not receive any support in the white paper. Instead, a council was proposed which was to be based on voluntary cooperation between the institutions.

The general election in 1973 brought the Labour Party government back into power. The report to Parliament prepared by the previous coalition was withdrawn and replaced by a revised version, which was discussed in Parliament in 1975 (Kyvik 2002a). The government retained the division into 17 regions. This was seen as natural, as the division in counties was used for most administrative purposes. Besides, this policy was in line with the persistent reform work within local administration in Norway. The counties were strengthened both politically and administratively in this period. However, contrary to the previous liberal/conservative coalition, the government stated that the various institutions should as far as possible be concentrated to one site in each region. The idea of the Ottosen Committee for an integrated regional college system was accordingly maintained. The proposal implied a decentralisation of power from the Ministry of Education to regional boards for college education.

The white paper also supported the proposal by the Ottosen Committee to regard all education beyond upper secondary school as higher education – including schools for health personnel and maritime schools – which had not been included in the former government's reform proposal. This was due to the desire to merge the many small educational establishments at this level into regional college centres. However, several years were to elapse before all these institutions achieved the

status of higher educational colleges. Generally speaking, it could be said that this proceeded with the adoption of the upper secondary school examination as the universal entry requirement to higher education.

In the white paper presented by the Labour Party government, the decentralisation of higher education was also presented as an argument based on economic and cultural considerations as well as the general desire to increase access to higher education. Positive economic consequences would result from its expansion in the rural areas. State funds, which hitherto had been largely directed to the three largest cities, would also be disbursed to the advantage of other parts of the country. Even more important were the indirect consequences for employment and the cultural life in these districts. Further, it was pointed out that the establishment of higher education institutions in other parts of the country would reduce geographic obstacles to higher education. A far greater proportion of students would be able to reside at home simultaneously with new options being created for part-time studies for those who were unable to study elsewhere due to family and employment obligations.

Both the liberal/conservative coalition and the Labour Party government thus opted for a decentralisation of higher education. The disagreement was focused on whether development should take place in regional centres or in various local communities. There was also political disagreement over the need for integration of different educational programmes.

The Continuing Decentralisation

Even though some of the new district colleges were located in cities and urban areas where other post-secondary educational establishments were located, the development of the regional college system did not follow the guidelines given by the Labour Party government in all aspects. In two counties, Sogn og Fjordane and Finnmark, where the local teacher training college and district college were established in the same local community, the Labour Party government forced the two colleges to merge in 1975. However, after some years of endless local dispute, the forced marriages ended with divorce and the teacher training colleges and the district colleges were restored as autonomous institutions (Berg 2006; Yttri 2008).

There was also strong local pressure to have a share of the resources going to higher education. There were claims both for more regional colleges and for enlarging those that already existed. Counties and several municipalities without a district college or another regional college expressed their desire to have one. Such regional demands often proved to carry considerable weight, because all counties claim equal rights to public benefits. Partly in conflict with the government's recommendations, a majority in Parliament supported the establishment of a number of new educational institutions at new locations. The emphasis on institutional decentralisation was at its greatest from 1976 to 1979, when the Minister of Education was

the former director of Rogaland District College. Under his responsibility, existing colleges for teacher training, engineering, and social work were upgraded to higher education institutions, and conceived as part of the national research system in line with a less restrictive concept of research. Consequently, the number of higher education institutions increased from fewer than ten in 1965 to some 70 in 1977, of which about 25 were new establishments (Kyvik & Skoie 1982).

While the whole of the 1970s was characterised by a decentralisation process within higher education, the 1980s were to become a time for reflection. In 1981, the Minister of Education expressed the opinion that Norway was approaching the limits of what was an appropriate number of institutions. He questioned whether the policy of decentralisation of higher education had gone too far. He blamed Parliament for being responsible for the development of a system of many small and dispersed institutions due to the enormous ambitions of members of Parliament on behalf of their region (Kyvik 2002a). The discussion should instead focus upon what was the 'critical mass' for educational institutions in a small country which was dependent upon the research and education communities being able to sustain an international quality. Expressions exclaiming that Norway possessed 'the world record in the number of colleges' in relation to its population, and that in the rural areas 'a college was to be found on every cape' added colour to the debate as well as pointing a finger at the problem (Skoie 1988:244).

In 1984, the Ministry stated that the number of institutions currently offering higher education courses had become very large. While 119 institutions offered such courses in 1973 (of which 74 were state, 13 were county, and 32 were private), this had increased to 227 institutions in 1982 (of which 114 were state, 48 were county, and 65 were private). The expansion, however, was essentially due to the fact that vocational courses had now achieved the status of higher education, and only to a limited extent to the establishment of new institutions. The mean size of institutions had declined from 536 students in 1973 to 387 in 1982. As many as 96 colleges had fewer than 100 students in 1982 (Kyvik 2002a).

The Ministry further pointed to the fact that the public had generally been in favour of this decentralisation policy, but that critical expression had now been voiced against a continuation of this line. Vocational education, and particularly health education, was being provided at a very large number of small institutions. It had been possible to defend this at a stage when the various health institutions trained their own personnel. However, when these courses, both formally and in practice, became divorced from the health institution to which they were most closely associated, the result was a large number of very small colleges which would encounter increasing difficulties in meeting their future tasks. Maritime courses would also acquire less than optimal dimensions when they were to become severed from the upper secondary maritime schools of which they were formerly a part. Some of the more recently established teacher training colleges and district colleges were also relatively small and encountered difficulties in the ongoing restructuring process on account of there being too few applicants for a number of the courses on offer. Based on these considerations, the Ministry concluded that a large part of the increase in the total number of student places would continue to be located in those regions with relatively limited study

choices. However, this was not to occur through the establishment of new institutions, but rather through an expansion and strengthening of those institutions which were already established.

Nevertheless, the desire for further expansion in the rural areas persisted strongly in Parliament. This was expressed as late as in 1985 in the consideration of the Education Committee in Parliament. The Committee recommended that all regions should be 'self-sufficient' regarding education in 'technical subjects, economics and business administration and health studies' (Kyvik 2002a).

Explaining Geographical and Institutional Decentralisation

With decentralisation of higher education, we have referred to two different though closely interrelated trends: *geographical decentralisation*, which means that institutions, programmes, and students are spread to regions outside the traditional university cities, and *institutional decentralisation*, which means that training opportunities are spread to establishments outside the universities. Although geographical and institutional decentralisation are closely related processes, as shown in Table 4.1, the arguments of societal stakeholders, the state, and the institutions themselves for these developments are different.

Earlier we suggested that the reasons for geographical and institutional decentralisation should be sought in structural developments and cultural trends in society, and in the role of interest groups at the various levels in the organisational field. In Norway, the geographical decentralisation of post-secondary schools obviously was strongly influenced by the need to cover local and regional demands for a skilled workforce. In a country with large distances between the major cities and most local communities, and with poorly developed infrastructural communication lines, the establishment of professional and vocational schools throughout the country can be regarded as part of a state-driven modernisation process. In a structural-functional perspective, the reasons for the particular localisation pattern of the various institutions can be found in characteristics of programmes and sites. Technical schools were located in local communities with an industrial infrastructure, teacher training colleges were established in regions in which trained teachers were in short supply, and nursing schools were established within the major hospitals in each region.

Table 4.1 Arguments for geographical and institutional decentralisation of higher education

Geographical decentralisation	Institutional decentralisation
The need for educational opportunities outside the traditional university cities	The need for new types of higher education, not covered by the universities
Regional needs for a skilled workforce	The need to relieve the universities of some of their teaching burden
The need for economic, social, and cultural development in non-urban regions	The need to reduce expenditures on higher education

This decentralisation policy was facilitated by cultural currents in Norwegian society, emphasising equality among regions with the basis in an ideology rested on distributional justice. In addition, young people in non-urban regions should be provided educational opportunities in those parts of the country where they were born and raised. This was part of a general democratisation wave in society. The development of urban centres had long been a priority; now it was time for the rural districts to get their fair share of public goods. This change was of great significance for the expansion of the post upper secondary education system. The location of training institutions became an instrument of regional politics, and the 1970s was a decade characterised by a trend towards decentralisation of higher education. There was a demand for education opportunities outside the traditional university cities to improve social recruitment into higher education, and a demand for economic and social development in the non-urban regions. Many new professional schools and district colleges were subsequently established in a variety of towns and non-urban communities. By establishing new institutions in regions where no university existed, with short-cycle vocational programmes, both geographical and social access to higher education would be considerably improved. From a human-capital perspective, education thus can be viewed, both by society and individuals as an investment with the likelihood of high returns (Schultz 1977). Geographic proximity to educational institutions was regarded as a precondition to enable young people to seek post-secondary education and resulted in a geographically decentralised pattern of post-secondary schools.

But neither structural nor cultural explanations are sufficient to explain the geographical decentralisation of post-secondary and higher education in Norway and the localisation of individual institutions. The decisions on actual establishments and localisations of professional and vocational schools and colleges were made by multiple actors and interest groups, of which Parliament had a central role. In these matters, the decision-making power was generally with representatives from non-urban regions. But an interest-group perspective reaches beyond power relations in Parliament. There is an enduring tradition of disputes over the location of public institutions in Norway, and the area of educational policy is no exception. The various regions had long been demanding their own training institutions, and the lack of state response to this resulted, in many instances, in the establishment of private schools, or schools run by municipal and county administrations. In addition, local hospitals established internal nurse-training courses to cover their own need for nurses, thus introducing another type of post-secondary education in the various regions.

While geographical decentralisation of post-secondary education had a long history, the policy of institutional decentralisation of higher education first came to the fore with the establishment of district colleges in the late 1960s. As shown in Table 4.1, different arguments were used to legitimise institutional decentralisation: the need for creating new types of vocationally oriented study programme, the need to relieve the universities of the need to provide elementary education, and the need to channel students into shorter and less-expensive programmes. Concurrently, the establishment of district colleges must also be regarded as a continuation and

enhancement of the policy of geographical decentralisation. Two parallel trends, the demand for geographical dispersion of public goods in terms of higher education and the need for developing new types of study programme, thus should form the basis for major innovation in Norwegian higher education (Kyvik 1983). The district colleges were founded on a set of twin objectives which, by their content, came to place them somewhere between the professional schools and the universities (Kyvik 1981; Fulsås 2000).

A structural-functional explanation for the larger expansion of the college sector would be the demand by the labour market for a skilled workforce holding professional and vocational degrees in engineering, nursing and other health professions, economics and business administration, teacher training, and so forth. This is partly due to technological innovation which has created new occupations and new demands for a highly educated workforce, and partly due to the development of the welfare state and the need for professional workers in education, health, and social care. According to this explanation, which builds on the human-capital tradition (Schultz 1977), the labour market has needed more people with professional or vocational degrees offered by the college sector than people with university degrees. In addition, changes within the education system itself through the building up of the upper secondary school system qualified a large share of each cohort for entrance into the higher education system, and there was a fear of crowded and expensive universities if young people did not have alternative educational opportunities (OECD 1973; 1974). In Norway, state authorities assumed that labour market needs for people with a college degree would be stronger than for university candidates. This policy, however, was not only a product of internal national discussions, but was also strongly influenced by reports by the OECD secretariat in the 1960s and 1970s and by the view common among member states of the need for establishing real alternatives to universities. Finally, the preference of a majority of young people for college education as a way to achieve a degree for access to the labour market should not be underestimated as a partial explanation for the institutional decentralisation of higher education.

The processes of geographical and institutional decentralisation thus came to reinforce each other. A geographically dispersed pattern of colleges was a precondition for institutional decentralisation of higher education to take place, and the latter process enhanced the geographically decentralised institutional pattern.

Chapter 3
Differentiation and Diversification

Introduction

The development of post-secondary education outside universities has first of all been characterised by the continuous establishment of new study programmes and courses. The classic programmes for teacher training, technical education, and nursing have been succeeded by numerous other vocationally oriented training programmes as well as basic academic courses. In addition, professional programmes have often developed a number of different specialities. Thus, an ever-increasing functional differentiation has taken place, in recent times partly as a result of modularisation. This strategy has allowed for the creation of many new small courses designed to cater for particular demands in society for specialist competence (Neave 2000), and this process still continues.

The development of post-secondary education outside universities is also a story of the establishment of separate schools for the different programmes. Teachers were educated in teacher training schools, nurses in nursing schools, social workers in social work schools, pre-school teachers in their own institutions, artists and designers in academies, musicians in conservatories, and so forth. This differentiation of study programmes in autonomous institutions was followed by a parallel diversification of organisational forms, school owners, funding, admission requirements, curricula, and qualifications of staff, in turn leading to a heterogeneous education sector.

The research questions asked in this chapter subsequently are as follows: Why did these processes of differentiation and diversification take place? Why were the different programmes organised within separate and autonomous schools and not within the borders of comprehensive multi-faculty institutions? Why did not state authorities standardise the various properties of the programmes from the outset?

The answers to these questions are not easily detectable, especially not considering that some of the programmes and schools were established in the nineteenth century, and only scattered information is readily available. Still, an attempt to unveil the causes of these differentiation and diversification processes will be made by reviewing the establishment and development of professional schools for teacher training, engineering and maritime education, health and social studies, and other specialist

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

professional schools. Most of these short-cycle programmes and institutions come from a long and unique historical tradition, and the chapter only gives a sketchy outline of the changes that have taken place. In addition, the chapter gives an account of the establishment and development of district colleges, and how these institutions enhanced differentiation of study programmes and diversification of organisational forms, curricula, and staff qualifications in the college sector.

Differentiation and Diversification: A Theoretical Approach

In a historical perspective, the establishment of professional programmes for teacher training, technical education, and nursing can be regarded as a public or private response to technological, economic, and social changes in society, and the subsequent need for trained personnel in new occupational specialities. In the first half of the twentieth century, these early vocational programmes were succeeded by attempts to create other specialised courses for various health- and social-related occupations, but it was not until the 1950s and 1960s that this development accelerated. The emergence of the notion of welfare societies in Western Europe created new occupations to cater for various needs and demands particularly related to the health and social sectors. The development of a differentiated post-secondary and vocationally oriented education system to cover the needs of an equally diversified labour market for qualified manpower was regarded as important and natural.

Structural-functional theory thus suggests that the different needs of society and its subsystems will manifest themselves in particular structural arrangements. With regard to differentiation of study programmes, according to this theoretical tradition, development and social change proceed through processes of division of labour, specialisation, and structural differentiation (Eisenstadt 1964). Thus, it is quite natural that when new needs for higher education courses are identified, they will be catered for by adding new components to the prevailing structure. The need for primary school teachers in the nineteenth century materialised in teacher training schools, the need for nurses in nursing courses, the need for technicians in technical schools, and so forth. The increasingly differentiated educational field is accordingly a function-induced and efficient structural pattern of programmes and courses of particular importance for the development of society.

With regard to the diversification in this field of organisational forms, procedures, entrance requirements, and so forth, a functional explanation will emphasise that there is no universal and optimal way of doing things across different programmes with their specific purposes and needs. What are the most efficient arrangements and procedures for the training of students will subsequently vary between programmes.

However, a structural-functional theory of differentiation and diversification has obvious weaknesses. Because it is above all the increase in efficiency attributed to specialisation which has served as an indirect causal explanation of structural differentiation of social roles and organisations (Rueschemeyer 1977), we would expect

that the more heterogeneous the organisational field becomes, the more efficient it will become. But as Rueschemeyer (1977) has argued, the connection between structural differentiation and efficiency is not a simple matter. What is efficient in terms of one preference structure may be wasteful by other criteria, and since preference structures vary, what efficiency means is always and inevitably determined by different interests and values in society. Thus, efficiency cannot serve the central role in a functional explanation of structural differentiation and diversification.

Another theoretical tradition of relevance for the analysis of differentiation and diversification processes is concerned with 'the drift of ideas' and their impact on social structure. In our context, this approach focuses on the impact of existing study programmes and courses in other countries for the establishment of similar programmes in a specific country. Thus, the reason why a particular programme is established can be due to the fact that such a programme already exists in another country and is regarded as a model which can be copied. The idea for a new programme may not originate in a recognised societal need in itself, but as a cultural import of an existing solution to a non-attendant problem. Likewise, various organisational forms, procedures, curricula, and entrance requirements in the different programmes can be based more on imitation of similar forms and regulations in other countries than on specific needs in the country in question. For some reason or another, some ideas on how this part of the educational system should be organised and run are adopted as meaningful, although the beliefs and values underpinning these ideas are not necessarily shared by all members of the organisational field.

While a functionalist approach will tend to look at system needs based on structural changes and needs in society, and a cultural approach will emphasise imitation of existing models, a third perspective on differentiation and diversification is the role of various actors and interest groups in the establishment and development of courses. In an early work, Eisenstadt (1964) pointed to the role of entrepreneurial groups and innovating elites in such processes. According to this theoretical tradition, the needs, interests, and values of different actors should be regarded as the major explanatory variable of differentiation and diversification, and not the rather vague functional and impersonal needs of society, or the drift of ideas of what a modern educational system should look like (Rueschemeyer 1977). Thus, Rhoades (1990) has argued that the key to understanding functional differentiation and diversification in higher education systems lies in examining the nature, values, and power of, and the relationships and struggles between, the various interest groups within the organisational field. He suggests that attention should be directed to both the state and a wide range of groups acting through the state to affect differentiation and diversification, as well as to political competition between various interest groups.[1]

In line with this way of thinking, we should look for the reasons for these differentiation and diversification processes by studying the roles of key actors at the various levels in the organisational field and how they were impacted by structural and cultural change in society as well as within the organisational field itself.

[1] For a general analysis of differentiation and diversity in higher education, see Huisman (1995).

The Establishment of Professional Programmes and Schools

In most countries, the establishment of professional programmes and schools is based partly on state initiatives, and partly on private initiatives. This is also the case in Norway, where the largest programmes are teacher training, engineering, and nursing. In addition, many smaller professional programmes have been established within separate institutions, in particular within the field of health and social education. Professional programmes initially established in autonomous schools also include specialities such as librarianship, journalism, music, and hotel management.

Teacher Training

Teacher training offered by institutions in the college sector encompasses general teacher programmes, pre-school teacher programmes, and vocational teacher programmes.

General teacher education is the professional programme with the longest traditions dating back to 1827, when teacher seminaries with 2-year training programmes were established (Dahl 1959). In addition to the public schools, private seminaries were also founded by individuals and organisations that were not content with the state-run school system. These latter seminaries usually operated on the basis of values that were somewhat different from those which prevailed in public institutions, with more emphasis placed on Christian elements in their courses, contributing to a diversification of teacher training.

Pre-school teacher training is an interesting example of how opposite interests of professional groups and governmental ministries enhanced differentiation processes in college education. This kind of training was first established in private institutions and later by a few municipalities and counties (Bøe 1980; Greve 1995). Until 1970, it was only taught in five schools, where training towards child welfare work was an important objective, in addition to pre-school teacher education (Kyvik 2002a). This double purpose within a common degree, however, proved not to be satisfactory. Even before the Second World War, there were attempts to split the training in two: one for orphanage- and one for kindergarten childcare, but it took a long time before this was eventually achieved (Bøe 1980). In this instance the Ministry of Social Affairs and the Ministry of Education were in disagreement as to whether this training should consist mainly of child welfare or of pre-school education. This fight between different professional interests finally resulted in the separation of pre-school teacher training from child welfare education.

Vocational teacher training was traditionally synonymous with handicraft, physical education, domestic science, commerce, and office work, and was taught in a series of institutions dedicated to each individual subject. Four schools specialised in handicraft teacher training, and two others in domestic science. In addition to these there were specific institutions for the practical and theoretical education of

vocational teachers (Kyvik 2002a). Vocational teacher training was also dispensed in *music academies*, even if these were not traditionally regarded as institutions of teacher education. These academies had partly been established by private actors, and partly by some of the counties.

Engineering and Maritime Education

These programmes share a certain degree of similarity as regards content, but until the college reform in 1994, they were dispensed – with a few exceptions – within separate institutional structures.

Engineering education has its roots in the nineteenth century when four technical schools were established. The first was opened in 1855 by the navy. Three more schools followed in the 1870s, offering a 3-year course. Still a need was felt for technical training at a higher level, but Parliament repeatedly refused the creation of a university institution specialising in engineering. As a result, two schools added a fourth year of term in order to provide for these demands. In 1910, the Norwegian Institute of Technology was established, and the existing technical schools were renamed technical intermediate schools. They offered a 2-year course, to which was added compulsory work experience equivalent to 2.5 years. The technical intermediate schools were reclassified as technical schools in 1936, leaving Norway still with four schools, all of them established in the previous century. In the post-war period, however, a large number of new technical schools were established, mainly by the counties but also on private initiative.

Maritime education was initially offered by a large number of maritime schools. As a coastal nation, equipped with a considerable national and international merchant fleet, not to mention its fishing fleet, from the 1960s onwards, Norway invested heavily in the shipping industry. The introduction of new ship technology created a demand for improved training of officers and crew. Quite a number of seamen's schools were established at secondary level, and modules in maritime education were introduced by some of the technical schools. There were individual schools dedicated to specific maritime trades, including cook and steward, radio technician, fishery trades, navigation, machinist, as well as a school for marine safety training.

Health and Social Education

This field encompasses a wide variety of programmes and courses which by and large belong to a different tradition and background than other short-cycle professional studies. Some of the courses have traditions dating back to the nineteenth century, while other courses were first introduced in the 1950s or later.

Nurse training is one of the oldest and largest of the programmes in the non-university sector and evolved from training attached to the hospitals to autonomous

courses forming part of the regional college system (Askjem 1996). The first study programme in nursing was established in 1868. The establishment of formal training was originally initiated by voluntary religious and humanitarian organisations, and most of the nursing schools were established by these organisations (Karseth 2002). Different school owners resulted in equally different curricula and a highly diversified nurse training system.

Social worker training began as a privately run school established in 1920 by the Norwegian Women's National Council. Training social workers was only deemed a public duty after the Second World War. It was in 1949 that the National School of Local Government Administration and Social Work was created, offering social worker training in one section, and local government administration in the other. The layout of this particular school was described as a forced marriage between two different programmes, and, in the following years, several proposals strove to have it split into independent institutions, each dedicated to one educational objective (Tutvedt 1990). The 1950s and 1960s witnessed a comprehensive expansion of the social services. The Social Welfare Act, which came into force in 1965, stated that every local authority should have its own social welfare office, and this led to a growing demand for social workers able to deal with individuals and families. Training capacities simply had to be increased. In 1962, the first independent school of social work was opened, followed in 1966 by another institution. In 1968, yet another school of social work was established, albeit this time as a private institution, based on Christian values.

Other health and social education courses established as autonomous schools include radiology, occupational therapy, medical laboratory technology, pharmacy preparation, audiology, orthopaedic engineering, sign language interpretation, dental hygiene, social education, and child welfare education. Health and social education are firmly anchored in the public sector, where the state has played a central role in regulating the market (Erichsen 2002). Thus the establishment of a course in occupational therapy in 1952 has to be regarded in connection with the introduction of disability insurance schemes. Similarly, the first child welfare course, established in 1951, must be considered a result of changes in the public care of children and young people. The establishment of the social educator programme in the 1950s owes a lot to the demand for qualified personnel to care for people with mental disabilities. The National School of Local Government Administration and Social Work was established as a result of the expansion of a more socially conscious policy in the public sector.

In conclusion, this cursory overview of the establishment of short-cycle professional education in Norway illustrates the process of differentiation of an increasing number of new programmes in autonomous schools. It goes without saying that within the frames of this study, it has not been possible to examine the background and reasons for each of the large number of establishments. It is obvious, however, that technological advances, economic development, and social change have constituted the bases for the creation of study programmes in an increasing number of new fields and specialities, and that foreign models have been important in this process. The functional organisation principle with separate schools for individual

programmes was not contested by and large, mainly due to the diversity of school establishers: different governmental ministries, counties and municipalities, hospitals, and private organisations. In those few cases where different study programmes were established within a common organisational structure, professional interests worked successfully towards division into separate schools.

The District College Reform and Its Reception

In the late 1960s, a new type of higher education institution was established – district colleges –with the specific purpose of enhancing study programme differentiation and the diversification of instructional methods and curricula. These colleges came to play an important role in the further transformation of the college sector, and therefore it is appropriate to describe their origin and establishment in more detail.[2]

In 1965, the Committee on Post-Secondary Education (the Ottosen Committee) was established by the government to assess future needs for education at this level. The government foresaw the necessity of introducing major structural reforms in order to cope with the changing and increasing demands for higher education. Among other things, the Committee was requested to assess the need for new types of education that could serve as alternatives to more lengthy studies at the universities for upper secondary school graduates. The development of the post-war industrial and welfare society had created new kinds of work and jobs that required new kinds of skills. In a relatively short period of time, the social structure had changed. There was a growing need for a qualified workforce and vocationally oriented higher education. On the one hand, the existing professional schools provided a limited number of programmes, specialising mainly in a single field: teacher training, nursing, social work, engineering, and so forth. On the other hand, the traditional theoretical university programmes did not satisfy the need in industry, commerce, and the public service for practical and vocational knowledge (Ottosen 1979).

The Ottosen Committee presented five reports from 1966 to 1970. The first report outlined some of the main problems of the future education policy and provided some estimates of the total need for places in post-secondary education. The need for places during the last part of the 1980s was estimated to be 90,000. This implied a trebling of the number of students compared with 1965. With reference to the distribution of places, the Committee estimated that 65,000 were to be found within the university sector and 23,000 within other post-secondary education institutions. According to the Committee, this increased capacity could only be attained by reorganising the structure of the post-secondary education system.

[2] In the years 1978–1980, I undertook a project on the decentralisation of higher education and research in Norway (Kyvik 1980, 1983). As a part of this project I conducted a study of the establishment and implementation of the district colleges as a collaborator in a European comparative project organised by Cerych and Sabatier (1986). The study (Kyvik 1981) covers the years 1966–1981; the period during which the district colleges were established.

In its second report, the Ottosen Committee proposed that a new type of higher education institution should be established through mergers of professional schools in each region, and by developing new types of short-cycle and work-oriented education as an alternative to the universities and the existing professional schools. The colleges should constitute a new alternative in higher education, contributing to a more differentiated and diversified post-secondary education system. The Committee stated that the well-established course boundaries might constrain the development towards new combinations of studies, thereby preventing new problems being tackled adequately. It was seen as important that in the future, special attention should be paid to the importance of establishing combinations of studies which traversed the traditional boundaries. Flexible transfer between same-level institutions would increase the possibility for a student to achieve a specific qualification based on a combination of courses undertaken at different institutions. Based on an assessment of the future requirements for new combinations of courses and students' demands for study choice, the Committee proposed the introduction of a course credit system with the possibility for flexible transfer between individual institutions and programmes. As an example, the Committee suggested a breakdown of courses into 2 + 2 years, 2 + 1 years, or even 1 + 1 + 1 + 1 years. The extent to which such modularisation was possible and desirable was to be determined by the institutions based on the needs of the various programmes.

Within the teacher training schools, the ensuing debate concentrated on deciding the degree to which teacher training should provide specialised vocational education for a particular profession with its specific curriculum requirements. While the supporters of integrated regional institutions favoured the idea that training could also be provided by teachers who were not part of the regular teacher training staff, the teacher training school labour union feared that it might weaken teacher training as a form of vocational training. Other professional schools also argued along the same lines, and that professional education should be offered by autonomous schools dedicated to the education of the future members of each of the semi-professions.

The Ottosen Committee had stressed the importance of treating their different reports and proposals for a reorganisation of post-secondary education in Norway as a whole. However, Parliament decided that the development of vocationally oriented programmes should be given priority, and this process led to the establishment of district colleges as autonomous institutions for a trial period until 1974. The original proposal to develop an integrated educational system at the regional level was to be reconsidered at the end of the trial period. After the withdrawal of this proposal, the reform did not directly concern the existing professional schools. Their autonomous position remained unchanged. The postponement of the difficult integration question and the enthusiasm at all political levels thus made the planning and the establishment of district colleges a speedy process. The three first colleges had already been established in 1969.

Following the general guidelines of the Ministry of Education, the Ottosen Committee proposed the creation of a variety of new study programmes and courses. Separate reports were made on programmes in economics and business administration,

business administration and technology, journalism, and electronic data processing. In addition to these, several other courses were mentioned: work in the health service and social institutions, public administration, transportation, fisheries, shipping, tourism, food technology, special education, local planning, and agricultural technology. The normal length of the programmes was proposed to be 2 years.

The Ministry of Education and Parliament supported the proposals of the Ottosen Committee. The Ministry stressed that it would be particularly important to establish short-cycle programmes which qualified directly for work in a chosen career. In Parliament, the Minister of Education characterised the district college as 'primarily a higher vocational school' (Kyvik 1981).

In university circles and especially in student groups, the reaction was however rather negative. Radical student groups regarded the proposal for vocationally oriented and short-cycle programmes as a rationalisation of higher education in compliance with the needs of capitalist interests. They feared that students in the district colleges would have little opportunity to develop self-reflection and a critical understanding of society (Vollset & Aamodt 1972).

The Ottosen Committee did not thoroughly discuss the question of recruitment of staff, but suggested that criteria for qualification should be comparable to those of the universities. However, this was not to be a general requirement. Only for those teaching university courses should this be an indispensable condition. The Ministry of Education, on the other hand, claimed that the same standard should generally apply to teaching in district colleges as to teaching in universities. Appointment of well-qualified teachers was regarded as necessary, and external appointment committees ought to evaluate applicants. The Ministry maintained that qualifications other than ability and experience from research should also be taken into account, but such criteria were not discussed. When establishing the first district colleges, Parliament decided that qualifications for appointment to teaching positions were to be the same at the district colleges as for similar positions at the universities. However, research competence should not constitute the only criterion for appointment; teaching experience should also count (Kyvik 1981). Subsequently, the career structure in the district colleges came to be different from that in the professional schools.

Within the Ministry of Education, a District College Section was established to attend to matters of administration. In addition, a Central Advisory Board on District Colleges was established in 1969 with members from various institutions and society at large. The advisory board was to be concerned with developments within the colleges, partly by appointing committees and working groups to prepare curricula in new subjects. It is likely that these solutions contributed to the success of the reform. The alternative to a new section in the Ministry would have been to place development work within the frames of the existing administrative structure, running the risk that traditional bureaucratic routine would hamper development work. The solution chosen was therefore more fruitful for innovation. Moreover, the appointed head of the district college section, the former secretary of the Ottosen Committee, was enthusiastic about the reform and obviously a driving force, and a so-called fixer (Bardach 1977) in the implementation process.

At the local level, each college would have a board of seven members. Two of the members were appointed directly by the Ministry, three members were appointed by the county assembly, one member was elected by and from the teaching staff, and one member by and from the students. The Ministry of Education would have the formal responsibility for the approval of teaching programmes and the final authority in matters concerning examinations, awarding of degrees, and the qualifications of the staff. The internal organisation of the district colleges was left mainly to the various college boards to decide upon.

The Creation of Study Programmes in the District Colleges

In the first years, the development of study programmes was conducted along two lines. First, the Central Advisory Board on District Colleges appointed committees and working groups to prepare new curricula for the various disciplines. Second, the individual colleges also pursued innovative projects and the staff spent a considerable amount of time planning new courses. The Central Advisory Board considered much of its work as transitory; as staff numbers grew in the colleges, the development of new programmes and courses were gradually taken over by the individual institutions. Apart from the first courses established, the idea and the design of new programmes originated in most cases within the colleges themselves. The district colleges put forward proposals for new subjects to the Ministry of Education, for which, in turn, the latter evaluated the need.

Generally speaking, the different courses were introduced in the following order: a 2-year programme in economics and business administration, some first-year university courses, and new types of short-cycle, vocationally oriented courses. The reason for this particular order of development was the speed of the establishment of the colleges. The urgency created the necessity to do what could be done in the shortest possible time. There was thus a definite need for employing existing or easily available solutions when it came to giving content to the new educational system.

Normally, situations like this give the various actors, whether they be individuals or interest groups, a good occasion to influence on the implementation process. When goals are not precisely formulated as well as being in conflict with each other without clear priorities, various actors may be able to promote their particular interests and demands in the course of the implementation process. In addition, this educational reform was implemented within organisations too young to have developed traditions. The district colleges were to be autonomous institutions with new courses and curricula. The teaching staff would be new, and rules and regulations had to be established and implemented in the colleges. The implementation of the district college reform thus was an excellent opportunity for individuals and groups to realise their particular interests and plans. The relatively vague formulation of many of the objectives provided the possibility for the colleges to develop their identity according to their own definitions of the purposes of the new institutions and their educational content.

When establishing the first district colleges, only one study programme – a 2-year programme in economics and business administration – was available. The Norwegian School of Economics and Business Administration had prepared a framework for a 2-year course of study, and the Ministry of Education then worked out a detailed curriculum. Most of the colleges subsequently introduced this study programme.

The colleges soon took the initiative to introduce university courses as well. A stated objective was that the colleges should give some elementary university education, but the speed of the introduction met opposition in the Central Advisory Board. The Board maintained that priority was to be given to development of courses different from those given by the existing institutions. The sudden introduction of a series of university courses could possibly give the colleges a too strong academic profile. The main emphasis, however, was placed on the development of new programmes. This was partly due to a relatively restrictive policy in the Ministry of Education, and partly due to a priority in the colleges themselves for alternative education.

The district colleges were also to meet local needs for higher vocationally oriented education. The courses were to be relevant for the particular social and economic conditions in the various regions. It seems clear that local needs influenced the content of several of the initial courses. Some typical examples are the following: Finnmark District College established courses in Sami and Finnish. Finnmark County has a large Sami minority and shares a border with Finland. Many people in the northern parts of Norway and Finland are also ethnically related. Nordland District College developed courses in fishing, a most important industry in that region. Rogaland District College established programmes in petroleum engineering and engineering management. The oil industry and oil administration were concentrated mainly in this county. Other colleges were also innovative with respect to establishing new types of programmes. The most typical examples are Tourism at Oppland District College, Transportation at Møre og Romsdal District College, and Mass Media and Communication at Møre og Romsdal District College. In addition to covering regional needs, these programmes were meeting national demands for qualified manpower.

Around 1980, the district colleges offered a wide range of study programmes, which could be divided into three categories: (a) studies lasting 2–3 years and leading to a district college degree, (b) special courses lasting 0.5–1 year, and (c) university courses of 1–1.5 years in length. Throughout the 1970s, more than 70% of the students were enrolled in category (a) programmes, and about 20% of the students in category (c) courses. From 1973 to 1979, the share of students in category (a) programmes declined from 74% to 70%, and in category (c) programmes from 25% to 21%, while category (b) programmes increased their share from 2% to 9%. These latter courses were developed by the district colleges themselves and represented an innovation in the courses offered in Norwegian higher education. However, these percentages varied much between individual colleges (Kyvik 1981).

The ideas behind the establishment of most of the new courses originated within the colleges themselves. The colleges put forward proposals for new programmes

and courses to the Ministry of Education which then assessed the need in a national context. The delegation of power and responsibility to the district colleges was a deliberate policy from the Ministry. Creating new courses and study programmes requires time and is dependent on contributions by teaching staff. This decentralised process obviously led to a higher degree of innovation and experimentation than otherwise would have been possible.

The Ottosen Committee suggested that the district colleges should have important commitments in continuing and adult education, particularly with respect to local needs for a qualified workforce, but also with regard to adult education in general. Both the Ministry of Education and Parliament emphasised the importance of lifelong education and the role of the district colleges in this respect. The Ministry stressed that special courses should be developed for part-time students and indicated that up to 25% of the teaching capacity could be used for this purpose.

According to a recalculation of part-time students into full-time students undertaken by the Ministry of Education, the average proportion of part-time students in relation to full-time students was relatively constant in the years 1973–1979, varying between 16% and 18%. Most of the colleges had thus fulfilled the original goals for adult and continuing education to a reasonable extent. However, this percentage varied considerably between colleges. The reasons for these differences are not easily understandable, but both geographical factors and attitudes towards adult and continuing education probably contribute to an explanation (Kyvik 1981).

The Ministry of Education also emphasised that the district colleges should engage in educational reforms with respect to the curriculum, instructional technology, etc. New ideas would be easier to adapt in these colleges which lacked the traditions of the old institutions. A separate report on educational reforms in the district colleges was made on the Ministry's initiative. Here it was suggested that the district colleges should attempt to break with tradition in curriculum, planning, methodology, and student evaluation (Kyvik 1981). This report was not taken into consideration by the Ministry. However, Parliament regarded experiments in this field as valuable in the trial period.

There is little doubt that the district colleges were a successful innovation in Norwegian higher education. Many new vocationally oriented programmes and courses were created, the majority of them being interdisciplinary. The colleges represented a new tradition within the educational system, and many young people obviously regarded the institutions as an attractive alternative to university education and to short-cycle professional education, bringing about differentiation and diversification in higher education.

The District College Reform in an International Context

In its first report, the Ottosen Committee referred to structural changes in the organisation of short-cycle post-secondary education in some other countries. The Committee noted the long-existing American *junior* or *community colleges*, which

not only had as their purpose to qualify young people directly for the labour market, but also to prepare for continuation of studies at university level. Another country pointed at was Canada with its diverse system of colleges with different organisation and purposes in the various provinces. In Europe, reforms in Yugoslavia, France, and Sweden were mentioned as particularly relevant. In the early 1960s, Yugoslavia had established 2-year post-secondary colleges (*Viša Škola*) which offered terminal vocational courses as well as possibilities for transfer to the universities. This reform was in fact the first European experience of relatively autonomous institutions outside the universities providing 2-year courses considered equivalent to the first 2 years of university study (OECD 1973). France had at that time decided to establish *instituts universitaires de technologie* (IUT), which were to be formally departments of universities, but with a larger degree of autonomy than ordinary university departments in dealing with recruitment of staff and in budget matters. These 2-year institutions were established in order to meet the expected need for engineering qualifications higher than technical vocational schools but lower than that of civil engineering graduates, as well as the need for vocational programmes in economics and business administration and other subjects (Cerych & Sabatier 1986). In Sweden, the government had recently decided to establish four university branches to relieve the universities of their teaching burden and to decentralise educational opportunities to regions outside the location of the traditional universities. These branches should essentially offer introductory courses and the staff should not conduct research. Finland was another country that had some influence on the thinking of the Committee through the establishment of several small regional universities and colleges with university status (Sørheim 1979).

However, neither the Swedish nor the Finnish reforms with their expansion of traditional university programmes were regarded as relevant models for the development of the Norwegian higher education system. The Committee feared that these countries in the succeeding years would suffer from an overproduction of university graduates and a shortage of vocationally trained people. The decision to establish an alternative to the established universities was explained as follows (Sørheim 1973: 70):

> *The alternatives were established primarily with a vocational goal rather than as a first cycle of university studies, as has been the case with the affiliated universities in Sweden. One of the main arguments against the Swedish solution is that affiliated universities can only grow in one direction, namely towards the universities; that diversification would be less and that such a policy would strongly increase recruitment to the longer university studies.*

Instead, the Committee suggested that Norway should build up a set of higher education institutions which should offer an alternative to traditional university education through the creation of new types of vocationally oriented short-cycle programmes qualifying directly for entry into the labour market. Yet, the idea that elementary university education could be offered at these institutions was embraced, and the Committee proposed that the district colleges should offer some first-year university courses as well. The British binary system introduced in 1965, with a clear division between universities and polytechnics, was briefly

mentioned in the report but not regarded as a model for the future organisation of post-secondary education in Norway.

With the establishment of district colleges in the late 1960s, Norway can be said to have started the process of turning a university-dominated higher education system into a dual system. The full transition to a dual system took place gradually with the formal upgrading of the professional schools to higher education institutions in the mid-1970s and early 1980s. In this respect, with the exception of UK, Norway was among the first Western European countries to establish alternatives to universities at the level of higher education. In the Netherlands, vocational programmes were granted status of higher vocational education in 1968. In the same year, Germany resolved to establish *fachhochschulen*, and Ireland established *regional technical colleges* at the end of the 1960s. The district college reform was clearly inspired by developments in other countries to establish new higher education institutions outside the established universities, but was not a copy of organisational solutions in these countries. Instead, it was considered appropriate to build up higher education institutions that combined vocationally oriented programmes and university courses. As such, the new colleges would become a hybrid of institutional solutions chosen in other countries. The introduction of university courses in these institutions should later prove to be a Trojan horse within the college sector, bringing in staff with academic ambitions and values other than those held by existing staff in the professional programmes.

Explaining Differentiation and Diversification

In this chapter, it has been suggested that the continuous differentiation of programmes and courses in the college sector should be explained as a function of the role of interest groups at the various levels in the organisational field, and how these vested groups were influenced by structural and cultural changes in society and within the organisational field itself. For analytical purposes, it might however be useful to start the concluding discussion by looking at differentiation and diversification in a structural and cultural perspective before proceeding to the analysis of the role of various interest groups.

A structural-functional perspective implies that the establishment of the major professional programmes for teacher training, nursing, technical education, the many different courses in health and social education, and other specialist courses can be regarded as a response to structural changes in society, and to societal demands for trained personnel in new occupations. Thus, the present programme structure in the college sector has been shaped primarily by the economic, technological, and social evolution of the country, from a poor economy based on primary industries to a post-industrial service-providing society. An increasing need for new types of educational qualifications and the demand by young people for short-cycle and vocationally oriented studies led to an increased public, as well as private involvement to establish professional schools for the various types of vocations.

Many of these training programmes have their origin in the growth of the welfare state after the Second World War. This is particularly true of health and social studies where most of the programmes were established to improve public services in the areas of social services, child welfare, care for the mentally handicapped, etc. The powerful expansion of pre-school teacher training in the 1960s and 1970s is another example of how much social evolution has shaped the education community. The governmental wish to attract more women into economic life to cover shortages in the workforce coincided with the women's liberation movement and a strong, growing demand for kindergartens.

A functional organisation principle involving specialised schools for each individual training programme became regarded as a natural way to organise professional and vocational education. Teachers should be trained in teacher training schools, nurses in nursing schools, social workers in social work schools, preschool teachers in their own training schools, and so forth. In fact, this organisational pattern was not challenged until the mid-1960s, when the Ottosen Committee suggested that existing professional schools and new study programmes should form new entities in the various regions. However, the establishment of district colleges proved to enhance the differentiation process in the college sector.

The differentiation of study programmes and schools was followed by a parallel diversification of organisational forms, school owners, funding, entrance requirements, curricula, and qualifications of staff, mainly based on the particular functional needs of each of them. On the whole, such diversity was regarded as a natural consequence of the functional organisation principle.

A cultural perspective on differentiation and diversification, however, would put less emphasis on the functional needs of society for a variety of new training programmes and more weight on norms, values, and ideas of what constitutes a proper post-secondary educational system. Such ideas may originate in the knowledge of how other, more developed countries, organise their educational system. Without doubt, impulses from abroad were important for the establishment of the various professional schools. The neighbouring countries, Sweden and Denmark, were far more economically developed than Norway. So was Germany, where many Norwegians had been trained as engineers. All these countries had established autonomous schools for the training of the different professional groups. The content of the various programmes was also inspired by their foreign models, and it was generally more relevant to look at established courses in other countries than at other domestic professional courses when designing the curriculum. In addition, the creation of the district colleges was inspired by similar reforms in other countries and which were discussed in the OECD where Norway was a member state: the long-existing American community colleges, the establishment of autonomous 2-year higher education institutions in Yugoslavia and 2-year engineering programmes in France, affiliated to the universities. The Norwegian concept, however, was not a copy of any of these reforms, but a new type of higher education establishment, based on defined and agreed-upon needs in this country.

However, to come to grip with the differentiation and diversification processes in this organisational field, we have to examine the role of interest groups at each of

the levels within the educational system. Constrained and influenced by structural change and cultural trends, important actors at these levels worked consistently to promote specific interests, often in opposition to other actors. In such a perspective, the differentiation processes can be regarded as taking place within two phases.

In the first phase, which we may label *state-driven and stakeholder-driven differentiation and diversification*, state authorities and external stakeholders were the driving force behind these processes by taking the initiative to new programmes and courses. The various professional programmes were originally established by different governmental ministries, counties, municipalities, hospitals, and private organisations. In a historical perspective, new occupational groups have tried – often successfully – to establish their own schools or programmes not linked to other related occupations and their educational institutions. It has been an integrated part of the professionalisation process to gain control over the education of the future members of the profession as well as to enhance legitimacy and social status of the occupation (Murphy 1988). The obvious solution for the various professions was to have their own programmes in autonomous schools.

In addition to professional associations, various religious, ideological, and humanitarian associations have been active in establishing schools to promote their particular interests, or to cover special needs of society for skilled labour, either because of failure by state authorities to make the necessary decisions, or because of a desire to create private alternatives to state-run schools. Differences in ideas, values, and interests of the various school owners, professional associations, institutional leaders, and staff have in turn resulted in a highly diversified system. The curriculum in teacher education, nursing, and so forth differed, dependent on whether the programme was state-driven or privately run.

The second phase, which we may call *institutionally driven differentiation and diversification*, commenced with the establishment of district colleges. While the Ministry of Education and other sector ministries traditionally exerted detailed control with the development of new programmes and the content of the curriculum, the Ministry of Education now left it to an intermediary body – the Ottosen Committee – to suggest new study programmes, and later granted considerable autonomy to the new institutions to find their own path within the organisational field.

The differentiation processes took place mainly at the institutional level through the creation of novel programmes and courses initiated by members o f academic staff, or, using the terminology of Eisenstadt (1964) what we can name entrepreneurial groups and innovating elites. Several factors contributed to this development, of which the lack of institutionalised traditions was the most important. The introduction of alternative types of higher education took place within a new organisational framework, both at a central and a local level. An alternative solution would have been to integrate the new study programmes in the university system or at some of the existing professional schools. However, in this case the rigidity and opposition in the old institutions would have had to be overcome. The universities and the teacher training colleges in particular were organisations with well-established structures, traditions, and values. It was generally recognised that they changed slowly and would have had difficulties in adapting to changes in the

environment. Moreover, these institutions possessed strong professional organisations that, in all likelihood, would have exerted influence on the development of the new study programmes. It was therefore felt that the reforms necessary in higher education could only be brought about by structural innovation and organisational change of a fairly radical nature. The creation of district colleges was accordingly a way of by-passing established traditions and structures that otherwise might have hindered the development of new subjects and courses (Sørheim 1973). The majority of these courses were designed to meet new needs in industry and the public sector for skilled labour, but many were also copies of university courses, but with some adaptations in order to underline the regional relevance, though in some cases for symbolic reasons to legitimise the introduction of these courses (Kyvik 1981). Most staff members in the district colleges had been trained in the universities, and some of them were eager to continue their disciplinary research in the new environment.

In the literature on change in higher education, two different though closely related theoretical approaches within the field of organisation theory have been applied to analyse institutionally driven programme differentiation: *population ecology* and *resource dependency*.

The population ecology approach suggests that changes that can be seen in communities of social organisations over time are caused by the same interactions between organisms and environment that define the evolution of biological species (Hannan & Freeman 1977). In the case of higher education, study programmes evolve through a three-stage process of variation, natural selection, and retention. Variation, the first stage of the process, is manifested through programme differentiation. Natural selection, through the competition for students is the second stage of the process. Those programmes that attract students will survive, while those that do not will disappear. In the third stage of the process, those programmes that succeed are preserved over time, and similar programmes may be established by other institutions (Birnbaum 1983).

The resource-dependence approach presumes that organisations are dependent on resources from the environment to survive, and that they are able to develop strategies to maintain or acquire new resources as the environment changes (Pfeffer & Salancik 1978). Higher education institutions can either create novel courses in order to capture a new market niche, or they can copy popular courses from other institutions to compete for students within the same niche. Those organisations which choose the right strategy will prosper, while those that fail might run into severe problems. In the higher education literature, the imitation of university programmes or university courses by colleges has been regarded as an indicator of homogenisation of the higher education sector. However, within the college sector, such behaviour would in fact lead to a greater differentiation of programmes and courses.

Each of these theoretical approaches is useful in analyses of institutionally driven differentiation processes in the organisational field of college education through their emphasis on the necessity of adapting to changing external environments in order to sustain or enhance their position in a field of competitive educational institutions. Still, we should not forget that organisations consist of people with different interests and that staff members do not always, more

or less passively, adapt to others, but often act without conducting painstaking assessments of market needs. Thus, Clark (1983) stated that differentiation in the academic system is a consequence of the dynamics of knowledge-production and the self-interest of academic staff through mutual group protection. In separating tasks, specialisation pulls apart groups that have conflicting interests. The continuous specialisation process in universities, through the division of disciplines into sub-disciplines (with their own departments), and the combination of different disciplinary approaches to investigate specific research problems (with their own centres), are driven by personal interests for control, legitimacy, and status of those academic staff who move into new fields of enquiry. Similar mechanisms apply to the college sector when new courses are created, but in this case, it is not disciplinary specialisation that is the main driving force, but entrepreneurial drive among staff members and institutional leaders for building up a professional environment in a speciality different from others.

To conclude, technical, economic, and social changes in society were preconditions for the establishment of a differentiated pattern of professional schools and programmes, changes in organisational forms, and revisions of curricula, but these establishments and reforms were largely inspired by developments abroad. However, various interest groups affected the evolution in different ways, like when religious groups and humanitarian organisations established private professional schools contributing to a diversification and fragmentation of post-secondary education outside the universities.

Phase 2
Horizontal Integration

In the 1980s, the decentralisation wave in higher education had reached its peak. The expansion of the college sector had led to a highly differentiated, diverse, and geographically dispersed organisational field which called for state coordination through horizontal integration of programmes and institutions. Processes of differentiation and diversification were countered by various processes of field contraction: authority unification, institutional de-differentiation, programme coordination, and field homogenisation, while geographical decentralisation was replaced by regionalisation of programmes and institutions.

Chapter 5 analyses the various processes of de-differentiation and de-diversification of professional and vocational programmes in the college sector, while Chapter 6 explains why the long period of geographic decentralisation of non-university institutions was replaced by a regionalisation policy. The dynamics of these processes combined are discussed in Chapter 9.

Chapter 5
Field Contraction

Introduction

Bleiklie (2004) has pointed to the fact that whereas a small higher education system lends itself to informal mechanisms of management and control, the strong growth and emergence of an institutionally and socially far more heterogeneous and functionally more complex system has been followed by the introduction of more formal mechanisms of management control and the rise of stronger administrative apparatuses. In a Norwegian context, the development towards an increasingly differentiated and diversified college sector eventually called for measures to counteract further fragmentation of the organisational field and to reverse the centrifugal processes. We can distinguish between four such measures – *authority unification*, *institutional de-differentiation*, *programme coordination*, and *field homogenisation*. These processes can be subsumed under the common notion of *field contraction* in order to illuminate some of the horizontal integration processes in the college sector.

Authority Unification

According to Archer (1979: 174), a universal characteristic of the development of educational systems is the incorporation of diverse establishments, activities, and personnel under a central, national, and specifically educational framework of administration. In turn this spells certain uniform controls emanating from the centre, although some kinds of educational institution, some forms of instruction, and some types of teacher may remain outside the central administrative framework. She terms this process *unification* – a concept which also encapsulates an important part of the horizontal integration process in the college sector: the gradual incorporation in many countries of private schools as well as public institutions attached to various governmental ministries, counties, and municipalities under the jurisdiction of a ministry for educational affairs.

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

Institutional De-differentiation

The functional organisation principle, which was applied in post-secondary education outside the universities with different schools for individual programmes, eventually resulted in a fragmented organisational field. In the outset, this differentiation process was regarded as natural and in accordance with the interests of the various professions. Gradually, however, this principle was challenged, and institutional differentiation was replaced by integration of institutions within each subfield. This integration process took place partly through mergers of closely related schools, and partly through the location of new programmes within existing institutions instead of creating new and autonomous schools.

Programme Coordination

Over time, the increasing differentiation of study programmes and courses, whether driven by different state agencies, private or local stakeholders, or by the institutions themselves, entailed a need for coordination of different programmes within the various subfields as well as across them. At the central state level, the Ministry of Education took measures to coordinate the various study programmes within the fields of teacher training, engineering and maritime education, health and social education, and economics and business administration by establishing advisory councils for the various subfields as intermediary bodies between the Ministry and the institutions. In addition, the Ministry of Education created regional boards to coordinate the establishment and development of study programmes and courses in each of 17 regions. The administrative coordination capacity was substantially improved through enlargement of the educational bureaucracy.

Field Homogenisation

As a reaction to the increasing diversification within the college sector, standardistion measures were gradually introduced to create order in a fragmented system. Standardisation is a form of control and coordination of human activities of increasing significance (Brunsson & Jacobsson 2000). The purpose of standardisation is to create a strong element of order in a diversified environment, and to reduce complexity in society. It is a way of creating homogeneity within and across cultures and organisations, as well as in the conditions and behaviour of individuals – also within the field of higher education outside universities. Thus, the structure and content of study programmes have become more similar, and appointment regulations, career structures, and working conditions of academic staff have become homogeneous.

The purpose of this chapter is to explore the dynamics of each of these four processes.

Field Contraction: A Theoretical Approach

As a scholar within the structural-functional theoretical tradition, Eisenstadt (1964) has pointed to the fact that differentiation and specialisation of institutions result in interdependency and potential complementarity in their functioning within the same system. But this very complementarity over time will lead to disintegration of the system. At a certain stage in the differentiation process, there are no longer any efficiency gains. On the contrary, an increasingly differentiated and diversified system will create greater disadvantages than advantages for society, and processes will develop to keep the system together. In such a perspective, the increasing structural complexity of the organisational field will be counteracted by processes of de-differentiation and de-diversification, which in turn will lead to field contraction through authority unification, institutional de-differentiation, programme coordination, and field homogenisation.

In a cultural perspective, de-differentiation and de-diversification are not so much a result of the system's functional needs as of changes in norms, values, and assessments of which organisational forms are appropriate for the further development of the field. With the development of the notion of the welfare state, the general view of which tasks should be a public responsibility has changed – also in the field of higher education – leading to a more homogeneous college sector. When the role of religion in society is downplayed, the need for private alternatives to the public education system may disappear, enabling measures of authority unification. Processes of institutional de-differentiation, coordination, and standardisation within each of the subfields were facilitated by general trends in public administration favouring less diversity and more homogeneity influenced by ideas imported from abroad.

In structural and cultural explanations, the role of interest groups in processes of de-differentiation and de-diversification tends to disappear. However, following the arguments of Rueschemeyer (1977) and Rhoades (1983), in Chapter 3 we suggested that the power of interest groups should be included in a conceptual framework for the study of structural differentiation and diversification in the college sector. As Rueschemeyer (1977) convincingly has shown, the functional assumption that efficiency advantages underlie long-term advances of differentiation remains indeterminate without such an inclusion, because efficiency is bound up with the definitions of the powerful interest groups. But if power is an important aspect of processes of differentiation and diversification, it will certainly apply for processes of de-differentiation and de-diversification as well. Within this theoretical tradition, the analysis by Clark (1983) of coordination of higher education systems is highly relevant as an analytical tool. He distinguishes between three ideal types of coordinating institutions: the state, the market, and the professional system, but for analytical purposes he splits state steering into political coordination and bureaucratic coordination.

First, Clark notes that political authority is a legitimate form of power in higher education and one of increasing importance with the expansion of the system and its increasing importance to society, not to mention its accelerating costs. Politicians initiate some reforms as well as sanction reform proposals suggested by the governmental bureaucracy, they enact legislation, and instruct the state bureaucracy. He argues, however, that political coordination of higher education is on an ad hoc basis and normally ranks fairly low on the governmental agenda, and that bureaucratic coordination is more persistent.

Second, five forms of bureaucratic coordination can be discerned: *Layering*, which means that bureaucracy expands by increasing the levels of formal coordination; *jurisdictional expansion*, or an increase in the responsibilities of administrative agencies; *personnel enlargement*, or an increase in the number of administrators who attend to matters of higher education; *administrative specialisation*, indicating a shift from amateurs to experts and a shift from part-time administrators to full-time professional bureaucrats; and *rule expansion*, or an increase in the number and complexity of formal rules designed to effect consistency in the actions of people within the higher education system. According to Clark, these processes, separately and together, increase the coordinating influence of bureaucrats. As a result, administrative officials in central committees, commissions, and councils, as well as in ministries and offices of education, become more implicated in the formation and implementation of policy.

Third, much of the coordination within higher education is undertaken by the academics themselves, as individuals and as members of various professional bodies, like collegial boards and councils, professional associations, and interest organisations. Professional coordination takes place within and across institutions, within and across disciplines, and within and across sectors. Clark notes that professional coordination is less obvious than the bureaucratic and political forms, but still important.

Finally, Clark distinguishes between three forms of market in higher education: *consumer market* (student choice of institutions and programmes), *labour market* (recruitment and mobility of staff), and *institutional market* (the relation between higher education institutions).

Clark's model is useful in order to understand processes of field contraction. To a varying degree, political-, bureaucratic-, professional-, and market coordination have been involved in keeping together the college sector. As the fragmented expansion of this field proceeded, an increasing need for political and bureaucratic coordination of a heterogeneous field appeared. At the system level, an increasing number of educational bureaucrats were employed to handle the growth in the number of students, staff, and institutions; new administrative sections were established to cater for the establishment of novel study programmes; a number of intermediary bodies were set up to coordinate professional and vocational programmes; standardised rules and regulations were enacted to keep the various parts of the system together; and, in some countries, new coordinating bodies were established at the regional level to coordinate and control institutional activity. In most countries, professional bodies and associations were allocated coordinating tasks with respect to the various study programmes. Market mecha-

nisms and market considerations have also been important elements in the contraction of the college sector through voluntary adaptations by programmes and institutions to minimum standards. In what ways and to what extent the various coordinating forces have been at play will be discussed in a Norwegian context throughout this chapter.

Clark's conceptual model, however, is not very well equipped to specify the mechanisms behind the various coordination processes. Such a tool is offered by DiMaggio and Powell (1983) in their seminal article on institutional isomorphism. They argue that highly structured organisational fields provide a context in which individual efforts to deal rationally with uncertainty and constraint often lead to homogeneity in structure, culture, and output. They state that: 'In the initial stages of their life cycle, organizational fields display considerable diversity in approach and form. Once a field becomes well established, however, there is an inexorable push towards homogenization' (DiMaggio & Powell 1983: 148). This description seems to be indicative of the development of the college sector with respect to authority unification, institutional de-differentiation, programme integration, and field homogenisation.

DiMaggio and Powell (1983) argued that the concept that best captures the process of homogenisation is isomorphism: a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions. They maintained that there are two types of isomorphism, competitive and institutional. The former type implies that organisations will be pressured towards similarity due to market competition for resources and customers, while the latter type involves organisational competition for political power and institutional legitimacy.

DiMaggio and Powell identified three mechanisms through which institutional isomorphic change occurs: *coercive isomorphism*, which results from both formal (legal) and informal pressures exerted by organisations upon which institutions are dependent and by cultural expectations in society; *mimetic isomorphism*, which is a response to uncertainty and leads to the imitation of organisations that are perceived to be more legitimate or successful; and, finally, *normative isomorphism*, which stems primarily from professionalisation and involving two processes – the socialisation through formal education to common knowledge and values, and the subsequent interaction and diffusion of ideas and values through professional associations.

While Clark's analytical framework builds mainly on a power perspective, DiMaggio and Powell draw extensively on a cultural approach, although they implicitly also include elements of a power perspective. Although the analytical concepts applied by Clark and DiMaggio and Powell are different, there are strong similarities in content. The concept of coercive isomorphism resembles political and bureaucratic coordination, mimetic isomorphism connotes market coordination, and normative isomorphism includes professional coordination.

From our discussion in Chapter 1 and the overview of relevant theories for the study of processes of field contraction, it follows that the role of actors at the different levels in the organisational field of college education should be explored.

The Ministry of Education, intermediary bodies at the central and regional levels, institutional leaders and programme leaders, academic staff and students, as well as external stakeholders like professional associations, have all taken part in processes of de-differentiation and de-diversification. Influenced by structural change and cultural trends, they have partly worked for a homogeneous organisational field, partly tried to preserve the differentiated and diversified system.

Authority Unification

The gradual development of a college sector with many different professional and vocationally oriented schools established by different governmental ministries, counties, municipalities, hospitals, and private organisations led to a highly diversified and structurally complex organisational field in terms of ownership, authority relations, funding, and institutional status. For various reasons, which we will discuss below, the majority of schools and colleges were gradually incorporated under the jurisdiction of the Ministry of Education:

- The last private teacher training school became public in 1947.
- The creation of preschool teacher programmes was initially put in place in a collaborative effort between the state and the county councils. The programmes would be taught in the state-run training schools and managed at county level, while the state would provide funding. Which authority should assume public responsibility for preschool teacher education, the state or the county councils, however, became a contentious issue, which was raised as early as the beginning of the 1950s. The Coordination Committee for the School System proposed in 1951 that it be run by the state (Bøe 1980). This proposal was re-examined at regular intervals during the next 20 years, but it was only first applied in 1973.
- In 1975, the school of social work established by the Norwegian Women's National Council was taken over by the state. For a time, debate took place over which Ministry should administer the National School of Local Government Administration and Social Work: the Ministry of Social Affairs or the Ministry of Education, but Parliament eventually settled for the latter (Kyvik 2002a).
- Having previously been under county council authority, technical schools were taken over by the Ministry of Education in 1977.
- In 1981, the administrative responsibility for nursing education was transferred to the Ministry of Education, detaching it from the strong influence of the hospitals, and integrated in the common educational system. Financially, however, the nursing colleges were the responsibility of their former owners until 1986.
- Music academies were partly private and partly county council institutions. They were taken over by the Ministry of Education between 1979 and 1988.
- Maritime education was the responsibility of the county councils until 1989, when it was transferred to the Ministry of Education.

In general, we can distinguish between five different causes of this authority unification process: (a) political/ideological reasons, (b) the interest of the central

educational bureaucracy, (c) the disinterest of other bureaucrats for operating training programmes, (d) the needs of private schools, and (d) the wishes of training institutions to appear as proper schools in line with other post-secondary education institutions.

Political/Ideological Reasons

In Norwegian society, there has been a long-lasting cleavage between political parties on the role of private organisations as providers of education. In the college sector, private establishments initially constituted a large share of the professional schools, but over time many of them were taken over by the state, motivated in part by ideological reasons. Such reasons were particularly important with regard to teacher training. The question of whether the education of teachers should be entirely public, or whether there should also be room for private schools, stirred up a lot of controversy. At the end of the nineteenth century, private schools were educating more teachers than their public counterparts, a situation which lasted well into the 1920s. At this stage, the state gradually started to take over private schools. Dahl (1991: 340) has described this development in the following way:

> *However, enthusiasm for the free schools cooled. The two types of schools converged, especially from 1918 onwards when the state was spending approximately the same on both types with the control that implied. (…) The radical parties went in for making all teacher training public. As sure as the grey goose in spring, as a parliamentarian put it, the dispute over private and public teacher training schools noisily re-emerged each and every year in Parliament, especially in connection with the layoffs and school-closings as overproduction supplanted teacher scarcity. Attempts to remove the legal basis for private schools failed time after time, even in 1937 and 1938 when there was only one such school left in operation. But, with the Oslo teacher school turning public in 1947, came the end of private teacher training in this country.*

In the twentieth century, the social-democratic Labour Party was a strong advocate of public education and gradually managed to transfer a large number of private schools to the state. But even though this policy was ideologically motivated, practical considerations also mattered in this process.

The Interest of the Central Educational Bureaucracy

Public education institutions not only have been operated by the Ministry of Education, but also by other governmental ministries, and not only by the state, but also by counties and municipalities. In the central state bureaucracy, the need for improved coordination of a highly differentiated and diversified college sector increased with the growth of the organisational field. Through political and bureaucratic coordination, or a process of coercive isomorphism through legal and administrative regulation, the state attempted to unify the diverse post-secondary

education sector by transferring jurisdictional responsibility for various training programmes to the governmental ministry in charge of educational affairs. In general, there could be two reasons for this administrative change.

One possible reason is that bureaucrats in the Ministry of Education have had interest in obtaining control over various training programmes subject to other governmental ministries and regional and local administrative bodies. This is due to the fact that a heterogeneous and fragmented post-secondary education system with many different providers of training programmes call for reduction of structural complexity through order-making and coordination. This is simply part of the logic of bureaucratisation as envisaged by Max Weber. Another possible reason is self-interest on the part of the educational bureaucrats because jurisdictional expansion enhances their power and influence over the educational system and in addition would lead to an expansion of the ministerial bureaucracy. Such underlying motives are not easily detectable in the source material, but still important to bear in mind when interpreting the past. In practice, however, these two reasons for extending the authority of the Ministry of Education are usually mixed together, and subsequently it is difficult to uphold an analytical distinction between them in empirical research.

The need for better coordination of the college sector by the Ministry of Education, however, is visible in many public documents on the transfer of private schools, as well as schools run by counties, municipalities, and other governmental ministries. One example can be drawn from the discussion on the status of nursing education. Karseth (2002) argues that the college reform in 1994 created a new environment where a new group of actors became more influential: the educational bureaucrats whose professional identity is not necessarily related to a specific field or profession. She describes the conflicts relating to the development of a new curriculum in nursing. Administratively, nursing education is the responsibility of the Ministry of Education, but the Ministry of Health and Social Affairs is responsible for the certification of nurses. Through the integration of the professional colleges in state colleges in 1994 and the creation of a common Act on Universities and Colleges in 1995, the Ministry of Education wanted to make nursing education as similar as possible to other short-cycle higher education programmes. That included a reduction in the amount of practice training. In contrast, the Ministry of Health and Social Affairs emphasised the need to strengthen the practice-oriented part of the nursing programme and in fact vetoed the curriculum guidelines proposed by the Ministry of Education in 1996.

Karseth shows that the two ministries have had different perspectives on the aim of nursing education. According to the Ministry of Health and Social Affairs, the aim of nursing education is to train students to become well-skilled practicing professionals. For the Ministry of Education, an additional objective is to provide students with a general education, which would qualify for graduate studies. Both perspectives are represented in the national curriculum, and there has been much debate and negotiation between teachers in the colleges over these conflicting views. Karseth furthermore shows that the professional association for nurses, which traditionally has had considerable influence on the curriculum, were in a less

powerful position after the college reform. The Ministry of Education now wanted to have a more direct influence on the content of the nursing programme.

The Disinterest of Non-educational Bureaucrats

The operation of training programmes is demanding, time-consuming, and costly, and there might have been pressure from other governmental ministries and local administrative bodies to transfer jurisdictional and financial responsibility for training programmes to the Ministry of Education. This ownership might have been regarded as an administrative and financial burden which was not among the core activities of these bodies. In addition, the various governmental ministries and local administrative agencies may have felt that they did not possess the necessary administrative competence to run training programmes which have gradually become more advanced. However, this explanation is not based on empirical evidence (Eide 2004), and the personal motives of ministerial bureaucrats are not easily detectable in written sources.

The Need of Non-state Schools for Financial and Administrative Support

In addition to increased bureaucratic coordination of the post-secondary education sector, the authority unification process took place through the adaptation of autonomous schools to new environmental conditions. Many training programmes established in the private sector and in the non-state public sector, as well as courses established and run by various governmental ministries, sought to become part of the common education system under the jurisdiction of the Ministry of Education, primarily for two reasons: the need for increased financial support, and the need for improved administrative support. Due to external resource dependency, the schools had to act strategically to survive as independent institutions. In addition, schools and training courses subject to owners other than the Ministry of Education did not have access to the same professional administrative expertise in educational matters as the schools within the common educational system. For that reason, they might have wanted to become part of this system in order to attain more equal terms. In the language of DiMaggio and Powell (1983), a process of mimetic isomorphism took place in order to equal the conditions of the schools run by the Ministry of Education.

Most private and non-state professional and vocational schools in Norway have experienced problems of funding and management. In those times, when a large part of teacher training was privately run, several of these schools eventually wished to become state schools in exchange for more secure circumstances (Dahl 1991: 340). Another example is the seven music academies of which three were private and four were run by county councils. In the period 1979–1988, they

became state institutions under the jurisdiction of the Ministry of Education, partly on economic grounds, and partly because they had been dragged into the general transformation process affecting these colleges, as the state took over higher education level training institutions from the county councils (Kyvik 2002a). During this process the Ministry of Education clearly stated that it was problematic to run small colleges such as these, and that the future organisation of musical education would have to be very carefully considered. A mix of mimetic and coercive isomorphic processes thus can be identified as drivers for the jurisdictional takeovers of the music academies by the Ministry of Education.

The Wishes of Training Institutions to Become Proper Schools

The different state professional schools were originally established by various governmental ministries. Thus, the technical schools were subject to the Ministry of Industry, the agricultural schools to the Ministry of Agriculture, the nursing schools to the Ministry of Health and Social Affairs, and so forth. A senior official in the Ministry of Education explained the transfer of these schools to this ministry in the following terms (Eide 2004: 225):

> *These institutions have gradually been transferred to the Ministry of Education. This was not to be blamed on some form of administrative imperialism from the Ministry's side, where the prevailing attitude was that they had more than enough on their hands already. The officials in the ministries in charge of these institutions were not willing either to let go of the schools under their jurisdiction. The Ministry of Industry even had plans to establish its own system of technical training, crowned by the NTH (in accordance with what had been done in some other countries). But the circumstances made it steadily less viable for the technical schools to operate independently outside the general school system; recruitment was affected among other things. It was pressure from the institutions themselves that eventually compelled administrative transfer to the Ministry of Education.*

In the language of DiMaggio and Powell (1983) these processes are an expression of normative isomorphism, or the socialisation to predominating educational values among the leaders of technical and nursing schools. They assumed that the further development of their institutions would benefit from attaching themselves to the Ministry of Education, rather than by sticking to the Ministry of Industry or the Ministry of Health and Social Affairs.

Many post-secondary training courses have been established outside the common educational system as a response to particular needs for a skilled workforce within different trades and professions. These courses have traditionally had a strong relationship with practical life and a non-existent or loose connection to the general school system. Over time, programme leaders, staff, and students as well as external stakeholders became increasingly aware of the lack of status of their programmes within the broader educational system. Questions were raised about the future status of the course: an internal course for members of the trade or profession with its specific, practical, and narrow curriculum requirements, or a course that could resemble those study programmes organised within the common educational

system. The reference groups for comparison and resemblance in this organisational identity formation process were the proper schools under the jurisdiction of the Ministry of Education, and many schools sought the same juridical status.

This specific process illuminates very well the general theoretical proposition by DiMaggio and Powell (1983: 153) that similarity can make it easier for organisations to transact with other organisations, to attract career-minded staff, to be acknowledged as legitimate and reputable, and to fit into administrative categories that define eligibility for public and private grants and contracts.

Institutional De-differentiation

The increasing differentiation of professional programmes into separate educational schools eventually led to institutional fragmentation of the organisational field. This development gradually met with critique and resistance from educational bureaucrats both at central state level and at regional level, and several proposals were put forward and measures initiated to counteract institutional differentiation. Thus, in the 1970s and 1980s, processes of institutional de-differentiation took place within each of the major professional subfields. Closely related schools – professionally and geographically – were merged, and several new programmes were located in already existing schools instead of in new and autonomous institutions dedicated to a single professional programme.

The reasons for this change were partly grounded in economic circumstances, the increasing structural complexity within the college sector itself, in new ideas on how professional education should be organised, and in the power of educational bureaucrats in the Ministry of Education to reorganise the sector. One motivation was the possibility to develop new courses within a new organisational framework for professional education, another motivation was to concentrate resources in order to reduce expenditure and create larger professional environments. These motivations for change dated back to the proposal by the Ottosen Committee in the late 1960s for integrated study centres in each region through mergers of professional schools across different professional boundaries. The rejection of this revolutionary reform proposal led to another strategy by educational bureaucrats in different governmental ministries. Instead of merging schools across professional boundaries, mergers of schools within the same professional field would have a greater likelihood of accomplishment.

Teacher Training

At the beginning of the 1960s, the National Council for Teacher Education adopted the idea of concentrating courses in *vocational teacher training* within a reduced number of training institutions. Vocational teacher schools placed such

a demand on equipment and resources that it would be advisable to concentrate teacher training in one specific school for each individual subject (Kyvik 2002a). The Ministry supported the idea of merging the vocational teacher training institutions, and practical and theoretical education of vocational teachers was later provided at one school.

The fate of *preschool teacher training* was described in Chapter 4, but needs to be dealt with in this context also. The central issue was whether this training should continue within its own institutions, or whether it should be more closely linked to the existing general teacher training programmes. The majority of staff in the preschool teacher training schools resented the assimilation of preschool teacher education into the existing general teacher training schools. This programme had a long history within its own schools, and had developed its own educational theory and practice. Many feared that this coordinated integration would ultimately cause the traditional preschool training methods to be abandoned, and that the course itself would slowly but surely lose its character and identity (Bøe 1980). In the early 1970s, the Ministry of Education decided however that the preschool teacher training institutions in Kristiansand and Bergen should merge with their respective, local general teacher training schools. In addition, further establishments of preschool teacher training programmes should take place within the organisational framework of the general teacher training colleges. Existing general teacher training personnel would cover teaching of theoretical subjects, while newly appointed preschool teachers would take charge of practical guidance and methodology teaching.

Engineering and Maritime Education

With a few exceptions, engineering and maritime education have been dispersed into separate institutional structures. Over the years, many proposals were brought forward in an attempt to achieve closer collaboration between these two educational programmes, both on academic and economic grounds (Kyvik 2002a). A large degree of institutional collaboration was only implemented in 1994, in connection with the college reform, but by that time maritime education had already been completely reorganised. Due to structural change in the shipping industry in the 1970s and 1980s, and new economic circumstances, the organisation of educational provisions in this field was also subject to change. Two evolutionary trends had become especially prominent: a significant technical development, and a decrease in the demand for Norwegian officers and crews in the merchant navy. Foreign seamen were preferred at the expense of Norwegians, due to the considerably lower salaries that had to be paid. In 1972, the Ministry of Education established the Committee for Seaman Education and assigned to it several tasks including the assessment of the need for, and location of, maritime schools. The committee proposed that the training which by then took place at 14 navigation and 11 machinist schools should be concentrated within 6 maritime colleges. It drew attention to the fact

that maritime training programmes, in both structure and content, shared a lot of common traits with their counterparts in the engineering colleges, and that consequently, there should be closer collaboration between these two types of school. In particular instances it should be permissible for a maritime college to offer ordinary engineering studies, or, conversely, for maritime studies to be taught in an engineering college.

The proposed location of the remaining maritime colleges caused a lot of dispute. The regions handpicked by the committee to be allocated a maritime college evidently supported that choice, but other regions objected to missing out on these educational facilities. The choice of a site led to even more conflicts erupting in several of the chosen regions. In 1977, the Ministry of Education decided that, initially, only four maritime colleges would be established as there were still uncertainties regarding the number of student places that would be needed in the long run. The Parliamentary Committee for Education Affairs, however, reached the conclusion that these proposed amendments would result in an excessive level of reorganisation for the 25 schools in operation by then. Consequently, in 1978, Parliament approved the creation of maritime colleges in seven locations: Arendal, Bergen, Haugesund, Oslo, Tromsø, Trondheim, and Tønsberg, and urged the government to come up with plans for two more training colleges in fishing technologies to be opened in Bodø and Ålesund. In the end, the institution in Ålesund was the only one to be established. All the while, the dispute continued to rage over the number of maritime colleges. A committee emanating from the Norwegian Ship-Owners' Association published a report in 1983 in which it proposed that licensed maritime college education should be concentrated in three locations nationwide. The remaining colleges would have to offer other technical/economic courses in association with engineering colleges, for instance. This was substantiated by reference to economies of scale with regard to both finances and the quality of training. For its part, the government argued that there was no actual basis for such an economic approach when dealing with this type of training, and that it would amount to a net loss for the regions concerned if they were denied the opportunity to offer education of the highest, certified standard. Furthermore, the government anticipated that concentrating the training in three institutions would lead to a geographically biased recruitment for these courses, and that it would cause an increase in building costs, which also needed to be addressed. The downscaling of maritime education followed its course nonetheless, with the closure of the colleges in Arendal, Bergen, Oslo, and Trondheim.

Health and Social Education

The differentiation between the health and social professions, induced by the various continuing education programmes, had long been recognised as a problem. Since the early 1970s, a series of official documents had advanced reform proposals in the health and social sector, stressing the need for tighter coupling between

the professions. The complex needs of individual patients and service users made it necessary to work out a higher degree of cooperation between the different professional groups (Erichsen 2002).

In the late 1960s, the Ottosen Committee had suggested that all kinds of health and social education programmes should be adapted to the requirements laid down for the common post-secondary educational institutions and integrated with other vocational and professional institutions within this system. The government thought, however, that this issue needed a more serious discussion and in 1968, it set up a separate committee (the Bjørnsson Committee) to prepare the future organisation of health and social education. The committee proposed the creation of common health and social schools substantiated by the need to see the health and social services become more integrated and coordinated. The large number of independent schools – approximately 60 – was perceived as an organisational problem. Most had a small number of students and were hosted by a medical institution, which often took charge of their administration and day-to-day running. The committee suggested that the variety of schools operating in the health and social sectors should be able to fit into a more uniform and coordinated system, thus allowing for greater opportunities to combine courses and to transfer from one course to another. Horizontal integration should be implemented through the introduction of a common first-year module in health and social work.

The committee disagreed, however, over the issue of nurse training and whether it should be coordinated with other health and social studies. According to a minority composed of nurses' representatives, the programmes offered by the schools for health and social education were so dissimilar that it would be inviting trouble to try to bring them together in a more uniform system. This minority was of the opinion that nurse training had a unique status and that it had to be organised within separate schools.

In 1972, the Ministry of Education decided that health and social studies should be taught within common institutions of health and social education as part of a regional college system. However, several professional groups objected to the idea of providing the same common basic education for different professions. Because of a regime change, this report was withdrawn and the issue of closer collaboration between health and social studies was left to rest. Still, integration processes continued here and there. Thus, in 1984, the school of social work established by the Norwegian Women's National Council became completely integrated into the National College of Local Government Administration and Social Work.

Programme Coordination

The differentiation of an increasing number of study programmes and courses in the college sector led to an equally diversified organisational field in terms of curriculum structures. The growing structural complexity and differences in rules and regulations that followed were met by attempts to improve coordination within

the major subfields. Such coordination was initiated by the Ministry of Education, both at the central level through creation of national advisory councils, and at the regional level through the establishment of regional boards.

Coordination at the Central Level

Contrary to professional programmes in universities, the content of the various professional programmes in the college sector has been regulated by means of national framework plans and curriculum guidelines. Such plans involve specification of objectives, content, and structure in order to secure the application of common national standards across the different colleges. The curriculum should be the same, irrespective of institutional affiliation. This is the normal pattern internationally as formulated by the OECD (1998: 55): 'There are usually detailed state or employer requirements to meet and the role of the institution may be to deliver, not to design the curriculum.'

Until the 1990s, advisory councils for each professional programme were responsible for the development of these plans and guidelines. These intermediary bodies were closely linked to the professional associations and trade unions even though they were state agencies. Within the subfield of teacher training, the National Council for Teacher Education played a central role. The Council's history had been both long and turbulent. The first governmental body in charge of coordinating teacher education was established in 1890 in the form of the Exam Commission for Seminaries. Its objective was to aim for homogeneous education throughout the teacher training system with its variety of institutions (Ramsfjell 1998). As its areas of responsibility became gradually wider, this body changed its name to the National Teacher School Council in 1929. In 1961, it changed its name again to the National Council for Teacher Education and received extended authority and area of competence. In 1973, the Council eventually assumed responsibility for preschool and vocational teacher education, in addition to general teacher training.

Despite guiding and coordinating teacher education, the National Council's role was marred by conflicts in its relations with both the Ministry and the training institutions (Baune 1991). For a long time its actual status within educational administration remained unclear. It was a state body, yet at the same time it was dominated by people emanating from the teaching professions. The unique character of its managerial structure led to a continuously tense relationship and a series of conflicts between the Council and the Ministry regarding the programmes' content and organisation.

In the late 1980s, the Hernes Committee (see Chapter 6) supported the attempts for a larger degree of integration of programmes within the various subfields. In the field of health and social education, the Committee suggested the creation of a national advisory council common to both health and social studies instead of the six existing councils for the various professional programmes. This proposal was implemented in 1991, when the National Council for Health and Social Work

Education was established. In 1992, this council recommended that future framework plans should work out a way to structure health and social education in two sections: one common part, and a second for specialisation in one particular area of training. The Ministry accepted this proposal and decided that the common section would amount to ten credits (one semester). This initiative became yet another building block in the Labour Party's old plan to strengthen horizontal integration in health and social studies.

In the Ministry of Education, administrative responsibility for the regional colleges was assigned to the College Section of the University and College Division. Up until 1989, this section was divided into four offices responsible for the teacher training colleges, the engineering colleges, the health education colleges, and the district colleges, respectively. According to the Ministry's own view, this organisational structure had not functioned satisfactorily, and, from 1989 onwards, a new administrative scheme was put in place. The division according to college type was replaced by four offices defined by their function in order to improve the coordination across professional programmes: planning and development, administration, rules and regulations, budget and finance, together with curriculum matters.

Coordination at the Regional Level

Since the establishment of district colleges in the late 1960s, there was conflict concerning the management structure of all regional colleges. Should the individual institution continue to be managed directly by the Ministry of Education, or should a regional college board be established within each region as an intermediary agency between the individual institutions and the Ministry? Parliament supported the Ottosen Committee's proposal for establishing a joint board for all higher education institutions in each region – with the exception of the universities and the specialised university institutions. In 1976, regional college boards were established in each of 17 regions charged with the responsibility for planning and coordination, but with restricted decision-making authority. These boards had nine members, five of which were appointed by the county assembly. Upon their establishment, the Ministry argued that the combination of regional boards and internal boards at the individual colleges would enable a comprehensive decentralisation of authority. For many of the existing professional schools, however, the definitive authority for securing national norms and standards in curriculum and practical/administrative matters rested with the Ministry and national advisory councils for each professional programme.

The management procedures for the regional colleges were largely a compromise in Parliament. The main division was between those desiring a college system with independent institutions and their own boards (supported by the Centre Party, the Christian Democratic Party, and the Socialist Left Party), and those who wanted a system where the colleges were subjected to a joint regional board and

administration with the responsibility for planning, development, and daily management, including a distribution of the budget and staff management (the Labour Party). However, both groups were a minority on the Education Committee. The Labour Party thereupon supported a proposal by the Conservative Party. Briefly, this stipulated that professional matters concerning curricula should be the responsibility of the individual college while the overall regional planning, priorities, and distribution of resources should be the responsibility of the regional board.

Right from the start, the boards only had responsibility for the district colleges, but from 1977 the teacher training colleges, the colleges of engineering, and the colleges of social work were also brought into the sphere of the boards' responsibility. This was also the destiny of the colleges of health education when in 1981 they were transferred from the Ministry of Health and Social Affairs to the Ministry of Education as part of the general authority unification process.

The establishment of regional boards did not mean that the original proposal for an integrated educational system was accomplished. The various institutions were still independent of each other, administratively, educationally, and financially. There also was limited communication between them on educational matters. Each type of professional college had strong associations with their section in the Ministry of Education, and with their national advisory council affiliated to the Ministry, but weak lines of communication with other colleges in the same region. The individual institutions generally showed little interest in cooperation. They clearly preferred the functional organisation principle to a geographically oriented one.

The establishment of regional boards met stiff opposition from a number of colleges from the very start, particularly the district colleges. It was maintained that the arrangement would lead to the centralisation of authority at the regional level through the transfer of decision-making authority from the individual college to a joint regional body (Repstad 1979). In addition, several specialised colleges in Oslo and the neighbouring county Akershus wanted to be exempted from this administrative arrangement, because they were institutions covering the national need for candidates in their specific domain. For that reason they found it unnatural to be subject to a board installed to assess and plan for the coverage of regional needs (Kyvik 1981).

There was considerable conflict between the regional college boards and their secretariats on the one hand, and the individual institutions – particularly the district colleges – on the other. These institutions were reluctant to be classified in the same category as other vocational colleges, and were casting their eyes at the university sector. For many the dream was to achieve the status of specialised university institution. For the district colleges in the cities of Stavanger and Kristiansand the objective was full university status. Consequently, the colleges resisted attempts at closer integration with the other regional colleges. It was widely believed that integration with the professional colleges would render progress towards achieving another status more difficult – and would eventually make it impossible altogether. The colleges largely considered the regional boards as superfluous and preferred to have direct communication with the Ministry, while for their part the boards

complained about the lack of decision-making authority by which they would be able to manage the task of regional coordination of education (Bakken & Hveding 1991). Thus, the boards had limited power, and the post-secondary education system at the regional level remained nearly as fragmented as before.

Field Homogenisation

The increasingly diversified field of college education in terms of rules and regulations, funding patterns, curriculum structures, and so forth eventually called for measures to counteract past developments and to make the field homogeneous. Diversification processes were gradually replaced by large-scale standardisation efforts. Standards were set by political, bureaucratic, and professional coordination and implemented through law-making, rule-making, directives, guidelines, and recommendations. Standards were set by the government and its administrative apparatus (coercive isomorphism) as well as by national and international professional organisations (normative isomorphism). Standards were introduced as mandatory regulations for a set of people, programmes, or institutions, but also as guidelines that people or organisations can adapt to voluntarily, either because they agree to them or because they cannot afford not to accept them (mimetic isomorphism) (DiMaggio & Powell 1983).

We can distinguish between four different reasons for standardisation processes having taken place in the college sector: (a) standards entail a more efficient education system; (b) standards secure the quality of educational programmes; (c) standards facilitate student mobility; and (d) standards promote equal conditions for institutions, programmes, staff, and students.

Standards Entail a More Efficient Education System

In general, standardisation is a way of regulating and controlling social life with a minimum of costs. Thus, the achievement of a more efficient and transparent college sector was a major reason for the many standardisation measures. The gradual introduction of common rules and regulations for the different institutions, study programmes, staff members, and students was explained by the need for a more cost-effective system. The fragmented expansion of the organisational field and the increasing differentiation of institutions and programmes as well as diversification of organisational forms, funding schemes, entrance requirements, curriculum structures, staff qualifications, and career structures had over time created a very heterogeneous educational sector. The Ministry of Education was constantly looking for ways to reduce the complexity of the system, and the Ministry of Finance was looking for ways to cut expenditure. In this respect, standardisation of rules and regulations was a measure that the governmental

bureaucracy could agree upon. Accordingly, the introduction of standards to create a more efficient educational system is in line with a structural-functional perspective on change.

Standards Secure the Quality of Study Programmes

An important purpose of standard-setting is to secure the quality of study programmes. This can be done by forcing the institutions or programmes to follow certain minimum standards through laws and regulations, or by establishing incentive and sanction systems which will lead the institutions to follow these minimum standards voluntarily. Accreditation of higher education programmes is a form of standardisation through the setting of common requirements and minimum standards. In Western Europe, the state has had to raise the quality of some individual courses to the level of other courses in the college sector with regard to admission requirements, duration of studies, and curriculum in order for them to be recognised as higher education. This was, for instance, the case in the reform of the Finnish college sector in the 1990s. A range of training programmes were consequently upgraded to a minimum standard so that they could be included in the new polytechnic institutions (Välimaa & Neuvonen-Rauhala 2008).

In addition, voluntary adaptation to common standards has taken place. In order to attract a sufficient number of students, a school and a study programme has to consider two aspects: the formal status of its course within the higher education system, and whether students are entitled to general public support in terms of loans and stipends. Private schools have sought internal and external legitimacy by imitating what were considered appropriate organisational forms for a higher education course and appropriate behaviour of staff and students in such a context. Legal recognition of their courses was sought through adapting their degree structure, curriculum, access requirements, examination rules, and staff competence to the common state regulations of the public institutions. In order to obtain recognition, they attempted to resemble those institutions that had already established a legitimate position. This process takes the character of mimetic isomorphism, and the organisational field in which these courses are embedded creates a normative order to which the courses conform to obtain the societal legitimacy, resources, and status that established programmes at the same-level already have.

Standards Facilitate Student Mobility

In recent years, a bid to increase the mobility of students between institutions and countries in Europe has led to comprehensive adjustment processes in individual states in order to harmonise their respective education systems. A 1988 EU agreement regarding the mutual recognition of higher education degrees stipulates that

upper-secondary vocational training programmes should be of 3-year duration. This decision created pressure in several countries to upgrade those post-secondary education programmes which were shorter than 3 years. The Bologna Process furthered this process with the introduction of 3-year bachelor degrees. In addition, the EU has drawn up guidelines regarding some vocational training programmes in order to improve their quality and to introduce common standards and minimum requirements regarding course content. The aim is to contribute to increased mobility of students and graduates across national borders.

Common international standards regulating minimum requirements regarding the duration of studies, conditions of admission, practice, and curriculum can also be set by professional associations. In order for professionals to work in another country, their national degree qualifications have to meet certain minimum standards enforced by legislation or regulation in other countries, often as a result of the adoption of international standards. Of the various professional courses, engineer training is undoubtedly the one that has undergone the most pronounced standardisation process with the introduction of common international requirements for certification. The European Federation of National Engineering Associations sets the standards for the mutual recognition of engineering studies. These standards are continuously submitted to a process of assessment and amendment. But other professional courses have also been subject to cross-national standardisation attempts in order to make national curricula compatible with the emerging European framework of qualifications. Thus, in the 1970s and 1980s, the International Maritime Organisation – IMO – had worked out an international convention setting up regulations for training and certification of seamen (the STCW convention). In the following years, this convention would have a strong influence on the content of Norwegian maritime education.

Standards Promote Equal Conditions for Institutions, Programmes, Staff, and Students

A final reason for the standardisation process in the college sector is that standards promote equal conditions for schools, study programmes, staff, and students. The various study programmes differed much from each other in terms of financial resources, career structures, working conditions for staff members, student regulations, and so forth. Over time, they have become homogeneous, partly as a result of pressure from the less favoured schools, programmes, staff members, and students to obtain the same conditions as the favoured ones, which constitute the relevant reference groups. Thus, standardisation in the college sector has in most cases entailed an improvement of conditions for the less favoured groups.

It would be too much to give a detailed account of the standardisation processes within each of the subfields in the college sector, but the major standardisation measures have to be reviewed in order to understand better why standards were introduced in the various programmes.

Teacher Training

During the 1960s and the early 1970s, extensive experimentation with diversified curricula took place in teacher education. Therefore, the Act on Teacher Training of 1973 can be regarded in many ways as a watershed (Kyvik 2002a). It turned teacher training schools into colleges of education; a 3-year programme was introduced for general, preschool, and vocational teacher training based on upper secondary education, and a large-scale standardisation of the various training programmes was subsequently carried out, using general teacher education as a gauge. The content of training programmes and the work practice within the institutions also underwent corresponding processes of standardisation during the 1970s and 1980s. For general teacher training, common guidelines were drawn up in 1974, dealing with the issue of instructions and regulations, as well as the curriculum. Guidelines and a programme framework followed in 1975 for preschool teachers and in 1977 for vocational teachers.

The standardisation of teacher education, in the way it took place, may seem like a paradox, considering that the Teacher Training Act of 1973 represented a rupture with the way in which it was traditionally controlled, namely in a centralised, detailed manner. The schools were granted their own internal management system, which in effect greatly restricted ministerial control. At the same time, a clear allocation of their respective responsibilities took place between the National Council for Teacher Education and the Ministry, which further weakened the role of the Ministry in teacher education development and reinforced the power of the Council's secretariat. These events contributed primarily to shift the old conflict between the Ministry and the Council over who should guide development in teacher education towards a conflict between the Council and the colleges of education (Baune 1991).

This new conflict emerged principally as a consequence of the detailed control exerted by the National Council for Teacher Education over the examination procedures in the colleges, but also because of the proposed introduction of a national core curriculum in the various subjects. Nevertheless, standardisation of the general teacher training programme was continued through the implementation of its framework plan. Some years later, an observer made the following comment (Frøysnes 1998: 38):

> *[T]he centrally organised studies imposed by the framework plan have led to an excessive standardisation of the curriculum. The colleges have less opportunity to adjust their programmes to local needs, and an even lesser degree of freedom when it comes to accommodating courses taught in other institutions. The situation, which is presently taking shape, will hinder the possibility of offering courses that might benefit groups of students or professionals from different backgrounds. Students in general teacher training programmes can only carry over very little from the courses they attended in universities or other colleges, except from colleges offering similar programmes. And so it shall be that everyone throughout the country will learn the same thing from one year to the next. Standardisation has gone a long way.*

Engineering

Standardisation processes also took place within technical education. In the 1970s, the 2-year versus 3-year term for engineering studies caused a lot of disagreement (Kyvik 2002a). The Ministry of Education decided in 1974 that the ordinary 2-year term should be kept as a definite unit, and that it should be possible to strengthen it through the gradual development of a 1-year supplementary course. Regarding this particular point, the Board of Rectors of the technical schools stated that the 2-year engineering training system operating in Norway did not conform to the European norms defining engineering qualifications, and that this option of voluntary access to an extra specialisation year should only remain a temporary arrangement. In the period between 1977 and 1993, engineering studies underwent a process of standardisation, ending up in a uniform type of training right across the spectrum of colleges, subjects, and areas of study. The establishment of the Council for Engineering Education in 1977 and of its successor, the National Council for Engineering Education in 1982, were important steps in this process. One of the Council's tasks was to supervise the academic level of engineering education.

In 1979, as a trial, the Ministry decided that coherent 3-year engineering programmes should be established, in the line of what had earlier been done in Rogaland and Agder, and in 1987, Parliament eventually decided that engineering studies would consist of a 3-year degree and offer a uniform professional qualification across the different colleges. In the course of the 1980s, therefore, all engineering colleges gradually extended their courses from 2 to 3 years. In 1993, the *college degree in engineering* was officially introduced. This designation complied with the persistent demand for protection of the engineer title, and with the intention expressed by the 1989 framework plan that this qualification should achieve a uniform level of recognition, regardless of the college offering it. International demands for standardisation and certification also certainly contributed to push matters in that direction. This internationalisation process set its stamp on engineering education through the need to adjust to international and European standards, and through participation in international forums (Halvorsen 1993).

Health and Social Education

Within the subfield of health and social studies, nursing education has been in a special position due to a large number of autonomous schools and private institutions. Up until 1948, there was no state regulation of nurse training curricula. However, The Norwegian Nurses' Association played an important role in the development of programme standards when it demanded, as a membership condition for its applicants, that they held a degree conferred by a school approved of by the Association, in practice a school offering a 3-year course (Melby 1990; Mathisen 2006). In 1948, the first Act regulating nursing training was passed, and

in 1950, directives on the public approval of qualified nurses became effective. The purpose was to guarantee the professional standard of both the course and the graduates. The Act not only made it clear that nurse training would consist of a 3-year programme, but also included provisions on the theoretical content of the programme and the extent of practical training. Nursing schools now had to satisfy a series of common requirements to obtain official recognition. This standardisation process of curricula in nurse training was later enhanced through the establishment of a national council for nurse training.

Explaining Field Contraction

The fragmented expansion of the college sector and the development of an increasingly differentiated and diversified education system led to increasing managerial problems for the educational bureaucracy and to demands by the less favoured institutions, study programmes, staff, and students for equal conditions compared to their relevant reference groups. In this chapter, we have distinguished between four types of process that took place to counteract the fragmentation of the sector: *authority unification*, *institutional de-differentiation*, *programme coordination*, and *field homogenisation*. These processes are subsumed under the notion of *field contraction* in order to describe these central integration processes.

First, a process of *authority unification* took place. Many of the programmes and institutions had originated as private initiatives, and that was also the case for domains that the state would regard as belonging to an area of public responsibility, such as teacher training. Time and again, conflicts erupted over the position of these private institutions in the education system, with regard to their legitimacy as well as the content of their programmes, but the discord over the role of private teacher training schools was particularly vehement. Although many private schools over time had been transferred to the Ministry of Education, it was first in 1974 that the government stated that higher education was a state responsibility, and the process of unification of the college sector commenced (Kyvik 2002a). In the years that followed, many private institutions, as well as vocational training courses managed at municipal and county level, were transferred to the state education system. They were gradually upgraded to higher education status as they became ever more tightly integrated within a unified college system managed by the Ministry of Education.

This unification process had several causes. It was not only driven by political and bureaucratic demands in the Ministry of Education for improved coordination of this sector (coercive isomorphism), but in some cases also by the need of private schools for legal recognition of their courses and better financial and administrative support to reduce uncertainty and enhance legitimacy in the environment (mimetic isomorphism), and the wish of course leaders to become proper higher education institutions in line with those under the jurisdiction of the Ministry of Education (professional isomorphism). Some of the study programmes offered nothing more

than in-service training, but the proposed reforms in higher education stipulated nonetheless that they would have to integrate into the general education system. Nurse training, for instance, would have to cut itself loose from hospitals.

Another area of concern was to decide if the training programmes that belonged under the area of responsibility of the county councils should be transferred to the state. And a third issue was whether all these courses should compulsorily be attached to the Ministry of Education, or continue to fall under the ministries for the respective sectors. For example, should nurse training be managed by the Ministry of Health and Social Affairs, or be moved under the Ministry of Education? There was no general agreement over some of these issues, even though the idea of allowing the ministry responsible for matters of education to take over responsibility for all courses gradually came to prevail. However, it took a long time to resolve the practical and financial difficulties generated by these organisational changes. The last of these programmes – maritime studies – was not transferred to the Ministry of Education until the end of the 1980s.

Second, within each sub-field a process of *institutional de-differentiation* took place through mergers of institutions which were professionally and geographically close to each other. In addition, several new study programmes were located within the organisational framework of already existing schools instead of in new and autonomous institutions. The reasons for this change process were partly grounded in economic circumstances, the increasing structural complexity within the college sector itself, in new ideas on how professional education should be organised, and in the power of educational bureaucrats in the Ministry of Education to reorganise the sector. One motivation was the possibility of developing new courses within a new organisational framework for professional education, and another motivation was to concentrate resources in order to reduce expenditure and create larger professional environments.

Third, the Ministry of Education took the initiative to counteract the increasing differentiation of study programmes and courses through *national coordination of programmes* within the various subfields, and through *regional coordination of programmes* across institutions (coercive isomorphism). At the central level, national advisory councils for each professional programme were instructed to create national framework plans and guidelines to secure a common curriculum across the different colleges. At the regional level, a board for all public colleges was established in each region to coordinate activities across institutions.

Finally, the Ministry of Education initiated a large number of *standardisation* processes within and across the different study programmes in the college sector (coercive isomorphism). While teacher training in the 1960s and early 1970s was marked by extensive experimentation with diversified curricula, the coming decades should witness homogenisation of curricula across the different institutions offering teacher training. Likewise, engineering studies underwent several standardisation processes before ending up in a uniform type of training across colleges and subjects. Nursing education, which was originally offered in diverse settings by private and public hospitals, was also exposed to several standardisation measures and regulated by the Nursing Act. Thus, private nursing schools were

forced to satisfy a series of standardised requirements to obtain official recognition of their study programmes (a combination of coercive, mimetic, and professional isomorphism). Gradually the various study programmes became more similar to each other with respect to the length of the study period, practice demands, teaching, and examination forms.

The processes of field contraction can be explained by a combination of structural, cultural, and interest group approaches. According to structural-functional theory, the increasing structural complexity of the organisational field due to increasing size; differentiation of programmes; and diversification of funding schemes, rules and regulations, curricula, and so forth, at a certain point will create greater disadvantages than advantages, and processes will develop to counteract further fragmentation of the field. In line with this proposition, the increasing extent of differentiation and diversification of short-cycle higher education in fact was met by efforts by state authorities to streamline this part of the educational system. A cultural approach to field contraction, however, will emphasise changes in ideological positions and assessments of which organisational forms and control structures are appropriate for the further development of the field. In such a perspective, coordination and standardisation of college education can be regarded as parts of current trends in society, which obviously constitute a partial explanation.

The contraction processes cannot be explained satisfactorily, however, without taking into account the role and power of the principle interest groups. In this respect, the Ministry of Education played a major role. In the language of Clark (1983), these contraction processes were expressions of bureaucratic coordination through *jurisdictional expansion* (an increase in the responsibilities of the Ministry of Education), *rule expansion* (an increase in the number of rules designed to effect consistency in the actions of people), *layering* (the establishment of an intermediary coordinating body at the regional level), *personnel enlargement* (an increase in the number of educational bureaucrats), and *administrative specialisation* (the establishment of special sections in the ministry itself to coordinate college education). But other interest groups were also important in this contraction process, for example through coordination enforced on the schools by the professional associations (like in nursing), by the national advisory councils for the various study programmes (like in teacher training), and by international federations (like in engineering and maritime education). Finally, market mechanisms played a role in the authority unification process through the voluntarily inclusion in the state educational system of private schools for matters of recognition and survival.

To the extent that political, bureaucratic, professional, and market coordination aimed at making the college sector more homogeneous, and not only reduce the number of institutions, these change processes can be explained by the theory of institutional isomorphism as developed by DiMaggio and Powell (1983), suggesting that once a set of organisations emerges as a field, rational actors make their organisations increasingly similar through coercive, mimetic, and normative isomorphic processes.

As a result of policy decisions made during the 1970s and 1980s, and the adaptation of actors within the college sector to changed circumstances, the legal status of the various institutions, and the structure of the various programmes were relatively alike by the time of the introduction of the college reform in 1994. In addition, the number of autonomous institutions had been reduced. These field contraction processes took place irrespective of policy aims to create and maintain a diversified higher education system. Contraction processes in the regional college sector facilitated the merger process in 1994, and the reform in itself further enhanced the processes of field contraction, as will be shown in Chapter 6.

Chapter 6
Regionalisation

Introduction

The transition from a dual to a binary higher education system with the merger of professional schools and other vocationally oriented schools and colleges in each region took place at different times in the various Western European countries, but mainly in the 1980s and 1990s. Simultaneously, the former decentralisation policy was replaced by a regionalisation policy by creating new centres of education at the regional level, which in addition were granted more autonomy by the government. In broad terms, one could say that the initial decentralisation process was superseded by a centralised decentralisation process, or more precisely by a *regionalisation process*. In most countries, horizontal integration of study programmes did not necessarily result in geographic proximity of the programmes. In many cases, the professional schools were not relocated to a joint regional centre, but were retained as geographically separate faculties or departments within the new regional institutions. To overcome the obstacles of geographical fragmentation, in many countries the notion of network was introduced as a guiding principle for mutual contact and collaboration.

The introduction of a meso level of governance in most Western European countries can be regarded as an impetus for the regionalisation of college education, and several of the reasons for this policy reform can be applied to the education sector as well. In the 1970s and 1980s, an intermediate level of government between the national centre and the basic municipal level emerged in most Western European states. This new political and administrative level took the form of an entirely new system of *regional* elected government (Italy, France, Spain, Belgium, Portugal, and Greece), the form of a strengthened *county* level of local government (Norway, Sweden, Denmark, United Kingdom, and some *länder* in West Germany), or an institutional type in between these two basic forms (The Netherlands) (Sharpe 1993). The reasons for the creation of a meso level of governance are complex and differ between states. One important factor in some countries, however, was latent regional nationalism which was strengthened in the 1960s. In addition, Sharpe (1993: 8–26) distinguishes between four distinct groups of factors which

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

are a mix of structural, cultural, and interest group explanations in his analysis of governance reforms:

(a) *Rational–functional*: Because an increasing proportion of the expansion in public activities has taken place at the sub-national level, some of these activities needed a meso-level government unit to be properly dealt with.
(b) *Ideological*: In many countries, the quest for decentralisation of the state apparatus and decision-making authority has been an important reason for the creation of a meso level of governance. Decentralisation came to be seen as an enhancement of democracy through greater local participation in local policy-making and the allocation of resources.
(c) *Sectional interest*: Politicians as well as bureaucrats supported the creation of a meso level, either as a base for exerting political power, or as a base for extending bureaucratic influence.
(d) C*entral advantage*: The central government has favoured the meso level in order to promote its own interests, e.g. through the transfer of complex and problematic governmental tasks, and thus their costs, to a lower level of government.

The introduction of a meso level of governance did not in itself have any immediate effects on the organisation of college education in the various countries. However, the idea of a meso managerial level in the organisational field of college education soon spread. To a varying extent, a mixture of rational–functional arguments, ideological reasons, sectional interest, and the assumption of central advantage became a premise for the regionalisation of higher education as well.

The purpose of this chapter is to explain the reasons for this change and to make an attempt to improve our understanding of the dynamics of regionalisation by using Norway as a case.

Regionalisation: A Theoretical Approach

A theory of regionalisation should include rational–functional causes grounded in structural deficits in the organisation of the field of college education, ideological impact on decision-making, and an analysis of power relations between various interest groups.

A structural–functional perspective on regionalisation of college education implies that the large number of small institutions was no longer an adequate organisational solution for the training of professional workers, and that larger entities should be established through mergers in each region. Former studies indicate that mergers of professional schools and colleges have been undertaken for various reasons, but the most frequent motive is the wish to achieve administrative, economic, and academic benefits (Skodvin 1999; Harman & Harman 2003). Mergers have been initiated to reduce problems of institutional fragmentation and efficiency, and to improve academic quality and viability. An important purpose has been to create larger academic units, either through the amalgamation of duplicative programmes, or through the merger of institutions and programmes that complement

each other. Most policy decisions on mergers seem to be implicitly based on two causal theories, or rather assumptions, on the relationship between means and ends. The first is that economies of scale will be present in professional, economic, and administrative functions. The second is that changes in the organisational structure, through the association of various programmes, will result in better contact between different academic and professional cultures and subsequently in a better educational and research environment.

An underlying assumption for the regionalisation of higher education through mergers of specialised colleges within a geographic area is that due to economies of scale, larger institutions will entail advantages compared to the previous, smaller institutions. This assumption can be accounted for on a theoretical basis with respect to administration, teaching, research, and innovation. Scale effects are supposed to take place with regard to cost-efficiency as well as to the quality of performance of tasks. First, the theory of administrative economies of scale states that in large organisations administrative costs will be relatively lower than in small organisations, because size in itself enables the administrative apparatus to be used more efficiently (Blau 1973). Small institutions need special personnel to take care of different special functions, although in consequence their competence will not be fully utilised because the number of similar tasks is too few. In addition, the quality of administrative services will increase as a consequence of task specialisation. The theory of administrative economies of scale can also be applied to academic staff's participation in administrative work. The premise is that the average amount of time used for administration by staff will decrease with an increase in the size of an institution, because more staff members will be able to share such work and relatively fewer will need to participate in boards and committees (Gornitzka, Kyvik, & Larsen 1998). Second, there are scale effects in the teaching of students in two respects; expenditure and instruction. It is a common assumption that larger institutions can provide education with lower unit costs than do small institutions. This is attributed to the increased possibilities for a more economical use of classrooms, laboratory places, library and data services, welfare services, and administrative support, and the possibility for larger classes. Third, it is a common assumption that a critical mass of people is needed to undertake research of high quality, although the size of higher education institutions in itself has hardly any direct effect on productivity and quality of research. Nevertheless, indirect effects may appear in cases where large institutions also have large departments where it is easier to establish stimulating research environments and viable research groups, because the likelihood that two or more staff members shall have the same research interests is greater in large than in small departments (Kyvik 1995). Finally, due to economies of scale, research facilities and research conditions will be better the larger the department. Good technical staff, instruments, equipment, and research administration can be established more easily in large departments than in small ones.[1]

[1] Former studies do not give a clear picture of large academic units as cost-effective and superior environments for teaching and research, even though they offer larger breadth (Gornitzka, Kyvik, & Larsen 1998). In a review of the literature on economies of scale in higher education, Patterson (2000) concludes that advocates and drivers of higher education mergers tend to overestimate and

In organisation theory there is a long tradition of maintaining that the manner in which an organisation is structured – physically and formally – will have an impact on the individual and collective behaviour of the members of the organisation (Pfeffer 1982; Egeberg 2003). By *physical structure* is meant the architectonic design of buildings, the geographic proximity, or distance between the organisation's units and between individuals. In general, three types of dependent variables have been treated as effects of physical arrangements: the amount of interaction that occurs in a social system, the affective reaction to the job and the organisation, and the affective reaction and orientation to those with whom one interacts (Pfeffer 1982). It is assumed that spatial proximity promotes both formal and informal contact, but it is particularly the informal interaction between the organisation's members which may increase. By *formal structure* is meant how and where boundaries between organisational units are drawn. In organisation theory, it is assumed that the location of individuals within the formal structure influences their thinking structure and action patterns, and that organisational behaviour can be made predictable through formal boundary-setting. The establishment of a new organisational structure thus becomes a means for coordinating activity in an area, as well as reducing this in other areas. In our context this would suggest that when different programmes, previously associated with their respective college, were physically and formally integrated within a new college, over time this would have an impact on communication patterns between staff members.

A cultural perspective on regionalisation of college education, however, will put less weight on rational explanations based on assessments of internal system deficits and more weight on new ideas on how this sector could be organised. In this context, we can distinguish between imitation of similar reforms in other countries and the introduction of reforms in public administration in general.

The idea of mergers of small institutions in each region was not unknown to policymakers. By the mid-1960s, such mergers had already been undertaken in the UK. In the years preceding the Norwegian state college reform, The Netherlands, Germany, Ireland, Sweden, Portugal, Belgium and Finland introduced binary higher education systems (see Chapter 2). Thus, at the time when Norway reorganised the college sector, many other Western European countries had already been through this process by merging the many specialised professional colleges into a smaller number of multipurpose higher education establishments. Functional organi-

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emphasise the benefits, but underplay the cost. The research literature indicates that changes in formal organisational structures do not necessarily lead to the expected effects on human behaviour. The extent to which change might take place would be dependent on the degree to which the objectives of the reform are consistent with, or break with, established patterns of behaviour and identities of the staff (Olsen 1992). In those cases where organisational culture and traditions are very dissimilar, possibilities for the creation of new and fruitful contacts are much smaller than in those cases where different units and persons share a common set of norms and values. Nevertheless, in spite of the many problems, tensions, and conflicts characterising many mergers in the higher education sector, the overall picture is that there are numerous examples of success and relatively few examples of substantial failure (Harman & Harman 2003).

sation of short-cycle post-secondary education had been substituted by regional integration of geographically close institutions.

In the 1980s, neo-liberal winds swept over Western Europe paving the way for major reforms in the steering of the public sector (Christensen & Lægreid 2003). Management principles developed in the private sector were embraced as ideals for public sector management as well. These reforms, which have been labelled New Public Management, came to influence the organisation and management of higher education in important ways (Bleiklie, Høstaker, & Vabø 2000; Larsen & Norgård 2002). The principal ideas behind this reform ideology were to make the public sector more efficient and user-oriented. Public institutions were expected to produce better services while at the same time cutting costs. Various measures were introduced to achieve these objectives. The main changes in governing principles were that rules and standard procedures should be given less emphasis, while decision-making authority and administrative tasks should be delegated and decentralised from the government to the individual institutions. This measure presupposed the introduction of a more detailed planning and reporting system than before to ensure that the institutions produced the expected results with a minimum of resources. The argument was that when public agencies acquire greater autonomy in determining how these goals were to be achieved, the results would be better and resource use would be more cost-effective. In this respect there was conformity between the changes in the governing ideology and the demands of subordinate agencies for local autonomy and extended authority in the use of the resources available. Furthermore, increased importance would be attached to a market orientation, either through increased demands for self-financing, or through the introduction of market and quasi-market mechanisms in the day-to-day operations. The private corporation with its managerial approach and divisional structure became a model for the organisation of public administration, including higher education (Gammelsæter 2002). In this respect, the regional level can be regarded as the equivalent of the divisional level in the corporation.

Finally, the role of interest groups at the various levels in the organisational field of college education should be investigated. With the expansion of higher education in terms of students, staff, institutions, programmes, and concomitant rules and regulations, an overloaded central administration was a likely outcome in most countries. In this respect, the notion of *central advantage* (Sharpe 1993) is useful to understand why the central government preferred to merge institutions at the regional level and to transfer tasks and responsibility to the new regional institutions.

In addition, the merger of small colleges into bigger units, which has usually been initiated by state authorities, has often been supported by regional bureaucrats and politicians who have regarded the larger institutions as cornerstones in the shaping of stronger regions. In this respect, the notion of *sectional interest* (Sharpe 1993) is a useful construct to improve our understanding of the dynamics of regionalisation processes. At the regional political and administrative level, the colleges have been considered as important driving forces in regional innovation processes. There is a growing consensus that higher education institutions should

contribute to a larger extent in developing the local economy. In many countries, such as Finland, Portugal, Austria, Switzerland, and Ireland, this is one of the formal tasks of the polytechnic colleges. In addition to providing graduates with an education that might elevate the level of competence in the business and public sectors in the region, it is expected that the new colleges will contribute directly to innovation and entrepreneurship. Research and development conducted by college staff would be applied and directed towards local needs. The colleges should also operate as centres of expertise aimed at facilitating knowledge dissemination and technology transfer. Collaboration between public authorities, training institutions, and industry – often referred to as '*triple helix*' (Etzkowitz & Leydesdorff 1997) – is regarded as desirable to promote regional innovation processes (Fritsch & Stephan 2005). In this context, the presence of a major college and a more visible institution in a region is considered a better alternative for strengthening innovation processes than a number of small entities lacking adequate managerial decision-making capacity and administrative support. Thus, in many cases, regional politicians and bureaucrats in several countries have encouraged the local higher education establishments to merge to create more powerful and visible institutions.

State-initiated mergers of professional schools have often been met with resistance by institutional leaders and academic staff fearing for their professional distinctiveness in the organisational field. Once the original institutional pattern, with its separate vocational schools for each individual training programme, has been dissolved, the threshold required for new mergers to be initiated by the new colleges themselves seem to become lower. This has been particularly evident in The Netherlands where individual colleges, for strategic reasons, took it upon themselves to initiate new mergers (Huisman & Kaiser 2001). Many such mergers, conducted locally, also took place in the UK (Pratt 1997). In his analysis of mergers in Dutch and Australian higher education, Goedegebuure (1992) applied resource-dependence theory to explain the merger processes. He showed that the involved institutions engaged in merger in reaction to changes in their competitive environment that appeared to threaten a secure supply of critical resources. The way in which the mergers were constituted further indicated that strategic motives played an overriding role, in the sense that the institutions strived towards strong, dominant positions at the regional level. He subsequently concluded that resource dependence can be used as a viable concept to understand the dynamics of merger processes in higher education. However, in some cases, the rationale behind regionally initiated merger processes can probably be better explained by the quest for social and academic reputation than by the need to secure a constant flow of critical resources, like student numbers, or by the demand to serve the regional community. A possible strategy for a group of small colleges in a region to achieve higher status would thus be to merge into a larger entity in order to overcome the problem of scale.

The reasons for the regionalisation of higher education thus are multiple, and should be explained by combining a structural perspective, a cultural approach, and a power model.

Preconditions for the Regionalisation of College Education

In Norway, we can distinguish between different preconditions for regional mergers of colleges related to structural change, cultural change, and different group interests.

Structural Preconditions

By the end of the 1980s, the organisational field of college education as part of a dual higher education system had developed in such a direction that several preconditions for regional mergers were embedded in the operation of the system. The decentralisation wave in higher education had reached its peak. The college sector had developed into a highly differentiated and geographically dispersed system which called for measures that could counteract the fragmented expansion. Regional boards had been established in 1976 to coordinate the professional and vocational colleges in each of 17 regions, but this arrangement proved to be too weak to integrate the various study programmes. In practice, individual colleges still had direct access to the Ministry of Education. The regional college boards were characterised by a lack of legitimacy within the college system and did not respond sufficiently to the Ministry's needs for assistance in administrative matters (Bakken & Hveding 1991). It gradually became more and more evident that the large number of small higher education institutions had created a complex environment and that the traditional detailed control of this field could not persist.

Subsequently, mergers of institutions were included as one of the premises in the mandate of the Governmental Committee set up in 1987 to evaluate the goals, organisation, and priorities of higher education and research (the Hernes Committee). In its 1988 report, the Committee pointed at some structural reasons for problems of coordination. The functional division into educational categories based on links to the professions intensified the local geographical disintegration of institutions, and the various programmes were administered by different offices in the Ministry of Education, and partly even by different ministries.

Cultural Preconditions

As mentioned above, the introduction of a meso level of governance can be regarded as an impetus for the regionalisation of college education. As a political concept, the creation of regional centres stood firm all through the 1960s and 1970s, and was later revitalised by new political currents from Europe. In the neighbouring country of Sweden, the regional policy aimed at creating a number of growth centres that could constitute attractive alternatives to the big cities (Premfors 1984), and

Norwegian political and administrative authorities were influenced by this policy. In 1976, the county was vitalised as a political region through the creation of a democratically elected county council and the establishment of a county council administration in addition to the existing state regional administration (Hansen 1993). The regional level gradually increased its importance as a service provider at the expense of the local and state levels in most public sectors. In principle, the proposal for integrated regional study centres was based upon the same view of regions as levels of planning and management. The stepwise attempts at regionalisation of college education throughout the 1970s, 1980s, and 1990s thus had its counterpart at the general political/administrative level.

In addition, the reorganisation of the college sector has to be viewed in a broader context in order to come to grips with the objectives of the reform and the processes that took place. In line with the recommendations of the OECD, in 1986 the government introduced a general programme for renewal of the public sector (Bleiklie, Høstaker, & Vabø 2000), which attained political support across the major political parties. The introduction of new steering principles in the public sector labelled New Public Management and imported from abroad came to exert influence on the higher education system as well. The college reform thus cannot be considered solely as an internal sector reorganisation process. It was an integrated part of the state administration reforms of the 1990s where joint and uniform management tools were developed along with a common set of regulations pertaining to all public activity, combined with delegation of decision-making authority and exposure to market mechanisms. The condition for the implementation of these governmental objectives was that the management system and the administrative capacity in the colleges would be strengthened. This could only be achieved by creating larger institutions at a regional level.

Group Interests

The Hernes Committee stated that conflicting interests had been an obstacle for coordination and collaboration in the field of college education. Arguments for coordination were opposed by the colleges, and arguments for mergers were defeated by local political interests. In addition, the various colleges had different study traditions, curricula, course structures, and staff members with obligations and rights which they wanted to retain. In some cases, personal conflict had effectively hindered collaboration. The debate over the status of district colleges in particular had been conflict-prone and long-lasting. These institutions were reluctant to be classified in the same category as the professional colleges, and were casting eyes at the university sector. For some of them the ambition was to achieve university status. Consequently, many of the colleges resisted attempts at closer integration with the other regional colleges. It was widely believed that integration with the professional colleges would render progress towards achieving another status more difficult – and would eventually make it impossible altogether.

The Hernes Committee stated that the significance of such problems had been overemphasised, and that the time now was ripe for reducing the number of independent colleges to about 55 institutions through mergers within each region. Different group-interests and personal conflicts at the regional level should no longer be decisive for the organisational structure in college education. According to the Committee, the state should use its political, legislative, and administrative powers to reorganise this sector according to more modern principles for the organisation of state agencies as well as higher education.

The Aims of the Mergers

The Ministry of Education formulated a number of objectives for the reform of the college sector (Kyvik 1999) which were in line with structural–functional theory. First, the Ministry based its argumentation on the assumption that the creation of larger institutions would lead to economies of scale in teaching, research, and administration. Second, the Ministry argued that changes in organisational structure and physical location of staff and education programmes through institutional mergers would have positive effects on collaboration patterns. In addition, the Ministry used the 'needs' of institutions, programmes, staff, and students to legitimise the reform. Even though these different groups in general did not agree with the reform, the Ministry argued that the mergers would in fact benefit each and all of them.

We may distinguish between objectives related to each of the various levels in the field of higher education:

The State Level

A significant reason for the merger of colleges into fewer units has to do with the Ministry of Education itself. In terms of size, the higher education sector is one of the largest in the state. In 1990, it encompassed some 127 public training institutions. In addition, 22 private institutions were receiving government support. The largest group of post-secondary institutions was clearly formed by the regional colleges. The regional college system encompassed about 100 state institutions: 14 district colleges, 25 teacher training colleges, 16 engineering colleges, 30 colleges of health education, 3 colleges of social work, 6 conservatories of music, and 4 other colleges (Kyvik 1999). The total number of students exceeded 60,000, about the same number as in the universities. Ever since the time when the proposal to integrate all post-secondary education outside the universities into regional study centres was launched in the mid-1960s, the Ministry had wished to deal with fewer institutions. The large number of colleges under its auspices created considerable administrative capacity problems. A huge part of the capacity of the bureaucracy went towards

resolving individual issues, which, according to the regulations, had to be referred to the Ministry. Because the directorate model had not been adopted in the education sector, it led in turn to capacity problems in the Ministry (Kyvik 1999).

The System Level

Second, the mergers were an integrated part of a new vision for the organisation of the higher education system, coined Network Norway. In the Act on Universities and Colleges of 1995, Network Norway was given a central position. In Section 2, it was stated: 'Within a national network for higher education and research (Network Norway), the institutions shall cooperate and supplement each other in their professional activities.' According to the Act, the universities and the specialised university institutions should be responsible for the major part of basic research, and be given main responsibility for graduate education and research training. The state colleges should be responsible for a wide variety of professionally and vocationally oriented programmes, and in addition take on some of the university courses for basic and undergraduate education. In reality, this meant the establishment of a formal binary system with a university sector and a college sector having different purposes. An additional aim, though not officially stated, was to prevent the two largest district colleges (Stavanger District College and Agder District College) from achieving university status. These two colleges had for many years attempted to become universities, but the Minister of Education, Gudmund Hernes, was very intent on curbing the tendencies to institutional drift and to limit the number of universities to the four established institutions. By establishing a binary system with two distinct higher education sectors, and by amalgamating these two colleges with the professional colleges in each region, he hoped to put an end to their university ambitions (Kyvik 2002b).

The Sector Level

An important aim of the reform, but probably not the most important, was to make the college sector more cost-efficient. The Ministry of Education argued that economic gains from mergers would be of considerable significance because fewer large institutions are normally less expensive to operate than the many small institutions. This applied particularly to operating costs per student that would result from economies of scale in teaching, administration, and a more efficient use of the premises. Regarding administrative costs, it was pointed out, however, that a merger of colleges was not assumed to result in any considerable short-term savings, as the administration at many of the new colleges would be too small to manage the tasks they would be obliged to carry out. In the longer term, however, the mergers and a joint location would result in benefits of rationalisation and a better use of resources.

The Institutional Level

A prime object of the reform was to create larger and stronger professional environments for teaching and research. In its white paper to Parliament, based on the recommendations of the Hernes Committee, the Ministry stated that it was the professional advantages that were the most conspicuous purpose of a changed institutional structure of college education. The various educational and research environments had much to offer each other, but individually they were too small. An institution should normally comprise not less than 700–800 students. The district college as originally conceived – a study centre with a broader coverage of professions – was to be the model for the future. It was pointed out that larger and broader professional environments would result in better use of available resources and, simultaneously, that reorganisation and the development of new courses would be easier to implement. Another objective was to improve the quality of administration through economies of scale. The new institutions would have comprehensive and complex tasks which would demand a well-qualified administrative staff and other support functions related to staff and finance management, course administration, etc. Several of the existing colleges were too small to establish good administrative arrangements which could solve these problems in an effective manner. Finally, the Ministry noted that larger institutions would be able to use the buildings and infrastructure (library, computer services, etc.) in a more rational manner.

The Programme Level

The Ministry stated that the existing institutional demarcation between the various study programmes inhibited the development of a common educational culture across professional programmes with different purposes, teaching methods, relationships between theory and practice, the role of research in the new institutions, staff promotion systems, and so forth. Each professional field had its own criteria and procedures for determining what should be taught, how this should be done, and so forth, and had often been resistant to attempts to create and offer common courses. Their educational profiles were outlined by different national advisory boards, one for each programme, to secure national norms and standards. A reorganisation of the relationship between different professional and vocational programmes within the framework of larger institutions was therefore important for the further development of college education. The Ministry stated that a professional tradition which could only be maintained through isolation was no living professional tradition, and that it could not take into consideration references to professional distinctions as an argument for non-cooperation with other professional programmes. However, during the debate on teacher training in Parliament, the Education Committee expressed

the view that the skills and culture which characterise teacher training colleges must be preserved and continued (Kyvik 1999). This comment obviously contradicted the Ministry's statement and was a result of active lobbying by the teacher's professional organisations. This question was raised again in Parliament in 1992, and on the basis of this debate the Minister of Education had to conclude that teacher training must be considered as an integrated entirety, both regarding theory and practice. This was later interpreted to include professional programmes in general.

Staff

Another purpose of the reform was to enhance contact and collaboration between staff across professional boundaries. The professional networks must be given other physical and organisational frameworks in order to operate efficiently with this objective in mind to achieve synergy effects in teaching and research. In addition, a more competent college administration should relieve academic staff of administrative tasks, and also improve the quality of administrative services.

Students

A final objective of the reform was to expand possibilities for students to combine subjects in new ways, such as by substituting a subject within economics and business administration with a subject in the teacher training programme, or by creating new courses with elements from different professional and academic courses. The Ministry maintained that the new and larger colleges would provide a broader range of options for students to combine different courses and also provide them with the chance to discover new subjects of which they had previous little knowledge. Combined with modularisation of coherent programmes, the merger reform would benefit students in the sense that greater variation of subjects within a single institution would entail new possibilities for combining elements from different programmes and courses in a college degree. This purpose was in line with ideas put forward by the OECD (1998), which had drawn attention to the value of an education that promotes breadth and a capacity to work in different ways and different jobs over the life cycle. In this way, the college sector would also become more responsive to the changing needs of industry, the public sector, and other parts of society. This was an explicit and important premise for the regionalisation of college education in several Western European countries. In Finland, for example, the reformed system should provide increased flexibility of choice for students, while making the vocational route attractive

(Välimaa & Neuvonen-Rauhala 2008). In addition, students would benefit from improvements in administrative services, in welfare services, and in infrastructure like libraries and computer services.

The Implementation of the Reform

The white paper that followed the proposal of the Hernes Committee supported the recommendations for mergers, but the Ministry stated that the proposal of the Committee did not go far enough in reducing the number of colleges. Parliament agreed that one should aim at ending up with fewer institutions, and in 1993, the government decided that the 98 existing colleges should be merged into 26 new units, named *state colleges*. The most comprehensive reform of Norwegian higher education ever became a fact. In the meantime it had taken almost 30 years from when the proposal for mergers had first been aired until the new colleges were inaugurated. The conditions for bringing about this reform were also considerably different in the early 1990s than at the end of the 1960s. The weaknesses of the regional college system were manifest, and the political opposition to such a change in the educational system had become considerably less. In addition, the rapidly increasing student numbers in the early 1990s, as the driving force behind growth in the higher education sector, provided a powerful argument for a managerial approach in handling the expansion of the system (Bleiklie, Høstaker, & Vabø 2000).

We can broadly distinguish between two stages in the implementation of the Norwegian college reform: the merger process conducted by the Ministry of Education, and processes taking place in the colleges after the mergers in order to accomplish (or counteract) the objectives of the reform. The first stage – the restructuring of the college sector – can be regarded as a set of organisational changes undertaken to achieve the various academic, administrative, and economic goals. First, the number of colleges was reduced to one fourth. Next, the internal organisation of each of the new state colleges was decided upon through the division into faculties and departments as well as by the establishment of new administrative structures. Finally, a university-like management system was introduced in accordance with the new Act on universities and colleges.

In the second stage – after the state colleges were established – it was generally the responsibility of the individual colleges to implement the measures necessary to fulfil the academic, administrative, and economic objectives of the reform. This was also in line with the predominating managerial model. The responsibility for the implementation of public goals should be left to subordinate units.[2] In the following, we briefly review the implementation process at the various organisational levels.

[2] The processes that took place in the individual colleges after the mergers have not been examined in this book. See Skodvin and Stensaker (1998) and Norgård and Skodvin (2002) for a discussion of institutional processes in Telemark College, and Yttri (2008) for similar processes in Sogn og Fjordane College.

The State Level

The reorganisation was a result of a long and extensive political decision-making process undertaken according to a Parliamentary Resolution. The reform process was instigated by the Ministry of Education in order to implement this political resolution. In the Ministry, a small group of dedicated people was set up to carry the mergers through.

The Regional Level

The regional boards for higher education were asked to organise the merger process in their region according to directives and lines of guidance developed by the Ministry. In the first phase, the main issue was to come to an agreement on which institutions were to be merged within the various regions. The regional boards were the driving force in this process. They had worked for many years for closer integration of the different colleges in their regions. Now they saw their chance to accomplish their plans for an integrated higher education system at the regional level. The various colleges were less enthusiastic, but accepted somewhat reluctantly the inevitable outcome of this process. Still, some colleges worked actively to avoid the merger, but for a variety of reasons. Some argued that the distance to the administrative centre of the new state college would be too far, while other colleges feared that their ambitions to be granted university status would effectively be stopped by the incorporation into a state college. However, the general political agreement on this reform made it impossible for the reluctant colleges to avoid being merged with other local institutions. The Ministry directed the merger processes, but negotiations between the regional boards and their affiliated colleges gave room for local leeway.

The Institutional Level

After the establishment of the 26 state colleges, the next phase in the reorganisation process was to come to an agreement on the faculty structure within the individual colleges. The expectation by the Ministry of Education was that previous boundaries between programmes should be toned down, and that there would be a higher degree of academic integration than in the previous system. Difficult negotiations took place at the various colleges, although the different actors knew that the Ministry was to accept the proposal for a division into faculties. At most colleges, the majority of the former independent institutions wanted to continue as separate faculties hoping to avoid becoming split into different units. The final outcome of this process was a diverse picture of faculty divisions. Many colleges organised

their activities in faculties that were responsible for a wide range of subjects; others were organised in faculties with a relatively unified profile, for example nursing education; yet others established faculties with related activities such as health and social work education.

Concurrently, the location of the administrative centre for each state college had to be determined, as well as the size of the central administration compared to the size of the faculty administrations. The location of the administrative centre was a conflict-ridden process at some of the multi-campus colleges. Another controversial question was the size of the administrative staff at the administrative centre. The Ministry determined that the central administration should be fairly large in order to keep the new institutions together, and to enable the decentralisation of decision-making authority from the Ministry to the individual colleges. A precondition for this policy would be to strengthen the capacity and competence in the central administration at the expense of the faculty administrations. The faculties, on the other hand, wanted to keep as many administrative staff as possible. The final outcome of this process was considerable variation in organisational solutions among individual colleges (Gammelsæter, Dimmen, & Kyvik 1999).

The new colleges were very different from each other with regard to size, organisational structure, and academic profile. In 1995, the state colleges had approximately 77,000 students and more than 7,000 members of staff, of whom about 5,000 occupied academic positions (Kyvik 1999). One of the intentions of the reform was to establish larger units. The Ministry set a minimum limit of 700 to 800 students. With the exception of the College of Sami Studies, the rest of the colleges fulfilled this objective. The size of these colleges varied much: from fewer than 1,000 at four of the colleges to more than 8,000 at Oslo College. The colleges offered study programmes of 1–4-year duration; 2–4-year programmes in professional and vocational fields, and 1–1.5-year university courses. Half of the colleges also offered several master's degree courses, most often in collaboration with a university. In addition, two colleges offered doctoral training in engineering. The largest programmes were nursing (offered at 22 colleges), general teacher training (offered at 20 colleges), and engineering (offered at 16 colleges), each with approximately 9,000 students. Half of the colleges had programmes only in professional fields, while the other half offered programmes in both professional and academic fields. Most of the professionally oriented colleges were intensive in teaching and instruction, while other colleges put more emphasis on lecturing and independent studies as well as on research. Finally, most colleges offered a variety of programmes and courses which were very different with respect to their knowledge basis.

A presumption for most of the objectives of the reform to become realised was that the state colleges were co-localised. However, the geographical location of each of the 98 original colleges made it politically unacceptable to move all programmes within each of the regions to a single centre. In most cases teaching therefore still took place at the sites where the original colleges were located, even though those institutions had been merged into one common institution.

Many of the new state colleges therefore had to compensate the lack of physical integration by developing networks between the various campuses. In most cases, the colleges were superstructures of faculties located far from each other. Even though half of the new colleges had their faculties located within the same municipality, only nine colleges were located on one campus (Kyvik 1999). The other half of the colleges had their faculties spread around in different municipalities. Nine of these institutions were located in more than two municipalities. Of the latter institutions, Telemark College had the largest geographic spread, where the distance between the five campuses ranged from 20 to 180 kilometres (Norgård & Skodvin 2002).

The Programme Level

One of the main objectives of the reform was to create larger and stronger professional environments in the new colleges. However, a merger of the previous professional colleges was not necessarily synonymous with larger and stronger professional environments, should the programmes differ to such an extent that new professional bonds were difficult to achieve. Naturally, there were examples where the mergers resulted in larger and stronger professional environments through the association of similar subjects. This was the case at Volda College, where similar subjects within the former teacher training college and the previous district college were amalgamated. But this was the exception rather than the rule. In most instances, the former teacher training colleges, nursing colleges, engineering colleges, and district colleges were not physically integrated, but remained as separate faculties on various geographical locations in each region. It would have been politically unacceptable to move established institutions to a regional centre.

The structure of the professional programmes varied much. Many colleges organised their activities in faculties which were responsible for a wide range of subjects; others were organised in faculties with a relatively unified profile. The reorganisation resulted in many different organisational solutions, especially for teacher training. Roughly speaking, we may distinguish between three models: (a) *the pure model*, where a single faculty is responsible for teacher training, (b) *the fragmented model*, where teacher training is spread over several faculties, and (c) *the mixed model*, where one faculty is responsible for most teacher training, but where there is some integration between teacher training subjects and subjects in other fields (Michelsen 2002). Also, nursing and other health courses were organised in very different ways in the various colleges, moving from being a faculty of its own, to be located in faculties with other forms of health education, and to being a part of a faculty with programmes in fishery and aquaculture. Differences in organisational solutions obviously influenced the local construction of the curriculum in these programmes (Erichsen 2002; Karseth 2002).

Why Was the Merger of Colleges Implemented in 1994 and Not in 1969?

One of the case studies in the book by Cerych and Sabatier (1986): 'Great Expectations and Mixed Performance – the Implementation of Higher Education Reforms in Europe', is based on the establishment of the Norwegian district colleges. As a collaborator in the comparative project and the author of the report that Ch. 7 in that book is primarily based on (Kyvik 1981), I have had the opportunity to reflect later on some of the conclusions drawn in the book and its contributions to implementation theory.[3] The evaluation of this reform, conducted by me in collaboration with Cerych and Sabatier, concluded that the establishment of district colleges as autonomous institutions had, on the whole, been successful during the first decade. The non-implementation of the proposal to merge post-secondary schools in each region was explained by the resistance from some of the institutions involved, and that it was easier to establish new study programmes in a new institution not hampered by cultural and social traditions. We concluded that the merger failed because the degree of system change envisaged was too large. But when we look at the development of these colleges over a 25-year period, it is obvious that the conclusions drawn on the basis of the first decade need to be modified.

As a starting point in their comparative project, Cerych and Sabatier developed a conceptual and analytical framework as a guide for the national case studies of implementation processes. They pointed out that normally major changes in public policy pass through a three-stage process: First, a period of policy formulation involving an awareness of inadequacies in the existing system, followed by the examination of one or more means of readdressing the situation, and culminating in a formal (legal) decision by the government or parliament to establish a new programme or institution. Second, the policy decision is assigned to one or more organisations for implementation. In higher education reforms, this will almost always include the ministry concerned and the affected institutions. Third, based upon various actors' evaluations of the implementation experience and reactions to changing conditions, there will follow a reformulation stage, in which efforts are made to revise policy goals.

In their analysis of higher education reforms, Cerych and Sabatier placed special emphasis on the analysis of goals (clarity and consistency, degree of system change envisaged), adequacy of causal theory underlying the reform, adequacy of financial resources provided to implementing institutions, the degree of commitment to programme objectives by those charged with its implementation, and changes in social and economic conditions affecting goal priorities or the causal assumptions of the reform.

On the basis of the analyses of the various reforms, Cerych and Sabatier discussed the importance of the various factors.

[3] This section is based on Kyvik (2005).

Goals and Extent of Change

The objectives of a reform are obviously the starting point for the analysis of implementation processes. Are goals clear and consistent, or vague or contradictory? Initially, the authors suggested that clearly formulated and consistent policy goals facilitate implementation of reforms. However, they stated that these conditions cannot often be fulfilled. Vague goals are frequently the price to be paid for attaining political consensus in the formulation stage, and many reforms have conflicting objectives. The authors concluded that ambiguity and conflict in goals are in many cases unavoidable, and in addition that a precise goal does not guarantee superior implementation. They therefore concluded that instead of focusing on clear and consistent objectives, implementation analyses ought to identify an 'acceptable mix of outcomes' of a reform.

With respect to the effect of degree of change on the outcome, Cerych and Sabatier initially pointed to the seemingly obvious fact that major changes are more difficult to implement than minor ones. They suggested that the degree of system change hoped for by a reform be conceptualised in terms of the number of institutions affected, the proportion of individuals within each institution whose behaviour would have to change, and the amount of behavioural change required of the staff. However, in their conclusion they stated that a more complex conceptualisation of the scope of change is necessary to capture the process. They suggested a three-dimensional framework that they called depth of change, functional breadth of change, and level of change. *Depth of change* indicates the degree to which a new policy implies a departure from existing values and practices of higher education. *Functional breadth of change* refers to the number of functional areas in which a given policy is expected to introduce more or less profound modifications, while *level of change* indicates the target of the reform: The system as a whole, a particular sector or segment of the system, a single institution, or an institutional subunit.

The two authors concluded that the relationship between the scope of change and implementation success seems to be curvilinear. Policies with a very wide functional breadth and extensive depth of change encounter strong opposition, whereas those with a narrow functional breadth and small depth of change do not galvanise sufficient energy to overcome inertia in the system: 'Thus reforms visualising a moderate scope of change are likely to be more successfully implemented than those with a very high or a very low scope' (p. 248).

Adequacy of Causal Theory Underlying the Reform

Cerych and Sabatier observed that many higher education reforms have been based on false assumptions. In line with Pressman and Wildavsky (1973), who argued that decision-makers should base new programmes on an 'economic theory of implementation', they emphasised the importance of an adequate causal theory, or a set of assumptions about means and ends. They stated that if goals are to be realised, it is

important that causal links be understood, and that the agents responsible for implementing the reform have jurisdiction over sufficient critical linkages to make possible the attainment of the objectives. However, in their conclusion they admitted that not everything can be foreseen in advance. Constraints that could not have been predicted emerge, and individual and group behaviours often change on non-rational grounds.

Adequacy of Financial Resources

The comparative project indicated that the economic aspects were of less importance than expected. Almost none of the failures identified in the case studies could be explained by lack of financial resources. The authors concluded that it is not meaningful to say that adequate funding is necessary to ensure successful implementation.

The Degree of Commitment to Objectives Among Those Charged with Their Implementation

Reforms are not self-executing; someone has to be in charge of their implementation. It is generally regarded as important for goal attainment that those agents who are responsible for the implementation of the reform are highly committed to their task. Cerych and Sabatier particularly emphasised the importance of having a strong leader – a so-called fixer (Bardach 1977) – committed to the reform. Such 'fixers' were also present in most of the higher education reforms they studied. However, their role was usually limited to policy formulation and adoption and restricted to the early phase of the implementation process. Cerych and Sabatier therefore suggested that many difficulties that arose later could have been overcome if the 'fixers' had been in charge for a longer period.

Changes in Social and Economic Conditions

The authors noted that social and economic conditions which originally motivate the adoption and launching of a reform may change, and that this new climate may either undermine its implementation or give it a new and unforeseen orientation. In the reforms studied, a changing climate often contributed to a shift in emphasis among multiple goals of a reform. Cerych and Sabatier (1986: 254) concluded that the effects of changed socio-economic environments on policy implementation are highly complex:

> *No clear direction can be identified in which worsened social, economic and financial conditions influence higher education reform implementation. Sometimes the impact was*

> *negative; often it was not. Occasionally, it facilitated implementation because the generally worsened conditions were in fact favourable in an unforeseen way to the realization of a policy. When the impact was negative, however, it was never the only factor in failure.*

On the basis of the analyses of the various reforms, Cerych and Sabatier concluded that it is a mistake to focus on *clear and consistent objectives*. They reduced the importance of an *adequate causal theory* for a successful outcome, and the comparative project indicated that *adequate financial resources* were of less importance than expected to ensure successful implementation. Still, they seemed to mean that two factors might be more important than others for a successful implementation of goals; a *moderate extent of change*, and the long-term presence of a '*fixer*' committed to the fulfilment of the reform.

In its report in 1968, the Ottosen Committee proposed that all post-secondary education institutions in each of 12 defined regions should be merged. However, during the political process the number of regions was increased to 17. In its report in 1988, the Hernes Committee suggested that the number of colleges should be reduced through amalgamations, and presented some examples on mergers. These examples indicated that the number of colleges might be reduced to about 55. The Ministry of Education (where Gudmund Hernes now was Minister of Education) thought this to be too large a number of entities and suggested in a white paper to Parliament that 20 to 30 colleges would be a more appropriate number.

The Hernes Committee and the Ministry of Education were less specific than the Ottosen Committee in terms of which colleges should be merged, and the suggested number of new institutions was much higher than proposed by the Ottosen Committee. One might therefore possibly conclude that the implementation of the 1994 merger was facilitated by *a less clear vision* of the final outcome and *a lower degree of system change*. On the other hand, the numbers of institutions, staff, and students affected by a merger were far fewer in the late 1960s than in the early 1990s. In 1965, fewer than 10,000 students were enrolled in college education as compared to 70,000 in 1994. Not only had 14 district colleges been established, but the number of colleges for various professional studies had also expanded considerably. The degree of system change in the 1994 merger therefore was greater than that of a similar reform in the late 1960s would have been. To use the terminology of Cerych and Sabatier, depth of change, functional breadth of change, and level of change were all substantial. In theory, the likelihood of such a revolutionary structural reform to achieve the necessary political support and be implemented should thus be very low.

A too large extent of system change was a very convincing explanation for the merger failure in the late 1960s. This is, of course, an explanation that has to be modified in the light of later events. So, what was different in the early 1990s? *Adequacy of causal theory* is included in the analytical scheme by Cerych and Sabatier. But to the extent that it is possible to apply this term in this respect, there is no great difference in the logic behind the reform proposal on the two occasions. *Adequacy of financial resources* to secure a successful implementation of a reform is another factor, but it cannot explain the differences in implementation success. As opposed to the first merger proposal, one of the aims of the 1994 reform was to

reduce public expenditure in the college sector through economies of scale in the larger merged institutions. In line with this assumption, the government anticipated a more cost-efficient state college system and reduced appropriations to the new colleges (Kyvik 2002a). The unimportance of adequate funding for the implementation of this reform corroborates the conclusion drawn by Cerych and Sabatier in this respect.

The big difference between the situation in the late 1960s and the early 1990s is *the degree of commitment to the objectives* of the reform proposals as suggested by the two committees. While the colleges and their staff opposed to the merger proposal on both occasions, the Hernes Committee attained general political support for the merger issue. Moreover, the chairman of this committee, Gudmund Hernes, was given the opportunity to restructure Norwegian higher education according to his own visions by being appointed as Minister of Education. Gudmund Hernes was accordingly a true 'fixer' in the implementation of the reform.

But why did the merger proposal by the Hernes Committee attain general political support? What was different on the later occasion from the situation in the late 1960s? The answer can be found primarily in *changes in the political and socio-economic environmental climate*, which is one of the important factors influencing policy implementation in the analytical scheme of Cerych and Sabatier.

The political decision to undertake large-scale mergers in the regional college sector, and the successful implementation of this decision in the early 1990s, were facilitated by cultural and ideological change. The proposal to establish fewer and larger state colleges through mergers was consistent with prevailing trends in political and administrative thinking about how the public sector should be organised to deal with structural inefficiency and reduce organisational complexity. The existence of a 'fixer', who in this case proposed the reform as well as having implemented it, was an additional factor which guaranteed a successful outcome from the political decision. However, the reform with great probability would have been implemented even without Gudmund Hernes being in charge of the Ministry of Education. The ministerial bureaucracy was intent on carrying this reform through and was backed by a unanimous political decision. One of the bureaucrats responsible for the implementation of the mergers later revealed that it was the ministerial bureaucracy that was the driving force in the merger process – not the Minister of Education. Gudmund Hernes had not expected that it would be possible to establish fewer than 40 new institutions. Subsequently, he was prepared to strengthen the role and power of the regional college boards – not to abolish them (Frøysnes 2004).

Explaining Regionalisation

As shown in this chapter, the regionalisation of higher education needs to be explained by a combination of structural–functional theory, a cultural approach, and a power perspective.

The governmental arguments for the reform were implicitly based on structural–functional theory. Through mergers of small institutions into larger entities, economies of scale and improved contact between different professional programmes could be achieved. In the time before the Ottosen Committee's radical proposal in 1966 to organise short-cycle and vocational post-secondary education in regional study centres, there were few who questioned the suitability of a system composed of small, specialised institutions for each individual field of training. New educational needs were met by the creation of new types of schools with no links to the existing ones. A profession-oriented training system based on the function principle was regarded as natural. Teacher training should take place in teacher training schools, engineering studies in technical schools, and so forth. Therefore, the proposal of the Ottosen Committee was defeated at first, but its idea of integrated education centres would prove to be resilient.

Earlier attempts at integrating the college sector by dividing it into 17 educational regions, each with its own regional board, had proved to be a failure. The different professional colleges and the district colleges had managed to preserve their organisational, professional, and academic identities, and to bypass the regional boards in their contacts with the Ministry of Education. The structural complexity of the organisational field was accordingly a powerful argument for a fundamental reorganisation of the sector.

This decision, however, was facilitated by the introduction of a general programme for renewal of the public sector in line with recommendations by the OECD (Gammelsæter 2002). The New Public Management concept presupposed the creation of larger state agencies in order to delegate decision-making authority from the central state level. In addition, many other Western European countries had at that time regionalised their college sector by large-scale mergers of professional and vocational colleges. Still, it would be a mistake to conclude that the Norwegian reform was the result of importing models and ideas for the organisation of the public sector in general, and the college sector in particular. The national history of the reform process was the most important premise. The idea of a regionalised sector dated back to 1966 and had been embraced by the Ministry of Education. However it lacked the necessary political support until 25 years later. Although the establishment of educational institutions outside the university cities gathered general political support, there was, however, a fundamental political and ideological disagreement as to whether these establishments should be concentrated in regional centres, or whether new training opportunities should be put in place in local communities where they had not been available before. This argument can be traced all the way back to the parliamentary discussions of the proposal by the Ottosen Committee, and ran more or less along the same political divide. The Labour Party wished primarily to concentrate the training institutions in regional study centres, whereas the liberal/conservative parties were more in favour of a geographically decentralised pattern of vocational and professional establishments. In spite of the strong resistance to it during the first 2 decades by many in this sector, as well as by the liberal/conservative parties in Parliament, the social-democrat reform project eventually prevailed.

By the end of the 1980s, there was a general – if gradual – realisation of the fact that running a large number of small, scattered colleges was hardly an appropriate way of managing the system, be it from a managerial, professional, administrative, or economic point of view. In addition, the Ministry of Education was administratively overloaded by an increasing number of institutions, programmes, staff, and students. Mergers had long been an accepted means of achieving economies of scale in industry and business, and this measure was also adopted by the government as a general reform strategy in public administration. Even though the merger of regional colleges can be best characterised as an administrative reform, it was marketed by the Ministry largely as a professional reform.

The regionalisation of the college sector was clearly the successful result of planned change orchestrated by the Ministry of Education. In the Ministry, a small group of dedicated people was set up to carry the mergers through, and in the regions the regional boards finally could accomplish the integration process they had worked for so many years to achieve. In most regions, the merger process created tensions and conflicts between existing colleges, programmes, and individuals, although the existing institutions were not physically closed and rebuilt in regional centres. This problem was solved through the creation of network colleges.

Most colleges and staff accepted, somewhat reluctantly, the inevitable outcome of this process, but organisational issues related to the construction of new faculties and administrations were ridden by conflicts in many regions. Still, by August 1994, the new state colleges were operative and the board of each institution was now responsible for implementing the objectives of the reform in relation to academic work and study conditions, administrative efficiency, and quality, and the further development of the college as a regional and national actor in higher education.

In conclusion, by the end of the 1980s, a number of structural and cultural preconditions for the regionalisation of college education were present. This part of the education system had developed into a highly differentiated and geographical dispersed system, creating a complex organisational field calling for measures that could counteract the fragmented expansion. The decentralisation wave had already peaked, and the regional level gradually increased its importance as a public service provider. The general reforms of the public sector, inspired by New Public Management ideas, spilled over to the field of higher education and demanded larger and more cost-effective units. Thus, the proposal to merge the regional colleges into fewer units was consistent with prevailing trends in political and administrative thinking. The Ministry of Education had waited for more than 2 decades to find the right moment for driving the reform proposal through.

The regionalisation policy is an example of a successful comprehensive institutional reform, in the sense that colleges with long historical traditions were closed down as independent institutions and that in many cases, existing professional faculties were split up and rearranged in new organisational entities based on staff from two or more professional and disciplinary cultures. However, new organisational structures did not necessarily guarantee that the intended effects on cost efficiency, the quality of administrative and academic work, study conditions, and the innovative capacity of the colleges would be achieved (Kyvik 2002b).

Phase 3
Vertical Integration

Three principal processes have worked to bring the two higher education sectors closer to each other: academic drift in the college sector, vocational drift in the university sector, and field-coupling. In this vertical integration process, we can distinguish between political, bureaucratic, and professional coordination of institutions and programmes, and on adaptation of individual institutions to new realities based on market coordination. Over time, these processes have reduced the differences between the sectors and worked towards integration.

Chapter 7 explains the academisation process in the college sector, and Chapter 8 analyses the processes which constitute what is here called field coupling through student mobility, rule harmonisation, network building, and cross-field organisational mergers. Because this study is devoted to the transformation of the college sector, vocational drift in the universities is not dealt with in a separate chapter, but in Chapter 9 where the dynamic relationship between the processes characteristic of vertical integration is discussed.

Chapter 7
Academisation

Introduction

Around 1990, a study undertaken by the OECD concluded that the establishment of a separate college sector had been successful in most countries (Gellert, Pratt, & Furth 1991). As planned, the proportion of higher education students studying outside universities had increased, and the institutions had to a lesser extent than anticipated become influenced by academic values. The vocational orientation was retained, the duration of programmes remained short, and relatively few college students continued their studies at university. This was explained by reference to the changes in the economy and society during the 1970s and 1980s and their influence on public policy and the labour market. The relevance of education came more to the fore, and, to an increasing extent, vocationally oriented study programmes became the choice of many students.

In the years that have passed since the publication of the OECD report, there is no doubt that an academisation process has taken place in most Western European countries. College programmes have generally been extended in years of study, the curricula have stronger elements of theory, and in many countries academic staff have engaged in research, though on a considerably smaller scale than in the universities (OECD 1998). However, significant differences remain between countries and programmes in terms of how far this process has come and also in terms of national policy regarding this sector.

This trend has been much debated in many countries. There has been a fear that academisation of the college sector will eventually lead to uniformity of higher education programmes, inhibiting the intended development of functional differentiation between universities and colleges (Birnbaum 1983; OECD 1991). Much of this literature on this topic is normative – academisation is viewed as counterproductive for the maintenance of a diversified post-secondary higher education system and for the training of skilled labour for the practical professional vocations. The beneficial aspects of this process, like quality improvement in teaching and research, and the strengthening of educational institutions in non-metropolitan regions, are often overlooked. The aim of this chapter however, is not to discuss the pros and cons of academisation of the college sector, but to explain the reasons for, and the dynamics of, this process.

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

Academisation: A Theoretical Approach

The analytical approach to the study of change processes in higher education outside universities, combining structural, cultural, and interest group explanations, will be used to examine the forces driving the academisation process. In a structural perspective, academisation can be regarded as a functional response to the need for more theory in the curriculum and better trained students to cope with the demands of an increasingly knowledge-based labour market. In a cultural perspective, the role of supra-national organisations, international professional associations, and trends in other countries should be explored. The role of interest groups in the academisation process is, however, the most frequently used explanation in the higher education literature. Within this tradition, a*cademic drift* is the most commonly used concept in analyses of academisation processes. It was originally coined to describe the tendency of polytechnics (in the UK) to orient their activities in ways that bring them closer to the university image (Burgess 1972). In his analysis of academic drift in Europe, Neave (1979) reserved this concept for processes taking place on the faculty and department level in individual establishments and introduced the notion of 'institutional drift' to account for similar processes at the institutional level. In addition, he used the notion of 'policy drift' to describe the failure of the government and central administration to enforce policy and the reluctance to intervene in processes at the institutional level. Moreover, he introduced a fourth category – 'drift in curricular emphasis'– implying accentuation of abstract knowledge, gradual reduction in emphasis attached to practical work and a move away from a utilitarian approach in course curricula. Finally, Neave mentioned 'personnel drift', meaning that teaching staff in colleges were more academically oriented than envisaged.

Neave's useful elaboration of the term academic drift seems to have been more or less neglected in the literature on this subject. This is a pity because he has offered a more advanced theoretical explanation of the logic of academisation processes than his predecessors and successors in this field. Inspired by his analysis, we will suggest an even more fine-grained typology and distinguish between six different, though related, academisation processes which take place at student level (student drift), staff level (staff drift), programme level (programme drift), institutional level (institutional drift), sector level (sector drift), and governmental level (policy drift). Although academisation processes at the various levels are closely intertwined, nevertheless, for analytical purposes, it is important to distinguish between them to improve our understanding of the dynamics of these processes.

Neave (1979) made the assumption that the various drift processes are hierarchically organised, such that policy drift will result in a chain reaction down through the different levels. But there will also be a reverse causality, beginning at the lowest level and eventually leading to policy drift. This, of course, is a plausible explanation for how these drift processes take place. We will, however, suggest an even more dynamic model for academic drift with less emphasis on vertical chain reactions and more weight on mutual interactions between the various levels.

The essence of this theoretical assumption is that (a) academic drift may take place simultaneously at several levels; (b) academic drift at one level may lead to academic drift at another level, either through chain reactions or by by-passing levels; and (c) academic drift at one level, which have been triggered by academic drift at another level, may have a reverse effect on drift processes at the initial level, leading to mutually reinforcing and self-sustaining processes that are virtually impossible to stop in the long run.

In Norway, academic drift may be deconstructed in several different, though related processes, of which the following will be discussed:

(a) Increasing emphasis on theory in the curriculum
(b) Upgrading of professional schools to higher education colleges
(c) Horizontal and vertical extension of study programmes
(d) Development of research activity
(e) The possibility for state colleges to advance to university status
(f) Symbolic drift in the sense that state colleges have been entitled to name themselves university colleges in international contexts

The dynamic model for the explanation of academic drift based on mutual and reinforcing processes among actors at the various levels of the organisational field will be applied as an analytical framework in the study of each of these processes, but it is important to bear in mind that actions are conditioned and constrained by structural and cultural change in society as well as in the higher education system itself.

Increasing Emphasis on Theory in the Curriculum

Smeby (2007) has argued that over the last 30–40 years, education in Norway in the semi-professions has become increasingly formalised and institutionalised. Professional education has moved from a 'vocational' to an 'academic' model. In all study programmes, theoretical knowledge has gained ground at the expense of practical training. This change relates to the removal of work practice as a requirement for admittance into a programme as well as to the reduction of practical training within the study period.

In general teacher training, practical experience in the teaching profession has been an important part of the study programme, but over time, the number of practice hours was reduced in favour of theoretical knowledge. In pre-school teacher training, a controversy arose in the early 1970s as to whether trainee practice in a kindergarten or an equivalent would remain a prerequisite for admission into the study programme. This question arose in connection with the elaboration of new legislation on teacher education, adopted in 1973, and which proposed to do away with pre-trainee practice altogether. Pre-school teachers in the Norwegian Teacher Union initially opposed that proposal, but after it was also suggested that training

be extended from 2 to 3 years, they modified their views. All things considered, the perspective of an upgraded pre-school teacher degree on a par with general teacher training outweighed the wish to preserve trainee practice (Greve 1995).

The organisation and content of technical courses was altered a number of times, as new demands were made regarding previous knowledge and practical experience as a mandatory admittance requirement. The latter in particular witnessed much change, going from 2.5 years in 1912, down to 2 years in 1939 and to 1 year in 1960, only to disappear altogether in 1969. The issue of work experience as part of the overall curriculum would, however, remain a recurrent theme, as it was regarded as a central element in other professional training courses. Still, the Ministry of Education dismissed the demands for work experience to become part of engineering education because the costs would be too high for the state (Kyvik 2002a).

This trend also applied to maritime education. A curriculum reform in the 1970s illustrates the kind of controversy that arose regarding the role that work experience, and in this instance, sea experience, should play as an admission criterion and as part of the course itself. In brief, the dispute centred on the fact that the Ministry of Education placed less importance and granted less scope to work experience than was acceptable to the Seaman Schools Council. In the Ministry's understanding, when it came to higher education, one had to distinguish between the sort of work experience that constitutes a prerequisite for the courses to be beneficial, and the sort of experience that is necessary in order to receive the authorisation or certification required to practise in certain professions. Indeed, the Ministry admitted that to a certain degree, sea experience was both necessary and desirable in order to complete a degree in maritime studies, but, at the same time, it doubted strongly that it needed to be extensive (Kyvik 2002a).

Concurrently, the curriculum in engineering and maritime studies gradually became more theoretical. The technological revolution was an obvious and important reason for this development. In addition, engineering education at a college gradually constituted a first step in a civil engineering programme at the Norwegian Institute of Technology, and the colleges had to adjust their curriculum to comply with the requirements for admittance at its second cycle (see Chapter 8).

In all health and social work studies, the theoretical element increased over time, while less time was allocated to work practice. Technical innovation in medical care created a demand for improvements in the training of nurses and the extension of the training period as well as changes in the curriculum. In nurse training, which is the most established of these programmes, this emphasis on theory was controversial. It was argued that making the course more science-oriented, in the common understanding of the concept, would in fact contradict what was considered good care practice (Martinsen & Wærness 1991; Karseth 2002).

As shown in Chapter 3, the district colleges were primarily meant to offer vocationally oriented study programmes. However, in the various 2-year programmes, theoretical perspectives soon gained a strong position. In 1970, a committee was set up by the Ministry of Education to evaluate the programme in Economics and Business Administration. Most of its members came from the district colleges.

The committee recommended that within the frame of 2 years (four terms) of study, basic theoretical education should be given priority over vocational specialisation. Moreover, a high level of problem analysis and problem-solving should be given priority over factual knowledge. Specialisation for specific vocations could instead be concentrated in a possible fifth or sixth term of study. The proposal of the committee was met with general agreement at the district colleges. This theoretical orientation seemed to become a general pattern (Sandvand 1976). Nevertheless, there is no doubt that the original goal for the programmes, that is, to offer an education qualifying directly for entry into certain types of employment, remained the predominant one.

However, the 2-year programme gradually came to represent a partial education, functioning as a basic introduction to the 4-year degree in economics and business administration at the Norwegian School of Economics and Business Administration. This change was to have major consequences for the content of the course, and implied the development of the curriculum in a theoretical and academic direction at the expense of a practical and vocational orientation (Rønhovde 2002). The need for vertical integration between the educational levels was consequently of greater significance for the curriculum of the 2-year programme than for the need of an autonomous and vocationally oriented course (see Chapter 8).

These examples drawn from the major study programmes illustrate very well this particular academisation process: the removal of work practice as a mandatory requirement for admittance into study programmes, and the reduction of practical training during the study period. There were several reasons for the introduction of the upper-secondary school certificate as the sole admission requirement, not least the harmonisation process in the college sector. The evolution towards more theory in the curriculum had its basis in technological and scientific advancements, and theoretical knowledge has become an important part of occupational competence in the various professional domains. Medical progress based on new knowledge gradually elevated the demands placed on nurse training programmes. Technological development likewise led to extensive changes being made to technical and maritime studies. A third example is the evolution of educational theory. For those involved in teacher education, this led to extra emphasis being placed on learning processes, in addition to the traditional weight on knowledge transfer between teachers and students. Changes such as these have resulted in a stronger emphasis on theory in the various programmes.

However, this trend can only be explained satisfactorily if we take into account the interaction between drift processes at the various levels in the organisational field. First, many college students clearly wished to pursue their studies in universities and specialised university institutions, and have them recognised as part of an academic degree at the same time. Second, this wish received broad political support. In the case where this implied using a foundation course directly dispensed by a college as part of a higher degree course, the college had to adjust the content of its courses to comply with the requirements of universities and university colleges in terms of academic level. Examples of this include the adjustments in the 3-year engineering programme and the 2-year business and administration programme introduced to satisfy demands concerning the level of theory. Other examples are university subjects taught in the district colleges which had to be more closely

aligned to the requirements of the corresponding subjects in the universities in order to be approved as a basic course for further university studies (Ulstein 1979). Thus, the curricula of a number of university courses which at an early stage included elements of regional relevance (such as history stressing local history, and Norwegian with special emphasis on local writers) were adapted to the corresponding courses at the universities. It was very important for the district colleges to get their courses approved by the universities. In particular, this was decisive for students wanting to take a higher degree at a university. Third, this process was supported by the attitudes and values of an increasingly larger part of the college personnel through the recruitment of research-oriented staff members. A stronger demand for theory and academic standards coincided with their specific academic interests. In the case of business and administration studies, this evolution had become necessary if the programme was to be able to recruit a sufficient number of students. If the 2-year programme had failed to obtain recognition as a foundation course for the 4-year programme in economics and business administration, a decline in recruitment could have ensued. Programme leaders, their professional organisations, and institutional leaders thus worked towards making the curriculum similar to that of the university programme. Finally, the Ministry of Education supported the enhancement of theory in the curriculum at the expense of practical training, partly to reduce expenditure on education, and partly to harmonise rules and regulations across different professional programmes.

Upgrading of Professional Schools to Higher Education Colleges

The academic status of professional schools was first discussed in general with the Ottosen Committee's proposal in 1966 to establish regional study centres, and to upgrade short-cycle professional and vocational training to higher education. There was no universal agreement that the existing schools should undergo an upgrade to higher education. Questions were asked as to whether some of these programmes, for instance nurse training and engineering studies, belonged at such a level. Some pointed out that the main body of students within these programmes did not hold an upper-secondary examination certificate, and therefore lacked the formal qualifications for access to higher education. Others were worried that these programmes would lose their practical character for the benefit of a more theory-based curriculum. The professional organisations, however, saw in the Ottosen Committee's proposals the opportunity to raise the status of these programmes together with the salaries of teaching staff and graduates, but wished for this to be achieved by developing existing schools, which would preserve their autonomy.

To those involved in teacher training, college status was an old issue, but their particular concern was to attain status as specialised university institutions. In the 1950s, there were attempts to change the status of general teacher training from vocational education to university-level education. This should be done

by concentrating teacher training to a handful of institutions in order to establish viable environments for teaching and research at a university level. While this attempt proved to be unsuccessful, the question of granting college or specialised university status to the teacher training schools reappeared a decade after it had been turned down. In 1960, the Minister of Education expressed the view that teacher training schools had to be equipped to the same standard as specialised university institutions, with lecture rooms and smaller seminar rooms for group or individual work. The old system of classrooms had to give way. The following year, the Ministry's director general declared that it was essential to instil a university environment in the teacher training schools (Dahl 1975).

The group-interests setting the agenda within the teacher training system also sensed the opportunity for upgrading the study programme to higher education level, with upper secondary school as its sole admission criterion. Status as specialised university institutions was clearly impossible to achieve for teacher training schools, whereas college status in its new understanding, as established with the creation of district colleges, lay within reach. With it was the possibility of achieving working conditions and the autonomy that people within the Norwegian teacher training-school union had strived for over many years (Dahl 1975). In 1971, the term college of education was used for the first time to designate general teacher training schools, as well as vocational and pre-school teacher training schools.

The gradual change and upgrading of technical schools to higher education institutions has been dealt with in Chapter 5. To summarise this development: in 1977 a reorganisation of technical education took place, the upper secondary school certificate became the general requirement for admission, and the technical schools were turned into engineering colleges as part of the higher education system.

Regarding the status of nursing schools, the Ministry of Health and Social Affairs argued in a 1976 white paper that the professionalization of nurse training should not be pushed too far, nor be more theoretical than necessary, and that a 2-year course would be sufficient. However, the Norwegian Nursing Council worked relentlessly and successfully for the introduction of a 3-year programme in nurse training at college level (Melby 1990). Following the discussions on the white paper, the political majority in Parliament – the conservative parties in coalition with the Socialist Left Party – opted to make nurse training a 3-year college programme, and decided that this should set the pattern for all programmes in health and social education. This incorporation of nurse training into the college system in 1981, together with the shift in ministerial responsibility, marked the end of a long tradition of internal hospital training and a break from the vocational field (Karseth 2002).

The college sector as we know it today thus developed gradually from 1969 onwards, partly because of the foundation of district colleges, but mainly through the upgrading to higher education institutions of the existing professional and vocational schools. This process started with the schools of teacher training in 1973. The technical schools and the social worker schools were upgraded in 1977, and the nursing schools and various other small institutions in 1981.

There were many reasons for the upgrading of professional schools to higher education colleges, of which two are structural. First, the gradual development

of a knowledge society with increased skills being required by engineers, nurses, teachers, and administrative staff entailed a need for an extension of the study period to a level comparable with the first degree in universities. Second, the establishment of district colleges as higher education institutions in the late 1960s, and the proposal of the Ottosen Committee to integrate professional schools in common regional study centres, created a kind of administrative logic whereby educational requirements should be standardised across study programmes. Thus, structural change in society generated by technological innovation and structural change in the post-secondary education system through the establishment of district colleges were driving forces in the process of upgrading professional schools and other vocational institutions to higher education colleges. In addition, the upgrading of professional programmes in some other countries obviously had an impact on the processes taking place in Norway, in particular with regard to technical education. Finally, actors at the various levels in the organisational field engaged in the fight for the future status of the professional schools. While some actors worked to preserve these institutions as vocational and practice-oriented schools, others worked relentlessly to upgrade them to higher education colleges. Entrepreneurial staff and ambitious institutional leaders together with their professional associations argued successfully for a change of status through the extension of the study period from 2 to 3 years based on upper secondary school as admission requirement. These extensions were often controversial and took a long time to enforce due to resistance from the government on economic grounds.

Horizontal and Vertical Extension of Study Programmes

The introduction of university courses in the district colleges and later in the teacher training colleges, the introduction of master's degrees in several study programmes, and the establishment of Ph.D. programmes in a few institutions constitute important parts of the academisation process in the college sector.

Introduction of University Courses

The inclusion of basic university courses in the district colleges is an early, but not particularly good example, of institutional drift processes in the college sector, as this was part of the official mandate for these institutions. However, several of the first-year university courses were soon extended by half a year and were approved as units equal to similar courses at the universities. Many argued, therefore, that the extent of these courses became larger than originally anticipated, and were worried about the effect of the teaching of university courses for the identity of the staff and the selection of reference groups for their work and aspirations (Sandvand 1976).

A similar trend took place within the teacher training colleges, which gradually changed in character. At the same time that the Norwegian College of

Education, which offered continuing education and university courses to graduates from teacher training schools, became part of the University of Trondheim, these institutions themselves were taking over more of the responsibilities the college once had. This development was linked to the introduction of mandatory lower secondary education in the 1960s and the expansion of lower secondary schools. During this period, a conflict erupted between the teacher training schools and the universities about who should be made responsible for training lower secondary school teachers. The Ministry tended to the position that the teacher training schools should primarily train elementary school teachers, while universities should be responsible for educating lower secondary school teachers. In spite of this, the view defended by the training schools and teacher organisations eventually prevailed (Kyvik 2002a). The general teacher training schools started to include a number of options for 1-year specialisations in one or two subjects, and many students in this way earned the 4-year qualification required to teach in secondary schools.

Introduction of Master's Degrees

In the 1970s, teacher training colleges started to develop a selection of master's degrees at a university level, qualifying graduates for employment as teachers in upper-secondary school. In 1974, the National Council for Teacher Education set up a committee with the purpose of discussing the development of master's degrees in teacher training colleges. These degrees would have to accommodate the requirements of teacher training, while presenting the same academic standard as university master's degrees. Although opposed by the universities, which wanted to reserve the training at this level for themselves (Eriksen 2006), the first master's degree in teacher training colleges was instituted in 1976. Universities and individual teacher training colleges later entered into a series of agreements to establish collaboration between them in order to facilitate the teaching of master's degrees within the colleges. Academic responsibility, however, would rest ultimately with the universities.

The upgrading of pre-school teacher training to higher education status soon called for teaching personnel with improved competence. Staff with pre-school teacher qualifications, it was felt, should be given the option to undertake a master's degree in the same field, in doing so helping to create a more research-oriented environment. This was achieved in 1982 through the creation of a master's degree in pre-school education at the pre-school teacher training college in Oslo, followed in 1985 by the introduction of a master's degree at the pre-school teacher training college in Trondheim (Hagesæther 1998).

Vocational teacher courses also underwent an academisation process through the introduction of a master's degree. This development injected momentum with the introduction of compulsory upper secondary education in 1976, where a significant proportion of vocational training would now take place within the school system rather than in the workplace.

In the mid-1970s, there was a widespread belief within the technological community that the future need for civil engineers would be considerably higher than the existing training capacities could deliver. The Norwegian Institute of Technology decided to expand its facilities in Trondheim, while recommending at the same time that a few technical schools or district colleges be given the opportunity to establish 3-year courses qualifying directly to the second cycle of the civil engineering programme (Johnsen 1999). To complement these measures, it was also proposed that at least one of the district colleges should be allowed to develop a full civil engineering programme specialised in a given field. These signals were received loud and clear by Rogaland District College in Stavanger, which immediately submitted a proposal for the creation of a civil engineering programme to meet the needs of the oil industry. It would, however, take another 10 years to see the establishment, in 1985, of the civil engineering programme in Stavanger, the result of a collaborative effort on the part of the district college and the local engineering college. Eventually, civil engineering programmes were established in conjunction with the engineering colleges in Porsgrunn, Narvik, Grimstad, and Gjøvik.

The reform wave in higher education continued at the turn of the century when in 1998 the Government appointed a committee (the Mjøs Committee) to assess the need for change in the higher education sector brought about by new demands from the government, students, industry, and commerce, as well as by internationalisation and globalisation processes. Two years later, the Committee presented a comprehensive report suggesting major changes in higher education (NOU 2000). The work of the Committee was generally approved by government and Parliament and led to several major reforms. One of these reforms implied that the state colleges would be granted greater institutional freedom to establish study programmes at the bachelor's degree level and to apply for accreditation of new programmes at the master's degree level. Until 2002, the state colleges had to submit applications to the Ministry of Education if they wanted to establish new programmes, and the government in its annual state budget set target figures for student numbers and the enrolment of new entrants for most programmes in each institution, and funds were allocated accordingly. The reform implied the need for the establishment in 2003 of a new agency for quality assurance and accreditation in higher education – Norwegian Agency for Quality Assurance in Education (NOKUT) – which was to be responsible for the accreditation of new study programmes. In the course of a few years, the number of master's degrees at the state colleges increased to nearly 200 in 2006.

Introduction of Doctoral Programmes

Initially, the state colleges did not have the right to grant doctoral degrees. Doctoral students accordingly were obliged to take their Ph.D. at a university, even if their thesis had been written on the basis of research conducted at a college,

and under the guidance of college staff. The Act on Universities and Colleges of 1995 gave the universities and the specialised university institutions a particular responsibility for basic research and research training, but the Act also stated that similar responsibilities could be given to other institutions in their respective fields. Meanwhile, the Ministry's position regarding this particular issue had remained fairly restrictive.

The change of government in 1997 with a Minister of Education from Kristiansand and his Secretary of State from Stavanger soon proved to be to the advantage of these colleges in their striving for the right to confer doctoral degrees. Agder College, Stavanger College, and Bodø College had for some years worked towards achieving the status of research training institutions in specific subjects, and in 1997, the Minister of Education stated that the Network Norway Council should establish a set of criteria which colleges had to fulfil to be given the right to confer doctoral degrees (Stensaker 2004b).

The Network Norway Council dealt with the Ministry's request in 1998. In its treatment of the matter it pointed to Sweden, where the corresponding state colleges would, under certain conditions, be awarded the right to confer doctoral degrees in the fields where they did display a definite academic scope and quality. The Council proposed a set of criteria to each institution and these criteria were accepted by the Ministry of Education the same year. In the meantime, Stavanger College, Agder College, and Bodø College submitted applications for the right to confer doctoral degrees in some restricted fields. The Council established three distinct committees to review these applications. The committees came to the conclusion that all three colleges failed to meet the requested criteria. Most difficult to fulfil was the so-called scope criterion defined jointly by the three committees in the following terms: At least three related and distinct research environments within the college must individually satisfy the requirements for doctoral education. The colleges objected to the committee's reading of the scope criterion, arguing that it was not in accordance with its formulation in the law. The Network Norway Council expressed its support for the colleges and recommended that they be granted the right to confer doctoral degrees in the subjects in which academic merit had been deemed satisfactory by the committees. The Ministry followed the recommendation from the Network Norway Council, and in 1999, Stavanger College became the first to receive the right to independently confer doctoral degrees, albeit in two disciplines only.

The admittance of the right for state colleges to confer doctoral degrees in fields where they could get accreditation is another example of policy drift by state authorities. Again, Swedish regulations were looked at as a model that could be imitated and transferred to the Norwegian system. The obvious strategy of those colleges that wanted to establish doctoral degrees was now to concentrate resources and efforts in those fields where the possibility for accreditation would be largest.

This drift in public policy towards the colleges would obviously lead to another turn in the spiralling academisation process in this sector. To quote the rector at Oslo College, who at that time was critical to the academic ambitions of some of the other colleges (Stjernø 1999):

> *Colleges that are assigned doctoral studies will of course be tempted to use this as a platform for demanding additional resources. If they get additional resources for that purpose from the Ministry, these resources will be taken from the common pool of resources for higher education. This will not only create incentives for other institutions to move in the same direction – not only to obtain fresh resources, but also to avoid being punished for lagging behind by losing resources in a zero-sum game.*

In conclusion, the introduction of university courses, master's degrees, and Ph.D. programmes in the colleges are an important part of the academisation of the college sector. This development was partly due to structural changes within the higher education system itself, through the establishment of district colleges (with a mandate to offer university courses), and the introduction of mandatory secondary education (with a subsequent need for improved qualifications of teachers). It was also partly due to structural changes in society entailing a demand for more civil engineers and expansion of training capacities beyond that of the Norwegian Institute of Technology, and partly due to import of educational models from abroad, in particular from Sweden. But the horizontal and vertical extension of study programmes did not just happen; the changes were initiated by, and fought through, by actors at the programme level, the institutional level, and the sector level in the organisational field, eventually leading to policy drift at the state level, which in turn enhanced the academisation process at the lower levels in the field.

Development of Research Activity

In the college sector, research as an ordinary activity alongside teaching started in the district colleges. According to the proposal of the Ottosen Committee in 1967 and the recommendation by the Ministry of Education, the district colleges should not engage in research. This was said to be the fundamental difference between the universities and the new colleges. Personal engagement in research was not considered necessary for teaching at college level. On the other hand, good contact with research institutions was regarded as a prerequisite for keeping informed about recent results. However, soon after the foundation of the colleges, the teachers took up research as an ordinary function. In the early 1970s, about 60% of the teachers were engaged in research (Sandvand 1976).

The attitude toward research in the district colleges gradually changed after their establishment in 1968. In 1970, Parliament stated that some research of particular relevance to the respective regions was desirable, although it was unrealistic to aim at building up expensive research in the colleges. Moreover, as opposed to the universities, involvement in research by staff members would be voluntary, not mandatory. Still, Parliament underlined the importance of giving the teachers working conditions that would stimulate personal engagement in research. Possibilities for regular contact with other research institutions, sabbaticals for research, and satisfactory library facilities were emphasised (Sandvand 1976).

There are several reasons why research came to play an important role in the district colleges once they were established, but the most important explanation are the criteria about recruitment of academic staff (Kyvik 1980). Research is an activity dependent on personal skills, attitudes, and motivation. Parliament had decided that the qualification criteria should be comparable to those of the universities. University practice in the evaluation of applicants was introduced at the district colleges as well. Traditional academic criteria were thus the main basis for recruitment. With a teaching staff selected on this basis, a development of the colleges towards research institutions was likely to happen.

Other factors, also present from the start, were significant in this development. The district colleges were given a relatively high degree of autonomy. The Ministry of Education did not make any regulations pertaining to the time to be devoted to teaching and research; this was left to the individual institution. As a result, working conditions at the colleges did not differ so much from those at the universities. The staff had a relatively small teaching load (6–8 hours per week) and their own offices. This was not customary at other post-secondary institutions outside the universities.

Another significant factor was the university ambitions in the counties of Rogaland and Agder. Both counties regarded the establishment of district colleges as a first step towards acquiring a full university. Representatives of the district colleges in these two counties were the most eager spokespersons for diminishing the differences between the universities and the colleges. Thus, the ambitions in Agder and Rogaland contributed to this development at all district colleges.

From the very outset, there was public disagreement regarding the role of research in the district colleges. Some feared that the development of research as a part of the functions of these institutions would be at the expense of the universities. Others warned against the dispersal of scarce resources to small institutions and staff who could hardly undertake serious research. It was argued that Norway, having but a small academic community, had to concentrate its resources and researchers in a few institutions to maintain an international level. Furthermore, it was claimed that research environments at the district colleges would be too small to maintain a satisfactory academic standard.

The universities, which had been sceptical about the development of research in the district colleges, also feared a contagion effect whereby staff in the colleges for teacher training, social work, health education, and engineering would also become more research-oriented. Should the staff at these colleges also have the opportunity to undertake research as part of their ordinary functions, this would be expensive and a waste of resources. The universities feared that they would lose out in this competition, particularly on account of the strong support of the regional colleges in Parliament.

Nevertheless, the evolution towards a steadily larger research component continued. Even though many were critical to the development of new activities that could draw attention away from practice-oriented vocational training, research gradually came to play a larger role in these institutions. Attempts by the Ministry and the government to slow it down were countered on several occasions by Parliament.

Reasons for this, among others, were that the regional colleges were present in every county, and that in addition, they had been considerably more skilful and enterprising than the universities in their lobbying of Parliament. Counter arguments were losing momentum throughout the whole period. The resistance to upgrading the colleges to become research institutions did not receive enough sympathy in the Ministry of Education, and certainly none in Parliament. Thus, in 1975, the right to carry out research was extended to include all institutions in the college sector.

Apart from the district colleges, the majority of the regional colleges had, however, an institutional culture where little interest was shown in research. The staff members regarded themselves predominantly as teachers, and the career system did not encourage research. The introduction in 1977 of the research-oriented associate professor position in the teacher training colleges thus met with resistance from large parts of the staff (Halvorsen 1999). It was mainly through the recruitment of new staff that had an interest in, and the ability to carry out research that this activity became established, initially in the colleges of social work and teacher training. In the 1980s and early 1990s, professional associations and agencies became increasingly interested in supporting the development of research activity in the professional colleges (Kyvik 2002a). The Norwegian Nursing Council, for instance, attached a lot of importance to the development of research on nursing with the view to giving the programme a more scientific character (Melby 1990).

When the individual institutions were incorporated into the state college system in 1994, the staff in the various professional programmes had very different academic qualifications for undertaking research. While the large majority of staff in the former district college programmes, and to some extent, teachers in social work were involved in research, very few of the teachers in engineering and health education were qualified and actively engaged in research. Differences in traditions, experience, organisational culture, vocational identity, and external relations characterised the research profile of the various programmes in the new institutions.

Still, the Act on Universities and Colleges of 1995 specifically urged the state colleges to engage in research. However, unlike in the universities, the government made it clear that in the state colleges undertaking research should neither be an individual duty nor right, but an institutional responsibility. It was the college that should determine the distribution of time resources among the staff according to certain constraints laid down by the Ministry of Education when determining the annual work programme for each individual (Kyvik & Smeby 2002).

Mail surveys of all academic staff in the colleges in 1997 and 2006 showed that on average 20% of their total working time was used for research and development (R&D) (Kyvik & Skodvin 2003; Larsen & Kyvik 2006). In comparison, university staff spent about 30% of their time on R&D (Kyvik & Smeby 2004). There were however large differences between individual colleges. These differences can for the most part be attributed to the educational profile of the colleges and differences in formal research competence. Institutions offering many vocational and professional programmes, particularly in engineering and health education, spent relatively little time on R&D.

The development of research activity as a legitimate task alongside teaching in the district colleges and later in all the regional colleges is an important part of the academisation process. Student drift towards universities indirectly enhanced research activity in colleges, because in order to retain students, the colleges would have to establish higher degrees, which in turn required an increase in their research capacity. Staff drift, especially among cosmopolitan-oriented members, was particularly connected to the involvement in research. Programme drift through the scientification of the knowledge core was based on the establishment of a research capability. Institutional drift, which is primarily driven by status competition, was enabled by the development of research activity, often supported by regional stakeholders. A major argument was that it is important to carry out research on regional problems and issues, and that such research should be undertaken by researchers living in the region. Sector drift took place through several public reforms enhancing research activity in all colleges, e.g. through the introduction of a common academic career structure and a common financial incentive system. Finally, policy drift through the gradual development of a more and more positive attitude and active policy to enhance research in the college sector had reverse effects on the research activity among staff and on attitudes and measures on the programme level and the institutional level, leading to mutually reinforcing and self-sustaining academisation processes.

However, the conventional assertion that staff drift, programme drift, and institutional drift are caused by vocational institutions and their personnel copying the universities and their academic staff's work practice has to be nuanced in two respects. First, it can also be regarded as the outcome of a process taking place within the college sector itself, where the district colleges and the relatively few full professors have been reference groups and role models for the other colleges and their staff. In many programmes comparing and aligning themselves to the level of the district colleges regarding work conditions, career structure, and research activities have been more important rather than taking after the universities. Second, the reasons for developing research in higher education institutions outside universities are more complex than a mere imitation of traditional university practice, or due to a wish by colleges to bring them closer to the university image (Horta, Huisman, & Heitor 2008). Staff members in professional programmes often do applied research and contribute to the dispersion of knowledge in their own particular way without paying much attention to prevailing views on what kinds of knowledge production constitute academic research (Kyvik & Skodvin 2003).

The Possibility for State Colleges to Advance to University Status

Traditionally, the development of the college sector has been strictly directed and controlled by the Ministry of Education, but under considerable pressure from local politicians and their supporters in Parliament for the establishment of new study

programmes throughout the country. The creation of the Network Norway concept was meant to sustain a strong central political and bureaucratic control with further development of this sector. Thus, in 1993, Parliament stated that unjustifiable use of resources could follow if the individual institutions were to be given the opportunity to shape their academic profile and activity exclusively from their own assessment of what would serve them best.

However, the new liberal winds that swept over Western Europe also reached Norway. In 1997, the Labour Party government was replaced by a liberal/conservative coalition. The Minister of Education and the Secretary of State were from Kristiansand and Stavanger, both cities home to the two state colleges most eagerly aspiring to university status, and this change of government, evidently, was to have a significant impact on the pace of the drive towards a market approach in the future development of higher education. Some of the colleges soon used the opportunity to tell the political establishment that the Network Norway concept had strong connotations to feudal societies with no possibility for social mobility, or to a Soviet-type planning system. Gradually, the term Network Norway disappeared from public documents (Eriksen 2006).

Furthermore, the development in Swedish higher education became an important premise for the change process in Norway. In 1996, the Swedish parliament adopted a set of criteria required for the allocation of university status to colleges, and in 1999, three colleges were awarded university status by the government. Obviously, this raised a lot of interest among the Norwegian state colleges as it became regarded as a potential model that might apply to Norway also. But the colleges, as it turned out, would come up with even more far-reaching proposals on how to achieve university status. Thus, in 1999, the Network Norway Council carried a unanimous resolution that was to cause quite a stir (Meeting of 23 September 1999):

> *In the opinion of the Network Norway Council, it is inopportune for a dynamic higher education system to see the foundations of its institutional structure laid by law. The Council therefore recommends that an amendment to the law be examined so that the institutions are given the freedom to choose which designation is best suited to their activity and academic profile.*

The motion was put forward during the meeting and had not been considered by the secretariat. The university representatives in the council also voted in favour of this resolution. The Norwegian Council of State Colleges backed up the Network Norway Council's motion and, by a majority of 44 votes to 5, adopted the following resolution (Meeting of 11 October 1999):

> *The Norwegian Council of State Colleges recommends that an amendment to the law be examined so that the institutional structure would not be fixed by law, but that instead the institutions would be granted the freedom to choose the designation which is best suited to their activity and academic profile.*

The minority vote consisted of the colleges in Agder, Bodø, and Stavanger, i.e. the three colleges with the most openly expressed ambitions for university status. These three wished to distance themselves from the other colleges, as they aimed to obtain university status through the improvement of their academic activity, and not as the result of a simple name change.

Not unexpectedly, the Norwegian Council of Universities disagreed over the resolution emanating from the Network Norway Council, and declared that the concept of university was in need of clarification, in line with international developments, and urged the Mjøs Committee to discuss an amendment to the law that would accommodate a diverse institutional structure. The Norwegian Council of Universities also appealed for its representatives in the Network Norway Council who had supported the colleges' stance on this issue to resign from their positions. The Ministry declared that the motion would be conveyed to the Mjøs Committee for consideration.

The Mjøs Committee dealt with the issue of institutional structure in a separate chapter. The Committee held the view that it should be possible for colleges and specialised university institutions – state and private – to be classified as universities that have a narrower range of disciplines than the four established universities. On certain conditions, institutions could apply to be transferred to other institutional categories than they previously belonged to. Following assessment by an independent accreditation body and subject to a satisfactory assessment by this body, the Ministry of Education should assign a new designation to an institution making such an application. The Committee formulated a number of general requirements for a higher education establishment to obtain university status and also several specific requirements for designating an institution a university. Offering master's degrees in at least five different areas and Ph.D.s in at least four different fields were the most important requirements.

The universities opposed this proposal. In particular, they feared that they would stand to lose out in the competition for research funds once new universities had been established. The Norwegian Research Council also opposed the proposal.

In the light of the Mjøs Committee's proposal, the Ministry of Education nevertheless suggested that the possibility should be opened for colleges with the right to confer doctoral degrees to apply for promotion to university. As had been the case for the specialised university institutions, this new designation would come with the responsibility to engage in fundamental research within the subject areas where they offered doctoral studies. In each individual case quality assessment would have to be carried out in order to decide if the right to confer doctoral degrees in specific disciplines was sufficient to achieve university status. Moreover, the Ministry proposed that the specialised university institutions should be designated as universities. Thus, the Ministry went much further than the Mjøs Committee in its suggested liberalisation of the use of the university designation. It stressed, however, that the old universities and the new ones would not be on a par in research terms (Eriksen 2006). The university-designated duties and tasks should only pertain within the fields authorised to confer doctoral degrees, and the conditions for the rest of the academic fields would not be directly affected. A change of designation did not therefore imply that all the personnel would be entitled to more research time.

In the ensuing debate, the majority in the Education Committee in Parliament, however, clearly expressed its support for the Mjøs Committee's views on more

stringent criteria for the attribution of university status to selected institutions (Eriksen 2006):

> *It is the majority's opinion that institutions wishing to be called universities must display both scope and depth at master's level, and also with respect to research excellence and research training. In the majority's view, the Government has failed to produce any substantial arguments to sustain its proposed dilution of these criteria, which would allow all colleges with the right to confer doctoral degrees to become universities. The majority therefore opts for the criteria, conditions and procedures drawn up from the Mjøs Committee as the basis to become a university*.

Furthermore, the Education Committee underlined the need for criteria which emphasised the use of regional competence and innovation potentials in the development of academic subjects and research fields.

The definitive and formal clarification of the promotion criteria took place in connection with the resolution of the new Act on Universities and Colleges of 2004, where the former regulation regarding the designation of individual institutions as respectively university, specialised university institution, and state college were abolished. The issue of institutional designation thus should no longer be a policy matter but strictly an academic matter.

The new Act specified that there are three types of higher education institutions – universities, specialised university institutions, and state colleges. Institutions can opt for the preferred status themselves, but have to be accredited by the Norwegian Agency for Quality Assurance in Education (NOKUT) to attain the status according to specific criteria. NOKUT must approve a change of status prior to the Ministry granting approval. However, the approval of NOKUT does not have to be accepted by the Ministry. On the other hand, the Ministry cannot change the status of a given institution without the institution being formally recognised by NOKUT as having the necessary quality.

The possibility for state colleges to achieve the status as a university in 2004 led to the application from one of the colleges – Stavanger College. NOKUT approved the application, and the Ministry of Education decided that from 2005 this college would become Norway's fifth university. Now the university system included a Trojan horse. Overnight, short-cycle professional and vocational programmes in teacher training, engineering, nursing, and social work offered by an institution had become university studies at one educational establishment, while still being college education at the other institutions.

The state colleges varied much in size, but most institutions were relatively small (Kyvik 1999). In 2005, only four colleges had more than 5,000 students, while eight colleges had fewer than 2,000 students. In addition to their small size, the weakly developed research base and the strong emphasis on professional programmes and vocationally oriented courses would make the step to university status according to the established criteria totally unrealistic for most of the individual institutions.

In order to attain university status according to the new regulations, individual colleges with such ambitions subsequently chose different strategies: (a) to make it on their own, (b) to merge with nearby colleges and create a network university, or (c) to advance to the status as specialised university institution.

Individual Advancement

Three of the largest state colleges had for many years aimed at becoming a university. These ambitions had been particularly strong in the city of Stavanger in Rogaland County and in the city of Kristiansand in Vest-Agder County. These two cities had competed with Tromsø for Norway's third university in the 1960s. They both lost, but attained a district college as compensation. In Northern Norway, Bodø is the second largest city after Tromsø and due to regional competition it wanted a university of its own based on the former district college. For all these three cities and their colleges, the obvious strategy was to obtain university status of their own. The largest state college – Oslo College – had earlier opposed university ambitions in Stavanger, Kristiansand, and Bodø and maintained that a diversified higher education system would be better maintained within a binary model than within a unitary model. However, with the advancement of Stavanger College to the University of Stavanger, Oslo College found it difficult to maintain its status as a non-university institution. Thus, the opportunity to advance to university status through an accreditation process led to the concentration of academic and material resources in certain fields at these colleges to reach the necessary critical mass of Ph.D. programmes. In 2007, Agder College succeeded in its attempt to attain university status.

Network Universities: A New Strategy

In Sweden, where three state colleges achieved university status in 1999 – a development that clearly influenced the process in Norway – a fourth state college achieved this status in 2005. The latter college had been established on local initiative in 1993 as a network institution constituted by several formerly independent and geographically dispersed colleges and with the declared aim to become a university for Mid Sweden. It was obvious for the majority of the actors in this process that each of the colleges concerned would be too small to become a university by itself, and that only a coordinated effort in collaboration with regional political authorities and representatives from local industry could lead to university status. The university concept had strong local political support, and a former prime minister had been chairman of the project group preparing the mergers (Nordling 1996).

This experiment was followed closely by state colleges in Norway as a possible strategy for building a network university through mergers of colleges in various regions. If such a university could be accepted by political authorities in Sweden, it certainly would be possible in Norway. The first initiative was taken in 1999 by local political authorities and the three state colleges located in eastern Mid Norway (Lillehammer College, Hedmark College, and Gjøvik College). The boards of these colleges declared that they wanted to create a future university through the amalgamation of the three institutions to a network college which could be the

base for building a university. The working name of this new entity was the Inland University, and the concept was strongly supported politically and financially by local and regional authorities.

A second initiative was taken in Møre og Romsdal County, situated on the west coast, and with three state colleges (Molde College, Volda College, and Ålesund College). The boards of the three colleges established a working group to prepare the eventual merging of the three colleges as a base for creating a university in the county – Møre University. However, this county has historically comprised three regions with a strongly competitive relationship – a tradition which in fact led to the establishment of a state college for each of the regions – and which was a serious hindrance to the merger process. A major problem in this process was the issue of localisation of the future central administration.

A third initiative was taken by the county councils in Telemark, Vestfold, and Buskerud situated south-west of Oslo. Each of these counties hosts its own state college and there was a growing feeling among local politicians that a university could be important in attracting students to the area, to build up competence, and be an engine in regional innovation. In this case we might speak of a new university as a cornerstone in the construction of a new region – Vestviken – that did not exist in literal terms. This initiative was obviously a reaction to the plans in other regions for creating a university. However, as all three colleges were themselves network institutions, a new entity would be located in about ten municipalities, making the localisation issue of the central administration difficult. Moreover, the board of Telemark College had already declared that this college should work towards becoming a university on its own.

Advancement to Specialised University Institution

Some colleges which found it difficult to merge with other colleges in order to raise their status, and which were too small to develop into a university on their own, declared that they would opt for advancement to become specialised university institutions. This strategy was deliberately chosen by Molde College, which developed a strong environment in logistics, and the College of Sami Studies, which planned to develop the institution as the central environment for Sami studies in Norway, Sweden, Finland, and Russia.

As shown, the policy drift at the governmental level enabling state colleges to advance to university status had a strong reverse effect on institutional drift processes and created much energy and entrepreneurial activity in the various colleges. This particular academisation process was predominantly driven by policy change in Sweden, where the government had formulated a set of criteria required for the allocation of university status to state colleges, and where three colleges had been awarded university status on this basis. The adoption of similar criteria in Norway is an interesting example on how policy drift enabling institutional drift in one country might entail similar processes in another country.

Symbolic Drift: From State Colleges to University Colleges

In connection with the merger of the regional colleges in 1994, the issue of English names for the new institutions had to be decided upon. At that time the Ministry of Education was preparing the Act on Universities and Colleges, to be approved by Parliament in 1995. In this Act, the higher education institutions were formally regarded as three distinct groups with the following English names; *universities* (4 institutions), *university colleges* (6 institutions), and *state colleges* (26 institutions). After the establishment of the state colleges, a controversy about English names of the colleges soon appeared. The colleges were not content with the official translation of '*statlige høgskoler*' into state colleges. One of the colleges – Bodø College – started in 1994 to use the name Bodø Regional University, even though the Ministry of Education insisted that the official English name was Bodø College. As a compromise, the Ministry suggested that the state colleges could add 'of higher education' to the English name.

The state colleges themselves argued that similar institutions in Sweden were named 'university colleges', and that it would be reasonable to apply the same terminology in Norway. However, in the new Act, this name was used on the six higher education institutions at the university level with respect to degrees and research opportunities, thus effectively hindering any movement on this issue. Nevertheless, the state colleges continued to fight for a change of English names. This conflict with the Ministry of Education, which the state colleges eventually won, illuminates an interesting aspect of the academisation process, and we will therefore quote the correspondence in this matter at some length.

In a letter of 21 May 1997 to the Norwegian Council of State Colleges, the rector of Bodø College argued as follows:

> *As is understood it has been determined by the Ministry that – until further – the term 'statlig høgskole' shall be designated 'college', alternatively 'state college of higher education'. It has been generally expressed by the college sector – and by Bodø College in particular, that the term 'college' is not appropriate for the activities undertaken at the state colleges. This applies particularly when a college is to profile itself internationally and within the EU. (…) I refer also to the Swedish presentation of higher education as portrayed on the Internet. Here, it emerges that Sweden consistently employs either 'University' or 'University College' for corresponding state colleges (…). Against this background it is requested that the Norwegian Council of State Colleges undertakes a new consideration of the terminology for the state colleges as institutions of higher education.*

This issue was also addressed in a letter of 23 May 1997 from the rector of Bodø College to the Ministry of Foreign Affairs:

> *I wish to express my gratitude for the meeting with the Minister of Foreign Affairs at Bodø College on 12 May 1997. In this connection the rector raised the question of foreign designations for the state colleges. For example, it appears unreasonable that our college is obliged to use the term 'College' while the corresponding institution in Sweden, Midthøgskolan, is translated as 'Mid Sweden University'. This seems particularly unreasonable when the EU directive (Guidelines for Applicants 1996 for Socrates and Erasmus programmes) assumes that all higher education is referred to as university 'whatever such establishments may be called in the participating countries'. I am conveying this to the*

> *Ministry of Foreign Affairs as I have reason to believe that the question of foreign terminology pertains to this ministry. (…). The matter has otherwise been raised with the Norwegian Council for State Colleges. In our opinion the relevant terminology for the majority of colleges will be 'University', 'Regional University' or 'University College'. We hope that this matter can be clarified such that we may be placed on equal terms with our colleagues in the EU countries*.

The Norwegian Council of State Colleges responded to the inquiry of Bodø College in a letter of 9 June 1997 to the Ministry of Education:

> *Bodø College raises a question which is experienced as a considerable problem among the state colleges. The designation 'College' leads to recurrent problems of clarification in our relations with foreign counterparts, and it can appear restrictive to the internationalisation process which the Ministry has given clear signals to the sector to be active participants in. The circumstances are further accentuated when viewed against the background of a more liberal and pragmatic approach to the use of the concept 'university' in our neighbouring countries. This is mentioned in the letter from Bodø College and attachment. In this connection the Norwegian Council for State Colleges requests that the Ministry considers the situation whereby the EU, and not least Sweden, use the term 'university' on a broad basis, and those consequences this may have for the state colleges' international cooperation*.

The Ministry of Education responded in a letter of 9 July to the Norwegian Council of State Colleges. Here it was stated that there are no EU directives or other documents which provide instructions as to which terminology should be applied to higher education institutions, neither in English nor other languages. National terminology would have no impact on the right to participate in EU educational programmes or other forms of international cooperation. In this matter, the Ministry of Education also consulted the Ministry of Foreign Affairs which in a letter to the Ministry of Education of 26 November 1997 stated that:

> *We do not find the term 'university college' satisfactory as a translation of* 'statlig høgskole' *and make reservations concerning the use of this term. In England a university college will be part of a university*.

However, by the end of the 1990s, some of the colleges started to call themselves university colleges without consulting their Ministry.

In a letter to the Ministry of Education of May 3 1999, the Norwegian Council of State Colleges stated that it had come to an agreement with the Norwegian Council of Universities that the state colleges as a group should be named 'university colleges', but without any change in the English names of each college, and that the Ministry again considered the English name of the colleges. The Ministry of Education insisted, however, on a direct translation of the Norwegian name ('*statlige høgskoler*') into English (state colleges), but with the possibility to add "of higher education" to the name.

In 1999 the Norwegian Council of State Colleges through active lobbying among members of the Education Committee in Parliament finally managed to get this committee accept 'university colleges' as the official name of state colleges (Eriksen 2006). On 15 December 1999, Parliament made the following decision: 'Parliament requests the Government to sanction use of the term *university college*

by the state colleges.' As a consequence of this instruction, in a letter to Parliament dated 8 September 2000, the Ministry stated: 'The Ministry is in the process of concluding a revised official translation of the university and college sector where the term "University College" is included. A report on this translation will shortly be sent to the relevant institutions.' As a result of this amendment, the six former 'university colleges' ('*vitenskapelige høgskoler*') were renamed 'specialised university institutions'.

This decision made by the Education Committee in Parliament could not have come as a surprise to anyone who had followed the academisation process in the college sector, and illustrates very well certain aspects of the mechanisms behind 'institutional drift', 'sector drift', and 'policy drift'. Time and again, Parliament with its majority of representatives from non-university regions and its susceptibility to lobbyists from the colleges and their professional organisations and trade unions had overruled decisions made by the Ministry of Education.

This particular case also illustrates the process of purposeful identity change, or what has been called 'branding' in the field of higher education (Stensaker 2007). Symbols and myths are important properties of the identity of an institution, and the change of symbols and language is a characteristic measure in the building of new identities. In order to obtain legitimacy as a potential cooperative partner on the international student and research market, the colleges strongly wished to be entitled to use the university label in international contexts irrespective of the fact that this symbolic change would not be consistent with their academic level. The strategy of the state colleges in this process was to pick the appropriate reference group to advance their own case. The evident choice was the equivalent state colleges in Sweden because for many years these institutions had been named university colleges in English. This was due to the fact that the first four of these colleges were established as university branches, which later became independent colleges, but still entitled to use the label university college in their international relations. Swedish state colleges were accordingly the deliberate choice as reference group.

Explaining Academisation

Even though most of the professional and vocational schools and colleges and their teaching staff have not had universities and their staff as reference groups in their academic work, there is little doubt that the processes advancing academisation have proved to be stronger than the forces attempting to hold on to the traditional training system designed around practice and closely tied to a trade. This trend seems to be universal and has been characterised as 'an historical process of aspiration' (Pratt & Burgess 1973: 22).

In this chapter, the academisation of the college sector has been deconstructed as several different, though related processes: (a) increasing emphasis on theory in the curriculum, (b) upgrading of professional schools to higher education colleges, (c) horizontal and vertical extension of study programmes, (d) development

of research activity, (e) the possibility for state colleges to advance to university status, and (f) symbolic drift by the introduction of the notion of university colleges. By combining the notions of organisational field and academic drift, a model of how these processes have taken place was developed by analysing the dynamic relationship between actors and drift process at the various levels, leading to mutually reinforcing and self-sustaining academisation processes.[1]

Student Drift

The role of students in academic drift processes has largely been bypassed in the research literature. As long as students enrol in vocational programmes in the college sector in sufficient numbers and enter working life upon graduation, it is natural to omit them in explanatory models. However, if an increasing number of young people prefer to enrol in university programmes, and if an increasing share of college graduates wants to extend their lower degree with a higher degree, we witness an academisation process on the student level (Jónasson 2004a).

A theoretical approach to student drift towards universities or higher degrees is *credentialism* (Collins 1979). Jónasson (2004a) has argued that the value of a credential, notably a university degree, lies implicitly in the degree as a formal declaration rather than explicitly in its content, i.e. the particular knowledge or skills it guarantees. Credentialism furthermore means that the capital implicit in a degree is as much tied to the status of the degree as to its content, and its value is symbolic as much as concrete. If academic degrees are perceived as containing a higher monetary, social, and cultural capital than a vocational or short-cycle professional degree, this may lead to student drift towards universities. Consequently, professional programmes and colleges will try to develop higher degrees, or to copy university programmes, in order to sustain or advance their position in the higher education market.

Staff Drift

Educational institutions are populated by individual staff members, and experience shows that, at all times, some individuals (cosmopolitan staff) have been more oriented towards the international and national community of scholars than others (local staff). In the college sector this has been particularly noticeable with regard to research orientation. Cosmopolitan staff have higher aspirations and pursue their academic interests even though they work in pure teaching establishments and no time is supposed to be spent on such a purpose. Still, they manage to get leeway

[1] This model of academic drift has previously been presented in Kyvik (2007).

to undertake research, write up the results, and publish. The majority of those who are recruited to these institutions have been trained in universities, and many hold a doctoral degree and expect it to be possible to pursue their research interests. Qualified staff usually act as the main driving force for these processes of academic drift. In addition to their position as college employees, cosmopolitan staff are, for a large part, also formally or informally affiliated to national and international associations with specific standards and status related to their programme and discipline. As a result, these staff members often tend to refer to the standards of their discipline as to what constitutes a prestigious academic achievement, rather than identifying with the expectations of their institution. Harman (1977) has suggested that in comparison to other groups and factors stimulating academisation in the college sector, academic staff have constituted the single most important influence.

A theoretical explanation for such individual drift processes can be deduced from reference group theory as developed by Merton (1968) and from institutional theory, which may be applied in order to understand individual behaviour as well because it is basically the same mechanisms that are at play (e.g. see Jenniskens & Morphew 1999; Morphew & Huisman 2002). The basic idea of reference group theory is that people frequently compare themselves with individuals within groups other than their own when assessing their own situation. When the higher education system is regarded as a hierarchy (Bleiklie 2003), staff members in programmes or institutions defined as being at the lower end of the ranking scale will be inclined to compare themselves with staff at higher-ranked programmes and institutions and will subsequently try to copy the behaviour of these people to obtain the same status or income.

Programme Drift

A common trend for many study programmes is a drift towards academic values and practices in relation to the curriculum, research, and degree structure. With respect to the curriculum, all vocational and short-cycle professional higher education programmes face a common dilemma: how much theory and how much practical training should be included in the courses? The balance between theory and practice is not static. It is influenced by a number of factors and changing norms regarding what constitutes job-relevant education. Historically, a range of courses has emerged from purely in-service training programmes to become college studies integrated into a common higher education system, where academic norms with an emphasis on theory are predominant. The traditional ties between vocational training and the labour market have been gradually weakened. Over time, some of the training programmes have played down the requirements for work experience and have also reduced the practice-oriented element of their courses, increasing the input of theory instead. The relative importance attached to theory and practice in the vocational courses is also strongly connected to whether the course qualifies for extended studies at university level, in which case the demands for theory will be considerably higher than if graduates are expected to commence a working career directly.

Furthermore, one of the most important points of contention in the development of the college sector has focused on the extent to which these institutions should undertake research. In every country where a college sector has been established, it was an assumption that to the extent that the teaching staff were to become engaged in research, this was to have a practical orientation and be directed towards meeting the needs of the local community. The programmes themselves, however, frequently viewed this in a different light, and in many countries it was soon accepted that research was to be one of the normal functions of these programmes, and an important part of the reward structure for teaching staff. Finally, in a number of countries, some programmes developed higher degree courses on top of the common 3-year degree structure, and even doctoral degree courses before this became a general issue through the Bologna Process.

The reasons for this programme drift are basically found in professionalization strategies by entrepreneurial staff and professional associations. Elzinga (1990) argues that professionalization is characterised by the scientification of the knowledge core through the establishment of a research capability, the introduction of master's and Ph.D. programmes, as well as new career patterns based on research and research training, while the role of tacit knowledge in the training process is downplayed. In an early work, Glazer (1974) pointed to some major sources of conflict related to the professionalization of what he calls 'the minor professions'. First, there is a tension between practitioners and academics. The route to higher status lies in replacing the professionals and the practitioners with academically trained teachers, but this process inevitably introduces conflict. Glazer argued that this replacement of experienced members of the profession by members of academic disciplines undoubtedly brings into the training of students a more sophisticated knowledge. However, it is more questionable whether this is the most useful knowledge for the intended occupation. Second, the professionalization process also produces conflicts between interests and expectations of students on the one side, and interests and demands of teachers on the other. Students enter a professional programme in order to become practitioners, but discover that parts of the curriculum might not be directly useful for the practice of the intended profession. Glazer used nursing as an example and maintained that student nurses were taught less and less of what they need for their immediate tasks, and more and more of what a teaching staff interested in subjects of higher status wished to teach them.

Within the programme, cosmopolitan-oriented academic staff, programme leaders, and their professional associations are important drivers in the academisation process. In addition, public professional bodies and accreditation agencies can play significant roles in such drift processes by setting minimum standards for different programmes which usually imply more emphasis on academic knowledge. Representatives of the academic community are often members of government committees, professional bodies, and councils, as well as evaluation and accreditation committees where they have considerable influence on curricula and quality standards (Morphew 2000). Even though these university representatives might oppose academic drift in the college sector, their own academic standards can unintentionally enhance drift processes in the various programmes.

Institutional Drift

According to Neave (1979) institutional drift involves the departure by an institution from publicly stated and agreed objectives ascribed to it by an authoritative government agency. This process is well documented internationally. There have been countless examples of vocational education institutions striving for college status, as well as colleges attempting to achieve university status. In many instances, these attempts have been successful. This evolution was first described in the USA, where it was shown how low-status institutions in the education hierarchy tried to elevate their status by imitating the course and research profile of institutions enjoying higher prestige (Riesman 1956). Since then, many studies have shown the same phenomenon in other countries, such as, for instance, the UK (Pratt & Burgess 1973) and Australia (Harman 1977). The introduction of university programmes within the framework of a professional school or college is a typical example of the kind of processes that are embedded within the broader process of academisation. The introduction of research as a regular part of the work of the teaching staff is another tendency characteristic of institutional drift, of which the development in the former British polytechnics is the most prominent example (Pratt & Burgess 1973; Pratt 1997). This development has taken place in many countries (OECD 1998).

The basic mechanism behind institutional drift is much the same as for programme drift, but still different. While programme drift is driven by professionalization processes, institutional drift is driven by status competition. An adequate theoretical explanation for institutional drift can be drawn from organisation theory. There seems to be a universal tendency for organisational leaders to try to imitate other organisations they regard as more successful (DiMaggio & Powell 1983), and colleges are no exception in their drive to achieve university status. In addition, regional political and administrative authorities and industry may encourage, or even pressure, the local college to develop research activity, to introduce higher degrees, or to seek university status as part of a policy effort to strengthen the region.

Sector Drift

While the term institutional drift describes processes within individual colleges, sector drift is related to the college sector as a whole, basically characterising processes driven by its joint associations to enhance the academic status of these institutions. Sector drift can also take place when new rules and regulations pertaining to the college sector as a whole have an academic direction. Such changes have taken place in most countries through the upgrading of post-secondary schools to higher education colleges, and in the UK with the renaming of polytechnics as universities. But sector drift also takes place through minor reforms pointing in an

academic direction like the introduction of academic career structures in the college sector, the introduction of financial incentive systems favouring academic practice, and standard-setting by accreditation agencies relating to staff qualifications and the curriculum. Such reforms are usually not deliberate efforts by various public agencies to move the college sector closer to the universities. In conclusion, however, such efforts may contribute to driving the college sector closer to the values and practices of the academic system.

A specific aspect of sector drift is the tendency of colleges to apply the university label in international contexts. In various Western European countries, these institutions have translated their national names into 'universities for professional education', 'university colleges', or 'universities of applied sciences'. This is a kind of symbolic drift that does not change their legal status, working conditions, or institutional reputation in the national environment. In an international context, however, the university label may be of great importance for marketing the institution to potential students from abroad and to providers of research funds. A theoretical explanation for symbolic drift processes can be deduced from institutional theory with its emphasis on values and symbols in the construction of organisational identity (Meyer & Rowan 1977). By imitating the university name, polytechnics and colleges try to appear as something other than institutions predominantly offering short-cycle professional and vocational education. The application of the university label in the English translation of *fachhochschulen*, *hogescholen*, or *högskolor* thus is aimed at blurring the distinction between the two types of educational institutions. This process must be regarded as one of many intended strategic steps towards a transformation of organisational identity – the upgrading to formal university status also in a national context.

Policy Drift

Neave (1979) has argued that the concept of 'policy drift' as used in this context implies a departure from publicly stated objectives. Policy drift, thus, implies that state authorities gradually change their views on the purposes of college education, the rights and obligations of academic staff, and its status and role within the higher education system. This policy change may be due to pressure from the college sector and important stakeholders, or to a shift in attitudes regarding the mission of these institutions and the content of their programmes. On the one hand, the drift away from initial objectives may be regarded as a failure by state authorities to stick to their policy. On the other hand, change of policy goals may be regarded as natural processes. Implementation theory can help us to understand better the mechanisms involved in policy drift. In the view of Majone and Wildavsky (1978) implementation is evolution. They argue that during the implementation process, policymakers must cope with new circumstances that often imply the reformulation and redesign of original intentions and plans. Thus, goals often change over time, partly because of weaknesses in the

ideas themselves, partly because of the fact that ideas change, and also because of new circumstances.

Academic Drift as Mutually Reinforcing Processes

The underlying theoretical assumption is that entrepreneurial institutional leaders, programme leaders, and their professional associations; cosmopolitan staff and academically oriented students; as well as college sector associations; state authorities; and external stakeholders take part in mutually reinforcing academisation processes. Cosmopolitan staff may, for instance, want to raise their status and pay through copying the academic behaviour of their university colleagues. They put pressure on the institution to obtain better research conditions and to develop higher degrees. In turn, institutional leaders and programme leaders, inspired by the academic achievements of cosmopolitan staff, may put pressure on all staff to become more academic. Another example is governmental reforms which may have far-reaching and unintended consequences for the behaviour of staff and students in the college sector. Thus, the introduction of institutional reward structures emphasising research and publishing may encourage academic drift at a staff level. Similarly, the improvement of transfer possibilities between college programmes and universities may encourage student drift and force these programmes to move unintentionally in an academic direction. In turn, programme drift may reinforce student drift.

This model of the academisation process is well equipped to explain the Norwegian case. Academic drift processes at the student level, the staff level, the programme level, the institutional level, the sector level, and the state level have worked together and mutually reinforced each other. The drift of students towards higher-degree programmes in the universities contributed to programme drift through the establishment of master's degrees in the state colleges. The recruitment of academic staff with cosmopolitan ambitions, doctoral degrees, research interests, and with the disciplinary academic community as their reference group entailed a general staff drift in the colleges. Entrepreneurial staff and programme leaders, and their professional associations, influenced by technological and scientific advances in their respective professional domains, worked effectively to raise quality standards by introducing more theory into the curriculum and by extending the study period. The institutional drift in some of the colleges eventually resulted in their upgrade to university status, enhancing similar drift processes in many of the other state colleges. Another aspect of academic drift is the processes that have taken place in order to change the college sector as a whole with respect to status of institutions as well as the status of teachers and their working conditions. These sector drift processes have been driven largely by the professional associations, the trade unions, and the common associations of the colleges. In addition, external stakeholders have enhanced academic drift processes. The colleges were clever in mobilising local support from industry and at the regional governmental level, and made local politicians promote their interests in the state government and Parliament. In these cases, members of Parliament more

often acted as representatives of their regions than as party members. The many colleges thus had considerably stronger political support than the relatively few universities, because as a group they were able to muster far more representatives in support of their interests (Bleiklie, Høstaker, & Vabø 2000). Thus, policy drift has taken place at the state level; in the Ministry of Education, in the government, and in Parliament. Over time, the colleges were gradually given more leeway to develop into academic institutions.

Academic drift thus can be regarded as mutually reinforcing processes, where a decision leading in an academic direction leads to another decision enhancing the effect of the former decision, which in turn activates a process leading to yet another decision pointing in an academic direction, and so forth, and this process of reinforcing decisions seems to be virtually impossible to stop in the long run. As has been shown, the transformation of the Norwegian college sector illuminates the dynamics of these academisation processes very well.

In conclusion, Neave's elaboration of the notion of academic drift has proved to be very useful. Nearly 30 years have now passed since he published his paper, and much more empirical evidence for such drift processes is available. We have therefore suggested that his model could be further developed, both with regard to the various levels involved in academic drift processes and the dynamic relationship between such processes on the various levels. Even though this approach is primarily based upon an interest-group perspective, structural and cultural explanations do not conflict with this change model, but can be regarded as driving forces having an impact on actions of the various interest groups. A structural–functional approach to the academisation process will emphasise efficiency gains, e.g. through the reduction of expensive practical training, or through the appointment of a more academically qualified teaching staff. In addition to providing better teaching, such staff can undertake research which might improve education and professional practice, and which can be of relevance to regional needs. Due to technological change and a more complex social and professional reality, students need more advanced knowledge to function effectively in the type of jobs they are supposed to hold. In such a perspective, academisation of college education is in fact both necessary and desirable in order to improve the training of students. A cultural approach to academisation will look for explanations in ideas within the organisational field on which values should predominate in the institution, the individual study programme, and among staff members. In particular, identity-formation processes brought about by the influence of the academic system and by the development in the college sector in other countries have proved to be important.

But in addition to these sector-internal academisation processes, the role of external stakeholders has to be included in the explanatory model. The share size of the state colleges and their visibility as higher education institutions in the various regions generated the interest of politicians at the local, regional and national level. In their eyes, the new colleges fitted in well with the emerging emphasis on regional innovation policy, where higher education institutions should be engines in the economic, social, and cultural development of the region. In this respect, university ambitions in some regions have been more pronounced by local and

regional political authorities than by the state colleges concerned. As stated by Skoie (2000: 415): 'Local pressure is often easy to mobilize as the funding usually comes from national authorities, and the regions argue for a fair share of the country's spending on higher education and research.' Similarly, Stjernø (1999) has noted that regional interests act as pressure groups, both towards Parliament and towards the leadership of the colleges, criticising college rectors if they are not sufficiently active in enhancing the status of their institutions. Thus, in several regions the initiative has come from local politicians, followed by additional funding to prepare mergers between the local state colleges, and by promises of considerable regional funding of the new institution to make the advancement to university possible. College leaders did not always share this political enthusiasm for the new role of the colleges. They regarded these ideas partly as naïve and unrealistic, and partly as a threat to their wish to develop the colleges into academic institutions. On the other hand, they welcomed the political support for their university dream.

Chapter 8
Field Coupling

Introduction

In all countries where a distinction is made between a college and a university sector, the question on how the relationship between the two organisational fields should be organised and regulated has been a recurrent topic of discussion. The idea that all higher education should be organised within a unified system with a common set of rules, however, has not found general support. In Western Europe, only Spain, the UK, and Iceland have incorporated most of their higher education programmes within the framework of institutions with university status. The majority of Western European countries have chosen to uphold the separation between a university and a college sector. Still, in some countries attempts have been made to bring the sectors closer to one another.

Sweden is an often-mentioned example in this respect. In a major educational reform in 1977, the entire higher education sector, including the universities, was designated *högskolan*. The interface between universities and colleges became more diffuse and a number of short-cycle professional programmes, particularly teacher training and nursing, were drawn into the university system. This reform accordingly had elements of a unified system, but it has been misunderstood frequently in the international literature. Even though *högskolan* was introduced as a joint concept for colleges and universities, the individual institutions retained their respective titles and had differently defined missions in society. The colleges were essentially to continue as teaching establishments, while research and researcher training were to be a function of the universities. As such, it is more correct to refer to the Swedish model as a concealed binary system (Bauer 2000).

Another example is Germany. In 1968, it was resolved that a new type of institution should be established – *fachhochschulen* – to be based on the existing post-secondary technical schools and vocational colleges teaching economics and social subjects. The first of the new colleges was established in 1971 (Klumpp & Teichler 2008). But by this time the idea of a unified higher education system had found expression, and in the 1970s, the majority of teacher training colleges were incorporated into existing or newly established universities. There was broad political agreement to transform universities and colleges into *gesamthochschulen*,

S. Kyvik, *The Dynamics of Change in Higher Education: Expansion and Contraction*, Higher Education Dynamics 27,

either by merging different types of institutions or through an organised partnership between universities and colleges in separate regions. The intention was to secure a closer association between research-oriented university education and vocationally oriented programmes in the colleges, to facilitate transfer from college studies to university courses, and to make the entire higher education system more cost-effective. The two organisational models most relevant were *integrierte gesamthochschulen*, where university students and students at the *fachhocschulen* would be able to participate in joint courses, and *kooperative gesamthochschulen*, where the study programmes would be particular for the two student groups. However, university teachers and teachers at the *fachhochschulen* had very different working conditions, salaries, and status. In practice only 11 *gesamthochschulen* were established, and none of these included an existing university. Thus, the attempt at a unified educational system based on a merger of universities and colleges was not successful (Cerych & Sabatier 1986). This was due to the fact that the majority of students chose prolonged academic studies in preference to the shorter vocational courses, that the universities were not interested in downgrading themselves, that dissension rapidly emerged between the university staff and college staff on matters of salary and working conditions, and that there was a lack of political will to implement the reform. In 1985, it was consequently determined that a binary system with two distinct sectors should be introduced: universities and *fachhocschulen* – pure vocational colleges having little contact with the universities.

However, there have also been pressures towards vertical integration in other countries (Taylor et al. 2008), and this pressure is likely to increase with the emerging academisation process in the college sector.

In a Norwegian context, in addition to the process of academic drift in the college sector discussed in Chapter 7, and vocational drift in the university sector which will be discussed in Chapter 9, four processes in particular have been of vital importance for the trend towards vertical integration: (a) *student mobility*, (b) *structural convergence*, (c) *network building*, and (d) *organisational integration*. These processes can be subsumed into the common notion of *field coupling* because in different ways they have led the two sectors closer to each other. As will be shown, these coupling processes have taken place at various levels across the two organisational fields.

Student Mobility

The possibility for student mobility between colleges and universities has been an important issue in higher education policy. It has been argued that due to a legacy of institution- or profession-based regulations and customs, there are too many restrictive practices in almost all countries regarding credit transfer and recognition of alternative modes of learning (OECD 1998: 52). Should a 2- or 3-year college programme providing direct entry to the labour market constitute a completed, distinct, and alternative form of education to that offered by the universities, or should these programmes also provide the possibility for enrolling in a higher-degree programme

at a university? These are questions that have formed an important part of the debate on the role of the college sector in the higher education system since the mid-1960s. Internationally, it was widely recognised that the two tasks could not easily be fulfilled at the same time (OECD 1973). In many countries, it was a basic idea that professional schools should only provide lower-degree vocational courses without the possibility for transfer to the universities. Short-cycle vocational courses were to be a clear alternative to a long university programme and there would be a watertight division between the two. In Germany and The Netherlands in particular, this was an expressed policy associated with the establishment of *fachhochschulen* and *hogescholen voor hoger beroepsonderwijs*. The selection of students for the two sectors would take place in upper secondary school, and the majority of students would not perceive the colleges as providing the first part of university degree programmes but rather as parallel institutions offering a complete and alternative education (Furth 1992). In most countries, however, professional and vocational colleges now provide possibilities for transfer to universities and vice versa. In Norway, student transfer across the binary divide has been an important field coupling process.

Structural Convergence

There is a trend in many countries to harmonise organisational structures, rules, and regulations across the two higher education sectors. In particular, the introduction of a common two-tier system across field boundaries has been an important part of this trend towards convergence. In Norway, such standardisation processes have come further than in most other Western European countries, and they relate to the various levels across the organisational fields.

Network Building

A third integrating force is the tendency to couple the university and college sectors through the development of various types of networks on the various levels of the two organisational fields. In this respect, formalised systems for cross-sector student mobility can be regarded as one type of network, but closer collaboration between staff, programmes, and institutions across the two organisational fields is also part of this coupling process.

Organisational Integration

Finally, there has been a development towards the establishment of joint organisations across the two organisational fields of higher education, in the Ministry of

Education, at the intermediary level, the institutional level, the programme level, and the staff level.

The purpose of this chapter is to analyse these four processes of field coupling in a Norwegian context, and to try to explain why these processes have taken place.

Field Coupling: A Theoretical Approach

The field coupling processes identified above – student mobility, structural convergence, network building, and organisational integration – can be explained by combining a structural–functional approach, a cultural approach, and an interest-group approach.

Student Mobility

In order to explain the reasons for student mobility, we have to distinguish between transfer from colleges to universities (upward mobility) and transfer from universities to colleges (downward mobility).

Scholars applying a structural approach to *upward mobility* will tend to look for explanations in labour market conditions. If university graduates are preferred by employers to college graduates, transfer into a university programme might be a strategic move to improve their value on the labour market. Those who prefer a cultural approach will examine the extent to which those who transfer are affected by the social and cultural esteem of a higher university degree. In this respect, these two perspectives build on the assumption that upward mobility is based on strategic decisions made to increase their economic, social, or cultural capital. As suggested in Chapter 7, the theory of credentialism (Collins 1979) offers a holistic explanation of student drift towards university programmes, by combining structural, cultural, and interest-group perspectives.

The reasons for *downward mobility* should also be investigated by combining these three perspectives. Such transfer can be a deliberate and planned strategy at the outset, but the most likely reason is a disappointing experience as university students. Tinto (1993) has distinguished between four causes for this mismatch between expectations and experiences. First, some students have problems adjusting to the norms and values of a university. Second, not all students are able to cope with the theoretical requirements of an academic programme. Third, some students find their needs, interests, and preferences to be incongruent with the content of an academic course curriculum. Fourth, some students feel social isolation in an academic environment, both in relation to other students and to teaching staff.

For those students who fall within one or more of these four categories and who realise that enrolment in an academic university programme was a mistake, three solutions to their problems are possible: (a) to continue their university studies in

spite of their negative experiences, (b) to drop out of higher education and start working, and (c) to leave the university for a college. The latter group of students may have different reasons for their choice: A wish to study at a smaller college with a more structured learning environment to avoid an isolated student life; to move closer to their home place, family, and friends; to enter a more work-related study programme due to a lack of interest in theoretical subjects; or an assessment of the opportunities for work and a career in the future labour market by getting a degree qualifying directly for a trade.

Structural Convergence

Different perspectives can be applied to study the trend towards harmonisation of organisational structures and rules and regulations across the two sectors and at the various levels in the field of higher education. Structural–functional theory suggests that when a social system based on a diverse set of rules adapted to the particular needs of various sub-systems becomes too complex, the system will become inefficient, and countervailing forces will set in to reduce the complexity in order to increase efficiency. The increasing size of the system in terms of staff and students in this respect would be an argument for the need for standardisation of rules and regulations across the two sectors. A cultural approach emphasises changes in ideas on how the public sector in general and the higher education sector in particular should be organised and managed, while an interest-group approach will look for explanations in power relations among groups within the organisational field, and how certain interest groups may enforce joint organisational structures and regulations on other groups.

Network Building

The tendency to closer integration of the college and university sectors through the development of different kinds of network can be illuminated by the use of network theory. According to this theoretical approach, three types of network can be distinguished from each other: *infrastructural*, *organisational*, and *social* networks. *Infrastructural networks* constitute the geographical space; are physical; and used in connection with different forms of transportation of people, physical resources, and information between nodes (Dicken & Lloyd 1990). It resembles technological networks like computer-based networks and related systems. *Organisational networks* link individuals, groups, and workplaces together in production systems, enterprises, and other organisations (Tichy 1981). *Social networks* transmit ideas, impulses, and influence within different parts of society. This type of network is usually made up of individuals who know each other quite well and who repeatedly have personal contact (Burt 1980).

These networks develop across the various levels of the two organisational fields in higher education: the state level, the intermediary level, the institutional level, the programme level, the staff level, and the student level. In our context, the development of common technological platforms for administrative and information purposes which link institutions together across the binary divide is an example of infrastructural networks. The development of cross-sector student transfer systems to enhance student mobility can be regarded as a type of organisational network. Finally, the increasing collaboration in research between staff across organisational fields takes place within social networks.

Network theory combines structural, cultural, and interest-group perspectives. When social systems become heterogeneous, according to a structural approach, countervailing forces will set in to keep the system together, e.g. through the development of different kinds of network. A cultural approach will explain the development of networks as appropriate reactions to deal with complexity in society in line with the notion of the 'network society' (Castells 2000). And finally, an interest-group perspective will stress the power of stakeholders to stimulate and enforce network building on the various members across the organisational fields.

Organisational Integration

This term relates to the tendency towards the establishment of joint organisations across the various levels of the organisational fields: the state level, the intermediary level, the institutional level, the programme level, and the staff level. A structural–functional approach to this trend will emphasise the dysfunctional aspects of keeping a parallel set of organisations at each level in a time of structural convergence of the two fields, and the benefits of mergers and the creation of new and common cross-field entities for efficiency purposes. A cultural approach to organisational integration will, on the other hand, look for explanations in social relations among important stakeholders and representatives across the college and university sectors, and also in the impact of similar trends in other countries. Finally, an interest-group approach will emphasise the power of important stakeholders to enforce organisational integration on the higher education system, or the joint interests of representatives of the two sectors to merge their respective organisations for strategic purposes.

Student Mobility

As indicated above, the mobility of students across institutional boundaries has been an important field-coupling mechanism. First and foremost the transfer of students from colleges to universities (upward mobility) has been an important

driver in this process, but also the mobility of students from universities to colleges (downward mobility) has contributed in the linking of the two sectors.

Upward Student Mobility

To what extent should study programmes in the college sector be considered as final degrees allowing direct entry into the labour market, and to what extent should they provide the academic basis required for further studies in the universities? On the one hand, there has been an underlying assumption that practice-oriented professional programmes should represent an alternative to academic university studies. The professional schools were meant to offer courses that were strictly vocational, and they did not constitute any sort of first step towards a higher university degree. On the other hand, it was also felt desirable that students who wished to continue at university level should be given the opportunity to do so without having to prolong the overall duration of their studies. In Norway, this issue was first discussed in the 1960s by the Ottosen Committee and should later re-emerge at regular intervals.

In 1966, the Ottosen Committee raised the rhetorical question whether the future increase in higher education should take place within the university sector or within separate institutions without any contacts to the academic places of learning. The Committee recommended the creation of alternative institutions to the universities but with strong linkages to them. A basic premise was that the post-secondary education system should be closer integrated. *Vertical integration* of study programmes should be created by facilitating student transfer across field boundaries.

The Committee argued that many graduates from upper secondary school were uncertain whether they wished to commit themselves to a longer period of university study. Now they were effectively forced to make such a decision immediately after taking their upper-secondary school examination. This resulted in many well-qualified graduates from professional schools being precluded from longer studies. At the same time the universities enrolled many students with inadequate qualifications or motivation for long and demanding studies.

The Committee stated that if the post-secondary education system was to function effectively, then it would be necessary to establish the possibility for transfer between the two sectors. The existing system was very rigid because most of the courses in the post-secondary schools gave no credit in the university sector. Historically, each university and specialised university institution had retained ultimate control over credit transfer. The Committee therefore proposed that graduates from district colleges and professional schools wishing to continue their studies in a university should be permitted to integrate their former courses into a university degree, thus improving opportunities for vertical transfer between institutions in the education system. Further, the possibility should also exist for transfer from the university sector to the college sector. The aim should be to offer a real alternative to the large numbers of university students who otherwise would have terminated their studies.

Both the Ministry of Education and Parliament supported the idea that the new district colleges should also qualify students for transfer into the university system. Neither the Ottosen Committee nor the Ministry seemed to regard these two objectives as conflicting. Parliament, however, admitted that it might be difficult to comply with both functions within the frame of a 2-year study programme (Kyvik 1981). If the purpose of courses should primarily be to enable the graduates to enter the life of work on completion of their studies, the teaching probably ought to stress vocational training. On the other hand, such emphasis could impede the possibilities for transfer into the university system. The universities might be hesitant to approve courses as part of a university degree if the studies deviated too much from the academic tradition. On the other hand, if the college courses were given a theoretical and academic profile to qualify the students for further study at the universities, the district colleges might not meet societal needs for vocationally oriented post-secondary education. This problem of balancing practical and theoretical training was not considered when establishing the district colleges for a trial period. However, Parliament stressed that the question of transfer had to be clarified with the universities as soon as possible.

The Ministry of Education and Parliament emphasised that studies at the district colleges should not constitute a blind alley for students wishing to continue at a university. It was important for the colleges to offer programmes and courses which could be used as a basis for transfer into the universities, and adaptations had to be made in the curricula to meet the requirements of the university. After a decade or so, many of the vocationally oriented programmes and courses at the district colleges gave credits towards a university degree. By 1980, 16 out of 17 degree programmes (2–3 years) were accepted by the universities as equivalent to 1.5 years of university study. Throughout the period from 1973 to 1979, approximately 10–15% of the district college graduates actually transferred to a university within 6 months after graduation (Kyvik 1981).

The major problem in this field coupling process was to have courses at the district colleges fully approved as part of the first degree programmes at the universities. This was not just a question affecting the district colleges, but all the regional colleges. It was nevertheless a number of district colleges which in the first instance applied pressure for an adequate transfer arrangement to be established. This related both to the approval of college courses as part of university degrees and as a basis for continuing to a higher degree at the universities. As a result of pressure by the district colleges, in the early 1970s, the Rectors' Conference of the Norwegian Universities appointed a national coordinating committee for the approval of degrees and courses at other institutions as part of the degree system at the universities and specialised university institutions. By 1979, the coordinating committee had considered 140 different courses, of which 40 were rejected. The overwhelming number of 1-year mostly university courses at the district colleges was approved, but the committee was more restrictive towards the 2-year vocational studies (Johnsen 1999). Consideration by the committee frequently took a long time and the approval procedure was lengthy. Following pressure by the district colleges, it was finally determined in 1981 that the Act on Examinations and Course Grades would be extended so as to include all the regional colleges. At the same time the colleges received the right to award

a regional first degree at the level of the first degree at the universities, which greatly improved opportunities for transfer between the two sectors.

Although the universities only reluctantly accepted to approve fully a regional college programme as part of the first degree university programme in 1981, a flexible credit transfer system had been established (Johnsen 1999). Transfer possibilities between the two fields increased considerably, allowing graduates from district colleges, teacher training colleges, engineering colleges, and health and social work colleges to continue their studies at a university. Two study programmes were particularly affected in this process – Engineering, and Economics and Business Administration.

During this period, the development of vertical integration schemes within the wider engineering education system was given extra importance. Bridging arrangements had long been in place between the 1-year technical schools and engineering colleges. Several of these colleges also signed agreements with foreign counterparts, facilitating the transition to civil engineering programmes for their graduates. In the 1980s, opportunities for engineering students to qualify for admission to the second cycle at the Norwegian Institute of Technology (NTH) continued to improve, and with it the possibilities of promotion from skilled worker to civil engineer. In this way, upper secondary school no longer stood as an impassable barrier in the way of professional promotion within the technical hierarchy, and at the same time technical knowledge became even more connected to skilled work expertise and working life experience (Halvorsen 1993). This arrangement supposed that engineering colleges had to adjust their curriculum to a certain degree, in order to comply with the NTH's demands for a defined basic knowledge in individual subjects, but, gradually, the NTH itself had to display more flexibility for transitional arrangements to work smoothly. An important reason for this field coupling process was the need in society for more civil engineers, and a smooth cross-field transfer system was a way of extending the capacity at the NTH without having to increase the number of student places at the lower level. A study undertaken in the 1990s estimated that of those who completed a 3-year degree in engineering at a state college, about one fourth continued to study for a civil engineer degree (Aamodt 2001).

The 2-year programme in Economics and Business Administration in the district colleges had been established independently of the degree programme at the Norwegian School of Economics and Business Administration, and was intended as a short-cycle and autonomous programme with a clear and practical work profile. The programme rapidly became a success, and during the 1970s and early 1980s, graduates of these courses easily found jobs in the labour market. By the end of the 1980s the labour market became more difficult. This was largely due to the strong growth in education capacity in this field in addition to the banking and finance crisis at that time. The district college graduates were displaced in the labour market by graduates from the Norwegian School of Economics and Business Administration and from the Norwegian School of Management, and a large proportion of the district college graduates therefore chose to continue with their education. The 2-year programme gradually came to represent a partial education, functioning as a basic introduction to the 4-year degree in economics and business administration at the Norwegian School of Economics and Business Administration, and at the 4-year

equivalent degree programmes established within the district colleges in Bodø and Kristiansand. In the 1990s, the 2-year programmes became the object of a number of attempts to standardise their professional content and quality. The objective was to ensure a common professional standard and to facilitate the transfer between the various district colleges and between the 2-year programmes and the second cycle of the 4-year degree studies (Rønhovde 2002).

Thus, structural changes in the economy should come to greatly improve possibilities for cross-field student mobility and actual transfer rates. In addition, to uphold a strong division between the two sectors would not be in line with democratic rights and the policy of equal rights for higher education. Students who for economic, social, or cultural reasons initially found a practically oriented engineering college or district college more attractive than a more theoretical university education should not be hindered if they wanted to continue their studies at a university. Finally, staff, programmes, and institutions in the college sector worked actively to establish a credit transfer system facilitating upward student mobility. This evolution, however, did not proceed without friction. In the 1960s and 1970s, it was usually difficult to have courses and programmes taught in regional colleges recognised in full as part of a university bachelor's degree. For a long time, the universities resisted granting full credit to exams taken in colleges. The reluctance by universities and some of their staff to this development had no political backing, however, and the strategic conflicts between the two sectors were solved through mutual adaptations in curriculum requirements.

Downward Student Mobility

Much less attention has been devoted to mobility of students from universities to colleges than vice versa, although the extent of such mobility is high. Data indicate that about one fourth of the students initially enrolling in a university move to a state college (Hovdhaugen 2008). This is due to the flexible student transfer system that has been developed, and there are presently no formal barriers to recognition of study programmes and credits between higher education institutions. In a report to the OECD, the Ministry of Education and Research (2005: 5) accordingly stated: 'The higher education sector is well integrated, with extensive and mandatory recognition of study programmes and degrees across institutional types, and through student mobility between institutions.'

Structural Convergence

In most countries, the development of higher education has been a balancing act between diversity and convergence (Meek et al. 1996). From a political point of view, the shaping of a diversified system is usually regarded as important to meet

the varied demands of society for skilled labour and the needs of a heterogeneous mass of young people for education. In addition, such a system makes it easier to accommodate variations in admission requirements, staff qualifications, and career structures, as well as variations in the balance between theory and practice, duration of courses, and financial arrangements. Although there are still considerable differences between the university and college sectors in most countries, recent developments in many Western European countries have gone in the direction of harmonisation of rules and regulations across the two sectors.

In Norway, this convergence process resulted in common admission requirements to colleges and universities, in a joint act for higher education institutions across the two sectors, in common administrative and economic regulations, in a joint academic career structure, in a joint degree structure, in a joint grading system, in a common funding system, and in a common quality assurance system.

Common Admission Rules

Over time, access requirements have become the same for universities and colleges, with an upper-secondary certificate qualifying for higher education entrance, as well as providing the possibility for people to enter higher education on the basis of an individual assessment of their formal, non-formal, and informal qualifications for the study programme applied for (Ministry of Education 2005).

Joint Act for Universities and Colleges

The introduction of a common act for higher education institutions – the Act on Universities and Colleges of 1995 – was an important part of the field coupling process. In addition to regulating the relationship between central authorities and the higher education system, the Act gave a common framework for the organisation, governance, and management of institutions; common rules on appointments to academic and auxiliary posts; and common rules on student admission and examination. The purpose was to enhance horizontal and vertical integration in higher education and to standardise rules and regulations across institutions and sectors (Kyvik 2008).

Common Administrative and Economic Regulations

As a part of the general reforms in public administration, in the 1990s, all higher education institutions became subject to a common set of administrative and economic regulations. A large-scale standardisation of administrative and technological

systems was gradually implemented with the aim to improve efficiency in the public sector (Gornitzka, Kyvik, & Larsen 1998).

Joint Academic Career System

As a consequence of its vision for an integrated higher education system, the Hernes Committee in its 1988-report recommended that universities and colleges should have a common career system. Although this reform proposal was controversial, in 1995 a chiefly common career system was introduced (Kyvik & Smeby 2004). However, already in 1993, associate professors in both the university and the college sectors were entitled to apply for promotion to full professorship on the basis of their research competence (Olsen, Kyvik, & Hovdhaugen 2005). The principle argument for this reform was that many staff members had a position and salary below their true level of qualifications and that this situation was unfair. Still, in 2005, only 5% of the academic staff in the state colleges were full professors, while more than 65% had the status as lecturers or teachers. In contrast, close to 50% of the permanent academic staff in the universities were full professors.

Joint Degree Structure

From 2003 on, the traditional degree structure of German origin was as a general rule replaced by the Anglo-American bachelor's degree, the master's degree, and the Ph.D. in both sectors according to the recommendations given in the Bologna Declaration. The time frames of these degrees generally follow the recommendations given in the Bologna Declaration.

Joint Grading System

As a consequence of the Bologna process, in 2003, a joint grading system for universities and colleges was introduced based on the European Credit Transfer System (ECTS) (Nyborg 2007).

Common Funding System

A new and common funding formula for higher education institutions was gradually being developed and implemented. In 2002, the Ministry introduced a new funding model for all public higher education institutions, shifting from an input-

based to an output-based funding system. The new funding model was set up to advantage those institutions that do well in producing student credit points and are active in research. As a general rule, 40% of the total funding from the government should be incentive-based, of which 25% of the budget should be based on course completion and 15% on research production.

Common Quality Assurance System

By the end of 2003, all higher education institutions were expected to have introduced an internal quality assurance system to ensure that each study programme is run according to certain minimum standards (Stensaker 2004b).

Over time, structural and cultural differences between the college sector and the university sector have been radically diminished and even swept out in a number of areas through rule harmonisation. The two organisational fields were regulated by a common Act, and a large number of harmonisation processes were initiated across the two fields with respect to organisation and management principles, funding, personnel policy, budgeting and accounting systems, and so forth. Teaching in the state colleges was supposed to be research-based, and the university academic career structure and reward system were implemented in the colleges. The introduction of a common academic career system in particular contributed to undermine the intended division of labour between universities and state colleges. In addition, international impulses have been important for the harmonisation policy, in particular those brought about through the Bologna Process in European higher education, introducing a common degree system across the two fields.

Network Building

In its 1988 report, the Hernes Committee launched a strategy for an integrated though diversified system for higher education based on three elements: a division of functions between the institutions concerning education and research, the establishment of nodes at the individual institutions, and the strengthening of lines of communication between the institutions. This strategy was coined ‘Network Norway’. The intention was to create a more homogeneous higher education sector, while simultaneously creating a division of labour between universities and state colleges.

In its proposal to Parliament on higher education in 1990, the Ministry of Education further developed the concept of Network Norway. Here it was stated that all higher education establishments should constitute a network for higher education and research. The majority of colleges should be able to develop their own particular profile and to become a node in at least one area. There should be a division of labour between the various state colleges in the sense that they should

specialise in different academic or professional fields. However, specialisation should only occur in part of the college's activity. In addition, importance was attached to cooperation and a division of functions between the institutions. Four lines of communication were mentioned: student mobility, contact between academic staff members, the cooperation on study programmes, and communication utilising modern data technology and the mass media. The intention was to couple the college sector and the university sector closer to each other through connecting the various levels in the two organisational fields.

The invention of the notion 'Network Norway' and the implementation of this strategy for an integration of the higher education system was in fact an attempt to apply network theory for practical purposes. The improvement of *infrastructural networks* through the creation and introduction of common ICT systems should facilitate communication and collaboration between institutions. The establishment and improvement of *organisational networks* should lay the ground for greater mobility of staff and students across institutions. And the development of *social networks* between individual staff should be encouraged and stimulated through the creation of common meeting places in various types of national board, and in research programmes cutting across the two sectors.

The Network Norway concept can be regarded as a governmental strategy to stimulate a stronger degree of cooperation between institutions, programmes, and staff across the binary divide through the building of infrastructural, organisational, and social networks. The application of the network notion was not accidental, but rather a strategic action to attach this policy to a general cultural shift in societal organisation. Networks are flexible and adaptive structures that according to Castells (2000) are gradually replacing hierarchical forms of organisation in their specific realms of activity. This is due partly to the development of new information and communication technology, partly to the increasing need for access to new information, and partly due to the increasing specialisation of knowledge production in a variety of institutions. As such, the Network Norway idea reflected new opportunities for human contact created by technological innovation, prevailing cultural trends on how communication and contact in social systems should be further developed, and the interest of different groups in the organisational field of higher education for being part of the network society.

But by the time the Network Norway concept was launched, organisational and social networks had already been at work for many years. As shown above, flexible cross-field student-transfer mechanisms had gradually been developed. Cooperation between universities and colleges on the training of master's students enrolled in the colleges had developed without the interference of the Ministry of Education, and collaboration in research was taking place, partly based on social relationships between university and college staff developed during the training period in universities. Finally, colleges and universities exchanged members on examination committees. Although the universities as institutions were in favour of keeping the binary system and keep their distance to the colleges, organisational and social networks developed between programmes and staff across field boundaries.

Organisational Integration

A final process of structural convergence has taken place through the gradual establishment of joint organisations at various levels across the two fields of higher education: the state level, the intermediary level, the institutional level, the programme level, and the staff level.

The State Level

In the Ministry of Education, administrative responsibility for colleges and universities traditionally rested with separate sections within the Division for Universities and Colleges. However, this division was reorganised according to function instead of educational sector to improve coordination across institutions and study programmes. Four sections for each their function now exist: (a) Ownership and steering, (b) Budget and finance, (c) Research and innovation, and (d) Education and quality assurance.

The Intermediary Level

The existing universities have tried to combat university ambitions in the college sector all the way, fearing competition for limited resources. Nevertheless, the vertical integration of the two fields proceeded, and signs of resignation appeared among university leaders. In 1999, the Norwegian Council of State Colleges took the initiative to merge with the Norwegian Council of Universities. The amalgamation of the two bodies was regarded as the natural consequence of the rapprochement that had taken place over a number of years between the two sectors (Nyborg 2007). Sweden, where the equivalent councils had been merged in 1995, provided a model to be followed, and in 2000, the Norwegian Council for Higher Education was established. This Council is a parallel to the rector's conference found in many countries and has no legal status in the higher education system. The aims of the Council are to serve as an interest organisation for its member institutions, and to promote coordination and cooperation within higher education.

The Institutional Level

Two of the state colleges took the initiative to merge with the nearby university; Tromsø College located in the city of Tromsø with the University of Tromsø, and Sør-Trøndelag College located in Trondheim with the local university. In both

these cases, processes were initiated to assess merger advantages and disadvantages. In Tromsø, the boards of the two institutions set up a joint committee in 1999 to look into the possibilities for closer cooperation and organisational amalgamation. The report, presented in 2000, concluded that a merger would be beneficial to both the university and the state college as well as to the regional community. There was tentative agreement that the two institutions should be merged in due course, but a lack of enthusiasm by the university delayed the process. Nevertheless, in 2006 the two institutions declared that the time was ripe to implement the merger decision, and in 2007, an application to merge the two institutions was submitted to the Ministry of Education. In Trondheim, similar discussions took place between the university and the state college. The latter institution wanted to merge with the local university, but its proposal was eventually turned down by the university, partly due to the practical problems such a merger would create, and partly due to a fear of losing its identity as a research university with the ambition it had to become more visible on the international scene.

The attainment of full university status by two university colleges in 2005 and 2007 led to a further blurring of the binary divide in higher education. The government was not comfortable with this development and set up a committee to address this problem (the Stjernø Committee). In its 2008 report, the committee suggested that the binary system should be abolished and a truly unified higher education system should be established, partly through mergers of colleges with existing universities, in order to avoid having the number of universities exceeding eight to ten establishments in the future (NOU 2008).

The Programme Level

As a consequence of the college reform in 1994, where one of the objectives was to break down the traditional barriers between the various professional programmes, the Ministry of Education resolved the councils for each type of programme. Instead, the Norwegian Council for Higher Education, the association for all higher education institutions, established four common national councils for professional education across the binary divide (teacher education, education in engineering and technology, economics and administrative education, and health and social work education). In addition, the Council set up national conferences within the major disciplines, as well as committees for research, education, and administration in higher education institutions across the binary divide (Nyborg 2007).

The Staff Level

The Norwegian Association of Researchers was initially a trade union for academic staff in universities, but gradually developed to encompass academic staff in colleges

as well. In 1970, the association of researchers in district colleges became a member association; in 1982, the association of academic staff in music conservatories; in 1985, the association of teachers in regional colleges; in 1990, the association of academic staff in teacher training colleges; and in 1993, the association of academic staff in engineering colleges (Nilsen 2005). The stepwise inclusion of these associations in the Norwegian Association of Researchers took place amidst considerable disagreement among its members. Some university representatives disagreed, objecting to the policy that the colleges should undertake research, while representatives of the district colleges were reluctant to include colleges other than their own as members. Still, this process continued, partly because the Norwegian Association of Researchers had a strategic interest in increasing its number of members to enhance its position in relation to other trade unions in negotiations with state authorities.

Explaining Field Coupling

The 1994 merger process in the college sector resulted in the creation of a binary higher education system. Strict state control of the further development of the higher education sector should secure the binary divide between university institutions and state colleges. By merging the two district colleges with university ambitions – Agder District College and Stavanger District College – with the professional and vocational colleges in each of the two regions, the Minister of Education hoped to set a final end to their university dreams.

However, even though governmental policy documents stated that the division between the university and the college sector should remain and be further clarified through the notion of Network Norway, differences in many ways decreased. We have identified four field coupling processes: (a) *student mobility*, (b) *structural convergence*, (c) *network building*, and (d) *organisational integration*. These field coupling processes should prove to undermine the intentions of a sustainable binary system.

The development of a flexible cross-sector student transfer system from colleges to universities and vice versa was in itself an important integrating force. The major explanation for *upward student mobility* can be developed with the basis in the theory of credentialism as formulated by Collins (1979) and further developed by a number of other scholars, e.g. Brown (1995, 2001) and Jónasson (2004b). This theory suggests that students compete for credentials (or degrees) in order to enhance their competitive advantage in the labour market and their social and cultural capital. Once access to upper-secondary education is open to virtually all, it becomes necessary to obtain a post-secondary degree to maintain an advantage in the competition for jobs and social status. The relative value of a professional college degree in the competition for attractive jobs and as a social and cultural capital has been reduced over time with the increasing number of higher-degree holders. Thus, it follows from this theory that the more people get a higher degree, the more people are induced to follow in their footsteps. An important aspect of this

way of reasoning is that students do not necessarily aim at attaining the technical skills embedded in a higher degree, but rather the perceived exchange value of the degree for entrance into the labour market or the perceived social status as a future degree-holder. In our context, this would mean that many students who enrol in a professional or vocational programme in the college sector would like to continue their studies at a university in order to earn a higher degree, not necessarily because they are particularly interested in obtaining the technical skills of such a degree, but because they want to improve their competitive advantage when applying for jobs, or because they like the idea of earning a higher degree or even a doctorate as a means of enhancing their social status (Jónasson 2004b).

The theory of educational credentialism combines structural, cultural, and interest-group explanations. Changes in the educational system itself with the introduction of mandatory secondary school and the development of stronger public and private economies created a large pool of applicants for higher education, deflating the economic, social, and cultural value of short-cycle professional and vocational degrees. It was in the interest of many students to move to a university to earn a higher degree in order to increase the exchange value of their education for entrance into the labour market as well as to enhance their social and cultural capital.

Paradoxically, this theory can also be used to explain *downward student mobility*. Many students who initially enrol in university programmes continue their studies at a college. The theory of educational credentialism suggests that it is the competition for formal degrees and the economic and social value of the status as degree-holder that are the major motivation of students, more so than the attainment of actual technical skills. According to this line of reasoning, many students are offered a faster and easier route to a degree by leaving long-term university studies for short-cycle professional or vocational studies at a college.

The theory of credentialism is a basic explanation for the trend towards upward and downward student mobility, but needs to be complemented in order to fully grasp this process. In addition to the interests of individual students, other actors at the various levels of the organisational field have contributed to bridging the divide between the two higher education sectors. The roles of state authorities, college leaders, and programme leaders in the establishment of a credit transfer system have therefore to be included.

The trend towards *structural convergence* of the two fields can be explained by combining structural, cultural, and interest-group perspectives. The harmonisation of rules and regulations can be understood as an effort by central state authorities to reduce complexity and to create a more efficient educational system. But this harmonisation process can also be explained as the outcome of a more general shift in ideas on how the public sector should be controlled and managed. The general process of making public administration more streamlined and efficient has obviously influenced the thinking and behaviour of educational bureaucrats. An interview study among administrative leaders in the various governmental ministries indicated that bureaucrats in the Ministry of Education were strongly influenced by the New Public Management ideology (Christensen & Lægreid 1997).

Furthermore, a common degree system across the two fields was introduced as a consequence of the Bologna Process. So far, the Bologna Process has not aimed to harmonise the structure of the various systems beyond the introduction of a common two-tier degree system. As long as students can move easily between countries and receive recognition of their qualifications domestically as well as internationally, the general policy has been that it does not matter how the various countries organise their higher education systems. However, the introduction of the two-tier degree structure – a 3-year first degree and a second degree – has led to a considerably shorter period of study for a university degree, and also to a demand for master's degrees on top of the bachelor's degrees in the college sector. This development has reduced differences between the university and college sectors, and the arguments for abolishing the division between the two fields have become stronger, as in the UK in the years preceding the introduction of the unified system (see also Witte, Wende, & Huisman 2008).

Network building across the two organisational fields is another coupling process. The Network Norway vision of an integrated though binary higher education system entailed a common arena for all public higher education institutions. Through the development of infrastructural, organisational, and social networks, the physical and cultural distance between the two sectors gradually declined.

As indicated above, the trend towards *organisational integration* across the college sector and the university sector has different causes. The structural convergence of the two fields gradually undermined those interests that wanted to uphold a parallel set of organisations. The cultural distance between universities and colleges gradually declined, mainly as a result of the introduction of a common career system across the two sectors. The different trade unions in higher education gradually came to the conclusion that a joint association for researchers across institutional boundaries would be in the interest of their members. The development in Sweden clearly had an impact on the organisational integration process in Norway, and finally, some colleges and universities started negotiations on strategic mergers to enhance their competitive advantage, a development that already had taken place in various other countries (Harman & Harman 2008).

These field coupling processes: student mobility, structural convergence, network building, and organisational integration gradually undermined the binary policy. Moreover, these processes reinforced each other. The building of networks reduced the cultural distance between important actors across the two fields, which in turn enabled organisational integration. The mobility of students from colleges to universities and vice versa enforced the standardisation of credit transfer rules as well as the homogenisation of curricula. Processes of structural convergence in turn affected processes of network building, and so forth.

Conclusion

This book has analysed the transformation of the Norwegian college sector over a period of more than 4 decades. In this country, the post-secondary education system has gradually changed from a university-dominated system via a dual system to a binary system and finally to a partly unified system.

In the discussion of the processes driving these changes, the book has distinguished between three different, though overlapping phases, coined fragmented expansion, horizontal integration, and vertical integration to capture the transformation of this sector. While university-dominated and dual systems in Western Europe were characterised by fragmented expansion of the college sector, the creation of binary systems was marked by horizontal integration of professional and vocational colleges at the regional level. The functional organisation principle with one school for each profession and vocation was left for an ordering according to geographic criteria. Finally, unified systems have gone through a process of vertical integration of the two higher education sectors.

In Chapter 9, the essence of each of the phases in the development of the college sector will be recapitulated: (a) fragmented expansion, (b) horizontal integration, and (c) vertical integration, and further analyses of the dynamics of the processes driving this development will be undertaken.

Chapter 9
The Dynamics of Change

Introduction

This book distinguishes between three types of explanation for change: (a) *structural*, (b) *cultural*, and (c) *interest-group* approaches. Structural change includes two processes. One is related to *technological, economic, and social changes in society* that have conditioned the establishment of the various study programmes and educational institutions that constitute college education, and also had an impact on the organisation of this sector and the content of the programmes. The other is related to *self-generated changes in the educational system* itself, such as the large expansion in the number of schools and colleges leading to a complex and not easily manageable organisational field, in the view of the state bureaucracy.

In addition to the impact of structural change on the transformation of the educational system, it is important to understand *the cultural context in society* within which higher education takes place and *the culture of the institutions* themselves. Traditional ways of thinking and behaving have gradually been replaced by new thoughts, ideas, and behaviours. Thus, new ideas may obtain a cultural hegemony making possible and even welcomed change processes in the education system unthinkable years ago. Cultural change of importance for the transformation of college education includes change in value systems related to *social utility*, *equality of opportunity*, *efficiency*, and *quality*. Another type of cultural explanation is concerned with *the drift of ideas and organisational solutions* across countries and sectors in society. Educational change in one country accordingly may influence educational policy in another country.

Structural and cultural changes in society and within the education system itself constitute important parts of an explanatory model. Still, there is no direct relationship between structural and cultural trends and the transformation of the college sector, and the mediating role of actors in the system has to be taken into consideration. As an analytical approach to include actors in the explanatory model, the notion of *organisational field* (DiMaggio & Powell 1983) has been adopted as a common metaphor for those organisations and actors that constitute the college sector: state authorities, intermediary bodies, educational institutions, study programmes, academic staff, and students. Organisational fields can be viewed as

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arenas of power relations, where actors struggle for their particular interests and values, although constrained by structural and cultural trends in society and within the organisational field itself. In this book, the research strategy has been to study the role of actors and interest groups at the different levels within the organisational field, the relationship between them, and how structural and cultural change in society have had an impact on them, as well as by societal stakeholders and the professional and cultural hegemony of the academic community.

With this explanatory model in mind, each of the three phases characterising the transformation of this part of the higher education system will be synthesised.

The Dynamics of Fragmented Expansion

As shown in the preceding chapters, the post-secondary education system in Norway has evolved over a period stretching back to the first half of the nineteenth century. Until the end of the twentieth century, the development of this sector can be described as a continuous growth period characterised by differentiation of study programmes and diversification of organisational forms and curricula, and by decentralisation of institutions and study places. This phase is termed *fragmented expansion* to illustrate the centrifugal processes driving this development, leading to a highly complex organisational field constituted by a large number of small educational institutions dispersed throughout the country in line with common trends in Western Europe.

The research questions guiding the analyses were simple though intriguing to answer: Why did these particular developments take place? Why did not state authorities establish a more coherent educational system at an earlier stage? These questions have been partially discussed in the two respective chapters. What remains is to discuss the relationship between the processes of differentiation and diversification on the one hand, and geographical and institutional decentralisation on the other hand. In order to refresh the memory of the reader, this chapter briefly recapitulates the logic of each of these processes.

The Logic of Differentiation and Diversification

The continuous differentiation of programmes and courses in the college sector can be explained as a function of technological, economic, and social change in society, cultural trends, and the particular interests of a large number of public and private stakeholders. In a structural–functional perspective, the establishment of programmes for teacher training, nursing, technical education, and the many different courses in health education, social work, and so forth, can be regarded as a response to societal demands for trained personnel in these vocations. These establishments were partly state initiatives to modernise the country, partly private and local initiatives to respond to specific regional needs for a skilled workforce, and partly initiatives by religious and other interest groups to establish their own schools. Many study programmes have their origin in particular demands for skilled labour created by technological

innovation, while other programmes were established to cater for specific needs for trained personnel in the public sector. The development of a differentiated college sector accelerated after the Second World War with the emergence of the notion of the welfare state and the creation of a number of new occupations in the health and social sectors, such as child welfare and care for the mentally handicapped. The strong expansion of pre-school teacher training is another example on the forces driving the differentiation process. The women's liberation movement coincided with shortages in the workforce and a governmental wish to attract more women into economic life, entailing a strong demand for kindergartens.

The differentiation process in the college sector can be regarded as taking place in two phases. In the first phase, called *state-driven and stakeholder-driven differentiation*, various state authorities and external interest groups were the driving forces by the establishment of new study programmes and courses. In the second phase, labelled *institutionally driven differentiation*, institutional leaders and academic staff themselves created novel programmes and courses. This latter trend was enhanced in the 1990s with the policy change towards a wider use of market mechanisms in higher education. Individual institutions now became even more dependent on attracting students in a competitive market in order to sustain their various courses and to maintain, or increase, student numbers. For some small institutions, success in the competition for students might be a matter of survival. Under such circumstances, a common strategy for these colleges would be to try to diversify their resource base through the creation of additional programmes and courses. This could be done in either of two ways: by creating novel courses not offered by any other institution, or by copying successful courses given at another college or a university. The former strategy would imply that students all over the country might be attracted to the course, the latter that young people within the region might choose the course on the basis of geographical proximity. The creation of novel courses would certainly entail differentiation. In the same way, the copying of university courses would also lead to increased programme differentiation within this sector.

The diversification of organisational forms, school owners, funding patterns, entrance requirements, curricula, and so forth followed more or less as a natural consequence of the differentiation process in the programme structure. In a structural–functional perspective, diversity should be the logical outcome because different programmes have different needs. In a cultural perspective, diversity is a result of different ideas and values on how a study programme should be organised and run, while in an interest-group perspective, diversity occurs because different actors work to promote their particular interests. As shown, all three explanations are relevant to understand the diversification processes.

The Logic of Geographical and Institutional Decentralisation

Decentralisation of higher education includes two different though closely intertwined trends: (a) *geographical decentralisation*, which means that institutions, programmes, and students are spread to regions outside the traditional

university cities, and (b) *institutional decentralisation*, which means that training opportunities are spread to establishments outside the university. In most Western European countries, geographical and institutional decentralisation gathered momentum in the 1960s and 1970s. In the 1960s, this trend was reinforced with the breakthrough of the idea of equal opportunity in higher education, in combination with a strong general decentralisation wave in society leading to the establishment of many new colleges in towns and non-urban areas in need of higher education institutions. Geographic proximity to educational institutions would entail a more egalitarian social recruitment to higher education and at the same time mobilise the talent of young people for the benefit of society. Thus, until the 1980s, most countries had experienced a very long period of dispersion of post-secondary training opportunities through the establishment of many schools and colleges in different parts of the country in fields like teacher training, technical studies, and nursing, and in some countries through the creation of new types of higher education institution, other than the traditional universities. In most countries, geographical and institutional decentralisation of higher education led to a larger growth in student numbers in the college sector than in the university sector (OECD 1991, 1998).

As shown, *geographical decentralisation* of post-secondary education can be explained by a combination of various theoretical perspectives. Structural–functional theory suggests that this process took place because there was a societal need for dispersion of professional and vocational schools and colleges to different parts of the country. Due to structural changes in the economy, the nation needed the talent of young people to develop society and its industries. Geographic proximity to educational institutions was regarded as a precondition for enabling young people to seek post-secondary education and to mobilise talent in a state-driven modernisation process. This resulted in a geographically decentralised pattern of post-secondary schools. A cultural perspective focuses on prevailing ideologies on distributional justice in public policymaking. Decentralisation of educational institutions and student places would accordingly be part of a general policy to strengthen values like regional development and equality of educational opportunities among young people. As opposed to explanations favouring structural developments or ideological trends, an interest-group theory on geographical decentralisation of higher education will stress power relations in society. In such a perspective, the geographical dispersion of programmes and institutions can be explained theoretically by the use of a power perspective within the framework of representative democracy. Parliaments are made up of representatives from various regions and local communities, and representatives from non-urban regions have been in the majority and in a position to establish new educational institutions in these regions. In addition, local interest groups, private organisations, as well as municipalities and counties contributed to the geographical dispersion of educational institutions.

The institutional decentralisation process likewise can be explained by combining structural, cultural, and interest-group explanations. Structural–functional theory suggests that there was a need for building up higher education capacity

outside the traditional universities for a variety of reasons. New institutions would be more innovative and more adaptive to the needs of society, the universities should be relieved of some of their teaching burden to be retained as viable research institutions, and expenditure for higher education would be lower in the college sector. In a cultural perspective, institutional decentralisation of higher education and the larger expansion of the college sector can be regarded as the appropriate public response to the strong growth in student numbers, based on a common understanding in the OECD of the necessity to give a higher priority to vocationally oriented higher education at the expense of academic studies. Finally, an interest-group approach would look for the actual behaviour of the major stakeholders in the organisational field. In this context, the preferences of a majority of students for enrolling in college programmes with the purpose of earning a degree qualifying for the labour market in a shorter period of time than that of a university degree is an important explanation for the institutional decentralisation process.

The Dynamics of Fragmented Expansion

The reasons for the fragmented expansion of post-secondary education are multiple, both in terms of differentiation and diversification of programmes and institutions and with respect to geographical and institutional decentralisation of these resources. These intertwined processes reinforced each other and enhanced the level of fragmentation through the prevailing functional organisation principle in college education with separate schools for different professional programmes. This principle was a basic condition for the geographical decentralisation process, and made it possible to locate schools for teacher training, engineering, maritime education, nursing, and so forth in various local communities within each of the regions. As long as this principle prevailed, the fragmented expansion of this part of the higher education system persisted. Thus, institutional decentralisation of higher education not only led to the expansion of study places in the college sector, but to the establishment of new colleges in new local communities. The power of Parliament in localisation issues was an important premise for this decentralisation process, where the number of representatives from counties without universities outweighed representatives from university regions.

In order to understand the persistent drive towards fragmented expansion of the field of college education, structural, cultural, and interest-group explanations have to be combined. Socio-economic changes in society created the basis for, as well as the need for, expansion of the higher education system and the need for developing new types of study programmes. The national cultural context with a strong emphasis on equal and fair geographical distribution of public goods paved the way for a further fragmented expansion of higher education outside universities through the establishment of new institutions in the various regions. The struggle between

the many local actors in each region for a new college enhanced the drive towards a dispersed pattern of institutions.

The idea put forward in the 1960s, that the various professional schools in a region should be merged and should lose their independent status, was not welcomed by either their staff or by their professional associations. At that time, the various vocations for which the schools were originally established to cover the need for qualified personnel underwent a period of strong professionalization. The identities as school teachers, nurses, engineers, social workers, and so forth would be best sustained and developed within separate school systems and specialised schools for each profession. It was clear from the outset that a merger of schools into comprehensive colleges would break down certain traditions within each school and lead to a homogenisation of working conditions, teaching, learning and examination forms, and so forth. Professional interests and local demands for keeping their local school thus combined to preserve the functional organisational principle.

Neither the political community was ready for a regionalisation of this sector. Norway was exposed to a decentralisation wave encompassing nearly all fields of society, and which did not start to withdraw until the 1980s. The same interests that turned down the proposal for a regionalised education system enthusiastically acclaimed the idea of district colleges without ties to the existing professional schools. This proposal was in line with prevailing ideas and values for a decentralised society with strong local communities as a counterweight to the dominating centralisation policy of the past.

However, the seeds of what should later come were planted in the 1960s. The Ministry of Education took the proposal for a regionalised college system to its heart, but had to wait for the right moment to declare its affection. The functional organisation principle prevailed, but the wish in the Ministry for a reordering according to geographic criteria was to grow stronger over time.

The Dynamics of Horizontal Integration

The decentralisation wave in higher education reached its peak in the 1980s. The expansion of higher education outside the universities had led to a highly differentiated, diverse, and geographically dispersed organisational field which called for state coordination through horizontal integration of study programmes and institutions. But how can the shift from fragmented expansion to horizontal integration of the college sector be explained? As a starting point, some propositions can be put forward:

1. The expansion of college education entailed fragmentation of institutions, study programmes, and curriculum structures and created disorder in the higher education system.
2. Too much disorder produced a need for order because it hindered the further development of an efficient educational system.

3. Order was achieved through state coordination of the diverse pattern of educational institutions, study programmes, and curriculum structures.
4. State coordination implied two principal processes of horizontal integration: (a) *field contraction* and (b) *regionalisation* of the college sector.

The Logic of Field Contraction

Field contraction includes four processes: (a) *authority unification* of the various educational establishments under the jurisdiction of the Ministry of Education; (b) *institutional de-differentiation* through mergers of professionally close schools; (c) *integration of programmes* within the various subfields; and (d) *homogenisation* of structures, procedures, and curriculum regulations within and across subfields.

Through a process of *authority unification*, the majority of professional and vocational post-secondary schools established by different governmental ministries, counties, municipalities, hospitals, and private organisations were gradually transferred to the Ministry of Education. This process can be explained by a combination of structural, cultural, and interest-group perspectives on organisational change. The increasing complexity of the organisational field entailed a need for stronger coordination of the various institutions by a central state authority. In addition, the economic basis for most of the private schools had become too unsound, but also the ideological demarcation that set them apart had gradually become less significant, facilitating this unification process. Furthermore, the interests of educational bureaucrats and institutional leaders were of importance. The central educational bureaucracy wanted to improve the coordination and control of post-secondary education, and there was a wish of some of the training institutions to become proper schools on a par with those subject to the jurisdiction of the Ministry of Education by attaching themselves to this ministry.

Within each sub-field, a process of *institutional de-differentiation* took place through mergers of institutions which were professionally and geographically close to each other. In addition, several new study programmes were located within the organisational framework of already existing schools instead of in new and autonomous institutions. The reasons for this change were partly grounded in economic circumstances, the increasing structural complexity within the college sector itself, in new ideas on how professional education should be organised, and in the power of educational bureaucrats in the Ministry of Education to reorganise the sector.

Furthermore, the Ministry of Education took the initiative to counteract the increasing differentiation of study programmes and courses through *national coordination* of programmes within the various subfields, and through *regional coordination* of programmes across institutions. At the central level, national advisory councils for each professional programme were instructed to create national framework plans and guidelines to secure a common curriculum across the different colleges. At the regional level, a board for all public colleges was established in each region to coordinate activities across institutions.

Finally, the Ministry of Education initiated a large number of *field homogenisation* processes across the different study programmes in the college sector. Each college became subject to the same guidelines through a common set of rules and regulations, covering all aspects of organisation, management, and administration of their activities. The standardisation process that took place between the mid-1980s and the mid-1990s, coinciding with the introduction of common financial regulations and the New Public Management approach in the public sector. In addition, a homogenisation of structure and content of programmes took place. They became closer to one another in aspects such as admission requirements; the duration of studies; and in forms of practice, teaching, and examinations.

The reasons for these horizontal integration processes can be explained by combining structural, cultural, and interest-group approaches. Structural changes within the professional school system itself, like the increasing differentiation of health and social education in different schools generated a need for integration and coordination of the various programmes. The standardisation of curricula within and across study programmes was largely driven by the pressure of a common national culture, but to some extent also by the pressure to adjust to the vision for a common European labour market. Within the framework of structural and cultural changes in society, various state authorities, professional colleges, and societal stakeholders fought for their particular interests.

To reiterate our argumentation, in the language of Clark (1983), these contraction processes were expressions of bureaucratic coordination through *jurisdictional expansion* (an increase in the responsibilities of the Ministry of Education), *rule expansion* (an increase in the number of rules designed to effect consistency in the actions of people), *layering* (the establishment of an intermediary coordinating body at the regional level), *personnel enlargement* (an increase in the number of educational bureaucrats), and *administrative specialisation* (the establishment of special sections in the ministry itself to coordinate college education). Other interest groups were also important in this contraction process, e.g. through coordination enforced on the colleges by the professional associations (as in nursing), by the national advisory councils for the various study programmes (as in teacher training), and by international federations (as in engineering and maritime education). Finally, market mechanisms played a role in the authority unification process through the voluntarily inclusion in the state educational system of private schools, for matters of recognition and survival.

To the extent that political, bureaucratic, professional, and market coordination aimed at making the college sector more homogeneous, and not only at reducing the number of institutions, these change processes can be explained by the theory of institutional isomorphism as developed by DiMaggio and Powell (1983), suggesting that once a set of organisations emerges as a field, rational actors make their organisations increasingly similar through coercive, mimetic, and normative isomorphic processes.

By the end of the 1980s, the outcome of these processes was a college system characterised by less heterogeneity and more homogeneity than in earlier periods, and by stronger political and bureaucratic coordinating authority by the Ministry of Education.

The Logic of Regionalisation

The evolution from specialised schools to comprehensive colleges can be described as a regionalisation process, where coordination by regional college boards eventually led to the merger of previously independent colleges. To understand the development towards a regional structure in the college sector, it is important to distinguish between the two processes embedded in the notion of regionalisation: (a) the transfer of resources and decision-making authority from the local to the central level within each region, and (b) the transfer of resources and decision-making authority from the national centre to the regional centre. The former process was primarily driven by rational–functional arguments attached to an implicit assumption on economies of scale, but also to sectional interest by regional bureaucrats and politicians, whereas the latter process was driven partly by ideological arguments on the importance of building strong regions, and partly by the sectional interest of an overloaded state bureaucracy to transfer tasks to the regional level.

The regionalisation of the college sector in Norway, and the subsequent change from a dual to a binary system, has many parallels in other countries. The creation of a meso level of governance and the regionalisation of college education were largely based on the same rationale: the assumption on economies of scale, the wish to build stronger regions, and the need for moving tasks out of an overloaded central administration. In this respect, Norway placed itself within an international trend aiming at reducing the number of many specialised, single-purpose colleges, and creating a smaller number of comprehensive institutions (Goedegebuure & Meek 1997). However, it is not clear to what extent these reforms were regarded as models for the Norwegian reform. In public documents, there was no mention of similar reforms in other countries. The past history of the reform process in Norway itself was obviously the predominating premise. Even in 1966, a proposal for a regional integration of post-secondary education had been put forward. Due to the resistance from the institutions concerned and their professional associations this reform proposal was postponed and later abandoned. However, the Ministry of Education had wanted to reorganise this sector since the late 1960s, and at the end of the 1980s, the time was finally ripe to put the merger issue on the agenda again. The fact that several other countries had already implemented such a reform was of course an additional reason to suggest similar measures in Norway, and was an argument that could be used to secure political acceptance from parties that had earlier resisted mergers of institutions for ideological reasons.

The Dynamics of Horizontal Integration

The horizontal integration process was primarily a state-driven attempt to deal with the increasing structural complexity of the college sector. The ever-continuing expansion of this sector gradually called for measures to counteract the fragmentation into numerous small institutions and study programmes. The horizontal

integration of the field was formally and symbolically accomplished with the establishment of state colleges in 1994. Before the college reform came into force, this horizontal integration process had started through processes of field contraction. In addition to state enforcement of these measures, some of the vocational schools voluntarily adapted themselves to new environmental conditions. By the time the regionalisation of the college sector was planned, the authority unification of this sector was complete, and can be regarded as a precondition for an effective implementation of the regionalisation process. Responsibility for each type of programme had gradually been removed from private organisations, municipalities, counties, and sector ministries, and been transferred to the Ministry of Education. The gradual convergence in the college sector through this unification process and through the processes of institutional de-differentiation, programme coordination, and standardisation facilitated the merger process, and the reform in itself enhanced the horizontal integration of the organisational field by reinforcing the various field contraction processes. Through the regionalisation of college education, institutions were merged, the coordination of study programmes was enhanced, and the standardisation of rules and regulations continued.

Changes in political, ideological, and cultural currents in society undoubtedly have affected state policies for the college sector. Changes over time in the emphasis on values like social utility, equality of opportunity, efficiency, and quality are important explanatory factors for the various change processes. Social utility and the principle of equal opportunity to higher education was the initial background of the gradual development of a diverse post-secondary educational system. The need for making higher education more efficient was an important driving force behind the processes of field contraction and regionalisation. The quest for improved quality of college education was a motivation for the unification and integration of diverse professional programmes under the common educational system subject to the authority of the Ministry of Education. Over time, ideas change regarding the appropriate way to manage and organise the public sector. Such new views were very significant in the context that led to the reorganisation of the college sector in 1994. This reform was inspired by international trends in public administration policies brought about by neo-liberal currents on how the public sector should be organised and run.

The governmental management and regulation policies of field contraction and regionalisation in the college sector were inspired by theories on efficiency improvement of public affairs. In this respect, these processes aimed at reducing the complexity of public administration. A common set of rules, common administrative systems, and homogeneous educational institutions would make the management of the field easier and reduce expenditure on higher education. Regionalisation, through the merger of small institutions into fewer, larger establishments, was argued for by implicit reference to theories of economic, administrative, and academic economies of scale. Besides, mergers had been implemented in the education sector of many other countries.

The horizontal integration processes in the college sector eventually turned the dual system into a formal binary system. This divide would however soon be challenged through processes of vertical integration of the two higher education sectors.

The Dynamics of Vertical Integration

The regionalisation of the college sector resulted in the creation of a formal binary higher education system, but also in a more integrated system across the college and the university sectors. Even though the government's policy documents stated that the division between the two fields should remain, in many ways differences decreased.

The vertical integration process in higher education has been driven by (a) *academic drift* in the college sector, (b) *vocational drift* in the university sector, and (c) *cross-field coupling* attempts enforced by the government and the Bologna Process. Together, these processes reduced differences between colleges and universities and led to a blurring of boundaries between the two fields. Academic drift in the college sector has been the most powerful of these vertical driving forces.

The Logic of Academisation

We can distinguish between several different, though interrelated, academisation processes in the college sector: (a) increasing emphasis on theory in the curriculum, (b) upgrading of professional schools to higher education colleges, (c) horizontal and vertical extension of study programmes, (d) development of research activity, (e) the possibility for state colleges to advance to university status, and (f) symbolic drift by the introduction of the notion of university colleges.

The interests of influential and powerful actors within the organisational field have driven much of the academisation process. The underlying theoretical assumption is that entrepreneurial institutional leaders, programme leaders, and their professional associations; cosmopolitan staff and academically oriented students; as well as college sector associations, state authorities, and external stakeholders take part in mutually reinforcing academisation processes. Cosmopolitan staff might, for instance, want to raise their status and salaries by copying the academic behaviour of their university colleagues. They put pressure on the institution to obtain better research conditions and to develop higher degrees. In turn, institutional leaders and programme leaders, inspired by academic achievements of cosmopolitan staff, might put pressure on all staff to become more academic. Another example is governmental reforms which might have far-reaching and unintended consequences for the behaviour of staff and students in the college sector. Thus, the introduction of institutional reward structures emphasising research and publishing might encourage academic drift at a staff level. Similarly, the improvement of transfer arrangements between college programmes and universities might encourage student drift and force these programmes unintentionally to move in an academic direction. In turn, programme drift might reinforce student drift.

Furthermore, structural changes in the post-secondary education system enhanced the academisation process. In many ways, the establishment of district colleges in the late 1960s, with a mix of vocational programmes and academic

courses, can be said to have undermined the social order between the universities and the rest of the post-secondary education sector. The reference groups of the district colleges and their staff were the universities, university disciplines, and university programmes. Thus, the adaptation of college curricula to the requirements of the universities fitted in with their long-term strategy for developing higher university degrees in the colleges. In turn, the district colleges became a reference group for the professional colleges with respect to academic standards, career systems, and research opportunities. Institutional drift in the latter colleges in turn influenced the attitude of the state bureaucracy towards all institutions in the college sector. The professional colleges were gradually accepted as research institutions and by virtue of this, were granted the same career structure as the universities, and fell under common legislation. Development of the range of college studies also influenced the student application patterns in higher education, and the overall activities of colleges were significant for local and regional support towards the central political level. Parliament repeatedly overruled attempts by the Ministry of Education to slow down the ambitions of the colleges. Finally, the drive for academic reputation and social recognition among individuals, programmes, and institutions in the college sector was strongly influenced by the structural and cultural dominance of the universities in the higher education system.

The Logic of Vocational Drift

Concurrently to academic drift in the college sector, there have been clear signs of vocational drift in the university sector. For analytical purposes vocational drift can be deconstructed into two interrelated processes: (a) *policy drift* and (b) *institutional drift*.

Vocational drift embeds the increasing tendency for policymakers to stress that the relation between universities and society should be strengthened, and that the programmes on offer should be relevant to the needs of society (*policy drift*). The transformation of universities from elite institutions to mass higher education institutions has changed governmental opinions on the role and purpose of universities in the production of candidates for the labour market. While continuing their traditional academic programmes, universities should also introduce more directly work-oriented courses to serve the needs of society and the demands of new student groups.

The mobility of students enrolled in academic university programmes to vocationally oriented courses in the colleges, and the increasing tendency for first-year students to enrol in vocationally oriented programmes are major causes of vocational drift in universities. For these two reasons, many universities have established new work-related courses as well as courses that were originally offered by colleges (*institutional drift*). First, in order to retain students who enrolled in an academic programme, but later found out that they would prefer a more work-related form of education, and second, in order to attract students who, in the first place, would opt for a vocationally oriented course. In addition to the competition for students,

the changing expectations of governmental policymakers have contributed to this institutional drift process.

Institutional vocational drift can be explained theoretically by the use of resource-dependence theory (Pfeffer & Salancik 1978). Universities usually wish to maintain or increase the number of students enrolled in their programmes. With the large expansion of the higher education system, over time, virtually all Western European universities experienced growth in their student population. However, zero growth, combined with the transition from strong political and bureaucratic coordination of student numbers at individual universities to market mechanisms in the allocation of students to institutions, created a new situation. Universities had to compete for students in order to sustain their resource base or to enlarge their share of the student market. Alternative strategies were to introduce professional programmes offered by colleges, to merge with professional schools or colleges, or to create vocationally oriented courses to attract new types of students.

But institutional drift can also be explained as symbolic change of institutional mission, or an attempt by universities to appear as institutions responding seriously to governmental policy signals in order to sustain their core academic mission (Meyer & Rowan 1977). Through the establishment of vocational courses, universities try to increase their legitimacy in society without seriously thinking of changing their core academic activities. They demonstrate that they are acting on societal needs and policy demands in a proper and adequate manner in order to be protected from having their conduct questioned.

The Logic of Field Coupling

Four processes can be subsumed under the notion of field coupling: (a) *student mobility*, (b) *structural convergence*, (c) *network building*, and (d) *organisational integration*.

For analytical purposes, *student mobility* needs to be distinguished in terms of upward mobility (transfer from a college to a university) and downward mobility (transfer from a university to a college). With respect to *upward mobility*, the theory of credentialism (Collins 1979) indicates that many students who enrol in short-cycle college programmes would later like to earn a higher degree in a university to improve their competitive advantage when applying for jobs. Thus, in order to attract students to their institutions, it has been in the interest of colleges to enhance opportunities for upward student mobility. To enable the implementation of a credit transfer system, the initial innovations in the curriculum of many courses developed by regional colleges, and by the district colleges in particular, thus, gradually were adapted to the curriculum of their parallel university courses. These adaptations evidently may be interpreted as a response to the need for cross-sector harmonisation of programmes and courses, resulting in isomorphism in higher education (DiMaggio & Powell 1983). The mutual interest by students, colleges, and their sector organisations in enhancing opportunities for flexible transfer between the

two sectors have been an important driving force in this vertical integration process. Paradoxically, the theory of credentialism can also contribute to the explanation of *downward mobility*. For many students, it will be a faster and easier route to a degree by favouring short-cycle professional or vocational studies at a college over long-term university studies.

A second field coupling process took place through *structural convergence* of the two sectors. This process resulted in a joint act for higher education institutions, in common administrative and economic regulations, in a joint academic career structure, in a joint degree structure, in a common funding system, etc. This process can be understood as an effort by central state authorities to reduce complexity and to create a more efficient education system, but also as the outcome of a more general shift in ideas on how the public sector should be controlled and managed. Finally, a common degree system across the two sectors was introduced as a consequence of the Bologna Process.

A third field coupling process took place by the implementation of an explicit state attempt at system integration: the introduction of the notion of *Network Norway*. This was a strategy for the development of an integrated, though diversified system of higher education, based on a division of functions between the university and the college sectors concerning education and research. Simultaneously, lines of communication and cooperation between the institutions should be improved by developing infrastructural, organisational, and social networks.

A fourth field coupling process took place through cross-sector *organisational integration* at various levels of the organisational field of higher education – through the reorganisation in the Ministry of Education of the Division of Universities and Colleges according to function instead of educational sector, through the merger of the councils of state colleges and universities, through initiatives to merge universities and state colleges, through the creation of joint councils for professional programmes across the binary divide, and through the integration of various professional trade unions into the Norwegian Association of Researchers.

These field coupling processes: student mobility, structural convergence, network building, and organisational integration gradually undermined the binary policy. Moreover, these processes mutually reinforced each other. The building of networks reduced the cultural distance between important actors across the two sectors, which in turn enabled organisational integration. The mobility of students from colleges to universities and vice versa enforced the standardisation of rules and regulations as well as the homogenisation of curricula. Processes of structural convergence in turn affected processes of network building, and so forth.

The Dynamics of Vertical Integration

Three principal processes have worked together to bring the two higher education sectors closer to each other: academic drift in the college sector, vocational drift in the university sector, and the introduction of field coupling mechanisms. Moreover,

field coupling mechanisms such as harmonisation of academic requirements and qualifications have in turn enhanced the academisation of this sector. Homogenisation processes have contributed to making colleges more similar to universities and not vice versa, and were in fact important driving forces in the subsequent academisation processes that took place in the college sector.

The vertical integration of the college and university sectors have multiple causes, of which some are structural, others are cultural, while still others have their basis in the particular interests of principal groups and stakeholders in the organisational field of higher education.

First, there is little doubt that the state college reform of 1994 radically changed the Norwegian educational landscape. First and foremost, the college sector and the individual state colleges became far more visible and acquired a higher status, in a regional, national, and international context. The transformation of a fragmented pattern of mainly small establishments into a fewer number of relatively large colleges made a big difference in terms of status, attraction, and power. The share size of some of the new colleges made institutional leaders aware of the potential for further development of their institutions towards university status. Thus, the restructuring of the college sector not only had immediate consequences for those institutions affected by the mergers, but should also soon prove to affect the future relationship between the two higher education fields. Several of the state colleges were not content with their status as non-university institutions, and at the turn of the century the discussion whether the binary system should be abolished in favour of a unified system emerged. In this respect, the creation of a binary system in 1994 to curb university ambitions in the largest district colleges would not turn out to have been an effective measure. The state-initiated mergers of small colleges into larger entities as an organisational solution to improve a malfunctioning college sector and to create a binary system thus became a platform for those interests that wished to get rid of the binary divide.

In the first years after the reform, however, the state colleges were too occupied with the building of a new organisation and the settling of the many internal disputes and priority issues to start processes that might change their future status within the higher education system. But gradually institutional leaders and regional stakeholders came to see the potential for a further status advancement which the mergers and the vision of a more closely integrated higher education system had laid the ground for. For many years there had been a clear academisation tendency in the college sector. Postgraduate education at master's degree level was already offered at a majority of the colleges, and some of the colleges also offered doctoral training in collaboration with a university. From the point of view of these colleges, a natural next step would be the achievement of university status. The development in Sweden, where three state colleges managed to attain university status, came to be of great importance for how this issue was handled in Norway.

Second, the general reforms in public administration labelled 'New Public Management' were also implemented in higher education. This change in perceptions of how the public sector should be organised and managed soon proved to fit in with the strategies of the colleges themselves. Van Vught (1997) has argued that we have witnessed a major shift in public governance structures from the

model of rational planning and control to the model of self-regulation. Applied to the higher education sector, the former model is based on the assumption that a strong state is capable of developing and maintaining a well-functioning system of universities, higher education colleges, and professional schools. Decision-making is centralised and the state exerts detailed control with the implementation of its policy. This model implies that governmental actors and agencies are capable of acquiring comprehensive knowledge about future trends and needs and able to take better decisions on how the higher education system should be further developed than the universities and colleges themselves. The model of self-regulation is basically the opposite of the model of rational planning and control and emphasises the capacity of the higher education institutions themselves to respond to signals from the state and the market. In Norway, like in other countries, the role of the state changed in this direction, and new relationships developed between the state and the higher education institutions. The neo-liberal winds that swept over Western Europe made detailed state-steering and planning less fashionable. The traditional social-democratic public policy model came to be regarded as incompatible with market values because they inhibited institutional initiative and discouraged entrepreneurial behaviour (Scott 1995). Accordingly, the binary policy came under attack as an outdated model for the organisation of the higher education policy, in which the various institutions were assigned different missions without the possibility of upward mobility. In many ways, the binary model could be seen as a metaphor of the old class society, where the class a person was born into was decisive for his or her social status, cultural taste, and income. In the same way, the binary divide between universities and colleges would preserve a socially constructed and socially institutionalised division between noble and less noble higher education institutions.

A third challenge to the binary system was imported from abroad. The establishment of rules and regulations that would permit colleges to advance to the status of university or specialised university institution provided accreditation was inspired by a similar Swedish reform. The policy drift in higher education, making this development possible, was facilitated by the general change in public policy in this period. The renaming of state colleges into university colleges in international contexts was clearly inspired by the practice of Swedish colleges, but this symbolic academisation of the college sector also had parallels in other Western European countries (universities of applied sciences in Germany, Switzerland, Finland, and the Netherlands). The renaming of the specific professional degrees into bachelor's degrees, and the 2-year higher degrees into master's degrees, was still another symbolic turn on the academisation wheel and a challenge to the binary system.

Additive and Mutually Reinforcing Processes

A major lesson that can be learnt from the transformation of the Norwegian college sector is that the many processes that have driven the development have not only been additive, but they have also mutually reinforced each other.

In the first phase – fragmented expansion – the processes of *geographical* and *institutional decentralisation* each contributed to the fragmentation of the post-secondary education system, but they also reinforced each other. A geographically dispersed pattern of colleges was a precondition for the institutional decentralisation of higher education to take place, and the latter process enhanced the geographically decentralised institutional pattern. Moreover, these two processes worked together with the process of *diversification* of schools and programmes and enhanced the level of fragmentation through the prevailing functional organisation principle with separate schools for different professional programmes.

In the second phase – horizontal integration – processes of *field contraction* and *regionalisation* both contributed to the integration of programmes and colleges, but these two processes also reinforced each other. Field contraction included the sub-processes of authority unification, institutional de-differentiation, programme integration, and standardisation. These were parallel processes adding to a more integrated college sector, but these processes were also intertwined, reinforcing each other. The combined effect accordingly was stronger than the separate effects of each of them would have been, and this field contraction process in turn facilitated the regionalisation process, while the latter process in itself further enhanced the process of field contraction.

In the third phase – vertical integration – various *academisation* processes contributed to the trend towards academic drift in the college sector. The upgrading of professional schools to higher education colleges led to increased emphasis on theory in the curriculum and to the development of research activity, which in turn entailed extension of study programmes. This development in turn led to the possibility of state colleges advancing to university status, which in turn increased the pressure for developing higher-degree programmes and doctoral degree programmes, and subsequently the need for enhancing the research base required to offer such programmes. Thus, various academisation processes not only added to each other, but they strongly reinforced each other. As shown above, a similar mechanism of mutual reinforcement took place with respect to the various *field coupling* processes. Finally, processes of academic drift in the college sector, vocational drift in the university sector, and field coupling played together and enhanced the vertical integration of the college and university sectors.

The fact that in each of the three phases, the processes that have driven the development over the last 4 decades have added to each other and have been mutually reinforcing, is a major explanation for the strength in the direction of the transformation of the college sector.

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