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(eds.)

The Changing Conditions
for Academic Work and Careers
in Select Countries

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Content

1

Introduction

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Institutions of higher education are usually acknowledged as the key organizations in society serving the generation, preservation and dissemination of systematic knowledge. The academic profession constitutes the "productive workforce" within these institutions. Academics are highly respected because they form the "key profession" among the professions, as the British social historian Harold Perkin once wrote, i.e. the apex of knowledge in all disciplinary and professional areas. They are a highly select group and have succeeded in most countries over long periods of history in claiming that academic freedom and the governance of their institutions as a republic of scholars were both necessary to ensure the highest quality and significance of higher education. In many countries of the world, a third claim has also been fundamental for about the last two centuries: that the highest quality is guaranteed if the academics at universities − the traditional core institutions of higher education in most countries of the world − are in charge of both the generation and dissemination of knowledge, i.e. research and teaching.

As the academic profession is so central to the functioning of the higher education system, academics are bound to experience substantial changes when higher education as a whole undergoes major transformation. Since the recovery from the devastation of World War II, higher education in many parts of the world has experienced unprecedented growth. Overall student enrolment all over the world has increased more than ten times within five decades. Most narrative accounts suggest that the institutions at the top hardly changed initially while systems developed a longer tail of new institutions only in part reflecting the quality, the functional composition, and the academic freedom of those at the top. The student protests in the late 1960s are often seen as the impetus for major reconsideration of structure, functions, governance, and the modes of teaching and learning. Altogether, both expansion and these major reforms reflect the growing importance of higher education for nations and, in a wider context, a major component of what is called the trend towards the "knowledge society".

It is interesting to note that the growing societal importance of higher education does not guarantee greater public appreciation or a higher self-esteem. On the contrary, academics lose some of their social exclusiveness and uniqueness as

carriers of systematic knowledge. The conditions for teaching and research are more strongly shaped by financial constraints and efficiency pressures. The respect for the quality of their work is challenged by a growth in measures of performance assessment, and their power to shape their institutional environment is weakened. Academic careers become less predictable and, at least in the early stages, more shaky. Although pressures for the relevance of academic work increase, academics have more difficulties in being heard and recognized by society as a key source of expertise.

The paradox of the growing importance of higher education and the increasingly insecure position of the major producers and disseminators of academic knowledge was already a key issue of debate when, for the first time, an international comparative study was undertaken in 1992. Initiated and coordinated by the Carnegie Foundation for the Advancement of Teaching, the so-called *Carnegie Study on the Academic Profession* (see Altbach 1996; Maassen and van Vught, 1996) suggested that the ideal of academic freedom and predominantly collegial coordination continued to shape the minds of most academics. However, higher education had changed so that academics had to accommodate and negotiate more than before within their institutional and societal environments and the conditions under which the academics operated had become quite diverse within each country. Moreover, this first major comparative study was most valuable in highlighting national differences, even though universities are shaped in some respect by universal conditions, cosmopolitan values and international cooperation. Striking differences could be observed in the extent and modes of institutional diversity, the conditions and selectivity of junior academic careers, the proportion of part-time teachers, the assessment of academic work, modes of governmental steering and institutional governance, the perception of the individual university as a place with which the academics identify themselves, as well as the role that academics play in society.

The conditions under which the academic profession operates seem to have changed even more rapidly during the one and a half decades since this first comparative survey was undertaken than in the preceding decades. Therefore, higher education researchers from more than 20 countries joined forces to undertake a second survey in 2007. Within the framework of the new project "The Changing Academic Profession", initiated by William K. Cummings (George Washington University, Washington D.C., United States.), two workshops were held in Paris (France) in 2004 and London (United Kingdom) in 2005 to establish a conceptual and methodological framework for a comparative study. Subsequently, efforts were made, first at a workshop in Hiroshima (Japan) in 2006, to map changes in national higher education systems most relevant for the academic profession (RIHE, 2006). As a second step, at a workshop in Kassel (Germany) in cooperation with the UNESCO Forum for Higher Education, Research and Knowledge, selected areas of change were scrutinized which are of utmost importance and play

a major role in most of the countries cooperating in this second comparative survey: how the academic profession is exposed and responds to increasing expectations of the relevance of academic work, how the growing trend of internationalization affects academia, how changes in the doctoral phase of learning and academic work shapes academic careers, and how academic work and employment changes amidst major transformations in governance, notably the growing power of institutional management in many countries (Kogan and Teichler, eds., 2007).

But obviously, other important changes clearly underpinned the topics highlighted by the second survey. Growing competition, increasing commercialization in all aspects of higher education, closer cooperation between universities and external stakeholders, the spread of communication technologies, the growing relevance of English as the *lingua franca* of higher education, the increasing relevance of life-long learning can all be named in this context. Therefore, team members of the comparative study were invited to write country reports in which they not only focus on the changes relevant to the academic profession that have been selected for particular attention in this study, but also begin to address a broader range of current conditions for the academic profession in their respective nations. Team members from twelve countries and five continents volunteered to contribute to this volume by highlighting the major conditions for the academic profession in their respective nations.

In the first chapter of this selection of reports on the *Changing Academic Profession*, Ulrich Teichler provides a broad-ranging review of the challenges to the profession in *Germany* and other European countries. The analysis untangles three issues: (i) the growing demand for systematic and applied knowledge, the expansion of higher education and the resulting pattern and structure of the system; (ii) changes in the steering, governance and management of higher education institutions; and (iii) growing international mobility and cooperation and the decline in the influence of nations on higher education. Teichler notes that the perception that the challenges are similar in most European countries and many other parts of the world should not obscure the reality that the reforms may be different, according to national traditions, the extent of modernization and the political choices made in each country.

Marek Melichar and Petr Pabian, of the Center for Higher Education Studies, Prague, use the metaphor of centers and peripheries to frame their chapter on the academic profession in the *Czech Republic*. They argue that the issue of the relevance of academic work is surprisingly peripheral in the Czech context; that Czech academics find themselves on the periphery of the international academy; and that they enjoy a central position in a rather peripheral model of higher education and research governance. The authors analyze the factors pushing Czech academics away from these peripheries: towards the centre of public attention, towards the centre of the international academic community, and towards more mainstream managerial models.

Gerard Postiglione, from the University of *Hong Kong*, reviews the drivers embedded in the Special Administrative Region of the People's Republic of China, viz economic globalization, the national mission and the human resource 'brain race'. Its market-oriented background, together with a strong history of internationalism has enabled the Region to establish a highly competitive academic system that has been able to take advantage of the current challenges to the academic profession and higher education in general. The reunion with the Chinese mainland and the social and economic changes occurring there, the expansion of a relatively small higher education system in Hong Kong and the dual use of English and Chinese Mandarin as the languages of instruction, make this a unique context in which to examine the complex interplay of factors affecting the profession and preparation for entry to it.

South Africa has experienced momentous changes in the past 15 years. These changes have affected not only South African society, but the higher education sector as well, and by implication, the academic profession. In their chapter, C. C. Wolhuter from North-West University and Philip Higgs from the University of South Africa outline the key social and economic changes arising from the ending of minority White rule and their impact on higher education. The authors draw on the results of a survey of academics in 2002 using the same instrument as the original Carnegie study a decade before, together with related research. They highlight the rapid internationalization of the profession and achievement of gender equity, together with low productivity and the persistence of racial disparities. The new survey will enable the researchers to investigate these aspects more thoroughly.

Elizabeth Balbachevsky and Simon Schwartzman from NUPES (Higher Education Research Center), University of San Paulo, *Brazil*, outline the evolution of Brazilian higher education during the stabilization of the country's economy and its opening up to international competition. They begin with a brief history of higher education in Brazil, describe its relevant features today and provide key data on the different segments of the system and the patterns of academic employment and credentials. Balbachevsky and Schwartzman outline a four-part typology of profiles of academics in different parts of this stratified system, and offer an analysis of how government and institutional policies have impacted differently on each type, including the recent retrenchment under the current president of the country. They conclude, however, that the system and the conditions for the academic profession are not becoming more stratified as many assume, and even that some convergence is observable.

The origins and main characteristics of the *Japanese* academic profession are analyzed in the chapter by Akira Arimoto, formerly of the Research Institute for Higher Education, Hiroshima University. They include a stronger orientation to research than teaching, a pyramid form of stratification of higher education institutions, a conflict between the German and the North American models in the con-

struction of a modern higher education system since World War II, an imbalance between male and female academics, and the transformation of the chair system and creation of four levels of academic posts in order to improve academic productivity. In a nation that is on the verge of achieving a universal higher education system, Arimoto outlines the challenges of constructing a new vision and identity for the profession.

The chapter on *Australia*, by Grant Harman and Lynn Meek of the Centre for Higher Education Management and Policy at the University of New England, pays particular attention to how academics have responded to a more managerial university administration and culture, with a much stronger emphasis on entrepreneurial activities within departments and faculties and enhanced university-industry links. Using national survey data and a variety of secondary sources, Harman and Meek summarize major Australian policy and contextual changes, explore how academics in general have reacted, and document aspects of the impact of changes on academic qualifications, work roles and practices, job satisfaction and academic values.

The phenomenal expansion of higher education in the last decade and a half in *Malaysia* has challenged the traditional roles of academics, writes Morshidi Sirat and colleagues from the National Higher Education Research Institute (NAHERI), Universiti Sains Malaysia. Bureaucratization and corporatization have eroded the collegial culture, and increasing demands on academics to be fundraisers and adopt administrative and managerial roles have taken them away from traditional teaching and research. Many academics remain strongly opposed to some of these changes, which bring about paradoxes and tensions for the academic community. Nevertheless, they have led to the generation of new academic roles and the diversification of existing ones.

The coexistence of change and continuity is the theme of the chapter on the *United Kingdom*, by John Brennan and William Locke of the Centre for Higher Education Research and Information at the Open University and Rajani Naidoo from the Department of Education, University of Bath. They outline the main features of the academic profession, which is increasingly being regarded by government and its agencies as part of a higher education 'workforce' to be 'developed' and which is becoming stratified by role and type of institution. Brennan, Locke and Naidoo describe the conditions of academic work in the UK and the impact of increasing demands for relevance in research and teaching, the internationalization of student and staff recruitment and the role of the English language in this process, and the impact of the market and managerialism on the locus of control and autonomy in higher education.

Agnete Vabø, from NIFU STEP Studies in Innovation, Research and Education, *Norway*, analyzes the autonomy and power of the profession in that country to control academic work. She argues that the academic profession has become increasingly subject to a principal-agent relationship with national and interna-

tional sponsors, and this has reduced its power to control the content and nature of this work. This is reflected in expectations that higher education will play a central role in Norway's transition from an economy based on raw materials to one that is sustainable, the quest for internationalization, and increasingly managerialist modes of governance of universities. Vabø concludes that, with the growing importance of stakeholders such as employers, students, university administrators, and external governors, academics have been reduced to one interest group among many others.

In *Finland*, the retention of the principles of a welfare society has strongly influenced the recent massification of the higher education system. In their chapter, Timo Aarrevaara and Seppo Hölttä, from the Department of Management Studies, University of Tampere, describe how the Ministry of Education contracts with universities with funding linked to agreed goals, in particular, the number of degrees awarded. Government policies have increasingly aligned higher education and research with national efforts to increase competitiveness. This contractual relationship is applied within universities and has increased the pressure for performance-oriented behavior and flexible workloads based on results. This brings into question the division of work between the different professions and support staff in institutions and the authors conclude by suggesting an alternative, combined academic profession in which individuals move between roles.

The final chapter, by James Taylor and colleagues at the Centre for Research on Higher Education Policies (CIPES) in *Portugal*, briefly follows the history of Portuguese higher education and examines the state of the academic profession as they find it today. It then takes a more critical view of the present by examining a recent report on Portuguese higher education issued by the OECD, the Bologna Process and efforts towards international assessment, and how these factors are impacting the academic profession. It concludes by providing thoughts on the future, with an emphasis on the multifaceted role of the academic professional in addressing system challenges, potential drivers of change and structural reform for system-wide prosperity.

Education Research, Kassel, took care of the printing costs. Without the active support of all the persons and institutions involved, this valuable basis for reflection and information could not have realized. Its value is likely to be even more highly appreciated when the survey of "The Changing Academic Profession" is completed and its findings are made available.

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Germany and Beyond:
New Dynamics for the Academic Profession

Ulrich Teichler

1. Preface

Academics are core staff in institutions of higher education since they perform the key functions of teaching and research which these institutions "deliver". Therefore, they are obviously affected by the changes around and within higher education. This causes problems, if we want to identify "key challenges" to the academic profession at any point in time because all challenges to higher education affect the academic profession in one way or other. This notwithstanding, the scholars involved in preparing the international survey "The Changing Academic Profession" concluded in a preparatory workshop held in summer 2005 that three challenges notably might have changed the role of the academic profession most substantially during the 1990s and the early years of the 21st century: Increasing expectations of relevance, internationalization, and changes of governance and management in higher education.

Several times in recent years, the author of this chapter has been invited to speak to international audiences on the key changes in higher education in Germany and similar changes in other European countries. In one of these presentations – a keynote speech at a conference of university managers and higher education researchers in Chile in 2004 – the arguments were surprisingly similar: the "knowledge society" and its emphasis on relevance, management reforms and steering as well as internationalization were the key issues of higher education reform. This chapter draws substantially on that earlier presentation. In addition, issues of internationalization will be addressed in more detail, and this part of the chapter draws on an overview of internationalization debates which was written in 2006 for a Japanese readership.

2.   A New Wave of Debates and Reform Efforts

In many European countries, but also in other parts of the world, we note a widespread view these days that higher education should undergo major reforms, leading to substantial changes. In Europe, we observe reform efforts and actual developments with respect to three issues in particular.

First, the changing *structure and substance of higher education* in the course of *growing demand for systematic knowledge and the continuing expansion of higher education*. The "knowledge society" is the term frequently used. We ask what the quantitative development of higher education will be, how the patterns of institutions and programs will change, and how knowledge and educational attainment will be distributed in the population. We also ask how close to application and utility universities should be at a time when systematic knowledge is gaining increasing importance in all spheres of life.

Second, changes in the *steering and administration of higher education*. Terms such as "steering from a distance", "the stakeholder society", "the managerial university" or "the entrepreneurial university" suggest the emergence of a new logic of power, decision-making, and day-to-day administration in higher education. In contrast, terms such as "evaluation" or "quality assurance" imply that we are moving toward "reflexivity", but that the growing role of continual monitoring of our intentions and the impact of our activities are overshadowed by a tension between improvement through self-reflection and the control of academic work.

The third issue is addressed by the terms *internationalization* and *globalization*. Growing international mobility and cooperation is on the agenda; we ask how this is going to change higher education. Recently, higher education is assumed to change rapidly in a "globalizing world" (Enders and Fulton, 2002), i.e. under conditions of a decline in the influence of national conditions on higher education, a growing need for institutions of higher education to position themselves on the world "map", and increasing demands to address the common concerns of humankind (environment, peace, food, water, health, etc.).

The three issues are *intertwined* in various ways. Universities in the process of expansion and moving in the direction of the knowledge society seem to be in need of a different regime from that in the past. New forms of higher education management are considered necessary for universities to act in a globalizing world.

Clearly, there are striking *similarities in debates* in most European countries and many other parts of the world with regard to the need for higher education reform. The "knowledge society", the spread of neo-liberal concepts of "marketization" and "new public management" as well as "internationalization" and "globalization" are key words and phrases depicting the similarity of challenges. Also, at first glance, the reform efforts and actual changes look similar across countries.

However, we know from previous waves of higher education reforms that the perception that the challenges are similar *does not necessarily produce similar reforms*. Actual reforms are shaped, as I have pointed out in various analyses, by three different paradigms of policies:

– the *idiosyncratic paradigm*, according to which all countries – or notably the large countries – will retain certain elements of their special traditions in all reforms,

– the *modernization paradigm*, according to which all countries have to seek for the most advanced solution, which in principle could be employed by all countries, and

– the *political paradigm*, according to which each country opts to a different degree for equality or inequality, social cohesion or survival of the fittest, fierce market competition or competition within a framework of commonality, etc. Accordingly, one country could learn from other countries that opt for similar political solutions.

In this chapter, largely similar challenges and common major reforms in Europe are highlighted, but emphasis is placed on debates and changes in Germany.

3.   Expansion, Restructuring, and the Knowledge Society

3.1 Trends and the Changing Interpretations of Higher Education Expansion

During the reform wave around 1970, it was customary to use the term *"mass higher education"* as significant grounds for reconsidering the role of higher education and actually reforming it. Frequent reference was made to the model presented by Martin Trow (1974) of "elite", "mass", and "universal" systems of higher education. His view was widely shared that an expansion up to an initial participation rate of 15 per cent or more implies a need to care for the "masses" while not neglecting the future of the academic and social "elite" under conditions which might be called educational meritocracy. At that time, in OECD member states, about 25 per cent on average of the younger age group were enrolled in higher education programs leading to at least a bachelor's degree, and a further 10 per cent attended other kinds of "post-secondary" or "tertiary" education.

Soon afterwards, expansion leveled off and was succeeded by a *period of stagnation* in various countries (see OECD, 1983). In most economically advanced nations, the concerns of educational traditionalists that the growing number of graduates would face serious problems of unemployment did not materialize, but, instead, the consensus was that a substantial proportion of graduates faced "inappropriate employment" or "under-employment", etc. (Teichler, 1999). Yet, this stagnation might have been a response to risky job prospects.

The OECD (1998) came to the conclusion in the late 1990s, that a *new trend of "massification"* began around the mid-1980s almost unnoticed in the international

debate. Many employers, politicians, and experts noted in the early nineties that various economically successful countries during the 1980s had relatively high student enrolment ratios. Moreover, the spread of "new technologies" led to a paradigmatic change in the public debate. Terms such as "the information society", "the knowledge society", or "the knowledge economy" were frequently employed in order to express, among other trends, that a large proportion of the population needs a relatively high level of systematic cognitive competence. In the meantime, in the economically advanced countries, on average about 40 per cent of the age group enrol in programs leading to at least a bachelor's degree, and more than 10 per cent enrol in other tertiary education programs (OECD, 2001).

In Germany, the perception of "over-expansion" dominated the policy debates from the 1970s to the early 1990s, although enrolment ratios were below the OECD average. Since the mid-1990s, however, the prevailing debate has been about whether, with only 30 per cent initial participation in higher education, we "lag behind" the more advanced countries and should catch up.

3.2 The Challenges of the Knowledge Society

Most participants and experts agree with the view that we are moving towards a "knowledge society". In trying to disentangle the various challenges higher education currently faces in the transition to a knowledge society, we observe five different thematic debates about:
− the growing expectation of relevance,
− the diversification debate or the issue of quality at the top or quality across expanded higher education systems,
− substantive changes in curricula: "professional qualifications", "key qualifications", and "employability",
− teaching and learning amidst massification and educational fatigue, and
− the importance of lifelong education.

First, experts agree that the emerging knowledge society is characterized by the growing significance of knowledge as a basis for the economy and many other spheres of life. This creates pressure on higher education to produce *useful knowledge* (cf. for example Stehr, 1994; Etzkowitz, Webster, and Healey, 1998). Those fields which promise major technological and economic progress gain most support, and all areas are under increasing pressure to ensure the relevance of teaching and research. This does not mean that higher education is pressed to be primarily concerned with instrumental knowledge and its application. Rather, some experts claim that a new type of knowledge is demanded that is required to take care both of application and unexpected innovation, academic notions of research and the relevance of its results, and problem-solving based on bringing together the knowledge of different disciplines (cf. Nowotny et al., 2001).

Some scholars point out that the universities do not necessarily gain from the move towards the knowledge society; they might even face a serious crisis, because they loose their monopoly of advanced knowledge production, growing expertise in all spheres of life leads to a demystification of knowledge, and they might begin to imitate other institutions in providing instrumental knowledge and thus lose their unique role in sustaining and promoting reflective knowledge (cf. Scott, 1998).

Second, views vary on *how knowledge should be dispersed* across institutions and persons. Some perceive increasing competition for the highest quality academic knowledge as crucial. Those countries with the most successful elite universities and highest quality knowledge production are also likely to be the most successful economically. Others point out that a knowledge society is based on the decentralization of competences and responsibilities and a broad base of knowledge throughout the population. Therefore, one might advocate a relatively high level across all institutions of higher education rather than a strong concentration and stratification of resources (cf. Teichler, 2005).

Third, views differ with respect to changes in the *curricular approaches* required in the move towards a knowledge society. Some see a greater need for specialization, others an increasing demand for interdisciplinary knowledge and understanding (cf. Stock et al., 1998). Others perceive a growing need for "key qualifications", ranging from problem-solving competences as well as instrumental skills in computer science and business to values and socio-communicative skills (cf. Nijhof and Streumer, 1998). Finally, "employability" became a recent catchphrase highlighting students' learning how to utilize their skills in work as well as succeeding in the labor market and in recruitment and search processes.

Fourth, concern grew about the *quality of schools and the motivation of young people*. In the U.S., such a concern was already widespread in the 1970s and 1980s. In Germany, the low score of pupils in the PISA tests triggered off in 2001 the most heated debate on education for several decades.

Finally, others see a close link between the emerging knowledge society and the growing need for *lifelong learning*. Through initial education, individuals can only be prepared for professional tasks to a limited extent, and the knowledge they acquire is likely to be rapidly obsolete. Therefore, an emphasis ought to be placed on learning-to-learn in initial education and an extension of life-long learning (cf. the overview in Tuijnman and Schuller, 1999).

In summing up: we note quite diverse themes addressed under the label "knowledge society". Nevertheless, the debate about the knowledge society implies that higher education will expand further and that instrumental pressures on it will grow.

4.   Changes of Steering and Governance

4.1 The Strong Government in Previous Reform Waves

In looking back at changes regarding the steering and the governance of higher education over the last few decades, we note that a major political confrontation existed in the political arena about 30 years ago. In some countries, market regulation was a major element of educational steering for a market economy (most pronounced in the U.S.). In others, educational reform was expected to serve a planned economy (notably in the Soviet Union). There was a group of – notably European – countries where targeted political options were to provide the knowledge basis for a market economy (see Hüfner, 1984).

Seemingly, *governments* in many industrialized – notably European – countries *played a stronger role* of steering, controlling or supervising higher education in the late 1960s and the 1970s than before or since. Expansion and the growing social relevance of higher education prompted governments to take action. Four different political rationales for that can be discerned:

- the *collective educational investment paradigm*: government had to take care that higher education grew sufficiently in order to ensure the future economic success of the country,
- the *educational equality and educational meritocracy paradigm*: government had to shape access and admission, the quantitative development, and the structures of the higher education system wisely in order to ensure that socio-biographical differences did not operate as barriers to educational success, that all available talents were mobilized, and that the educationally successful were rewarded and took the lead in society,
- the *modernization paradigm*: government had to take strong measures in order to shape the framework in which the academic profession operated, because higher education institutions based on collegiality and concern for academic freedom were resistant to change when an overhaul of the functions of higher education was required, and
- the *welfare state paradigm*: the function of the state had to grow in many respects, including with regard to higher education, when society became willing to, and could, afford decent living conditions and participation in decision-making for more or less all.

Still, there existed an enormous variation of practices of steering and administration. Various higher education researchers tried to establish the distribution of power in higher education in different countries. Clark's (1983) "triangle" of academic power became most widely known: countries vary to the extent that higher education is ruled by the *state*, by the *market*, or by the "*academic oligarchy*" (i.e. the professors). Another, well known typology is that by Harman (1992), according to which governance in higher education is based on:

- the *collegial model* which emphasizes non-hierarchical cooperative decision-making and a significant degree of self-determination by academic staff,
- the *bureaucratic* model which stresses legal-rational authority and formal hierarchies,
- the *professional model* which puts the authority of experts at the forefront as well as the importance of horizontally differentiated units linked in loose confederations, and finally
- the *political model* which conceptualizes governance in terms of political conflict among interest groups with competing views and values.

Other experts underscore country differences according to the degree of power attributed to various levels of actors (see Maassen and van Vught, 1992). For example, the university management tends to dominate in the U.S.; Britain historically had a balance of strong university management and academia; while continental European countries were characterized by a polarization of strong government and strong academics together with weak university leadership.

4.2 Towards the Managerial University

Since the 1980s, we observe in most economically advanced countries substantial changes in steering, governance, and administration which have at least one element in common: a high degree of concentration of the power among the executives in higher education institutions, notably at the centre of the institution.

Of course, we know that the U.S. has a tradition of powerful university management, and we could interpret the changes in other economically advanced countries as steps towards adoption of the U.S. model. I believe, however, there are reasons to argue differently: the changes in other countries were more strongly shaped by new higher educational policies emerging in the Netherlands and the United Kingdom in the 1980s, by the spread of the New Public Management philosophy and other new organizational concepts (cf. Arimoto, 1997; Maassen and Gornitza, 1999), and also by the growing popularity of neo-liberal thinking in the political arena world-wide in the 1990s.

Changes in governance and administration became the major issue in higher education reforms for some time. This was triggered by notions of crisis:

- a *crisis of the academic profession*: the belief that the traditional models of academic socialization and collegiality would ensure a high quality of academic work was questioned;
- a *crisis of the state*: there was disappointment about the impact of government planning and steering activities with respect to higher education in the 1960s and 1970s;
- a *financial crisis*: the difficulties that welfare policies were facing and the disinclination of governments to increase expenditure on higher education in line

with the expansion of higher education and in accordance with the move to-
wards a knowledge society;
- a *crisis of the participatory models* of internal university governance which had
  spread in various European countries in response to the student protests in the
  late 1960s and early 1970s, and finally
- a *crisis of research in universities* amidst growing demands for technological,
  economic, and social relevance and insistence on cost-effectiveness.

The notions of crisis seem to have been similar across most economically ad-
vanced countries. Also, the rhetoric was similar in most countries, as far as grow-
ing emphasis on efficiency, effectiveness, and relevance are concerned as well as
the need for stronger powers among university leaders and the growing role of
market mechanisms in higher education. Yet, the climate of debate was different
in Continental European countries from that in the U.S., and striking differences
between the individual European countries have been noted (see Felt, 2002).

Changes in the higher education policies of the governments in the Netherlands
and the United Kingdom during the 1980s had a strong impact on other European
countries. In the Netherlands, a new triangle of power and supervision emerged:
Government reduced its detailed process regulations and controls and instead
moved towards a target-setting policy and university management was strength-
ened. An evaluation system was introduced in order to ensure both processes of
feedback and reflection for the purpose of improvement and information for gov-
ernment and society which might lead, in the long run, to the prioritizing of fund-
ing and strategic intervention. In the UK, in contrast, government gave up its role
as merely a benevolent funder of higher education and utilized evaluation as the
basis for stronger strategic prioritization and steering.

Altogether, the Dutch higher education reforms starting in the early 1980s had
the strongest impact on other European countries. Most European countries
adapted this philosophy, but to a varying extent and in various ways. Governments
in Europe, first, differ according to the *extent they specify targets* for higher edu-
cation, or rely in their resource allocation decisions or other prioritization judg-
ments on evaluation or indicators more or less based on "academic" criteria of
quality (see for example Kogan et al., 2000).

Secondly, there are variations between European countries in *how "authority"
is distributed within institutions of higher education*. What is the role of university
leadership compared with faculty leadership, and what is the role of the profes-
soriate compared with managers? Obviously, the regulatory system of individual
countries also plays a role in this regard. However, individual institutions of
higher education develop their own styles in the distribution of authority and deci-
sion-making (cf. Clark, 1998).

Third, *market mechanisms* played a growing role in the overall regulatory sys-
tem of higher education in most economically advanced countries. However, the

degree of influence varied between countries. Moreover, the trend toward strengthening market components does not continue in all countries, and we also note signs of reversal, e.g. a strong emphasis on "contractual" relationships between government and universities.

Fourth, other external "*stakeholders*" began to play a stronger role in countries where government was viewed in the past as the prime representative of society's demands. Again, we note strikingly different modes between countries (cf. Neave, 2002).

Fifth and finally, views differ about the desirable *diversification* of the higher education system as a consequence of changes in steering and management. Do we expect a highly stratified system, or will vertical difference be relatively small? Will the individual institutions of higher education become more alike or will they successfully strive for individual profiles and thus contribute to increasing horizontal diversity (Teichler, 1999)?

Obviously, individual countries favor different options of steering and governance despite a universal rhetoric. In addition, the traditions, problems, and policies of individual countries explain to a limited extent only the reality of each higher education system (see Kogan, 2002): they often leave room for the diverse choices of individual universities. The diversity of options and choices is to some extent due to the fact that there are also problems and contradictions in the current steering and management philosophies, as follows.

First, there is a *tension between the changing function of higher education and the current dominant modes of steering and governance*. This can be demonstrated most clearly by highlighting two frequently employed terms: "autonomy" and "quality". "Autonomy" can be considered merely as the right and the possibility of higher education institutions to make decisions about their goals, activities, and modes of operation. However, "autonomy" is often understood as the right of universities to pursue their activities based on their own values of "academic freedom", "the pursuit of knowledge for its own sake", etc. In the past, government has often been responsible for striking the balance between channeling society's demands and being a "guardian angel" of academic values and activities; now universities are granted more rights of self-determination just at the historical stage when they are expected to be more responsive to external demands in the transition towards the knowledge society. We are experiencing an interesting period of trial and error in establishing a combination of authority between governments, external stakeholders, university management, faculty leaders, the academic profession, students, etc., and nobody knows the perfect solution. Decision-making does not become more "efficient", but rather more "complex".

Second, there is a *tension between managerial competences and the academic understanding of faculty leaders*. A balance has to be found between managerial competences and leading autonomous academics. Again, we observe trial and error experiments with respect to the definition of these roles, the recruitment and

training of leaders, the key modes of interaction with academics, and the decision-making structures. Is the university leader steering by the use of incentives and the professor a homo economicus? Is the former a powerful supervisor and the latter a potentially lazy subordinate? Is the university leader a smart motivator and the professor a gently guided professional? (cf. Enders, 2001).

4.3 Evaluation

Since the 1980s, the evaluation activities have expanded in many higher education systems. In the late 1990s, one of the best known experts in evaluation estimated that about forty countries had introduced major national schemes (Kells, 1999) characterized by periodic and systematic review of individual institutions, departments or programs.

Evaluation has changed the nature of thinking among academics. They cannot focus their thoughts on their area of teaching and research anymore; they also have to reflect on questions such as: "What do I do?", "Why do I do it?", "Are the ways I act most appropriate for achieving the goals I want to achieve?", "What are the results?", "Why do I not achieve more?", and "What can I do to improve?". Similarly, those in power have moved from "input control" to output-based steering.

Thus, evaluation certainly has a common basis. However, the purposes and modes of evaluation are manifold. We also note a *diversity of terms and mechanisms: performance indicators*, *quality assessment*, *quality assurance*, *audits*, *accreditation*, etc. They vary according to functions and modes of operation. For example, the major evaluation system established in the Netherlands in the 1980s addressed teaching in individual departments. The French evaluation system aims to evaluate each university according to a common scheme. The Finnish evaluation scheme allows individual universities to choose the priorities of the evaluation. The British evaluation systems put a strong emphasis on the research function of higher education.

Most European countries have established an evaluation agency and carry out evaluation according to specific rules as a staged process of self-evaluation and external evaluation by "peers" or other experts (see Daniel, 2001). Nowadays, the evaluation agencies of the various European countries cooperate closely. Sometimes, joint European evaluation activities are suggested, but no agreement has been reached about common practices.

Many factors contribute to a persistent variety among evaluation systems. It is difficult to measure the processes and outcomes of higher education. The criteria vary, as also suggested by the terms employed: efficiency, effectiveness, performance, quality, etc. Some measures can be employed easily, but are not valid. Some methods of gathering in-depth information might be considered too subjective and

others as too expensive. Last, but not least, the major functions of the different evaluation systems vary.

In discussing the functions of evaluation, we can first identify the *ways information gathered is assessed and employed in decision-making*. Accreditation is a term frequently employed for the assessment and the related decisions for formal approval of programs or institutions of higher education. Evaluation might inform resource allocation decisions, it might be used to assess publications and award research grants, and it might provide information for the public. The more we measure the processes and outcomes of higher education, the greater the danger that too much energy is absorbed in assessment and too little in productive work. In addition, the multitude of measures might send inconsistent signals to academics about what they should actually do.

Second, evaluation exercises are difficult to undertake because they *serve the conflicting functions of improvement* based on reflection on the one hand *and*, on the other, that of *control* for various purposes, e.g. control of the supervisors, the priorities for resource allocation, accountability to the public, and transparency for potential users. Often, evaluation activities aim to serve both functions and thereby avoid the *Scylla* of over-emphasizing improvement − whereby some academics and institutions do not see the need to do this and decisions on resource allocation might be based on insufficient information − and the *Charybdis* of over-emphasizing control − whereby some academics and institutions refuse to provide accurate information or produce "results" which do not indicate real quality improvement (see Vroeijenstijn, 1994).

Third, evaluation systems might assess institutions and programs according to *common yardsticks*, based on the belief that the goals of institutions and programs are more or less the same. *Or* evaluation systems might explore the *varied "fitness for purpose"* of the institutions and programs based on the belief that a horizontal diversity of goals in higher education is desirable.

4.4 Reforms of Steering and Management in German Higher Education

Reform of the relationship between government and higher education and of the management within higher education institutions *started later in Germany than in many other European countries*. After the reform wave around 1970 when participatory models spread, there was reform fatigue in German higher education. Moreover, the key actors agreed that the increasing student numbers in the 1970s and 1980s should be absorbed without major experiments in organizational matters. Finally, after the German unification in 1990, the key actors were so much involved in the transformation of East German higher education and could not agree on major concurrent reforms in the West, that analyses of problems and reform efforts were again postponed.

From the mid-1990s onwards, however, German higher education obviously wanted to catch up with the changes occurring in other European countries, including the relations between higher education and government, management within higher education institutions, the introduction of incentives and sanctions as well as the establishment of various evaluative mechanisms. Some policy makers and academics wrote books deploring the problems of German higher education (e.g. Glotz, 1996; Daxner, 1996). Three German university presidents wrote impressive academic books on the developments of higher education reforms and the potential of the new wave of reform (Brinckmann, 1998; Hoedl and Zegelin, 1999; Turner, 2001). A consultancy agency sponsored by a publishing company spread optimism that a strengthening of management power within higher education institutions was likely to lead to a substantive improvement in quality (see Müller-Böling, 2000).

What actually has happened?

− The German institutions of higher education acquired more *financial flexibility* in handling the funds provided by governments.
− The university *presidents and deans became more powerful actors* while the influence of committees within higher education was substantially reduced.
− Governments often provide support to higher education institutions in the form of *contracts* whereby performance indicators play a significant role in resource allocation.
− The individual institutions of higher education established *boards* of external representatives having a substantial say in various respects.
− Various means of *quality assessment* were introduced.
− Various initiatives emerged to establish *private higher education institutions*, though their overall enrolment remained clearly below five per cent of all students in Germany.
− In some cases, institutions of higher education moved from special status-institutions within the public system towards *independent legal entities* subsidized by government.
− First steps have been taken to extend *incentive-based remuneration* to the professoriate.

It is very difficult to understand the extent to which higher education in Germany has really changed in recent years. We do not often distinguish whether particular reforms are still in the process of initial debate, legal change, or actual implementation. The different *Länder* in Germany, the regional entities which supervise and fund higher education, chose different forms of steering and management, and individual universities might also take different routes. Yet, a few general remarks are worth noting. The debate about new modes of steering and management suggests that most key actors in German higher education feel very *nervous*. There is an inclination to be *over-critical of the past* in order to legitimize current reforms.

Examples of "*good practice*" from other countries are brought into the debate in a very *sketchy and unsystematic* manner. The new managerial class emerging in German higher education often *promises miracles* as a consequence of managerial reforms in such an exaggerated way that we note a growing alienation between the managers and the academic profession. Germans *do not accept the wonderful opportunity of being a late-comer* and learning from the achievements and mistakes of our neighbors who started to trial reforms earlier. Yet, Germans are still in the early stages of debating reforms and measures. The following identifies some issues still open to discussion.

(a) What should be the *distribution of power* in higher education? Should higher education move towards a clear division of responsibilities between different actors, or do we continue to create a complex system of decision-making which makes clear and visible actions even less likely than in the past?

(b) How are the changing *roles of managers linked to the roles of the academic professions*? Are the managers becoming low-key controllers of a market and incentive system, whereby the professors as *homines oeconomici* are primarily driven by an invisible hand? Will the managers become powerful actors directing the academics almost like assembly line workers? Will the managers be smart moderators with individualized strategies? What other roles will emerge?

(c) Will the managers move towards a general managerial role without in-depth knowledge of the substance, thus taking *"efficiency"* as a guideline (and thus becoming *l'art pour l'art* managers), or will they become strategic leaders of research and teaching?

(d) Will competition for so-called quality improvement reinforce the homogenization of the system at the higher end, or will individual higher education institutions develop ideas and the courage to establish and sustain distinctive *profiles*?

(e) What will happen with the emerging *jungle of different assessment activities*? Will they continue to coexist and, if so, how can this guide improvement and appropriate control? Or will we move toward a less burdensome and more coherent system of evaluation?

(f) Altogether, Germans have not yet come to the point of saying proudly where they want to adapt promising solutions from other countries and where they wish go their own ways, thereby reflecting specific conditions and strengths of the German higher education system.

These confusions and uncertainties regarding the management of higher education in Germany notwithstanding, I believe that it would be interesting for key actors from other countries to embark on bilateral dialogues with German experts in higher education management. There is an interesting range of trials being undertaken in higher education management in Germany, and this experimentation

draws to some extent on prior experiences in other countries. Germany can be viewed as a gold mine of diversity, and Germans are willing to open the window on this arena of experimentation to others without having to claim that they have already found optimal solutions.

5.   Internationalization and Globalization

5.1 The Debates

In recent years, the terms "internationalization" and "globalization" have frequently been employed to describe how national borders are less and less influential in the inner life and functions of higher education. In addition, terms are employed emphasizing its regional (e.g. European) basis.

The uses of the terms have in common a belief that national regulations have become less powerful for higher education than they were in the past. Moreover, they suggest that both the conditions under which higher education operates, and higher education itself, have become more international or global. The terms employed, however, differed initially in two respects:

– *Internationalization* addresses an increase in cross-border activities amidst a more or less clear *persistence of national systems* of higher education, while *globalization* assumes that borders and *national systems get blurred* or might even disappear (see Scott, 1998).
– Second, the terms are often discussed in relation to different issues. While internationalization is used to refer to physical *mobility*, academic *cooperation*, international *knowledge transfer*, *international education*, etc., globalization tends to be associated with *competition* and market-steering, *trans-national education* and *commercial knowledge transfer* (see van der Wende, 2001).

Higher education has been international for some time. However, the structure and organization, and especially its funding, regulatory framework, governance, curricula, and credentials are strongly shaped by individual countries and cultures (see Kerr, 1990). Now, internationalization or globalization has become more important for all institutions of higher education and affects most decisions which have to be taken. International activities are *not anymore marginal and occasional*, *but central and systematic*.

In debates on the internationalization of higher education, two distinct features tend to be addressed. Either reference is made primarily to cross-border activities, or internationalization and globalization are used with respect to possibly everything in higher education.

5.2 Cross-border Activities

Cross-border activities in higher education have grown in the recent past and are likely to increase further. The growing *knowledge transfer* across borders through media (books, electronic information, etc.) is an incremental process, while the increase in *physical mobility*, e.g. that of students, was promoted by clear policies. In Europe, internationalization policies were most pronounced with respect to student mobility.

Study abroad, however, according to UNESCO statistics, has remained more or less constant over the last few decades at about two per cent, although there is an *increase in students going to a select number of economically advanced countries*. As a consequence, the proportion of foreign students in Germany has grown from less than five per cent in 1980 to more than 10 per cent today.

Widespread attention was paid internationally to the "success story" of *ERAS-MUS* student mobility. In 1987, the European Community founded the ERAS-MUS program, subsequent to a pilot phase from 1976 onwards, which eventually became a sub-program of the education support program SOCRATES; in the meantime, the annual number of supported students has surpassed 100,000 (Teichler, 2002). According to evaluation studies, progress in learning can be expected from study in another European country, notably in three areas:

− *general knowledge transfer*: students acquire knowledge abroad in areas not presented at home or only at a lower academic level,
− *international education*, e.g. area study, foreign languages, international relations, international trade, etc, and
− *reflection stimulated by creative contrasts*: students become aware that there are different schools of thought and that comparison is valuable and thus broadens their horizon.

The three areas play a varying role in different fields of study. Obviously, their relevance is different by country. Most student mobility in the past was "*vertical*", i.e. from countries of lower academic standards to those of higher academic standards. In contrast, in the framework of "*horizontal*" *mobility*, i.e. mobility between institutions of more or less the same academic standard (e.g. within ERASMUS), general knowledge transfer is less central, while the most visible impact is the improvement of reflective thinking.

In Europe, a strong emphasis is placed on the likelihood that the academic achievements of mobile students will be recognized subsequently: students should be certain that their academic achievements in one European country will be accepted in another European country. Many activities are undertaken in order to facilitate recognition on the basis of trust.

Since the mid-1990s, awareness has grown in continental European countries that they had lost ground as hosts of students from outside Europe; they became concerned that the most talented students from around the world opt for Anglo-

Saxon countries. Eventually, ministers from about 30 European countries agreed the so-called Bologna Declaration in 1999 that they would introduce a cycle of programs and degrees similar to the bachelors and masters degrees in order to make study in Europe more attractive for students from all parts of the world (see Haug and Tauch, 2001). They opted for structural convergence, improved "record-keeping" of academic achievements (credit transfer and internationally readable "diploma supplements"), extended teaching in foreign languages, and increased cooperation in order to establish a "European higher education area" by 2010. Thus, continuing support for mobility is being combined with a transition towards the supra-national integration of higher education systems.

5.3 Strategic Action as a Response to Globalization

In recent years, the term "globalization" has been employed frequently. The notion has spread that the individual institution of higher education in any single country is no longer so strongly influenced by its national context. Higher education is increasingly interpreted as a world market of knowledge and persons, whereby *individual universities have to define their profile and to act strategically* in order to achieve their goals in an increasingly competitive environment. "Globalization" has been referred to as a challenge to be fit for strategic action (cf. van der Wende, 2001).

Again, the rhetoric seems to be more common than observable actions and activities. Some believe that higher education will become completely commercialized, while others continue to emphasize higher education as a public good. Some claim to open their borders for "trans-national education" of any kind, while others see the need for the targeted protection of quality. Some believe there is only a competition for the highest quality, while others see the need and opportunity for institutions of higher education to develop individual profiles and thus contribute to horizontal diversity. Some believe that competition replaces the spirit of cooperation based on the mutual trust, while others see even more need for cooperation based on mutual trust. Some believe that market forces will be the dominant drivers for higher education in a globalizing world while others point to growing regulatory forces within and across countries.

But there seems to be a consensus that individual institutions of higher education have to be increasingly aware of the specific role they play and want to play in the future and that they are willing, and in a position, to act in a targeted manner. A university acting strategically and managing its affairs successfully seems to be on the agenda.

5.4 Past and Recent Major Debates and Policies in Germany

Whether we look at the policies of governments and national umbrella organizations or of the individual Länder (states) in Germany, or at the strategies of the

individual universities or other institutions of higher education, we do not observe any clear dividing lines between internationalization, globalization, and regionalization (i.e. Europeanization) policies, as described above.

In analyzing policy statements, organizational arrangements, and the day-to-day activities of individual universities, we find at most a stronger emphasis on certain issues discussed and on certain activities undertaken (see Hahn, 2005; Hahn and Teichler, 2005). Therefore, we have to examine the whole bundle of strategies and activities pursued under all the three labels.

As the German Academic Exchange Service has often pointed out, before World War I, more than half of the internationally mobile students from all over the world went to German universities. This reflected their academic quality and reputation, but also the international scope and openness of the German university system. However, German universities did not maintain this superior level of quality and reputation thereafter. The Nazi regime's decision to cut the size of higher education by half and to sever international ties were two of the major, but not the only, reasons.

After World War II, it was clear that German higher educational policy makers intended to strengthen again the international ties and the world-wide flow of knowledge. In fact, information available for the period from the 1960s to the 1980s suggests that – among the large economically advanced countries – Germany had the second or third highest proportion of foreign students, the highest or second highest proportion of students studying abroad, and the highest proportion of the overall public higher education budget reserved for staff and student exchange. There was only one element of international cooperation and mobility in which Germany was not strongly involved: support for the development of higher education in developing countries remained small and addressed very select areas, e.g. advanced vocational training and teacher training, as well as applied research in areas highly relevant for development.

Since the 1980s, efforts to reposition German higher education internationally intensified. Below, we note a gradually changing climate in various respects, but also some highly visible debates and actions:

(a) *Global competition in science and technology:* In the 1980s, concern spread not only in Germany that the majority of European countries might lag behind the U.S., Japan, and a few very successful European countries as far as investment in research, the quality of research, and the impact of research on economic development were concerned. This global comparison was the starting point for a call to increase research expenditure and to undertake various measures to increase both the quality and technological utility of research. In fact, the proportion of publications in reviewed journals written by German authors is now on the rise again, but further improvements are called for.

(b) *Temporary student mobility in Europe:* With the inauguration of the ERASMUS program in 1987 to support the temporary exchange of large numbers

of students within Europe for six months or a year, there was a substantial leap forward in the internationalization activities of universities in Europe. International mobility was no longer seen as a rare exception but as one of the normal range of options for students; most universities enlarged their international offices, established the position of a vice-rector for international activities, or undertook similar efforts to make international activities a priority, and often changed the curricula and the services for all students in order to become more open internationally. By 2003, about seven per cent of students in Germany were citizens of other European countries and about three per cent of German students studied in other European countries (see Kelo, Teichler, and Wächter, 2006).

In a survey undertaken that year, 15 per cent of students enrolled at German institutions of higher education reported shortly before graduation that they had studied for a while abroad, including some who had internships abroad in addition to study. Another 15 per cent reported that they had spent some time abroad only for other study-related activities (internships, language courses, summer schools, etc.). In 1991, the respective figures had been six per cent and seven per cent (Deutscher Akademischer Austauschdienst, 2005).

(c) *Fitness for international challenges through new modes of governance:* As already pointed out, the German higher education system during the 1990s experienced similar changes in governmental steering, university management, and the extension of evaluation activities as in many other European countries. It is premature to assess the impact these had on their globalization, internationalization, and Europeanization strategies and activities.

(d) *Targeted measures to make German higher education more attractive and more export-minded:* In 1996, the German national government, the Academic Exchange Service, and the Higher Education Rectors' Conference jointly started a campaign to shift the emphasis of German universities' international strategies and activities. It was felt that German higher education institutions should attract larger numbers of high quality foreign students and scholars to study and to undertake academic work in Germany. In addition, some financial incentives were provided to encourage the export of German study programs or to establish joint or franchise programs or joint branch campuses in other parts of the world.

Among others, support measures were extended and activities started for the joint promotion world-wide of study opportunities at German universities, improvements in the selection of foreign applicants, and an export of German study programs or the establishment of joint programs in other parts of the world, in order to attract about 15,000 students enrolled abroad in such programs by the year 2010. Also on the agenda were efforts to increase the number of foreign doctoral students in Germany (currently about 10% of doctoral degrees are awarded to foreigners), reduce "brain drain" to the U.S. (altogether more than 20,000 German-born persons are in the U.S. as university personnel or as researchers in other institutions), increase the number of study programs taught in English, of German

language learning provisions for foreign students and foreign language learning provision, and finally to "foster a service culture" at German universities (see Deutscher Akademischer Austauschdienst, 2004). One consequence of this, among others, is that the proportion of foreign students among all students in Germany is expected to rise to 20 per cent.

(e) *Establishing a European Higher Education and Research Area:* Between 1998 and 2000, governments of various European countries agreed to take joint action for the purposes of reforming higher education and research, strengthening intra-European cooperation and mobility, and raising the world-wide attractiveness of higher education and research in order to increase the quality and relevance of higher education and research in Europe as compared to and in competition with other parts of the world. Two major lines of European policies are being pursued, although with little co-ordination:

− Towards a European Higher Education Area: In 1998, the ministers of education of four countries (among them Germany) agreed in the Sorbonne Declaration and, in 1999, ministers of education in 29 European countries in the Bologna Declaration to establish a Bachelors and Masters structure of study programs and degrees all over Europe and to undertake some other accompanying measures.

− Towards a European Research Area: In 2000, the European Council, i.e. the assembly of the governments of the member states of the European Union, agreed in the Lisbon Declaration to raise the level of public and private research expenditures from somewhat more than two per cent to three per cent of the GDP by 2010.

Actually, Germany lags behind the European average in the process of transforming their structure of study programs and degrees. In 2005, only about one tenth of students were enrolled in the new programs (see Alesi et al., 2005). One might predict, though, that most programs in Germany will be changed to fit the bachelors and masters structure by 2010. On research expenditures, however, little change has occurred in Europe, and the so-called "Lisbon process" is in deep crisis.

(f) *Stratification:* There has been a lengthy debate about whether the German higher education system would be more successful overall if substantial resources were reserved for reinforcing the elite sector. Currently, the German higher education system is stratified vertically to a much lesser extent than higher education systems in all other larger economically advanced countries. For example, in 1999 and 2000, the top ten universities raised on average 61,000 Euros per scholar from external research grants, while even the fifth group of ten universities raised 32,000 Euros per scholar (see Deutsche Forschungsgemeinschaft, 2003). Traditionally, German universities are viewed as top quality in some disciplines and less excellent in other fields. This low degree of stratification has facilitated the

movement of students between different universities during their course of study as well as the mobility of professors who are not so concerned about the reputations of the individual universities, but rather the resources offered to them by a specific university.

Arguments in favor of strengthening top universities have gained momentum in Germany in recent years given the popularity of the lists ranking the top universities in the world and the underlying philosophy that only the elite can be "global players" in the growing world-wide competition. There is also a debate in Europe about whether European countries should establish jointly a few world class universities. Governmental agencies and other higher education policy makers eventually agreed in 2005 to reserve somewhat more than one per cent of the total public higher education expenditure over a period of five years for 30 excellent research "clusters", for 10 top universities and a for a few dozen new graduate schools in order to foster a sector of "excellence".

6.   Consequences for the Academic Profession

It is very difficult to present an overview of the actual impact of these challenges for the academic profession. No representative survey has been undertaken of the academic profession in Germany for more than a decade. And we do not know how representative are the voices that are most vocal in the public debates. This notwithstanding, some general remarks might be in order before the results of the survey of the German academic profession are available.

Most experts in Germany expect a *growth in student enrolment* during the next decade as a consequence of a demographic peak, which will be followed by a decline, and as a consequence of an expected increase in the enrolment rates of the respective cohorts. The latter prediction is based on the assumption that Germany is likely to "catch up" with the higher enrolment rates prevailing in the majority of OECD member states. There are arguments, though, that there is less of a need to increase the number of study places for these reasons, because the introduction of tuition fees in various German *Länder* might lead more young Germans to opt for alternatives to studying. Moreover, the introduction of the bachelors-masters structure might encourage more students to confine themselves to shorter periods of study. The majority of experts and policy makers, however, seem to believe that an expansion in student enrolment is likely for at least a decade, and measures should be taken to accommodate this certain increase in the teaching and teaching-related activities of the academic profession. The Federal government and governments of the *Länder* agreed in 2006 on an emergency strategy to accommodate rising student enrolment. Accordingly, some additional financial means will be provided, but most of the additional tasks have to be borne within existing resources. Among the various possibilities discussed for increasing the teaching load, one proposal caught attention and caused controversy: the establishment of a

senior academic position within universities predominantly for teaching purposes; this post of 'professor of teaching' would be similar to the position of professors at *Fachhochschulen.*

There are many indications in Germany that coping with the challenges of the *knowledge society* will require an increase of the overall funds available for research and technology development. However, this does not seem to be resulting in a general improvement of research conditions across the higher education system, but rather to a higher concentration of resources in those parts that are regarded as better suited to ensuring high quality, being successful in competitive fund raising, and promising contributions to future technological development.

As regards *internationalization*, most academics in Germany seem to support a further growth in the proportion of internationally mobile students. The introduction of the bachelors-masters structure has caused mixed feelings, in that more academics at *Fachhochschulen* than academics at universities seem to consider this an opportunity. Concern is expressed widely among academics that German universities cannot compete with those of the U.S. and that a brain drain of the most talented scholars is likely to intensify if conditions for research are not improved substantially at German universities. Most experts and policy makers seem to agree that a higher concentration of research resources is imminent, but views diverge on whether resources should be concentrated in a few universities in order to make German higher education more visible in the international rankings of top universities, or whether competition should remain open for networks or individual scholars within a relatively flat hierarchy among universities.

The move towards a stronger *managerial approach* in German higher education affects the power of the academics in internal decision-making. It is worth noting that the trend of growing managerial power is viewed with skepticism by the majority of academics, but with little actual resistance. In many German universities we note a transitional situation in the management system: at the university level, a paradigmatic change is implemented, while at departmental level, a blurred situation is often apparent as a consequence of hesitant or inconsistent implementation. Moreover, the new managerial approaches affect the academic profession notably in the form of an increase in assessment activities as well as of incentives and sanctions. In many respects, though, changes were implemented in ways which do not revoke established privileges but, rather, will affect future generations. For example, when the remuneration system of professors was changed from a mix of income differentials according to the initial negotiation, years of service and subsequent negotiation if a higher paid position was offered externally, towards a remuneration system where differentials are primarily based on internal assessment of achievements, the professors already appointed in the "old" system were permitted to choose between the old and the new system.

In the past, the academic profession was by no means homogeneous. Ranks between university professors played an important role, and there was a clear divide

between professors and junior academic staff as well as between university professors and professors at *Fachhochschulen*. Moreover, disciplinary cultures not only shaped the views and working styles of university professors, but the working conditions for professors also varied substantially by discipline. The new challenges emerging for the academic profession suggest that the diversity of cultures, working styles, conditions for teaching and research as well as employment conditions will grow further. Experts anticipate that academics' potential to shape their own professional destiny through voicing their views collectively will further decrease. Moreover, the academic profession as a whole seems to be losing more of its reputation and exclusivity in the process of higher education expansion than it seems to win in helping to create the "knowledge society". It remains to be seen whether this leads to an impoverishment of the academic profession and to a loss of quality as a whole, as some experts fear, or whether the new challenges trigger new dynamics for the academic profession.

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Czech Republic – Shifting Peripheries: A State of the Art Report on the Czech Academic Profession

Marek Melichar and Petr Pabian

1. Introduction

The principal aim of this chapter is to review the state of research on the Czech academic profession within the conceptual framework of the international project "The Changing Academic Profession" (CAP). The chapter thus serves two purposes: on the one hand, to inform the international public about the developments and the present situation of the academic profession in the Czech Republic; on the other hand, to provide an interpretive framework for the quantitative survey of Czech academics to be conducted in 2007.

The paper is framed by the metaphor of centres and peripheries. As was the case in other recent studies on academics (e.g. Clegg, 2003; Enders, 2006; Kimber, 2003), we have found this approach useful not only for addressing the relative international position of Czech higher education but also for exploring the three main themes of the CAP project: relevance, internationalization and management. We will argue that the issue of the relevance of academic work is surprisingly peripheral in the Czech context; that Czech academics find themselves on the periphery of the international academy; and that Czech academics enjoy a central position in a rather peripheral model of higher education and research governance. We will also analyze the factors pushing Czech academics away from these peripheries: towards the centre of public attention, towards the centre of the international academic community, and towards more mainstream managerial models.

2. Defining the Czech Academic Profession

The two most common criteria used to define the academic profession focus on teaching in tertiary education and on engagement in research. To refine these criteria, it is necessary to take into account some specific aspects of higher education and research in the Czech Republic.

The Czech tertiary education sector consists of two sub-sectors. The first includes higher education institutions (HEIs) carrying out bachelors, masters and doctoral programs (ISCED 5A+6), the other vocational institutions carrying out programs at the ISCED 5B level. We will include in our definition of the Czech academic profession only the teaching staff of the former institutions, because the latter are in many ways closer to secondary than university education (Beneš et al., 2006a). Similarly, research in the Czech Republic is conducted in three main institutional settings: public universities, public research institutions, and private research institutions. However, private research institutions differ significantly from the other two categories in terms of research orientation: while private institutions employ some 40 per cent of researchers, they produce more than half of new technologies but only an insignificant proportion of academic publications (Roskovec, 2006). We will therefore exclude researchers in private institutions from our definition of the academic profession.

To sum up, the academic profession in the Czech Republic consists of academic staff at higher education institutions as well as of research staff at public research institutions. This definition coincides with the self-definition of Czech academics themselves, as expressed for instance by the association of Czech scholarly societies that claims to include scholars "from higher education institutions, the Academy of Sciences and other specialized research institutions" (Rada vědeckých společností, 2006). The academic profession consists of about 20 thousand academics: 16,045 at public HEIs, 924 at private HEIs, 3,700 at the Academy, and 729 in other specialized public research institutions (full-time equivalents as of 2004).

Members of the academic profession perform many diverse functions within the academy and within society at large. Besides teaching and research, a significant proportion of academics take part in the governance of their own institutions, and many academics in top positions within institutional governance structures assume the role of experts in the formulation of the country's higher education and research policies. Few academics play other social roles as well: they contribute to newspapers and magazines to popularize their area of research, comment on public affairs, work in non-governmental organizations, even run for elections; using the old-fashioned words we may say that they perceive their responsibility as "engaged intellectuals."

3.   Academics on the Periphery of Scholarship: Literature Review 1990-2006

In the decade and a half since 1990, research on academics has not been a major topic of Czech higher education scholarship. Even though Czech authors produced on average almost three publications on this topic per year, the quantity of research production on this issue has considerably trailed behind the dominant issues such as the student experience, quality assurance and funding. Furthermore,

the vast majority of studies on Czech academics suffered from concentration on a small range of topics, low relevance to public debates as well as weak links with other areas of higher education research.

The chronological distribution of publications shows that the issue has attracted considerably more attention in recent years than in the 1990s – two thirds of studies have been published since 1999. The difference is even more pronounced with respect to system-wide sample surveys: eight out of twelve of these surveys were conducted since 2003.[1] The growing scholarly production, however, is yet to yield a systematic knowledge base on the Czech academic profession.

One of the reasons for this absence of a systematic knowledge base is the fragmentary nature of the existing research on academics. Most of the newly published studies hardly relate their findings to the already existing studies even on the same topic[2], not to say to the broader concerns of higher education studies and policy.

The fragmentation of research on academics is closely related to another characteristic of the literature, namely the uneven attention devoted to different aspects of the topic. Virtually all published studies deal with higher education academic staff while paying no attention to academics in public research institutions (the only exception being Šrámek, 1994). In terms of thematic approach, one third of studies (14 out of 52) can be classified as general, i.e. without any specific focus: typically overviews (very often for an international audience, e.g. Tollingerová, 1992; Svatoň and Vlk, 2004; Beneš, 2006) and descriptive reports based on general surveys (e.g. Tollingerová, 1999; Svatoň et al., 2006). Another third of publications (15) concentrate on the teacher training of higher education academic staff, which is quite ironic because such training has been virtually non-existent throughout the period (Vašutová, 2005a). In contrast, issues that have been at the forefront of public policy debates attracted very little scholarly attention: academic salaries (2 articles), research as part of the academic profession (3) or doctoral studies (3). As a result, higher education scholarship has contributed very little to public debate on the contemporary Czech academic profession.

To sum up, in the last 15 years research on the Czech academic profession has been peripheral in two respects. Firstly, the academic profession as a topic has found itself on the periphery of Czech higher education research. Secondly, the existing scholarship on the Czech academic profession lingered on the periphery of public policy debates on the issue.

4. Background

As is obvious from the introductory definition, Czech academics operate in two main settings – in higher education institutions and in research institutions. This separation is the legacy of the communist regime, when the former Czechoslova-

kia adopted the soviet dual model of academy of sciences (focused on research)[3] and higher education institutions (focused on teaching). This dual system was preserved after 1989 but with certain modifications: the academy was considerably reduced in size and the engagement of HEIs in research increased significantly. At present, the academy and universities cooperate especially in the provision of doctoral programs and in establishing joint research centers. Nevertheless, in the area of research, competition often prevails over cooperation (Roskovec, 2006; cf. also Muller, 1995; Šebková, 1994).

This institutional division implies differences in the dominant activity conducted in the two institutional settings: teaching at HEIs and research at research institutions. The available survey data indicate that academic staff at public HEIs devote approximately the same amount of time to teaching and research but most of them give preference to teaching (Tollingerová, 1999); similarly, teaching is their main source of income, accounting for about 60 per cent of the total salary, while about 25 per cent comes from research activities (Matějů and Vitásková, 2005). The process of rapid massification in the last 15 years probably influenced the teaching experience in higher education, although survey data on this issue are lacking. Between 1989 and 2004, the number of teaching staff at public HEIs increased by about 25 per cent while student numbers increased by more than 140 per cent. As a result, the student-teacher ratio has almost doubled from 9.7 in 1989 to 18.8 in 2004.

Along with increasing student enrolments, the participation of public HEIs in research has been growing. According to the division of responsibilities before 1989, the Academy of Sciences conducted basic research, specialized research institutions carried out applied research, while HEIs were expected to prioritize teaching. Only the changes after the end of the communist regime established research as one of the main roles of public universities; correspondingly, research funding allocated to HEIs has grown considerably. In 2004, 15 per cent of the total research and development expenditures (GERD) went to HEIs, 21 per cent to public research institutions and 65 per cent to private organizations. The opposite trend, the introduction of teaching as an integral part of the activities of researchers at public research institutions, has not been so strong or uniform. Nevertheless, at least some researchers from the Academy are also engaged in university teaching and in supervising doctoral students.

The most striking feature of the Czech academic careers is the limited extent of inter-institutional mobility. Survey data from 1994 already showed a clear pattern of academic inbreeding, confirmed by a large-scale survey conducted in 1998: 69 per cent of professors and 82 per cent of associate professors spent their entire career at a single institution (Tollingerová, 1999). Czech academic vacancies are formally open to competition but, in practice, there is usually an informal pre-selection based on patron-client relations (Nodl, 2000; Tucker, 2000).

The career track in the Academy is based on a periodic peer review assessing primarily publication productivity but also taking into account international activities, applied research, teaching, as well as administrative and managerial duties. On the basis of this assessment, researchers are categorized into five hierarchical and consecutive levels (Pravidla pro zařazování, 2004; Návrh kariérního řádu, 2006). However, more than one third of researchers stand outside this career structure as they have not yet undergone peer review (Akademie věd České republiky, (2004 and 2005). The higher education career track is similarly hierarchical and consecutive but progress through the levels is based not on periodic assessment but on one-off events: completion of a doctoral degree and the appointment of associate professors and professors. There are six traditional categories of academic staff: professors (about 10 % of all academics), associate professors (20 %), senior assistants (50 %), assistants (8 %), lecturers (3 %) and researchers (9 %). Special procedures exist for the appointment of the top two categories, which in the Czech system denote an academic qualification rather than a position; the associate professor appointment (following a *habilitation* procedure) thus marks the transition from junior to senior academic staff. Research productivity and reputation are the most important criteria in the appointment of associate professors and professors, while teaching plays only a peripheral role. Climbing to the top of this hierarchy is for most academics a very demanding life-long quest.

Consequently, categories of professors and associate professors are characterized by maturity: the average age of professors and associate professors appointed in 2004 was 53 and 48 years, respectively (Akademie věd České republiky, 2004). The rigid career structure is probably one of the reasons (the other being unsatisfactory salaries) for many young researchers leaving academe, which contributes to the perception of the ageing academy (Tollingerová, 1992, 1999).

In addition to age, gender significantly shapes the careers of Czech academics (Kolářová and Linková, 2002; Kraťková et al., 2004; Kraťková, 2006). To start with, about two thirds of academics at both higher education and research institutions are men. Moreover, while men and women are almost equally represented at the bottom of the higher education academic hierarchy (women constitute 55 % of lecturers and 47 % of assistants), men clearly predominate among associate professors and professors (22 and 11 % of women, respectively). Men are also significantly over-represented in the decision-making positions at higher education and research institutions. For example, in 2003, men clearly predominated in higher education executive positions: 49 out of 58 rectors, 102 out of 129 vice-rectors, 112 out of 118 deans and 327 out of 422 vice-deans. A similar study of the Academy found that women amount to only about 10 per cent of the total membership of governing bodies. Men also predominate in the governing bodies and funding agencies at the system level. In a European comparison, the Czech Republic ranks as the country with the third highest glass ceiling index, i.e. with the third lowest relative chance for women of reaching a top position; it also ranks as the

country with the fourth lowest proportion of women on scientific boards (She Figures, 2006). A gender gap is also clearly visible in income: women academics in higher education earn significantly less than men not only overall (due to under-representation in higher career positions) but also at the same level of the hierarchy and in the same age group (Matějů and Vitásková, 2005). Similarly, at the Academy, women on average earn around 80 per cent of men's income (Srb, 2000). Nevertheless, most women academics perceive the opportunities for men and women as equal (Kraťková et al., 2004; Kraťková et al., 2006) – a view rather unsurprising in Czech society where "feminism remains close to a dirty word" (Ferber and Raabe, 2003).

Salaries in general constitute the single most frequently debated issue in relation to Czech academics: ever since 1990, academics have complained that their salaries are too low and these complaints even resulted in several public protests, demonstrations and minor strikes. According to recent surveys, only about one third of higher education academic staff are satisfied with their salary while the discontent was especially high among younger academics and also among academics with higher research output (Matějů and Vitásková, 2005; Svatoň et al., 2006). The fact is that academic salaries in recent years have always hovered below the average income of all higher education graduates (see Table 1). One of the analyses concluded that "some academics resign on the aspiration for higher incomes at their institution and look for them outside the academy" (Matějů and Vitásková, 2005, p. 176). The dissatisfaction with salaries coupled with the growth of student numbers led to the widely discussed phenomenon of "flying professors", employed simultaneously at several HEIs (Kohoutek et al., 2006; Machálková, 2006; Možný, 2006).

Table 1: Average Monthly Salaries: All HE Graduates in the Czech Republic Compared to Academics (in CZK)

	Public higher education institutions						Academy of Sciences	
	All HE Graduates	Prof.	Assoc. Prof.	Senior Assist.	Assis-tant	Lec-turer	Researcher after peer review	Researcher before peer review
1997	20 107	111%	95%	66%	48%	53%	82%	55%
2004	35 067	122%	94%	64%	51%	41%	95%	63%

Sources: Czech Statistical Office; Institute of Information on Education; Czech Academy of Sciences.

Reliable data on the prevalence of this phenomenon are unfortunately not available. The discontent with salaries persists even though Czech academics are employed by their institutions (i.e. not by the state), which are autonomous in setting salary levels. However, as all public institutions in both research and higher edu-

cation rely on public funding for a significant part of their budget, an insufficient amount of public expenditure is blamed for the unsatisfactory level of academic salaries (Pabian et al., 2006).

5.   Relevance of Academic Work

The higher education system, its problems and concerns, are on the periphery of public attention. Public opinion polls consistently show widespread satisfaction with the quality of Czech higher education – usually, less than 10 per cent of respondents express dissatisfaction (Glasová 2002; Rezková 2003; Horáková 2004; Šamanová 2005; Procházková 2006). Correspondingly, education in general and higher education in particular are seen as one of the least problematic public policy areas (Červenka 2004a; Červenka 2005; Matějů and Soukup 2006). Also, in surveys of occupational prestige, academic occupations of "higher education teacher" and "researcher" have consistently ranked at the very top, currently second only to "medical doctor" (Červenka 2004b and 2006; Křížová-Frýdová and Filáček, 1993). Due to this popular satisfaction with the state of higher education, there is little public pressure for increasing the relevance of teaching and research; furthermore, due to the high prestige of academic occupations, the concerns about higher education and research are largely left to academics themselves. The question of relevance is therefore rather peripheral, if not irrelevant, in the Czech context.

Nevertheless, the fact that issues of relevance are on the periphery of public attention, and even of higher education policy, does not mean that they are completely absent. Substantial growth in student enrolments as well as the introduction of the two-tier degree structure since the early 1990s have triggered debates especially about the quality of higher education and the employability of graduates.

Many academics perceive massification as a threat to quality; in a recent survey, more than 80 per cent of respondents agreed that it reduces the quality of higher education (Svatoň et al., 2006). A minority of replies agreed that HEIs should enrol still more students and that the aim should be to diversify study options rather than inflating the current institutional system with more students (Melichar, 2006). So far, however, most of the enrolment growth has been concentrated in the public university sector: about 80 per cent of tertiary education students study at one of the public universities. This dominance of public universities also has important consequences for the fate of the two-tier degree structure:

> "This university sector is formally undifferentiated, driven by a traditional Humboldtian vision, highly autonomous, self-governing and characterized by strenuous academic career requirements – in this context bachelors programs primarily aimed at graduate entry to the labor market have not found it easy to take root and flourish." (File et al., 2006, p. 17)

The uneasy acceptance of a vocational orientation in higher education is not limited to academics, because the majority of students as well as employers still prefer master's level degrees – even after the implementation of the Bologna degree structure, the majority of bachelors graduates continue on to master's programs (Beneš and Šťastná, 2006).

The issue of vocational orientation is intimately related to the question of graduate employability. The ministry in its most important policy document expressed a conviction that the "employability of graduates [is] one of the most important indicators of the quality of the institutions' academic performance" and called on HEIs to "respond to the labor market needs" (Long-term plan, 2005). The academic representative bodies of HEIs unanimously adopted this focus on employability and themselves proposed the inclusion of this factor into the main public funding formula; this proposal been implemented from 2005 (Pabian et al., 2006). The debates on graduate employability recently culminated with the publication of a first detailed study of the employability and unemployment of Czech higher education graduates (Koucký and Zelenka, 2006). According to a recent survey of employers, the majority agree that graduates are theoretically well prepared, but only one fifth of respondents think that higher education curricula are designed with employers' needs in mind (Šmídová et al., 2006).

Employers certainly do not play any major role in the current model of curriculum development. Curricular design is a matter of institutional autonomy and therefore fully in the hands of academics, who also control the accreditation process through occupying virtually all the seats in the national accreditation commission.[4] Perhaps not surprisingly, the formal requirements for the accreditation of study programs published by the commission only mention employability once (among the criteria for assessing the quality of vocational bachelor programs) – otherwise the criteria are purely academic (Standardy Akreditační komise, 2006).

Recent changes in the organization of public support for research and development pushed the issue more to the centre of public attention. The establishment of the Research and Development Council as an advisory body to the cabinet recognized the need to coordinate national research policy at the highest political level. Governmental policy documents view an efficient research and development sector as a premise for economic development, in accordance with international developments (Economic Growth Strategy, 2005; National Innovation Policy, 2005). However, practice in academic settings has so far lagged behind these policy proposals:

> "[P]roject evaluation for the purposes of funding appears to be based upon citations, rather than indicators that measure (and reward) the intensity of cooperation between firms and researchers, such as patents granted, patents commercially exploited, licenses sold, or other indicators." (File et al., 2006, p. 52)

It seems, however, that Czech academics themselves widely accept the emphasis on the application of research results. According to a recent survey of higher edu-

cation academic staff, only about 15 per cent of respondents conduct predominantly applied research while this type of research would be preferred by more than 40 per cent of respondents (Matějů and Vitásková, 2005). This reveals a relatively widespread desire to increase research relevance, which is not sufficiently satisfied within the current institutional and financial framework.

All in all, even though the question of the relevance of academic work is certainly not one of the central public policy issues and is not even central in the context of higher education policy, there exist both pushes and pulls drawing Czech academics in the direction of increased relevance in both teaching and research. In the area of teaching, mostly external pressures are at play, above all the persistent excess demand for higher education and the policy emphasis on employability, while academics either resist these trends or reluctantly try to accommodate them. In contrast, academics' desire to reorient research in the direction of applied research may constitute an important impulse for the transformation of the existing research framework. In both of these areas, however, the current debates slowly push the academic profession from the periphery towards the centre of attention of politicians, economists and the general public.

6.   International Periphery, Peripheral Internationalization

Czech academics find themselves on the margins of the international academy. In response to this peripheral position, the internationalization agenda has moved to the centre of both governmental and institutional policies. However, participation in the international academic community still remains rather peripheral in the practice of many Czech academics. Despite a steady increase in recent years, many indicators of international activity among Czech academics remain low. In this section, we will deal in more detail with four core dimensions of academic internationalization: policy, mobility, publishing activity and foreign funding.

Internationalization tops the list of higher education policy priorities in the most recent policy document of the Czech ministry of education. This agenda includes increasing the number of courses available in foreign languages, raising the language skills of students and staff, involvement in international educational programs, student and staff mobility, the development of joint degrees, the implementation of the European Credit Transfer Scheme (ECTS), and international cooperation in research (Long-term plan, 2005, pp. 9-12). Internationalization enjoys similar prominence in the strategies of both higher education institutions (Šturzová, 2005) and their representatives (Bilanční a hodnotící zpráva, 2005, pp. 33-42). However, this emphasis on internationalization is somewhat ironic because the extent of international influence on Czech higher education policies has been rather low since 1990 (Pabian, 2006b).

Mobility has become the most important dimension of internationalization in public debate, as well as the most costly to both state and institutional budgets.

Public expenditure on mobility within the most important mobility program, the EU's Socrates program, increased almost 20-times between 1998 and 2004, resulting in an almost six-fold increase in the number of outgoing students and teachers alike. Nevertheless, the total number of outgoing teachers within this program (1,226 in 2004/05) still amounts to only slightly more than 6 per cent of all academic staff members of public HEIs. The peripheral character of mobility is even more visible when we count individual weeks spent abroad (1,851 in 2004/05): Czech academics spent about 0.25 per cent of their working time abroad (Kovář and Šťastná, 2006).[5] Also, support for student mobility on the part of academic staff does not appear to be universal: in a recent survey, one quarter of mobile students reported problems with gaining recognition of their stay abroad and one half reported delayed completion of studies at the home institution (Menclová et al., 2006).

A focus on producing world-class research results has become the prime criterion of research assessment in the Czech Republic. Correspondingly, publishing abroad and in foreign languages is becoming more common among Czech academics. For example, almost three quarters of journal articles authored by researchers from the Academy of Sciences in 2004 were published in languages other than Czech. However, there are strong disciplinary differences: while the share of articles in foreign languages exceeds 90 per cent in Chemistry and the life sciences, it was lower than 20 per cent in the Humanities and Social Sciences (Akademie věd České republiky, 2005). The only available in-depth analysis of the publishing activity of Czech academics comes from the field of economics and reveals that international publishing is actually limited to a narrow elite of the Economics academy: two thirds of all international publications were produced by four institutions comprising less than 10 per cent of Czech economists. Even among the top 50 Czech economists, there are 11 without a single international publication in the course of ten years (Turnovec, 2005). Similar analysis reveals that it is possible to reach even the highest ranks of the academic hierarchy without publishing abroad: at the time of promotion 85 per cent of economics professors and 89 per cent of associate professors did not have a single article in a journal published abroad to their name (Macháček and Kolcunová, 2005; cf. also Gregor and Schneider, 2005).

The amount of foreign funding flowing into Czech higher education and research is still insignificant in comparison with domestic sources. This is hardly surprising in the dominant public higher education sector that relies heavily on the state budget (Pabian et al., 2006). However, foreign sources also play a marginal role in financing research: the combined public and private foreign sources amount to less than five per cent of the total funding and this proportion has not changed significantly in the last few years (Analýza 2005).

To sum up, the available data show that internationalization still remains on the periphery of Czech academics' activities. This low rate of international activity

reinforces the marginal position of Czech academics on the international stage, as witnessed by their limited ability to attract foreign funding as well as by the lowly position of Czech universities in international rankings (World University Rankings, 2006; Institute of Higher Education, 2006). The recent policy initiatives at both the governmental and institutional levels have not yet induced any significant change in either respect: whether in bringing internationalization to the centre of academics' practice, or in bringing the Czech academy to the centre of the international academic community.

7.   Academics at the Centre of a Peripheral Governance Model

Czech academics play a central role in the governance of Czech higher education and research. Public higher education and research institutions enjoy a high degree of autonomy and are governed according to the principle of academic self-governance. The extent of self-governance and autonomy enjoyed by the Czech public HEIs is exceptional in the international context and, as such, also in a sense peripheral (de Boer and Goedegebuure, 2003). The recent dominant trend "towards the vision of a service enterprise embedded in competitive markets" (Olsen, 2005, pp. 15-16), usually subsumed under the heading of "New Public Management" (Sporn, 2006), has so far left the Czech academy relatively untouched (Pabian, 2006a). When attempts at introducing some aspects of this management model were made, Czech academics usually opposed these because this model would relegate them to a peripheral position in the governance of higher education and research.

To secure the self-governance and autonomy of public higher education and research institutions, both types of institutions are granted a special status in Czech public law.[6] The central body in the university governance structure, the academic senate, is elected by academic staff and students and includes representatives of both groups. The senate elects a rector (to be appointed by the president of the country), as a rule from the senior academics of the institution. The only non-academic governing body is the so-called "board of trustees". Its introduction (by law at the end of the 1990s) generated heated protests from academics concerned to defend their academic autonomy. As a result, the board does not have any decision-making power in most matters of the institution (Beneš et al., 2006b). Recently, the Academy of Sciences and other research institutes have been granted a similar structure and position through conferment of the new legal status of "public research institutions".

In addition to institutional governance, Czech academics play a significant role in system-level governance as well. In matters of higher education policy, the ministry of education is legally obliged to consult on all important issues with representative bodies of HEIs, consisting mostly of senior academics. Similarly, the most important advisory body to the ministry in the area of research policy

includes a considerable number of academics (Pabian et al., 2006). In addition to their presence in advisory bodies, academics enjoy an important presence at the ministry itself: as a rule, the deputy minister responsible for higher education and research is selected from the ranks of senior academics at public institutions. Furthermore, academic peer review plays a key role in the Czech accreditation system as well as in research governance (Kohoutek et al., 2006).

The central role of academics probably greatly contributes to their satisfaction with institutional management. In the international survey conducted at the end of the 1990s, Czech academic staff members surpassed all others in their satisfaction with the competence of institutional management, the transparency of governance, and the protection of academic freedom (Tollingerová, 1999, pp. 52-53). Nevertheless, even this top position in international comparison means that only a half of academic staff are satisfied with institutional management, while the other half expressed dissatisfaction to a greater or lesser extent (Matějů and Vitásková, 2005, pp. 168-169; Svatoň et al., 2006). Even this contrasts starkly with academics' assessment of state higher education policy, which the academics' view predominantly in stark terms (Svatoň et al., 2006, pp. 19-20; Pabian et al., 2006). Senior academics tend to be more positive in their assessment of both institutional and state governance, a fact that corresponds to their stronger role at both levels (Svatoň et al., 2006; Pabian et al., 2006).

Public debates about higher education governance are not conducted in terms of an opposition between the academic and managerial approaches to governance, but are almost exclusively about the kind of academic approach. Ever since 1990, debates about institutional management have focused on the balance of power between the representative and executive academic bodies. The unmistakable trend towards the gradual strengthening of the executive (i.e. rectors) has always been accompanied by protests from academics in senates, warning against watering down the democratic character of institutional governance. At the system level, the key debate takes place between academic representatives of both rectors and senates on the one hand, and the ministry of education on the other. Here the trend has been a gradual strengthening of the ministry at the expense of institutions, accompanied again by academics' protests, voiced in the name of institutional autonomy (Pabian et al., 2006).

In sum, Czech academics enjoy, appreciate and defend the governance model of academic democracy, originally adopted as an immediate response to Communist centralization (Pabian, 2006a). This model grants them a central role especially in institutional governance, which is reflected in their internationally unprecedented satisfaction with it. At the same time, it is obvious that this model benefits senior academics more than their junior colleagues. All of them, though, close ranks in opposition to attempts at introducing more managerial approaches to institutional governance. These approaches, developed in the West as an adaptation of mainstream management models for HEIs, threaten to relegate academics

from the centre to the periphery of institutional and system governance. Faced with this threat, Czech academics defend their peripheral governance model and their central position in it.

8. Conclusions

The end of the communist regime presented an opportunity for higher education to assume a central role in social and economic transformation. In 1992, the OECD review team advocated "promoting the leading role of higher education in the country's overall reform process" (Černých, 1992, p. 100). However, Czech academics did not fully capitalize on this opportunity and Czech higher education and research remained on the periphery of public attention, overshadowed in the transformation process by other issues. The academic profession only slowly moved towards the centre of public attention, particularly as a result of steeply rising student enrolments, debates on the vocational orientation of higher education and on graduate employability, and the growing recognition of the economic potential of research and development.

Recently, another OECD review team echoed the concerns of their predecessors and recommended that Czech higher education move "beyond the 'inward focus' [towards] a more outward focus. This outward focus is multi-dimensional – it entails stronger educational links to employers, regions and labor markets; the development of research and innovation partnerships with business, industry and other HEIs; a greater role for external stakeholders in system and institutional governance and in accreditation" (File et al., 2006, p. 61). Using the metaphor framing this paper, this also means shifting the position of the Czech academic profession from the peripheries towards the centres.

Notes

1   The following publications are based on surveys claiming system-wide samples and relevance: Šrámek, 1994; Paulík, 1995; Tollingerová and Šebková, 1995; Tollingerová, 1999; Svatoň, 2003; Kraťková, 2003; Kraťková et al., 2004; Matějů and Vitásková, 2005; Šturzová, 2006; Pabian et al., 2006; Svatoň et al., 2006; Kraťková et al., 2006.

2   The prime example is the chapter on academic staff in the recent comprehensive report on Czech higher education (Beneš, 2006), which ignores all but one of more than 50 existing studies on the topic.

3   In addition to the Academy, nowadays there exist 22 smaller public research institutions specializing in particular fields. The Academy, together with these institutions, will be transferred in 2007 to a new legal status of "public research institutions" (Act 341/2005).

4   Currently, there is only one member with affiliation other than academic – Škoda Auto, the largest Czech automobile manufacturer; however, the person in question also holds the position of an associate professor at the company's private higher education institution.

5   Already in the international comparative survey of 14 countries conducted at the end of the 1990s,
    Czech academic staff ranked as the least involved in international activities (Tollingerová, 1999,
    pp. 50-51).

6   "Public higher education institution" and "public research institution" respectively.

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Hong Kong:
Expansion, Re-union with China and the
Transformation of Academic Culture

Gerard A. Postiglione*

1. Introduction

Hong Kong[1] has long been distinguished as a trading port driven by a market economy (Tsang, 2004; Chan and Postiglione, 1997). One English medium university stood alone for over 50 years until mass schooling led to the establishment of a Chinese medium university in 1964. The two universities became elite training grounds for civil servants, professionals, and urban elites. By 1981, only two per cent of the relevant age group occupied a university place. This grew to eight per cent by 1989, but an outflow of professional talent led to a doubling of university places by 1994. The number of universities increased to eight by 1997 (UGC, 1996). The Chief Executive of the Hong Kong Special Administrative Region (HKSAR) announced in 2000 that 60 per cent of the 17-20 age cohort would be in higher education by the year 2010, a doubling of the 2001 figure. This was achieved by 2006, largely through self-financed associate degree programs. In 2006, Hong Kong had 12 degree-granting institutions, of which eight were publicly funded. By 2012, the traditional British 5+2+3 education system will be converted to a 3+3+4 structure (three years of junior and senior secondary education with a four-year university system) (EMB, 2005). Although competition for the best students and for the most research funds among the eight publicly funded institutions of higher education is intense, new incentives have been introduced to speed up cross-institutional collaboration as a way of cutting costs and strengthening areas of teaching and research (Sutherland, 2002).

As knowledge economics, financial retrenchment, and massification of higher education came to dominate policy discourse at the beginning of the 21st century, Hong Kong executed a rethinking of its tertiary education strategy. A 2004 Report by the University Grants Committee of Hong Kong entitled "To Make a Difference: To Move with the Times" stated:

"In short, Hong Kong needs its own higher education system to provide the depth and breadth of people who can participate in making Hong Kong a vibrant, economically powerful, cultured, civilized, and socially active and responsible society. The higher education sector is a key source of impetus for social development. Human capital is the single most important asset of Hong Kong. We need home-grown graduates who have a strong sense of belonging, and a strong sense of identity as being a part of Hong Kong. At the same time it is also important to nurture a core of local faculty who give stability, local character, and cultural and intellectual rootedness to local universities, and engage themselves heavily with the local community. Their social and public role is vital to the development of a civil society and the quality of life" (University Grants Committee, 2004).

After a review of the context embedded drivers, this chapter focuses on how changes in four dimensions (relevance, internationalization, management and preparation/entry into the profession) are affecting academic work.

2. Context-embedded Drivers: Economic Globalization, National Mission, and the Human Resource Brain Race

2.1 Economic Globalization

Market competition has long been a sacred part of the Hong Kong's way of life (Lau, 1982; Lau et al., 1999). The mainland's transition to a socialist market economy has reinforced Hong Kong's economic philosophy and its new effort to link improvements in higher education to the marketplace. As cities like Beijing, Shanghai, and Guangzhou bear down on Hong Kong's position as China's economic powerhouse, educational reforms in Hong Kong have taken on a new urgency, as the Director General of the World Trade Organization observed:

"…the rise of an increasingly skilled Chinese workforce, as well as direct transportation links with Taiwan, means that Hong Kong will have to fight to keep its privileged place…If recently launched educational reforms have the intended effect of producing a more flexible, creative, and skilled workforce, Hong Kong will have a fighting chance to keep its vaunted position as China's international window over a longer time period" (Panitchpadki and Clifford, 2002).

It is within this context that the Hong Kong SAR imported a more managerial-entrepreneurial model of higher education that could help sustain it through the years of economic crisis that stretched from 1997 to 2005 (Jao, 2001). Beyond this, there are other context embedded drivers affecting Hong Kong higher education, such as the transfer of manufacturing to the hinterland over the border into mainland China, and a transition to a knowledge based service economy. Moreover, market forces have also made it possible for Hong Kong's universities to recruit top mainland talent via places like the United States of America, Canada, England, and Australia.

2.2 National Mission: From Bridge to Window to Hub

The quarter of a century of reform and opening up of the Chinese mainland significantly affected Hong Kong's long held position as the key bridging centre for China's educational exchange with the West. In order to survive, Hong Kong had to adapt to changes on the mainland. The earlier role played by Hong Kong left an indelible impression on its historical development and contributed to the impetus for readapting as a bridge for educational exchange (Postiglione, 2005).

The first Chinese to study in America was Yung Wing, who attended the Hong Kong's Morrison Education Society School before earning a degree from Yale University in 1854 (Ting et al., 2003). The first group China sent to America in 1872 included Chow Shouson, Liang Tun Yen, and others who had attended school in Hong Kong. Dr. Sun Yat-sen, the Father of Modern China, had studied in Hawaii and later at the Hong Kong Medical College (later to become the University of Hong Kong). Throughout the rest of the 20th Century, thousands followed, including Nobel laureate Daniel Chee Tsui, a graduate of Hong Kong Pui Ching Middle School and the University of Chicago.

Hong Kong's educational exchanges became an integral part of the unprecedented transformation of South China. Strengthened by its *huaqiao* education links, Hong Kong began an economic integration with Guangdong's Pearl River Delta that continues to this day, supporting Hong Kong's role in trade and transport, banking and finance, travel and tourism, communication and diplomacy (Kwok and So, 1995). The tradition of studying abroad added to Hong Kong's remarkable ability to attract human capital. It also contributed significantly toward its unique capacity to operate tri-lingually and multi-culturally. Moreover, it supported the establishment of the highest proportion of international academic staff in China, making possible a rapid expansion of its university system.

As the reform era unfolded and China established direct educational exchanges with the USA, Hong Kong refined its bridge role. In the meantime, the mainland media sometimes referred to Hong Kong as China's window on the world, a place where knowledge, skills, and alternative ideas from the outside world were on display within a Chinese society. Hong Kong continued its own educational exchanges with other countries, but it also continued to facilitate global educational exchanges for the mainland. Its cross-cultural sophistication and easy access to mainland sources permitted it to provide broad perspectives, reliable advice, and penetrating analyses of China's reforms. This role has since become integrated with Hong Kong's transition to a knowledge economy, and came to constitute the nucleus of Hong Kong's vision for cross-Pacific and other global academic exchanges.

Hong Kong excelled in this way by capitalizing on its intimate knowledge of China, international links, communication infrastructure, and cultural affinity with the mainland. It remains a key centre for interpreting China's reform across cul-

tures, building mutual understanding between China and the rest of the world. In this respect, its universities play a central role. The University of Hong Kong (UHK) was specifically established with the mission to advance China's modernization, a mission that continues to guide its academic work. Together, Hong Kong's universities coordinate educational exchanges within an atmosphere of academic tradition, values, and practices, unlike their counterparts in the mainland.

The Chinese mainland's economic reforms and its opening up to the outside world have also helped to strengthen Hong Kong's innovative capacity within the increasingly competitive global economy. Hong Kong's universities shifted from a traditional role of being an academic bridge between China and the West to being an international centre or hub for trade in educational services. Finally, Hong Kong has also been involved at various levels in the Chinese mainland's transition from elite to mass higher education, the mainland's aspiration for its top universities to achieve world class status, and in the establishment of joint degrees and other academic joint ventures.

2.3 The Brain Race for Human Resources

Despite the new emphasis on higher education for social and civic development, Hong Kong's future is viewed as depending heavily on its human resources – the skills of its people in such fields as financial management, law, science and technology, tourism, the management of trade and business, and related fields (Chen and Ng, 2001). In a 2006 poll of 11,000 business leaders, almost 20 per cent highlighted an inadequately educated work force as the most problematic factor for doing business in Hong Kong (IHT, 2006). In the World Economic Forum's Global Competitiveness Report of 2005/06 (WEF, 2005/06), Hong Kong dropped seven places to 28th out of 117. To build and maintain human capital, Hong Kong needs world-class innovative and competitive universities. Singapore, similar to Hong Kong in its size and dependence on brains and innovation, has been rapidly internationalizing its higher education system, actively recruiting scholars and students globally and from mainland China as well (Lee and Gopinathan, 2003). This includes inviting world class universities to set up branches in Singapore, including the University of Pennsylvania, John Hopkins University, and others (Lynch and Low 2005). Hong Kong has not done this, possibly due to the sensitivity of internationalizing at this time. Moreover, Singapore (along with South Korea and Taiwan) leaped ahead of Hong Kong by heavily investing in science and technology research and development in the 1980s and 1990s. Hong Kong has paid for that mistake and continues to lag far behind the pack with a GDP expenditure on research and development of 0.7 per cent compared with a 1.9 per cent average in the EU in 2004, 2.26 for OECD countries, 2.59 per cent in the United States, 3.15 per cent in Japan, and 2.25 per cent in Singapore (HDR, 2003; OECD,

2004). Even renowned astrophysicist Steven Hawking, on a visit with Hong Kong chief executive in June 2006, called for the funding of more research and teaching posts at Hong Kong's universities (SCMP, 2006).

Hong Kong's quick-profit business community chose to rely more on the approaching reunion with China for keeping the economy charging ahead, rather than following the path of the other three Asian Tigers; and it remains a question of whether they will repeat that scenario with respect to investment in higher education. Another special challenge for Hong Kong is to keep abreast of the rapidly developing and improving universities in other parts of China (Zhou, 2006; Li, 2005). If Hong Kong does not pay special attention to its universities, it risks losing its position as a primary location for innovation and commerce internationally and in the region. However, another widely held perspective is that Hong Kong benefits greatly from robust university growth on the mainland and that the proximity to, and unique relationships with mainland universities will become instrumental to enhancing Hong Kong's global competitiveness (Postiglione, 1998).

Mainland China is moving ahead to create "world-class" universities, and focusing more on Harvard, Yale, Oxford and MIT than Hong Kong. As university presidents from around the world visit Beijing and Tsinghua Universities, they cannot help noticing the tremendous sums of money being funnelled into expanding and modernizing these campuses (Ministry of Education, 2004). They will also hear a great deal about new measures to raise academic quality and make the universities more competitive. Still, mainland universities need much further development in the human resources that characterize "an advanced academic culture focused on research, collaborative work, meritocratic advancement, and top-quality teaching and consultancy" (Altbach and Postiglione, 2006).

It is in the culture of academic management that Hong Kong's universities have important advantages that go beyond its impressive facilities. The University of Hong Kong is undergoing a major expansion and renovation to its campus in anticipation of its 100th anniversary (SCMP, 2006a). But it is in the academic culture and traditions – where Hong Kong's top universities have a competitive advantage. These include the predominant use of English in higher education instruction as well as the constantly improving standard of Chinese Mandarin. Academic freedom is sufficiently well entrenched to have withstood several major challenges in the last decade. An international faculty with both Chinese and other foreign heritages has not been sidelined in the day-to-day operation of the universities and this complements the cosmopolitanism of local staff and their institutions. Transparency in administration and a significant degree of faculty governance have meant that academic staff have been involved in major development planning and key decisions. Working conditions are favourable by international standards, as are academic salaries – despite quickly sliding downward toward international norms with several cuts in recent years, the de-linking from the civil

service salary scale, and the introduction of a performance-based salary system. However, Hong Kong's competitiveness may gradually decline as salaries and conditions on the mainland improve and those in other countries like the United States of America continue to rise (AAUP, 2005).

While tenured academic appointments are highly competitive and difficult to obtain in Hong Kong, there is a recognized academic career path and reasonable security of employment. Mainland institutions are still struggling to establish regularized personnel policies, with appropriate expectations and evaluations (China Newsweek, 2006). Perhaps most important is the fact that both Hong Kong's universities and its society function according to accepted international standards and have a general commitment to excellence, meritocracy, and an openness to ideas and innovation.

There is a view that the main requirement for Hong Kong to maintain its competitive academic system is for society at all levels – including the universities themselves as well as the government and the public – to support the universities and recognize them as a central element of Hong Kong's future. This means both adequate funding and attention to maintaining and strengthening Hong Kong's distinctive academic culture. An environment in which the most creative professors can pursue their work is essential. Hong Kong academics have debated how much scientists' deference to authority on the mainland can be a hindrance to scientific breakthroughs (Cray, 2006). Many mainland Chinese academics are still at the crossroads between the old traditional bureaucratic control and the new forces of global corporate university culture. But, it will not be this way forever as social change continues in China. Outside the sphere of influence in Chinese history, Hong Kong has not been recognized as a cultural Mecca or center of intellectual dynamism, and the powerful business sector is sometimes sceptical of the usefulness of Hong Kong's universities with their high price tags.

The discourse on the knowledge economy means that Hong Kong's key universities need to be supported in their efforts to compete globally. Specific policy initiatives include a closer relationship with universities on the mainland and joint programs of academic cooperation and exchange, internationalization in student recruitment, the continued use of English as the language of higher education, an emphasis on the academic and professional fields especially relevant to Hong Kong's competitive future, dedication to intellectual freedom as the hallmark of Hong Kong higher education, attracting Hong Kong scientists to return home from overseas, continued reform of the school system, an undergraduate curriculum that builds problem solving skills, commitment to community building, and a research culture that is supported with bold initiatives to sustain a new intellectual environment of discovery and application (Li, 2006).

3.   Relevance, Internationalism, and Management: New Environments, Perspectives, and Modes of Operation

Relevance, internationalism and management have long been among the key drivers of the style of academic work, although the form, effect, and linkages have changed.

3.1 Relevance

Given the insulated nature of Hong Kong education during the colonial era, relevance had a more limited meaning than in the contemporary context. Universities only began funding research in a significant way toward the end of the 1980s, and even then the emphasis on building a research culture was limited. Moreover, the highly selective examination oriented university culture had a heavy emphasis on relevance in terms of the socialization of civil servants. Moreover, for much of the time, the two universities existed in a fully funded government system that did not permit private universities. Since that time, relevance has become a paramount concern, not only as part of the global discourse on higher education but due to the significant drop in funding, the aspiration for greater integration with the mainland, and the shift to more hands on control of the universities by the business community. An emergent test of relevance in Hong Kong's market economy is whether scholars are able to raise their own funds in the marketplace. This has been strengthened by the prevailing view within the business community that universities are no longer merely degree awarding bodies that measure academic muscle but are also pockets of expertise that can be adapted to pragmatic needs and problem solving that will help Hong Kong take a more innovative approach to its future competitive position in the international marketplace. As the government and the universities have introduced matching funding schemes to encourage philanthropy and alumni donations, many academic staff are gravitating to a new sense of relevance. Academic pragmatism is on the rise in Hong Kong.

3.2 Internationalism

The international marketplace has long been familiar to the Hong Kong business community. However, the meaning of internationalism in higher education has changed in one sense. For historical reasons, UHK had a special relationship with the United Kingdom while the Chinese University of Hong Kong (CUHK) had links with the United States of America. Hong Kong's internationalism, including colonial period links with China, was limited before China's opening to the outside world beginning in the late 1970s. Since 1997, Hong Kong higher education has had to initiate outreach efforts around the world in student recruitment. At the same time, it has had to maintain its reputation for having a highly international staff and Hong Kong academics have trained around the world. Hong Kong has

taken advantage of mainland scholars who gained postdoctoral experience overseas in the USA or elsewhere. They can be recruited to Hong Kong higher education with salaries and working conditions generally more attractive than those offered on the mainland. Moreover, the degree of academic corruption noted in the Chinese media in recent years has further benefited recruitment by Hong Kong's academy.

However, this situation will not last forever. Hong Kong goes to great lengths to protect the international dimension of its higher education. Part of the reason is an intention to maintain its special position within greater China, as well as to give it a competitive edge. This is best exemplified by its language policy. After a brief period of debate in higher education around the time of the repossession of Hong Kong, the use of English was strengthened as the main medium of instruction in higher education. The unique case of CUHK is particularly illustrative. Established in 1964 to cater for the increasing number of graduates of Chinese language secondary schools, the Vice-Chancellor, now Minister of Education, proposed extra pay for those staff who could use English as a medium of instruction. The effort to use internationalism as a tool to sharpen Hong Kong's competitive edge both, within China and internationally evolved gradually. Internationalism became the infrastructure or platform for testing the degree to which relevance could make Hong Kong higher education more competitive and financially self-sustaining. The missing piece for the powers that be was how to manage this position and process.

It is also generally accepted that the survival of Hong Kong's higher education system depends heavily upon its internationalism. This not only means having most of its staff earning their doctorates from other (mostly English speaking) countries, but also a high number of academic staff recruited from outside Hong Kong. Internationalizing the student population has meant moving away from recruitment of most first degree students from local secondary schools. Several universities have set a target of 20 per cent non-local student recruitment. There is no limit on the admission of non-local postgraduate research students, but for publicly-funded programs, non-local students can be no more than 10 per cent of the total student numbers. Several universities have started recruiting first-year students from top mainland universities, and the number has grown to over 2,000 − a fact that draws international students to these campuses.

International university partnerships have increased; something that is strengthened by Hong Kong's English medium higher education, its location within China, the university infrastructure, the safety and ease of transportation, its experience with launching and hosting international study programs, the rich tradition of educational exchange, and an academic environment that protects academic freedom.

In the Carnegie Study of the International Academic Profession, eight in ten Hong Kong academics in 1993 thought that connections with scholars outside

Hong Kong were very important to their professional work (Boyer et al., 1994; Postiglione, 1996, 1997). Most believed that in order to keep up with developments in their disciplines, they must read books and journals published outside Hong Kong (ranked only behind Russia and Israel), and in a 1999 follow-up study, almost 90 per cent agreed. In 1993, more than eight in ten stated that institutions of higher education should do more to promote student and staff mobility from one country to another (76 % agreed in the 1999 survey), and almost two-thirds responded that the curriculum at their institutions should be more international in focus. Only academics from Israel and Sweden travelled more to study and research abroad, and only academics from Israel and the Netherlands served more as faculty members in another country.

3.3 Management

Despite rapid changes in management styles and strategies, academics in Hong Kong seem to have developed a more favourable view of the management. The change in management of universities in the past 10 to 15 years is reflected in the responses to earlier surveys. For example, in 1993, only 30 per cent of Hong Kong faculty agreed that they were kept informed about what was going on at their institution. In that international survey, only Germany ranked lower than Hong Kong on this question. However, the overall figure increased from 30 per cent in 1993 to 44 per cent in 1999. Also in 1993, top level administrators received moderate scores from respondents in all sectors of the faculty across institutions. Less than a quarter agreed that top-level administrators were providing competent leadership. However, that figure increased to 41 per cent in the 1999 follow-up survey. Over half were of the opinion in 1993 that communication between faculty and administration was poor. That figure decreased to 39 per cent in 1999. Nevertheless, there is still a sense of being without significant influence in shaping academic policies at the institutional level. Since 1999, however, the economic crisis experienced in Hong Kong has deeply affected the management strategies of universities. Not only has management been preoccupied with how to do more with less funding, but it has also had to consider more effective strategies for maintaining a competitive edge in the region.

Leading up to the current period, four factors came together within the short span of a few years to foster a rapid evolution in management style within Hong Kong. The first was the rapid expansion of higher education in the 1990s followed by consolidation measures aimed at preserving quality. The second factor that affected university management was the end of colonial rule, a time when it became clear that "Hong Kong people ruling Hong Kong" would necessitate a localization of management expertise. The third factor was the Asian economic and SARS crises which had an enormous impact on spending. With little warning, university budgets could no longer be taken for granted as had been the case for

decades. Finally, the end of century global discourse on university management pointed to a way out of the dilemma and provided a clear signal to academic staff that changes in their working conditions and environment were equally a function of global and local changes. As the new century unfolded, traditional colonial academic links had already been modified toward a more international networking and in some ways, Hong Kong began to piggyback off mainland China's internationalization. While the mainland's internationalization was deeper and more significant, the management of higher education was more resistant to reform for several reasons (size, traditions, conversion from a planed to a socialist market economy, legal provisions, less institutional autonomy, etc.), and its efforts to reform personnel policy were hindered (Rosen, 2004, 2005).

3.4 Pragmatic Adaptation to Changing Environment

In a sense, Hong Kong was able to take advantage of the increased emphasis by management on relevance. As a small territory with an open society having long-standing international links and a pragmatic tendency in business and commerce, it was quick, and relieved, to bring its high-cost public universities out of their academic isolation and convert them from symbols of academic excellence to engines for economic survival, social development, and cultural vitality. Hong Kong business and commerce has long been noted for their pragmatism and quick adaptation to global markets. While certain sectors of the academy continued to operate in traditional discipline-driven patterns, the large majority of academic work patterns had come under the umbrella of new management priorities and were driven less by guaranteed government funding, and more by restructured incentives synchronized with internationalism and a reinvigoration of the traditional mission of working for China's modernization. This fostered more cross-disciplinary, cross-department, and cross-institutional cooperation.

Changes in the structure of academic work have become more closely intertwined with the survival and development needs of the HKSAR. Teaching, research, and service were subject to more direct influence than before by new environmental factors and a broad array of HKSAR problems, that included improving competitive trade relations, keeping pace with mainland China's internationalization, preventing infectious diseases and a global pandemic, preserving colonial architecture, reining in the rising health care costs, promoting civic leadership, minimizing cross border air pollution, ensuring more transparency in governance, engendering equal pay in the work place, and removing obstacles to innovative thinking within the school system. While the Hong Kong Research Grants Council continued to invite research proposals on all topics, there was a stated preference for funding projects that were linked to Hong Kong's development. Moreover, the government's Central Policy Unit began inviting research on a variety of specifically identified topics critical to Hong Kong's development, such as income ine-

quality, youth delinquency, integrating new migrants, air quality, hybrid vehicles, land usage, etc. Universities' management became reprogrammed for increased relevance to these emerging global and local problems. In *Higher Education Relevance in the 21ˢᵗ Century*, Michael Gibbons (1998) sets out a view familiar to those in Hong Kong higher education:

> "The main change, as far as universities are concerned, is that knowledge production and dissemination – research and teaching – are no longer self contained activities, carried out in relative institutional isolation. They now involve interaction with a variety of other knowledge producers. In this situation, connections will increasingly involve the use of the potentialities of the new information and communication technologies."

Cross-institutional interaction has increased. This has been management driven in the sense that incentives have been made available to groups of academics to coordinate their academic activities. However, the emphasis has been on teaching collaboration and there is an implicit intention that such collaboration might lead to forms of cross cutting consolidation. In the case of research, university management emphasizes the amount of funding it wins per year, and since the pool is finite, universities provide support to academic staff to improve their competitive edge over their counterparts in other universities around the world. This has had some effect on cross institutional collaboration, though this needs to be studied in more detail. The size of Hong Kong makes this particularly relevant. Hong Kong academic associations tend to have a small number of members in each field, but they do provide a forum that can bring specialists across all institutions together once a year to generate new kinds of academic vitality.

The changing university–society relationship permits more opportunities for traditional academic disciplines to link with professional schools and government/civic organizations in solving practical social problems ranging from transport infrastructure to school management, from legal challenges to world trade agreements, and from infectious diseases to commercializing biotechnology. Nevertheless, Hong Kong academic workers continued to wrestle with issues similar to those of academics in other systems, including how to maintain academic integrity and freedom. Yet, while on the one hand Hong Kong's localization of the academy and its management in the 1990s created a more pragmatic intellectual culture and work style that fitted with greater relevance, it was also disadvantaged by the residual colonialism of a privileged academy with virtually guaranteed public funding. The resulting inertia and resistance to change lingers to some extent. As higher education admissions began to expand amid rising costs, and as public involvement in educational issues rose, there was a necessity to rethink the management and finance of higher education. Members of the business community began to take a more proactive role in university affairs and models were borrowed from the corporate world to increase the management efficiency of Hong Kong's universities.

One of the ways used to break down traditional disciplinary barriers was to permit small groups of individuals with ideas and initiative to establish self-funding centres of academic activity. While some of these centres were short lived, others became dynamic enterprises that fostered areas of excellence. Another mode of breaking down departmental boundaries established along disciplinary lines was to merge departments into unitary faculties, streamlining the budgeting and financial allocation process. Still another format was to establish strategic research themes that would begin with some funding and work toward becoming areas of excellence. In general, university management provides more organizational opportunities for academic staff activities that help build stronger claims for funding projects that direct knowledge to where it can be used effectively in specific problem-solving contexts. This re-configuring of knowledge is generally easier to facilitate in an immigrant society that is viewed as being successful on the basis of an inherent pragmatism brought by previous generations.

3.5 Preparation for, and Entry into the Profession

A unique feature of Hong Kong higher education is that the three top research universities generally recruit academic staff from outside Hong Kong. The number of doctorates earned in Hong Kong has increased rapidly. However, the proportion of these taking university posts in Hong Kong is quite limited. The second unique feature of Hong Kong higher education is that virtually all of those from the Chinese mainland that earn doctorates in Hong Kong go on to academic posts at universities in China. In short, most academic staff at universities in Hong Kong have earned their doctorates overseas, and most of those earning their doctorates in Hong Kong go on to teach on the mainland.

More Hong Kong university staff earned their doctorates in the Unites States than they did elsewhere. This was true in 1993 when about 39 per cent had doctorates from the United States and in 1999 when it was almost 40 per cent. The figures for Master's degrees were 16 per cent (1993 and 1998) and 6 per cent for Bachelor degrees in 1993 and less than one per cent in 1998. It would not be surprising, therefore, to find that this has influenced the perspectives, commitments and values of the academic profession.

Academic staff trained in the United States who responded to the 1998 survey took a particular perspective on the educational reforms occurring in Hong Kong, including the move from a three to a four year university system, the introduction of the credit-unit system, liberal studies, tolerance of diversity, and the role of government in higher education The response pattern in the last of these, also apparent in the 1993 survey, may partly reflect the prominence of private higher education in the USA and the absence of it in Hong Kong.

Table 1: Responses to the Statement: "Seven-year secondary education and three year university education is most suitable for Hong Kong", by Place of Training

	Strongly agree	Agree with reservations	Disagree with reservations	Strongly disagree	Not applicable/ Don't know	Total
USA		3.2%	20.6%	76.2%		100%
Other	8.8%	22.4%	28.0%	38.4%	2.4%	100%

Source: Postiglione, 1999.

Hong Kong still has a three year university system, something that was established during the colonial era to bring it in line with the system in the United Kingdom. This will eventually be transformed into a six year secondary school pattern to permit the establishment of a four year university education. Academics with a US higher degree clearly favour the six plus four system, including mainland academics who received their highest degree in the USA. In fact, only those who attended secondary school in the mainland or in America were missing from the "strongly agree" category.

Table 2: Responses to the Statement: "Less emphasis on specialized training and more on broad liberal education", by Place of Training

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree	Total
USA	32.8%	32.8%	23.0%	9.8%	1.6%	100%
Other	12.8%	36.8%	25.6%	20.8%	4.0%	100%

Source: Postiglione, 1999.

Another area where the Hong Kong and American higher education systems have differed is in the emphasis on specialized and liberal education. A four-year system makes it easier for students to broaden their undergraduate studies, whereas the limited number of A-Levels taken during the matriculation years in secondary school usually prepare students for more specialized training. Those academics who were trained in the USA are more in favour of broad liberal education.

Table 3: Responses to the Statement: "Implementing some form of the credit unit systems in Hong Kong higher education will have an overall beneficial effect on the quality of education received", by Place of Training

	Strongly agree	Agree with reservations	Disagree with reservations	Strongly disagree	Not applicable/ Don't know	Total
USA	44.4%	31.7%	7.9%	3.2%	12.7%	100%
Other	22.6%	38.7%	15.3%	7.3%	16.1%	100%

Source: Postiglione, 1999.

Although the credit system has been implemented in the China mainland since the early 1990s, Hong Kong British style higher education system resisted this until the late 1990s. Although the credit unit system of mainland China universities has not been used as it has in the USA for cross institutional transfers, it nonetheless became implemented earlier than in Hong Kong. American trained academics are more favourable to this innovation than others.

Table 4: Responses to the question: "What priority should higher education give to tolerance of diversity?", by Place of Training

	Very important	Fairly important	Not so important	Not at all important	Total
USA	55.7%	42.6%	1.6%	0	100%
Other	54.4%	36.0%	8.8%	0.8%	100%

Source: Postiglione, 1999.

It would seem difficult to argue with the value of promoting diversity in higher education. Nonetheless, those trained in the USA tended more than others to believe it should be given a high priority in higher education. This is relevant in the post-colonial period educational reforms in Hong Kong, where the government has decided to place an unmistakable emphasis on diversity.

There is a high proportion of private higher education in the United States and many Hong Kong academics have attended Yale, Harvard, Stanford, and other Ivy League institutions, universities that do not rely on government to define their policies. Those trained in other countries where the top institutions are state run, generally favoured university policies and purposes influenced by government.

Table 5: Responses to the Statement: "The Government should have the responsibility to define the overall purposes and policies for higher education", by Place of Training

	Strongly agree	Agree with reservations	Disagree with reservations	Strongly disagree	Don't know	Total
USA	21.9%	26.6%	31.3%	18.8%	1.6%	100%
Other	25.4%	45.2%	16.7%	10.3%	2.4%	100%

Source: Postiglione, 1999.

Finally, Hong Kong academic staff trained in the USA seemed to emphasize global links more than those trained in other places. When asked specifically about the importance of links with scholars in other parts of China, over 70 per cent agreed it was important to their professional work, even more than those who earned their highest degree in Hong Kong.

Table 6: Responses to the Statement: "Connections with scholars in other countries are very important to my professional work", by Place of Training

	Strongly agree	Agree with reservations	Disagree with reservations	Strongly disagree	Don't know	Total
USA	78.7%	18.0%	3.3%	0.0%	0.0%	100%
Other	56.8%	35.2%	7.2%	0.0%	0.8%	100%

Source: Postiglione, 1999.

4. Reflections on Training, Relevance, Managerialism, and Internationalism

Though the data above were gathered in 1993 and 1999, they may no longer reflect the views of the post 2000 academic profession in Hong Kong, if for no other reason than that the recruitment of academics has become more diversified in recent years. More academics are recruited after receiving training locally in Hong Kong or in other countries aside from the United States. Moreover, the academic climate of mainland China has been increasingly influential. Whereas academic visits from mainland academics were sporadic before 2000, they are now a regular occurrence.

Nevertheless, a preliminary analysis of the data suggests that the composition of academic staff in terms of where they received their academic training does have a significant effect on views about a number of educational issues, such as

university reform, academic culture, the role of government in higher educational policy, and connections with scholars in other parts of the world.

The expansion of enrolments and universities in Hong Kong, the attractiveness of research universities in the USA, and the weakening of colonial links with the United Kingdom, all led Hong Kong toward a transformation of academic culture. Moreover, economic globalization has nudged universities in other countries toward a more entrepreneurial model of management.

Further research is needed in order to attain a more detailed examination of the actual process by which this is occurring and its precise role in Hong Kong's adaptation to, and integration with, the global academy and higher education on the mainland during the reform era. Given the Chinese government's increasing support for raising the standards of its universities, it may not be long before Hong Kong's universities begin to recruit world class staff directly from universities on the mainland. In the meantime, the work of academics within Hong Kong's small system of universities will be driven by a complex interplay of local, national, and international factors (Yang, 2006).

Notes

1 Hong Kong is a Special Administrative Region (SAR) of the People's Republic of China under Deng Xiaoping's conception of *one country and two systems.* It is governed by the Basic Law of the Hong Kong SAR.

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5

South Africa:
Rapid Change and Re-integration with
the Global Community

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1.   Introduction

The fundamental expansion and changes that have been sweeping world-wide through higher education during the past few decades has led to the academic profession rising to prominence on the higher education research agenda (see Wolhuter, 1997). South Africa has experienced momentous changes in the past 15 years. These changes have affected not only South African society, but the higher education sector as well, and by implication, the academic profession.

Traditionally, the academic profession has not featured prominently on the South African higher education research agenda (see Wolhuter, 1997; Strydom and Fourie, 1999). As will be explained in this chapter, a thorough survey of the South African academic profession is therefore timely.

2.   Historical Context (until 1994)

The first university in South Africa was the University of Good Hope, founded in 1873 under the auspices of the then British colonial administration. This university undertook no teaching, but prescribed syllabuses, conducted examinations, and awarded degrees for programmes taught at colleges, such as the South African College (Cape Town), and the Victoria College (Stellenbosch). Act 12 of 1916 made provision for the establishment of a federal examining university, to be called the University of South Africa (UNISA), located in Pretoria. In time, its constituent colleges became autonomous universities: University of Stellenbosch (1916), University of Cape Town (South African College, 1916), Witwatersrand University (1922), University of Pretoria (1930), University of Natal (1949), University of the Orange Free State (1950), Rhodes University (1951) and Potchefstroom University (1951). When its constituent colleges became independent

universities, UNISA became a correspondence university (1951). All these institutions were meant to cater for the White population.

Tertiary education for Black South Africans commenced in 1916, when the South African Native College was established in Fort Hare. This institution became autonomous in 1949, under the name of the University of Fort Hare. 1948 is a key date in the history of South Africa. In that year the National Party came to power. It implemented a programme of rigorous *de facto* and *de jure* racial segregation – "Apartheid" policies (a typical colonial set-up, *de facto* racial segregation had always been a characteristic of South African society). The advocates of Apartheid believed that the separation of the races (and the various ethnic groupings within the Black race) would enable each grouping to develop to prosperity upon the basis, and along the lines, of their own cultures. For this purpose, ten autonomous states (so-called "homelands") were created within the borders of South Africa, for the various ethnic groupings. Each was to have its own government, school system, universities, etc. Consequently, such universities were created, each exclusively for students of the particular ethnic group.

The idea of separate, segregated education systems and universities was widely condemned among Black South Africans as inferior education designed to perpetuate inequality and White domination (see Karis and Gerhart, 1977; Nkomo, 1990; Christie, 1991, pp. 229-265). The South Africa government did not succeed in selling its policies to the international community either. After 1961 (when the country ceded from the British Commonwealth and became an independent republic), South Africa was subjected to a barrage of international sanctions and isolation measures directed at, for example, trade, economic, political, diplomatic, cultural, sports and other activities. With regard to universities, the international academic boycott was waged for three decades (1960-1990) as part of the international protest against the segregation policies of the South African government. Harricombe and Lancaster (1995, p. 30) note that this boycott included the following:

− a refusal of international scholars to travel to South Africa or to invite South Africans abroad;
− a refusal to publish South African manuscripts internationally;
− a refusal of international scholars to collaborate with South African scholars;
− a refusal by some publishers to provide access to information (e.g. books, software);
− a denial of South African participation at international conferences;
− a denial of access to South African academics by certain institutions abroad; and
− a refusal to act as external examiners for theses at South African universities.

(For a survey of the full extent and intensity of this academic boycott, the interested reader is referred to the publication of Harricombe and Lancaster, 1995).

Since the change of government and the new socio-political dispensation from 1994, South African academicians have been facing three sets of changes:
− a reintegration into the mainstream international academic community;
− one unintended effect of the international academic isolation was that South Africa had been kept aloof from changes taking place in the environment of academicians abroad, such as increasing managerialism, increased calls for accountability and increased measures of quality control;
− the exigencies of the new socio-political environment.

This new environment and its new demands is the focus of the next section.

3.   The Changed Environment of the South African Academic Profession

In 1994, 342 years of White minority government in South Africa ended. A new political dispensation commenced, the basis of which was a new constitution with a Bill of Human Rights widely hailed as one of the most democratic and most progressive in the world. The ANC (African National Congress) took over as ruling party from the National Party.

3.1 A New Educational Dispensation in the Changed Socio-political Context

In the first years after 1994, the ANC formulated a new education policy, based upon the following principles: equalization of educational opportunities, desegregation, multiculturalism and democratization (see Wolhuter, 1999, p. 366). The aim of this policy was the economic development and modernization of South Africa.

Equal educational opportunities: One of the rallying points of the socio-political turmoil which preceded the 1994 political settlement was the segregated and unequal education system. In 1993 the gross tertiary education enrolment ratio in South Africa was 12.9 per cent (aggregate figure) (Wolhuter, 1998, p. 15). This aggregate figure masked big differences: for the different racial groups, the figures were as follows: Whites 50.4 per cent, Indians (i.e. South Africans of Indian descent) 30.4 per cent, Coloureds (South Africans of mixed-racial descent) 9.7 per cent, Blacks 11.1 per cent (Wolhuter, 1998, p. 15). This policy meant that universities had to gear themselves for a surge in Black student enrolments after 1994. A problem was that the Black primary and secondary schools of the pre-1994 era offered the worst quality education in South Africa. The unequal education system was dramatically illustrated by the differences in levels of governmental funding, teacher-pupil ratios, physical facilities, levels of enrolment, teacher qualifications and pass rates of the schools for the different race groups. For example, in 1993 government funding per pupil, was R1,659 in the case of Blacks, R2,902 in the case of Coloureds, R3,702 in the case of Indians and R4,732 in the case of Whites (Nkabinde, 1997, p. 44) (1993 exchange rate, 1 US $= R3.50). This meant a surge

of Black students from schools which ill-prepared them for tertiary study. The racial make-up of the South African population (total 44.8 million) is as follows: Whites 10 per cent, Indians: 2 per cent, Coloureds: 9 per cent, Blacks: 79 per cent (Steyn, 2007).

Desegregation: In 1994, the various racially based education systems and their administrations were collapsed into one national Ministry of Education. In the South African context, desegregation would be very much a one-way movement of Blacks from the historically Black educational institutions to the better endowed historically White educational institutions. This meant that the historically White institutions had to gear themselves for a much more diverse student body. Desegregation and equity also meant that the academic profession (traditionally very White male dominated, even at the historically Black universities) would have to change to reflect the demographic make-up of the South African population.

Multiculturalism: A criticism from the circles of the new rulers was that the pre-1994 education system was too Eurocentric, and that Africa's cultural heritage was neglected. In very radical quarters it was felt that the message was preached that African cultures were inferior, and the most extreme critics alleged that curricula contributed to the subjugation of Blacks. Even curricula at university level were thus criticized (for example, see Jansen, 1991).

Democratization: The pre-1994 education system was also criticized as being too authoritarian and of therefore fostering a culture of submission. In response, the new government accepted the principle of democratization in education. This meant that all stakeholders (teachers, parents, workers, students, and the broader community) would participate actively in decision-making on education.

Development: The government pursued an ambitious set of national development goals by means of education. These goals include:

− economic goals: the eradication of poverty and the promotion of the country's economic productivity and development;
− nation building: molding national unity in a country with a divided past; building a communal value system for a society characterized by democracy, equality, freedom, peace, justice, tolerance and stability;
− social goals: building a society free of racial, gender and other forms of unfair discrimination, creating a socially-mobile society and the removal of artificial hierarchies and obstructions in the way of progress.

Fourie (1999, pp. 275-296) summarizes the implications of this new education policy for higher education and for the academic profession in South Africa:

− democratization of institutional governance – institutions have traditionally been governed by a small number of top academics and management officers;
− increased access for financially and educationally disadvantaged students;
− restructuring the curriculum;

- focusing on development needs in research and community service;
- the post 1994 socio-political environment required a move from the ivory tower that had traditionally characterized the academic profession in South Africa (cf. van der Berg as quoted by Steinberg, 1987, p. 16);
- redressing inequities in terms of race and gender in both student and staff profiles.

3.2 Reintegration into the Mainstream International Academic Community

The new political order which commenced in 1994 meant that South African academicians, after having been cut off from their colleagues abroad for some thirty years, were once again welcome at international conferences as visiting professors and as research collaborators world-wide.

3.3 The Force of International Trends Shaping a New Academic Environment

As mentioned above, one (unintended) effect of the international boycotts waged against South Africa was that universities remained relatively isolated from changes that affected universities elsewhere in the world. During the boycott years some radical changes took place abroad. These changes could, to a large extent, be traced back to the neo-liberal economic revolution which commenced in the 1980s and gained ever increasing momentum in the 1990s. The welfare state scaled down its range of activities and the capitalist or free market system was accepted globally. For the academic environment this meant the persistent denudation of academic autonomy as business principles such as accountability, quality control, managerialism and profitability were applied to the running of universities, and as governments (as the main sources of funds to most universities) assumed ever more say in the affairs of universities (Wolhuter and Higgs, 2006, p. 64). It should be mentioned that, apart from applying pressure to conform to governmental segregation policies, in the pre-1994 era universities in South Africa enjoyed a measure of autonomy probably unparalleled elsewhere in the world (Bundy, 2005). While management issues were the prerogative of a few incumbents at top management positions, academicians had full autonomy on academic matters. Even the renowned British comparativist, Edmund J King, an outspoken critic of the pre-1994 government's policies, lauded the autonomy enjoyed by South African universities (King, 1979). After the advent of the new socio-political dispensation and after South Africa's incorporation into the international mainstream, the South African academic environment was confronted with these changes not gradually as elsewhere in the world, but intensely and rapidly (Jansen, 2004; Bundy, 2005).

In 1995 the *National Qualifications Act (Act 58 of 1995)* was promulgated. Following developments in other parts of the world, such as Britain and Australia, this act made provision for the development of a National Qualifications Frame-

work (NQF) (see Boughey, 2004, p. 7). The NQF is a structure in which all qualifications in education can be placed in a network providing for a comprehensive system of lifelong learning for all (see Steyn, 2000). The aim of the National Qualifications Act, as well as the NQF, with its goals of equivalence, quality, standards-setting and portability, is the attainment of both equity and efficiency in the education system. Although the National Qualifications Act and the NQF were well received by many sectors of industry and commerce, this was not the case when it came to the higher education sector. In this instance, criticism was leveled by the higher education sector which was related to the autonomy traditionally enjoyed by institutions of higher education and the academics working in them (see Boughey, 2004, p. 12).

Institutions of higher education are required to register their qualifications on the NQF. To have their qualifications registered, higher education institutions need to have their quality certified by the Higher Education Qualification Committee (HEQC), established under the auspices of the Council of Higher Education – a body appointed by the Minister of Education in terms of the Higher Education Act. All these represent a significant curtailment of the autonomy that the academic profession had traditionally enjoyed in South Africa.

Webster and Mosoetsa's (2002) empirical study concluded that managerialism has had a seriously negative effect on the South African academic profession.

The *Higher Education Act (Act 101 of 1997)* gave the Minister of Education sweeping powers over institutions in the higher education sector, including universities (see Republic of South Africa, 1997). This represented a radical break with the past. Warner (2004) notes that curtailing university autonomy has been a common practice in the history of universities in Africa during the decolonial period, as governments harnessed universities to achieve their objectives. In 2001, the Minister of Education effected a transformation of the higher education system in South Africa. Two major reforms were involved. The first had to do with the change from a binary to a unitary higher education system. Traditionally, South Africa had two types of higher education institutions, namely universities and technikons (see Bunting, 2002, pp. 61-63). The mandate of the universities was advanced teaching and research, while that for the technikons was the training of high-level technical human resources. However, with the Minister of Education's 2001 reforms, technikons were transformed into technical universities, thereby elevating them to the status of universities. The second major reform involved reducing the number of higher education institutions in South Africa from 36 to 24. This was done by merging institutions, especially historically Black institutions with historically White institutions.

4. The South African Academic Profession: Results of the Carnegie Investigation

The first major international investigation into the academic profession was the Carnegie International Survey into the Academic Profession of the early 1990's, which covered fourteen countries: Australia, Korea, Japan, Hong Kong, Brazil, Chile, Mexico, the United States of America, England, Germany, the Netherlands, Sweden, Russia, and Israel. This survey led to numerous publications, among others *The International Academic Profession: Portraits of Fourteen Countries* (P. G. Altbach, Princeton, Carnegie Foundation, 1996). The survey covered countries on all the continents, with the exception of Africa, which has always been conspicuously absent in the scientific debate on the academic profession which followed the Carnegie investigation. At the time when the survey was conducted, South Africa was still subjected to the international academic boycott. The authors applied the Carnegie survey to the South African academic profession during 2002 (i.e. a time lag of nearly a decade after the survey was conducted in the other countries).

The survey covered the following aspects of the South African academic profession:
− biographic details;
− teaching activities;
− research activities;
− community service;
− international dimensions;
− relationship with institutional management; and
− relations in the higher education society.

Biographic details: Of the returned questionnaires 47 per cent were completed by females and 52 per cent by males (1% of respondents declined to disclose their gender). This division comes closer to the national aggregate male/female composition of the academic profession in South Africa (see UNESCO, 1999), which shows that the sample could be regarded as representative. The average age of male and female respondents was respectively 43.6 and 43.2 years.

Male and female respondents were employed for 13.8 and 9.8 years respectively in higher education. South African higher education institutions distinguish between the following academic ranks: junior lecturer, lecturer, senior lecturer, associate professor and professor. The questionnaire accorded to these ranks respectively the numbers 1 to 5; and added another category, for respondents in management positions. The average male response was 3.9 and the average female response 2.8.

The above portray the South African academic profession as having a relatively young profile. The proportion of female academicians is comparatively high. In

the other countries in which the survey was conducted the percentage of male faculty ranged from 60 per cent in Brazil to over 90 per cent in Korea and Japan (Altbach and Lewis, 1996). In the other countries in which the survey was conducted, the average ages of faculty were as follows: Mexico: 39.2 (Gil-Antón, 1996); Netherlands: 42.3 (Geurts et al., 1996); Korea: 44.8 (Lee, 1996); Australia: 45 (Sheehan and Welch, 1996); England: 47 (Fulton, 1996); and United States of America: 48 (Haas, 1996), while in Japan and Russia the average academician was over 50 years of age (Arimoto, 1996). Together with female academicians' concentration in the lower academic ranks, and their smaller number of years in the academic profession, this points to the effect of vigorous affirmative action policies in recruitments and appointments in recent years.

Teaching activities: During the academic year, respondents spend an average of 12.9 hours per week teaching. This is quite low, compared to the international norm. The average in the 14 countries of the Carnegie investigation was 22.2 hours (Altbach and Lewis, 1996, p. 21). On the other hand, the classes with which South African academics have to deal are quite large. Respondents' average answers to the questions as to the smallest and largest introductory course classes which they teach were 81.1 and 128.0 students. In Korea the corresponding figures (Carnegie Investigation data) were 39.4 and 76.6 (Lee, 1996, p. 121).

The increase in student numbers in recent years (Jansen, 2004; Bundy, 2005), amidst considerations such as admission policies being determined by equalization and democratization rather than merit, is being experienced rather negatively by academics, as illustrated by the following responses to questions pertaining to undergraduate students at the respondents' institutions (averages are reflected, on the following scale: 1: agree, 3: neutral, 5: disagree):

– current undergraduate students are adequately prepared in written and oral communication skills: 4.46
– current undergraduate students are adequately prepared in mathematics and quantitative reasoning skills: 4.73
– current undergraduate students do just enough to get by academically: 2.49
– current undergraduate students are more studious than the students I had five years ago: 3.97.

Research: Universities in South Africa have traditionally been conceptualized as teaching and training institutions, with research occupying a subordinate role (see Sutherland and Wolhuter, 2002, pp. 77, 79). This however was subjected to change by a subsidy formula, introduced in 1984, which links government grants to research output. Since then, academics have been subjected to ever increasing pressure to publish.

The questionnaire asked respondents the following question: "Regarding your own preferences, do your interests lie *primarily* in teaching or in research?", and then asked them to choose between the following four answers:

- primarily in teaching (1)
- in both, but leaning towards teaching (2)
- in both, but leaning towards research (3)
- primarily in research (4)

The mean of the responses was 2.46, that is, just on the teaching side of 2.5 mid-point of the teaching-research continuum.

Research output is, however, rather low. The question as to how many articles respondents have published in an academic book or scholarly journal over the past three years drew an average response of 3.65. In the other countries for which data are available the figure ranges from 4.3 in the case of Australia (Sheenan and Welch, 1996) to 7.7 in the case of the Netherlands (Geurts et al., 1996). Respondents indicated that factors influencing their research output included the availability of research funding, facilities and resources for research but, surprisingly, not the number of students enrolled in their classes.

Service: Respondents had a positive attitude towards service activities. Respondents were asked to reply yes (=1) or no (=2) to the following statements:
- academics in my discipline have a professional obligation to apply their knowledge to problems in society;
- for me service activity beyond the institution is a distraction and competes with essential academic work.

The mean responses to two statements were 1.27 and 2.00 respectively. Yet respondents were apparently engaged in very few service activities. They had to indicate whether they had performed service (paid or unpaid) in any of the types of organizations below by answering yes (=1) or no (=2). Their average responses were as follows:
- business or industry: 1.71;
- educational institutions: 1.33;
- local government bodies: 1.82;
- national government bodies: 1.66;
- private social service agencies: 1.68;
- international government bodies: 1.86;
- other international associations: 1.77.

The reasons for the low service profile could not be ascertained. Respondents were asked to indicate on a Likert scale (ranging from 1: strong positive influence to 3: no influence/neutral to 5: strong negative influence) the extent to which their service activities were influenced by each of the following factors: the number of courses which they teach, the number of students enrolled in their classes, the amount of student advising which they do, their research commitments, their administrative work and their non-academic professional activities. All these drew responses of between 2.5 and 3.5.

It seems, therefore, that South African academics appreciate the necessity of changing the "ivory tower" approach towards their profession and that they desire to do so, but that they are prevented from accomplishing this for reasons that have not yet been identified.

Relations with institutional and national governance: Respondents were asked to score their influence in shaping key academic policies at each of the three levels of department or similar unit, faculty, school or similar unit and institution level. They had to indicate their response on a four-point Likert scale, with 1 signifying "very influential", 2 "somewhat influential", 3 "a little influential" and 4 "not at all influential".

The mean responses were as follows:
– department level: 2.12;
– faculty level: 2.65;
– institutional level: 3.73.

It seems that while academics felt that they had some influence in shaping key academic policies at department level and a little influence at faculty level, they had no influence in shaping such policies at institutional level.

Academics appear to have neutral (neither exceptionally good nor very bad) relations with institutional governance. Respondents had to indicate the extent to which they agreed or disagreed with the statements below on an Osgood scale (ranging from 1: agree to 3: neutral to 5: disagree). Their average scores were as follows:
– top-level administrators are providing competent leadership: 3.23;
– I am kept informed about what is going on at this institution: 2.86;
– communication between academics and administration is poor: 2.69;
– the administration is often autocratic: 2.43;
– administration supports academic freedom: 2.95.

International activities: On average, respondents have published articles or books in another country 3.75 times during the three years prior to the survey, and 3.67 times during the ten year period prior to the survey. In the other 14 countries in which the survey had been conducted the corresponding averages were 1.3 and 4.0 (Altbach and Lewis, 1996, p. 37). These patterns were also evident in the other indicators of international activity measured by the survey, namely that whereas the effect of the international academic boycott was still visible over the ten years prior to the survey being carried out in South Africa (2002), in the period three years before the survey the effect was more than cancelled out.

Gender and Racial Disparities: The authors used the data obtained in the survey to investigate the extent of gender inequalities in the academic profession of South Africa (see: Higgs, Higgs and Wolhuter, 2004). No statistically significant gender differences on any of the questions surveyed could be found, except in the case of age, and in the cases of the two questions about the number of years em-

ployed in higher education and academic rank. As reported above, female academics score lower than male academics on these counts, and these could possibly be ascribed to the recent influx of females into the academic profession, due to vigorous affirmative action policies. The absence of gender differences with respect to other questions is in vivid contrast to the pattern in all the other countries surveyed (see: Welch, 1997, p. 329; Bain and Cummings, 2000).

The instruments (the international questionnaire) did not include a question asking respondents about their racial identity. The post-1994 policy principle of equalization has called for the radical transformation of the traditionally White dominated academic profession. This apparently has not been as successful as the demolition of the gender divide. Gibbon and Kalaki (2002, p. 200) draw attention to the fact that White academic staff dropped but slightly from 87 per cent in 1993 to 80 per cent in 1998. Potgieter (2002) investigated reasons for leaving their institutions and for leaving the academic profession. She used interviews and focus group discussions. The study identified the following reasons: institutional racism, poor management or leadership and responding to the new environment. The last mentioned refers to academics leaving universities as they were uncomfortable with the role of academics as fund raisers and entrepreneurs, and because they feel that universities had not risen to the challenge of operating within a changing global economy.

5. Conclusion

While the South African academic profession, in line with the changing idea of a university and the South African university in particular, see research as one of their core tasks, their research output has not yet matched this conceptualization. Similarly, while they accept that the walls around the ivory tower must come down, and that they have an obligation to undertake community service and to contribute towards the preconstruction and development of society, they have not yet gone so far as to step out of the ivory tower and perform community service or become very prolific researchers into the problems experienced by society.

Concerning moving away from elitist to mass education, at least as far as student intake is concerned, they seem to not have embraced equity principles yet. On the other hand, the South African academic profession seems to have progressed far down the road of gender equity. Other research suggests that this is not the case with racial equity though, and that racial inequalities persist.

In times of globalization, the profession seems to have internationalized rapidly, to the point of more than having wiped out the effect of the international academic boycott.

From the reported study, the two weak points of the South African academic profession seem to be low productivity and the persistence of racial disparities. In terms of all three fields of academic activity - teaching, research and community

service, the output of academicians in South Africa is, compared to their peers abroad, low. The questions included in the questionnaire failed to detect the causes for that. Follow-up research, similar to Potgieter's (2002) study on the racial divide, getting to the roots of the causes of the low productivity and suggesting solutions, would be valuable.

The two strongest points of the South African academic profession, on the other hand, appear to be the rapid and vigorous achievement of internationalization and of gender equity. On the evidence of the survey, the South African academic profession has attained a degree of gender equity exemplary even for egalitarian societies and higher education systems, such as Germany and Sweden. Further research, aimed at identifying societal and institutional contextual factors that facilitated attainment of this equality would therefore be valuable for the international higher education community.

At a time when concerns are raised that the present international trend of globalization will bypass Africa, and thus aggravate the continent's marginalization, the internationalization of the universities of Africa should become the focus of research, and the resulting findings employed in comparative educational research studies of the internationalization of universities worldwide. In such studies, successful strategies facilitating the internationalization of universities could be identified. As indicated by the research findings included in this chapter, faculty of South African universities apparently internationalized within one decade, to the point of being a model even for first class universities and higher education systems worldwide. Subjecting this process to thorough research, and juxtaposing and integrating the results with knowledge such as De Wit's (1995) study on strategies for internationalizing universities in Australia, Canada, Europe and the USA, can put the South African experience of the internationalization of universities to the benefit of the whole world.

Against the backdrop of this conclusion the imminent international (including South Africa) study of the changing academic profession is timely. The first international investigation (the Carnegie study) was colour and culture blind. With questions on respondents' home language, the new investigation will allow studies of how academicians of (at least different linguistic) communities experience the academic profession in their countries. The new study will also allow a more thorough investigation of topics such as the internationalization of the South African academic profession, their teaching and research activities and their morale. Moreover, it will enable comparisons with some 20 other countries worldwide (which are also participating in the investigation), with the potential benefits to be reaped from comparative studies.

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Brazil:
A Typology of the Academic Profession and the Impact of Recent Government and Institutional Policies

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1. Introduction

Brazil, like many other countries in Latin America, was taken by surprise by the new demands and challenges posed by globalization. The successful experience of industrialization based on import-substitution had produced a strong inwardly-oriented culture among the Brazilian elite and society. The prevailing notion was one that linked development to the government's success in protecting Brazilian enterprises. Thus, autarchic, hierarchical, and centralized perspectives were predominant.

But the last decade of the 20th century brought impressive changes in this framework. The opening up of the economy, even though moderate, exposed Brazilian enterprises to an unusually high level of competition. Monetary stabilization[1], a successful privatization program and a new regulatory framework, enacted by the Constitutional amendments of the 1990s, created a new macro-economic environment. The impact of these changes in education and the labor market was contradictory. The need for highly qualified manpower increased; however, industrial employment did not grow, while technology-intensive agriculture replaced the more traditional, labor-intensive rural economy. At the same time, with the expansion of secondary education in the 1990s, the demand for mass higher education increased, particularly in sectors requiring fewer entry qualifications from students, and low investment from the teaching institutions. So, the tensions between the higher-end, selective and highly productive higher education and the demand for lower-end, accessible and less demanding education became stronger than ever.

This chapter outlines the evolution of Brazilian higher education under these circumstances. It begins with a brief history of higher education in Brazil, de-

scribes its most relevant features today, and ends with a picture of the most recent trends, highlighting some of the challenges facing the Brazilian academic profession.[2]

2. Background

Higher education is a recent experience in Brazilian society. The first higher education institutions were created only in early nineteenth century. Then, the chosen institutional framework was the isolated professional school. These schools were public, with free tuition and supported by the federal government. Only in the early 1920s was the aim of creating a university seriously considered by the Brazilian elite. The first university, the Universidade do Brasil, was nominally established in 1920, but remained a loose connection of autonomous professional schools. In 1931 the first university law was enacted. This law was based on the Napoleonic notion that higher education institutions were licensed by the state to teach and certify for the established professions. Since all institutions had to provide the same core curriculum for each profession, the 1931 Law reserved little room for academic autonomy. In the long run, this starting point generated a large federal bureaucracy and an intricate web of rules and regulations regarding all dimensions of higher education. Until today, the Ministry of Education is in charge of supervision, inspection and enforcement of all these regulations. Such a complex system is also controlled by a National Council of Education and its state level counterparts.

The years between 1930 and 1950 consisted of growth and diversification. In 1934, the State of São Paulo, the richest region in the country, created its own university, the Universidade de São Paulo, by merging several existing professional schools (in engineering, law, medicine, agriculture) with a newly founded Faculty of Science, Philosophy and Humanities. This was followed in 1940 by the reorganization of the Universidade of Brasil with its own Faculty of Philosophy. After 1945, the University of Brazil became the federal university of Rio de Janeiro, and a nation-wide network of federal universities began to grow. The first Catholic university, the Pontifícia Universidade Católica do Rio de Janeiro, was launched in 1940. In the following years, new federal and Catholic universities were created in the most important state capitals throughout the country, and several states started to organize their own regional higher education systems. Isolated non-university institutions continued to be created by state governments and the private sector.

In 1968, the federal government, then under military rule, enacted a bill seeking to reorganize the entire Brazilian higher education sector. The reform replaced the old chair system with the departmental model, proposed the adoption of full-time contracts for faculty, regulated graduate studies and shifted the undergraduate level from the conventional sequential courses to a credit system, similar to the

U.S. model (for an overview of the 1968 Reform, see Klein, 1992, and Durhan, 1998). Due to its authoritarian origins, the reform faced mistrust among faculty and students and resistance from the powerful faculty of the most traditional professional schools. Nevertheless, in the long run, it was successfully implemented in the public sector. Estimates show that the federal universities budget grew 5.4 fold in real terms between 1972 and 1986. Most of these resources were used to pay for full-time contracts for faculty (Schwartzman, J., 1993, and Velloso, 1987).

The 1968 Reform was implemented amid an explosive increase in the demand for higher education. In 1960, total enrolment in Brazilian higher education amounted to 93,000 students (Schwartzman, 1992). By 1970, enrolment had already jumped to 425,478. Five years later, in 1975, students at the undergraduate level had reached 1.1 million. This sharply enlarged student population was not envisaged by the 1968 Reform. To meet this demand, the Government relaxed the constraints over the creation of private, non-university institutions. The new colleges and professional schools absorbed the bulk of the expansion, protecting the public sector from the most deleterious effects of mass higher education. The growth of the private sector was achieved mostly by an increase in the number of for-profit, teaching-oriented, non-university schools and colleges. In the public sector, entrance examinations and numerus clausus are still used to limit the growth of enrolment and the pressures on teaching.

As depicted in more detail by one of the authors in another paper (Balbachevsky, 2004), graduate education in Brazil was first regulated in 1968. In the 1970s, a period of rapid economic expansion, it experienced explosive growth, when the major public science and technology agencies identified graduate programs as a priority for investment. In the 1980s, the economy ceased to grow, resources for research and new investment in higher education dwindled, but support for graduate education was maintained, and the number of scholarships increased dramatically. The explanation for such a paradox can be found in the Brazilian federal budgetary process. While funding for research is conceived as "expenses" and can be subject to major cuts from one year to the next, funding for scholarships is conceived as "salary" and the law forbids major cuts. When economic stagnation beset the Brazilian economy in the 1980s, the managers in the major science and technology agencies converted their funds from "soft" research expenses to "hard" scholarships and bench funds for graduate studies.

Thus, the federal government has been investing huge resources in the graduate level since the early 1970s. Money is provided to support programs and fellowships are generously offered to attract students. Unlike at the undergraduate level, the Government and the academic community has made a decisive effort to assure quality at this level since the early 1970s. At that time, the Fundação Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), the Ministry of Education agency in charge of graduate education, created a sophisticated peer review

system that, to this day, successfully connects performance with support at the graduate level.

3. Some Key Data

The 2004 census of the Brazilian higher education system shows that it comprises 2,013 institutions, of which 169 are universities. Only 11 per cent of the institutions are public. Public institutions are owned by the federal government (4 %), or by state (provincial) governments (4 %) and also by municipalities (local government) (3 %). On average, public institutions are bigger and more established than the private ones: they represent 49 per cent of all Brazilian universities and are responsible for most of the country's graduate education (82 % of the enrolments at this level). The exceptions are the municipal-owned institutions, which are usually small and less well-established colleges.

The private sector is huge: it includes 1,789 institutions and 72 per cent of all undergraduate enrolment. Most of these institutions are small, family owned colleges, and 78 per cent are formally classified as for-profit institutions. As such, they pay taxes and are not required to provide scholarships or philanthropic services. Others, formally classified as philanthropic, are mostly confessional or community-owned institutions. Most of the catholic universities belong to this group. However, there are also large for-profit universities, and small philanthropic institutions.

In the private sector, full time contracts are mostly found in philanthropic universities (75 %), and particularly in catholic universities. These universities are usually very prestigious and tend to favor graduate academics with full-time contracts. Among non-university, for-profit institutions, only 10 per cent of the academic posts are full-time. In for-profit universities, this figure rises but remains low at 22 per cent.

Table 1 also shows that 21 per cent of all academic positions in Brazilian higher education are filled by professionals holding a doctorate. Academics with such a profile are to be found more usually in federal and state owned universities. In fact, while the public sector offers only 34 per cent of all academic positions, 63 per cent of all Brazilian academics holding a doctorate find employment in the public sector. This pattern is opposed to the one found in the private sector, which offers 66 per cent of all academic positions, but secures only 37 per cent of the academics holding a Ph.D.

Table 1: Brazilian Higher Education System: Key Data, 2004

Own-ership	Type	Number of Insti-tutions	Under-graduate Enrolments	Graduate Enrol-ments*	Faculty employed		
					Total	Ph.D.	Full-time
Federal	Universities	46	533,892	N/A	49,104	21,941	40,577
	Non Univ.	41	40,692	N/A	5,335	922	4,260
	Total	87	574,584	53,776	54,439	22,863	44,837
State	Universities	32	429,823	N/A	34,804	14,274	26,538
	Non Univ.	43	41,838	N/A	3,378	467	1648
	Total	75	471,661	35,002	38,182	14,741	28,186
Local	Universities	5	59,208	N/A	4,007	588	1,305
	Non Univ.	57	72,875	N/A	3,796	449	301
	Total	62	132,083	414	7,803	1,034	1,606
All Public	Universities	83	1,022,923	N/A	87.915	36,803	69,420
	Non Univ.	141	155405	N/A	12,509	1,835	5,209
	Total	224	1,178,328	89,192	100,424	38,638	74,629
For Profit	Universities	26	407,303	N/A	21,822	2,624	4,880
	Non Univ.	1,375	1,189,591	N/A	86,149	7,214	8,635
	Total	1,401	1,596,894	N/A	107,971	9,838	13,515
Philan-tropic	Universities	60	939,491	N/A	55,434	9,631	10,644
	Non Univ.	328	449.020	N/A	29,413	3,172	3,474
	Total	388	1,388,511	N/A	84,847	12,803	14,117
All Private	Universities	86	1,346,794	N/A	77,256	12,255	15,524
	Non Univ.	1703	1,683,611	N/A	115,562	10,386	12,108
	Total	1,789	2,985,405	19,380	192,818	22,641	27,632
Total	Universities	169	2,369,717	N/A	165,171	49,058	83,944
	Non Univ.	1844	1,734,016	N/A	128,071	12,221	18,317
	Total	2,013	4,163,733	108,572	293,242	61,279	102,261

Source: Brazilian Ministry of Education, Higher Education Census of 2004, for institutions, under-graduate enrolments and faculty information.
*These figures include students enrolled in master's of science programs, professional master's programs, and doctorate programs. Source: CAPES Foundation, 2004
URL: http://www.capes.gov.br/sobre/estatisticas/
N/A: not available.

Table 2 shows how these figures have changed since the early 1990s. This table highlights two different tendencies in the Brazilian academic market: first, as it has expanded in the last years, it has also became more selective regarding academic credentials: in 1994, 63 per cent of the academics holding only a master's degree found employment in the public sector. Ten years later, this figure dropped to 28 per cent.[3] At the same time, a growing number of graduate professionals has been absorbed by private institutions: in 1994, 37 per cent of professionals with a master's degree were employed by the private sector. In 1996, this figure increased to 45 per cent, and in 2002 it was 71 per cent. In the last census, 74 per cent of the Brazilian academics with master's degrees had jobs in private institu-

tions. Among professionals with doctorates, the pattern is similar: in 1994, 21 per cent of the academics with a doctorate were employed by the private sector. In the last ten years this figure grew steadily and reached 37 per cent in 2004.

Table 2: Patterns of Academic Employment and Credentials 1994-2004

Year	Academic credentials	Public sector institutions	Private sector institutions	Total (100%)
1994	Without master's degree	42.9	57.1	(86,625)
	Master's degree	63.4	36.6	(33,531)
	Doctorate	79.0	21.0	(21,326)
1998	Without master's degree	39.6	60.4	(88,567)
	Master's degree	55.1	44.9	(45,482)
	Doctorate	75.8	24.2	(31,073)
2002	Without master's degree	28.6	71.4	(101,153)
	Master's degree	29.7	70.3	(77,404)
	Doctorate	65.1	34.9	(49,287)
2004	Without master's degree	25.7	74.3	(126,987)
	Master's degree	27.8	72.2	(104,976)
	Doctorate	63.0	37.0	(61,279)

Source: Brazilian Ministry of Education, Higher Education Census of 1994, 1998, 2002 and 2004.

Table 2 reveals a new pattern. From the 1970s until the early 1990s, the private and public sectors coexisted with almost no point of contact. Operating under different rules and with diverse goals, one sector almost ignored the other, and recruited professionals from segregated markets: public institutions relied on their alumni and had the public graduate system meet their needs for faculty preparation. Private institutions also enlisted their academics from among their alumni. In their market, faculty's academic credentials were not important. Instructors working in the private sector were poorly qualified and were totally ignorant of the rules of academic life.

This picture started to change at the beginning of 1990s, when a new Education Act, the Lei de Diretrizes e Bases da Educação (LDB), was passed. The changes in the regulatory framework, discussed below, required the private sector to improve the academic credentials of their staff, to qualify for university autonomy and other privileges granted by the new legislation. So, they opened a new market for young academics coming from the ever-expanding graduate education system. This happened at a time when recruitment in the public sector was frozen,[4] making the private sector more attractive for young scholars. The new professional profile sought by the private sector entailed a differentiation among faculty within institutions and pressures for research support and institutional career paths. Some institutions resisted such expensive changes and continued operating in the old pattern.

Others opted to restrict such opportunities to small "islands of academic life", while preserving the traditional ways of operation in the rest of the institution. Finally, a few are trying to take advantage of this opportunity to create a new entrepreneurial environment inside the institution.

4. Intra-sector Institutional Differences

All the developments depicted above have made Brazilian higher education not only a diversified but also a highly stratified system. Some patterns of stratification are indicated by the sector analysis sketched in the last section. But, even inside each sector, a more detailed analysis is needed to highlight the major forms of differentiation.[5]

Within the public sector, the major divide is the one created by the presence of graduate education. In the late 1960s, only a few public institutions and a small number of catholic ones were well-positioned to take advantage of government initiatives to support graduate education. These institutions created many graduate programs and built up a strong domain of graduate studies. As such, they offered better prospects of work for the new generation of young scholars that was returning after completing their graduate studies abroad. The influx of new scholars created a dynamic environment inside these institutions. With a great number of Ph.D. holders, they were also able to take advantage of the investment the Brazilian government was mobilizing for science and technology. Today, these institutions form what could be called the first stratum of the Brazilian higher education, the Brazilian *research universities*. They provide a good working environment, which, in turn, allows them to secure the better-qualified academics and attract financial support for research. Major features of these institutions are, first, a great proportion of Ph.D. holders among their faculty. In some of them, more than 90 per cent of all professors have a Ph.D. Second, graduate education: none of them have less than 30 per cent of their students enrolled in graduate programs. In some, this proportion is nearly 50 per cent. These are few in number. In the last education census no more than 20 institutions qualified for this stratum. But they awarded most of the 9,000 doctoral degrees conferred annually in the country.

Most public institutions could be placed in the second stratum. They hold university status but lack the conditions for effective academic development. They have not been able to establish a strong graduate provision and thus have problems in attracting and retaining holders of doctorates among their faculty. Here, bureaucracy and unions have greater power, and the central administration tends to have more room for maneuver. Usually less than 15 per cent of the students are enrolled in graduate studies and they tend to be confined to the master's level. Only a few programs are able to muster the credentials and competences required to be qualified to award Ph.Ds. Yet, these institutions are regionally relevant, both as a local alternative for advanced training and also as a source of competence in

solving local problems. In previous research (Balbachevsky et al., 2004), faculty from these institutions were found to be strongly motivated by regional demands and problems. Thus, institutions in this stratum can be classified as *regional* institutions.

The third and lowest stratum includes the majority of Brazilian higher education institutions. They are mostly private institutions or owned by small municipalities and poorer states. Most of them are small colleges or isolated professional schools. But there are also giants among them, holding the status of universities, where undergraduate enrolments can stretch to 40,000 students or more. Regardless of size, all institutions in this stratum are strongly oriented towards labor market demands for short-term training (Sampaio, 2000). For this reason, institutions at this stratum are classified as *market*-oriented.

5.   Segmentation[6]

In 1992, the first nationwide survey of the academic profession in Brazil revealed an occupational group as diverse and stratified as the higher education institutions in which they worked. The data collected by the survey distinguished at least four occupational profiles. Ten years later, in 2003, a new nationwide survey confirmed the findings of the first survey while revealing interesting patterns of change.

The first profile, Type I, is the traditional professor as originally conceived in Brazil at the time that the first professional schools were created: a scholar distinguished in his profession and occupying the higher ranks in the faculty of professional schools. This profile fits with the ideal type of the liberal professional as described in the sociological literature of the 1950s. Professors with this profile dedicate most of their time to the practice of their profession and do little if any systematic research. Some of them are academically under-qualified; for them, academic life is a prestigious activity but not central to their professional life. They come to the university to deliver their lectures and prestige is the most important currency in their relations with the academic world. They do not perceive themselves as part of the academic profession but rather as members of their particular profession.

This academic profile was dominant in Brazilian higher education until the end of the 1960s. The 1968 reform, with the suppression of the chair system and the introduction of full-time contracts in public universities, represented a severe blow to their previous dominance. Today, they are to be found mostly in some prestigious traditional professional schools, particularly in law and medicine. Nevertheless, in both the 1992 and 2003 surveys, there are many academics in private and public institutions that declared that most of their income comes from other, non-academic activities. Most of them have a master's or lower degree, but all, even the Ph.D. holders, show an active engagement in publishing books and articles,

while at the same time not undertaking any systematic research. Usually, these are part-time or hourly paid professors, declaring only a small number of teaching hours per week (six to eight hours on average).

Type II encompasses those with a profile that closely resembles those identified in the international literature as the academic scholar: good academic credentials and a full-time academic contract, which permits a permanent involvement in research and knowledge production. In our analyses of the 1992 and 2003 data, these academics are fully professionalized as researchers: they relate strongly with academic networks in their fields, and some of them showed strong links with the international community. They publish regularly and have regular access to resources for supporting their research work. When asked, they tend to identify research as the activity they most prefer. In 1992, professionals with this profile were more often in research-oriented institutions, but even there they represented a minority: only 22 per cent of the faculty from the most prestigious universities could be classified as having this profile. They could also be found in regional institutions, but here they represented only a tiny minority of 5 per cent. In both types of institutions they were strongly committed to graduate education. In regional institutions, scholars with this profile tended to be concentrated in some departments – the ones the Brazilian literature used to call "islands of competence" (Oliveira, 1984).

The 2003 survey showed an increase in the proportion of academics with this profile in all kinds of institutions: 37 per cent in the research-oriented institutions, 14 per cent in regional institutions, and 5 per cent in market-oriented institutions. For academics fitting this profile in both regional and research institutions, the link with the university is central. They have full-time contracts, work only at one institution and the salary paid by this institution represents, on average, 84 per cent of their income. In market-oriented institutions, most of the academics fitting this profile are younger (40 years old, on average, compared with 48 years old on average in research universities) and most (65 %) declared they carry out their research-related activities in other institutions. Yet, they also tend to concentrate their teaching responsibilities in only one institution, in spite of not having a full-time contract there.

The Type III profile refers to professors who have stable and full-time contracts but do not match the standards of professional achievement of Type II. Most of them do not have a doctoral degree and are not involved in publishing. They not only publish less, but when they do publish, they have access only to less relevant channels (Balbachevsky, 2006), with little, if any, impact. As such, they have no access to funds to support research activity. They are almost entirely disconnected from the national and international community of peers. Thus, their professional identities are not defined by their professional degree, as with Type I, nor by their personal achievements as an independent scholar and researcher, as with Type II. Their professional identity is based on their affiliation to the institution and to the

small group of colleagues with whom they share daily problems, concerns, and successes. In a sense, they tend to have a semi-professional identity, as depicted by Etzioni and collaborators (1969): they tended to emphasize intrinsic rewards – such as the personal satisfaction of being a good teacher – as opposed to extrinsic ones, achieved through scholarly activity, that are by definition under public scrutiny. This explains why scholars with this profile are so intensely opposed any attempts to introduce intra-institutional differentiation based on merit, prestige, and power. For them, the only acceptable bases for differentiation are the ones determined by factors in principle accessible to everyone, like seniority. In the 1992 survey, professors with this profile corresponded to 53 per cent of all scholars employed by the research-oriented institutions and 77 per cent of those at regional institutions. Data from the 2003 survey shows a decrease in the proportion of professionals with this profile in both contexts: 38 per cent of the faculty working in research-oriented institutions and 58 per cent in regional institutions. Data from the 2003 survey indicates a small number of professionals with these characteristics working in the private sector (3 %). They are mostly employed by small, isolated graduate programs at master's level created by private institutions in order to fulfill the criteria for official recognition as universities. In these small environments, they have access to excellent working conditions: well-paid full time contracts (on average with higher incomes than their peers in the public sector), small teaching loads (on average 3 hours per week), and few performance pressures.

Type IV consists of the professors who teach undergraduates in private institutions. They cannot count on job security and spend long hours in the classroom in order to earn a living. In the 1992 survey, these professionals usually had no higher education beyond their undergraduate degree and were almost entirely ignorant of the rules and procedures of academic life. Data from the 2003 survey complemented by the data collected in the 2004 official census of Brazil's higher education (INEP, 2006) show an impressive change in the profile of these professors: they now hold better academic credentials than in the past. The 2004 census showed that 39 per cent of the academics employed by the private sector had a master's degree, while another 12 per cent had a doctoral degree. These figures sharply contrast with those from 1989, when only 12 per cent of these professors held a master's degree and another 3 per cent had a doctoral degree. Nevertheless, while their academic profile had improved in the past decade, other features had not. Most of these professionals continue to work part-time or are hourly paid with no prospect of security and few opportunities for personal academic initiative.

The profiles outlined above are by-products of the historical changes in Brazilian higher education. The Type I profile was well fitted to the first, pre-1920 institutional model – the professional school. The Type II profile emerged with the first universities and grew in number and strength with the 1968 reforms and with the support that graduate education has received from government since the late

1960s. The Type III profile grew with the earlier expansion of the public sector in the 1960s and 1970s. By that time, the number of scholars with good academic credentials was not sufficient to fill all the full-time positions created in the public sector. Recruited with the privileges that went with their civil servant status, these academics were soon organized in teachers' unions that fiercely defended their access to all the rights associated with the professorate, while actively fighting for reductions in the requirements for academic performance and credentials.[7] Finally, the emergence of the Type IV profile is related to the process of massification that, in Brazil, was undertaken by the private sector. The growth of this sector was achieved mostly by an increase in the number of for-profit, teaching-oriented, non-university schools and colleges. As such, these institutions sought staff with lower academic credentials who would accept being paid on an hourly basis.

6.   The New Societal Framework

The new economic and social environment of the 1990s brought additional pressures for Brazilian higher education. Society's perceptions of higher education changed in two major respects: the first was a shift from viewing the purpose of higher education as elite formation towards the education and training of the general work-force. This movement increased the demand for quality control at the undergraduate level, including the mass-oriented private sector, and teacher training programs. Demands in this direction were voiced early in the 1990s by public opinion as articulated in newspapers and magazines. In the 2000s, this perspective was reinforced and supplemented by the issue of social inclusion and access to higher education by minority groups.

    The other change was to shift the academic research system from an inner academic self-orientation to one that is more demand-driven. Expectations about the outputs of scientists, the interface between the university and industry and the beneficial impact of knowledge in enhancing enterprises' competitiveness are widespread in Brazilian society. Demands of this kind have been voiced by some influential organizations in Brazilian industry and were echoed by senior administrators of major science and technology funding agencies, in their fight to sustain the levels of public spending allocated to science and technology.

    From 1994 to 2003, the Brazilian government was led by President Fernando Henrique Cardoso. Cardoso's response to these new demands followed the standard reforms in higher education in the context of globalization identified in the literature (Enders, 2001, 2004; Scott, 2003; Goedegebuure et al., 1993). Government adopted new approaches designed to steer institutions from both the private and public sectors towards better performance in undergraduate education and improving the interface between higher education institutions and the productive sector.

In 1994, the Ministry of Education took the first steps towards an effective evaluation of undergraduate courses. From 1995 to 2002, it implemented a National Evaluation of Undergraduate Programs (Schwartzman, 2004). This was a mandatory assessment, where the performance of all graduating students in the each discipline was measured nationwide. Even though individual students' scores were not made public, the average performance of students in each institution was widely publicized and achieved great media coverage, strongly impacting public opinion. The outcome of the National Evaluation was also used by the Ministry of Education to rank institutions. The ranking procedures took into consideration the institution's average student performance, its infrastructure, and the academic profile of its faculty. Institutions placed in the bottom quartile were to be placed under supervision by expert visiting committees. Failure to implement the recommended corrective measures could be punished by suspending accreditation of the undergraduate program.

In 1997, the Brazilian government also passed a new Education Act, the Lei de Diretrizes e Bases da Educação (LDB). The new Act explicitly recognized the existence of institutions primarily devoted to undergraduate teaching. This differentiation was officially acknowledged for the first time. Previously, the ideal of a unitary system, governed by the same rules and sharing the same goals was the basis for all Brazilian higher education regulations. Recognizing undergraduate teaching as a legitimate academic goal was an important step, since it freed institutions from having to create some kind of graduate education and research just for the sake of fulfilling bureaucratic requirements, wasting resources and energies in activities that were beyond their reach.

The new Education Act also granted greater autonomy to universities, while increasing pressure on their academic staff. According to LDB, in order to be accredited (and, for the first time, re-accredited every five years) as a university, the institution should provide graduate education to a minimum standard as evaluated by CAPES, a career path for its faculty, and at least one third of its academics must have a master's or higher degree.

For the federal universities, the government proposed effective financial autonomy. The universities were to be free to make their own decisions on allocating their resources,[8] but their budgets would be based on achievements measured by performance indicators, rather than historical expenditure. Congress however did not approve this proposal. It was received with mistrust by the universities' authorities, faculty and employees and also by Congress members with strong regional interests. University authorities feared that the proposal could lead to the reduction of their budgets. Faculty and employees' unions suspected that university autonomy could be the first step in a government strategy to privatize public higher education, and they feared the competition it could entail within and among institutions. Finally, distrust of the government's intentions was coupled with

regional concerns that autonomy could mean transferring the financial burden of operating the universities from the federal to the states' budget.

Another initiative was the introduction of a financial bonus for faculty, based on the time each person dedicated to undergraduate teaching. Most institutions, however, distributed the resources evenly among their staff, and the original intention, to enhance the value of undergraduate education, went unfulfilled.

In spite of these obstacles, the results of these and other initiatives achieved some important results. They improved the standards of the system as a whole. Pressures from the regulatory agencies at the federal level resulted in improvements in institutional recruitment policies, raising the threshold for the minimum academic profile. All in all, these new developments had the effect of creating a more competitive environment for higher education as a whole (Sampaio, 2000).

7. Recent Trends

The election of Luis Ignacio Lula da Silva as president in 2003 weakened the process of reform in the Brazilian higher education system sketched so far in this chapter. His party, Partido dos Trabalhadores (PT, the Workers Party), has strong links with the unions and social movements. Thus, Lula's policy proposals for higher education are strongly based on the demands made by public university teachers and employee's unions.

One of the most salient components of Lula's higher education policy is its outspoken aversion to any initiative which resembles privatization. From the point of view of unions in the public sector, privatization is related to three different issues to which they are strongly opposed: charging tuition fees in public institutions, external assessment, and allowing the universities to raise and manage funds independently. Since Lula's election, a myriad of decisions and regulations were put in place to force universities to be more dependent on public money while, at the same time, less accountable to external stakeholders.

In his election campaign of 2002, Lula had criticized the National Evaluation of Undergraduate Programs, which was opposed by unions from the public sector. Once elected, however, he did not dare to abolish the evaluation procedures that had attained such visibility in the preceding years. Instead, he created a whole new system of quality assurance for higher education, giving strong emphasis to self-assessment by the institutions, and replacing the existing National Evaluation by a similar assessment called ENADE (Exame Nacional de Desempenho dos Estudantes – National Assessment of Students' performance). The new assessment is applied just to a sample of students each year, and has serious methodological flaws; the government itself says that its results should not be taken at face value, since it is just one part of a comprehensive assessment procedure – which is still to be developed (Verhine et al., 2006). Lula's government also proved to be less committed to the quest for university autonomy as it was proposed in the Educa-

tion Law (LDB) passed by the former government. As such, this issue has been successfully blocked by the forces opposing change to the *status quo*.

Lula' government also attempted a major reform of higher education. Its main points, presented as a draft in early 2005, are the promise of significant increase in resources for federal universities, strict supervision of the private sector and severe restrictions on international investment in the Brazilian higher education market. Answering the organizational demands from unions in the public sector, the initiative reasserts the Government's compromise with higher education over democratic governance, allowing higher education institutions to be free to appoint people to senior positions internally, in direct elections with the participation of all students, teachers and employees. Non-governmental organizations' (NGO) pressure for a policies on access to higher education were met by the proposed introduction of quotas for blacks and students graduating from public secondary schools.

The reform's first draft was received with mistrust by almost all stakeholders. It was perceived as feeble by Lula's supporters and too intrusive by the public universities' authorities and the private sector. It was also widely criticized for its lack of focus and failure to address some critical issues about the future of higher education in Brazil, such as the quality and relevance of undergraduate education. By mid-2006, the government issued a new, attenuated version but the discussion of these issues is until now (February, 2007) paralyzed (Castro and Schwartzman, 2005).

The most relevant steps made by Lula in higher education are related to the issues of social inclusion and minority access. Even before proposing the reform, the government launched a program called "University for All", which exchanged fiscal benefits for tuition exemption for about 300,000 low income and minority students in private institutions. Thus, in spite of the strong statements against the private sector, the Lula government was the first, in Brazilian history, to provide it with a very significant subsidy (except for the support for research and graduate education in a few institutions such as the Catholic university in Rio de Janeiro).

Public universities were also encouraged to implement quota programs in order to lower the entrance threshold for students from public high schools and minority groups. These measures had mixed results. "University for All" has no means of assessing the quality of the undergraduate courses benefiting from the program and shows high levels of dropout among students. Also, while most of the public universities' administrators are willing to implement quotas for the entrance examinations; they are not ready to set aside resources for initiatives that could support the needs and improve the academic performance of the new kind of students the public universities are supposed to be catering for. Even the recent pressures to open evening courses and programs at federal universities were met with distrust and pleading for more resources on the part of the university authorities.

Even so, these initiatives created a new awareness in society about issues of inclusiveness in Brazilian higher education. It generated great expectations among the huge number of families on low income with young children and placed new pressures on the public sector institutions. Traditionally, public universities are elite institutions; teaching does not have a high status within these institutions; academic staff are not willing to take on large teaching loads, nor are they prepared to support the special needs of students with poor academic backgrounds. In such a scenario, it is not difficult to understand how much tension the new government's priorities have raised inside these institutions.

Regarding the private sector, Lula's initiatives have a permanent *leit-motif*: to introduce strict control and restrictions. One usual instrument for this policy, dating back several decades, has been to require high academic standards – full-time staff, doctoral degrees, evidence of research – of teaching-oriented and tuition-dependent institutions. The assumption is that teaching quality could only be assured if linked to research and a full-time, highly qualified professoriate. But the effects tend to contradict this. For most institutions, answering these demands creates budgetary burdens that can only be resolved by reducing the major item in their expenditures: academic salaries. These policies also have had an adverse impact on the process of differentiation that took place inside the private sector in the 1990s. It is not surprising that, in such environment, the institutions faring better are those adopting the old pattern for answering government demands: just make up the figures in order to give the right answers.

8. Concluding Remarks

The recent trends in Brazilian higher education outlined above give a framework for analyzing the dilemmas the country is facing and also for analyzing the effectiveness of the solutions offered. First, contrary to what is usually assumed, segmentation of the academic profession in Brazil has not increased in recent years. On the contrary, thanks to the regulations enforced in the 1990s and, to some extent, the expansion of graduate education, we can observe a convergence in broad terms: in all institutions faculty are now more active in research, more connected with their international peers, and have access to better contract conditions, including full-time contracts. However, this trend does not mean that Brazilian higher education is becoming more homogeneous, with all institutions evolving towards the research university model.

In the private sector, the pressures toward hiring highly qualified, full-time staff have created some good opportunities for young scholars, at the cost of keeping down the salaries and working conditions of most of their staff, including part-time contracts or payment by the hour. Indeed, most private institutions are confined to operating in a market consisting of the poorer families who cannot afford to pay more for educating their children. In this market, education is almost a

commodity. Competition is based on comparative advantages in cost and location. In such market, it is almost impossible to raise tuition fees to cover the extra expenses that institutions incur by employing better qualified staff with improved contract conditions. Quality is a luxury almost out of these institutions' reach.

One might wonder why private institutions do not diversify and make use of the new competences for tapping other more lucrative markets. It seems that the answer to this question rests on the small range of competences these institutions can muster. They are, mostly, family-owned enterprises that grew from successful examples of private secondary education. As such, they are institutionally weak. Not surprisingly, they are very centralized, and do not allow for much academic entrepreneurship. A few institutions are trying to diversify their portfolio, providing upgraded education in fields like business administration, and providing graduate faculty with services and new alternatives for professional training. But these are exceptions rather than the rule.

At public institutions, as access has become the prime issue, increasing undergraduate enrolment has been a priority. Until now, the target of raising the participation of public institutions in undergraduate education has been used by university authorities as an excuse for increasing the commitment of public funds to federal universities. Nevertheless, as public institutions only answer for a little more than 28 per cent of all undergraduate enrolments in the country, this issue has created some insecurity within the public sector.

The institutional model for the public sector in Brazil is very expensive: it presupposes small institutional differentiation and is based on a uniform contract model for all academic staff: stable, full-time employment and a small teaching load (from 6 to 8 hours in class per week). To significantly increase the participation of the public (elite and tuition free) sector in the country's undergraduate education, government can either radically increase the funds it invests in higher education – but this could only be made at expense of public spending on primary and secondary education – or squeeze academic salaries in real terms, jeopardizing the full-time commitment to the public sector. So far, the choice has been to pressurize the public universities to open up more places, without the additional investment in staff and institutions. Traditionally, most federal universities provide only day time courses, with the assumption that their students are young and do not need to work. Now, they are under pressure to open up evening courses for older and working students, and to lower their admission standards. There is also a promise of more resources for these developments, but this is still uncertain.

The pressure to increase undergraduate enrolment in public institutions has also generated tensions in some of the best public institutions, where senior academic staff find themselves undervalued by the government's new metric: commitment to graduate education and excellence in scholarly endeavor seems to have been withdrawn, and government officials appear less interest in this. Power is clearly shifting from the Type II to the Type III academics in these institutions.

One consequence is that Brazilian higher education institutions are not responding as swiftly as one would expect to the growing need to link education and research to the productive sector. Since the end of 2005, Brazil adopted an Innovation Act (Lei da Inovação, no. 10.973/05). The law, proposed in 2002, creates some incentives for private investment in technology and opens up opportunities for interchange between universities and enterprises, including shared gains from patents and periods of paid academic internship in enterprises and commercial laboratories. However, the law was treated with mistrust by the academic community and enterprises and so far has had little impact on academic research in Brazil. The push for opening up the ivory tower presented by this law has been successfully countered by a myriad of decisions and regulations forcing the universities to become more dependent on public money and offering less room for individual entrepreneurial initiatives on the part of academics. In the past, dynamic institutes and research centers within the universities were able to act independently in search of external resources and partners. Now, centralization is increasing, and these groups and sectors are left with few weapons to fight for its worth, especially as government pushes for the massification of the country's remaining elite public universities.

Notes

1 High inflation rates had plagued the Brazilian economy for more than three decades. Rates above 100% per year were registered from the end of 1980s. At the beginning of 1994, when the "Plano Real" stabilization program was launched, Brazil's inflation rate had reached more than 1,000 per cent per year. This long period with high inflation rates created a peculiar business culture in Brazil, where gains were to be sought in the overnight financial market rather than in good management. This, in turn, had an important impact on the demands for qualifications and training offered by the higher education system.

2 For this analysis we will use the data collected in two national surveys on the Brazilian academic profession. The first took place in 1992 and was supported by the Carnegie Foundation under the international project "International Academic Profession." The second survey took place ten years later, in 2003, and was supported by the Ford Foundation. Both surveys use the same sample design and parameters, which enables comparison of similar variables in two time periods.

3 While the data from the official census refers to academic positions (places), this data is the best estimate available for individuals. The 2003 National Survey of the Brazilian Academic Profession shows that the Brazilian academics tend to concentrate their academic activity in just one institution, even when they do not have a full-time contract. Even in the private sector, when asked how many academic institutions they were working for at the time of the interview, 71% of the respondents answered just one. This pattern is a by product of individual strategies on the part of the professors, but also a policy adopted by a great number of private institutions. Due to the heavy burden placed by the Brazilian labor legislation, even private for-profit institutions show a marked tendency to hire a small number of instructors, giving them a large number of classes to teach.

4 In the mid-1990s, to limit public spending, the federal government forbade the hiring of new civil servants, which included university staff in the federal institutions.

5 The typology presented here was first proposed by Balbachevsky, 2000.

6 This typology was firstly outlined in Schwartzman and Balbachevsky, 1995. It was updated for 2003 in Balbachevsky, 2007.

7   As an example, in 1980 the unions in federal universities were victorious in a movement that demanded the immediate and universal inclusion of all scholars hired as helpers in the permanent staff of these institutions. Most of these had no graduate education at all. Nevertheless, they were assigned the position of assistant professor. The same decree (Decree 86.487/80) also disconnected the institutional career from the academic degree in federal universities, allowing scholars without doctorates to reach full professorship. This decree was only withdrawn in 1994. In another example, at the beginning of 2006, the University of São Paulo Teachers' Union (ADUSP) asked for a downgrade in the requirements for a career at the University, so that professors without Ph.D.s could be accepted, leading to secure tenured contracts.

8   As part of the civil service, Federal universities cannot decide about creating or closing down academic departments; cannot define the salary levels for their staff, which is the same for all federal institutions; and cannot transfer resources between budgetary items (investment, consumption, salaries, equipment, and so forth). Also acquisition of equipment and service contracts have to follow the strict rules of the public sector.

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Japan:
Origins, History and Transition to a
Universal Higher Education System

Akira Arimoto

1. Introduction

Higher education is changing rapidly throughout the world as a result of pressures from both outside and inside higher education systems and institutions. From outside, a range of social changes are prevailing, such as the emerging knowledge society, globalization, and the introduction of market mechanisms, and from inside, a significant number of recent developments in scientific knowledge are prompting reforms and innovations in higher education. It is also true to say that a lot of changes are occurring in the academic profession as a result of these same pressures and their effects.

There are some characteristics particular to the Japanese academic profession, and the national higher education system as a whole. Examples include: a stronger orientation to research than teaching as shown by the original Carnegie international survey of the academic profession; a pyramid form of stratification of higher education institutions (HEIs); conflicts between the German and American models that are manifestly visible and underlie the process of constructing a modern higher education system; the small proportion of female professors that make up the total number of academics; and the chair system being transformed by the introduction of new categories of academics such as *Junkyoju* (associate professor) and *Jokyo* (assistant professor), in order to improve academic productivity.

There are both historical and social reasons for these facts and phenomena. Some of the changes are still undergoing transformation and some are not likely to develop much further. This chapter aims to consider these issues and consists of five parts: the Japanese higher education system: its origins and heritage; Post-World War II change: the influence of the American model; the current higher education system; the academic profession in Japan; and concluding remarks.

2. The Japanese Higher Education System: its Origins and Heritage

2.1 The Establishment of the University of Tokyo and Characteristics of the Modern Japanese Higher Education System

As a modern university in Japan, Tokyo University was established in Meiji 10, or 1877, by the integration of the various institutions developed since the Tokugawa age. However, the real modern university was established in Meiji 19, or 1886, as the Imperial University (Teikoku Daigaku) consisting of five Faculties: law, economics, literature, science, and agriculture. Its name was changed to Tokyo Imperial University (Tokyo Teikoku Daigaku) in 1897 when Kyoto Teikoku Daigaku was established, followed by other Imperial universities such as Tohoku, Kyushu, Hokkaido, Osaka, and Nagoya (Table 1). These seven imperial universities are the leading universities in Japan right up to today, in terms of their history, status, prestige, position, hierarchy, culture, etc.

Table 1: Teikoku Daigaku by Establishment Order

1886 (Meiji10)	Tokyo Teikoku Daigaku
1897 (Meiji 30)	Kyoto Teikoku Daigaku
1907 (Meiji 40)	Tohoku Teikoku Daigaku
1910 (Meiji 43)	Kyushu Teikoku Daigaku
1918 (Taisho 7)	Hokkaido Teikoku Daigaku
1924 (Taisho 13)	Keijo Teikoku Daigaku
1928 (Showa 3)	Taihoku Teikoku Daigaku
1931 (Showa 6)	Osaka Teikoku Daigaku
1939 (Showa14)	Nagoya Teikoku Daigaku

2.2 Before World War II: Introduction of the German Research-Oriented Model

During the early stage of the establishment of the modern universities in Japan, the government tried to import advanced models from Western countries. As Shigeru Nakayama (1978) has described it, a period of intense "window shopping" preceded the selection of the most appropriate model to be adopted. Consequently, no single model such as from the UK, Germany, France, or the USA was imported. However, through a process of trial and error lasting many years, the German model of the university was gradually introduced through the establishment of a series of Teikoku Daigaku. For example, a chair system was introduced in Teikoku Daigaku in Meiji 28, or 1895, in order to raise the status of the academic profession and emphasize a research orientation (Amano, 1977). As Ikuo Amano has pointed out, the profession was not attractive at all for the best educated stu-

dents who graduated from Teikoku Daigaku compared with other careers that might appeal to them. The introduction of a chair system as a career goal in an academic organization was mainly designed to encourage such graduates to remain within academia as researchers.

Before that time, in 1886, when the Imperial University of Tokyo was established, the national government asked Hozumi Norishige, who was an international student sent by the government to the United Kingdom (UK) in order to study English law, to move to Germany (Prussia) to study German law instead, because German law was thought to be more fitted to the greater centralization within Japan. He became the first Japanese professor in the Faculty of Law where French professors had taught French law in French since the establishment of the Faculty. Only students who could understand French could follow the lectures. Students had to learn French as the second foreign language after English. However, from the introduction of German law and during the height of its influence, students applied to study German as the second foreign language in almost all national universities, which tended to follow the practices of the Imperial University of Tokyo (Nakayama, 1978). For example, even during the postwar period, when the author of this chapter was a student at a national university, it was normal for all students to be asked to study German, almost as a requirement. Of course, this traditional custom has been transformed recently so that students can now freely choose various foreign languages such as Chinese, Korean, Italian, Russian, Spanish, etc, as their second foreign language other than German.

Naturally, the introduction of the German model of university education brought about a research-orientated climate, which was a strong feature of the German system, although the original Humboldtian idea aimed to integrate research and teaching (Clark, 1995).

3. Post-World War II Change: The Influence of the American Model

After the war, in 1947, a new approach was introduced in Japanese higher education on the basis of a School Education Law influenced by the American education system. Universities were divided into two categories: the first consisted of the existing universities and the second category established a new type of university formed from the former professional schools (senmon-gakko). In this process of reconstructing the higher education system and its institutions, the former imperial universities (teikoku-daigaku) lost the title "imperial" and their status and prestige was reduced to that of a "university" (daigaku), which was the term also applied to the new institutions that had previously had lower status than the former imperial universities.

By introducing the American model, a single track was realized in the school system with a pattern of attendance of 6, 3, 3 and 4 years. The prewar hierarchy of higher education institutions was abolished in name, although the former imperial

universities have substantially retained their higher status and prestige until today thanks to the national government's protection through the process of resource allocation among higher education institutions.

In addition to this, the German model has continued to be influential in the national higher education system, as well as in academics' consciousness, albeit in a covert fashion. In particular, the research orientation has not been easily transformed into a teaching focus even today, despite the American model being introduced at the undergraduate level through the incorporation of general education into the curriculum. Before the war, general education took place at high school and professional education at the undergraduate level. After the war, general education on the US model was introduced in the two-year period of Kyoyo-bu during the undergraduate course. This new form of general education lasted for about a half century, until 1991, when it was abolished in a reform of higher education by the Ministry of Education (MEXT). Academic staff had previously been separated into two groups at the undergraduate level: one forming the Faculty of General Education (Kyoyo-bu) and the other responsible for professional education in Senmon gakubu (Professional Faculty). After 1991, this institutional separation was abolished and academic staff are now integrated in providing general and professional education at the undergraduate level and, largely, professional education at the graduate level.

4. The Current Higher Education System

4.1 Three Major Institutional Types

In the postwar period, Japanese higher education has diversified into three categories: universities (daigaku) as the long-term form, and junior colleges (tank: daigaku) and colleges of technology (kôto senmon gaku) as short-term types. These categories have arisen in response to the increasing massification of higher education. According to Martin Trow's model of higher education development, the Japanese higher education system remained in the elite phase between 1877 when the first university, Tokyo University, was established and the middle of the 1960s; massification followed this until the early 2000s, lasting as long as forty years, and perhaps including a post-massification stage (Ehara, 1994; Arimoto, 1996, 1998); since then Japan has entered the universal phase.

In 2006, the proportion of 18-year olds who enrolled in university reached 45 per cent which, in Trow's terms, would mean it has yet to go beyond the mass phase, although the share of those enrolled in the category of daigaku, including universities and junior colleges reached 52 per cent, and the comprehensive category of post-secondary education included approximately 85 per cent, which is well into the universal stage.

4.2 Three Major Sectors: National University Corporations, Local Public Institutions, and Private Institutions

Institutions in the higher education sector are divided into three categories: the national, public, and private sectors. These sectors consist of the prewar categories of university and professional school which were promoted to *daigaku* as previously described. These sectors have brought about the diversification of the academic profession today.

4.3 Characteristics of the Japanese Higher Education System

By making international comparisons between national higher education systems, we can identify some interesting traits peculiar to Japan.

First, among the three sectors, the private sector constitutes a large proportion of the system in terms of the numbers of both students and institutions. The legacy of the prewar hierarchical and elitist higher education system and postwar reforms have left two distinct types of universities: the national and public sectors that are controlled and also sponsored by the national and local government on the one hand, and the private sector on the other, which is regulated by the national government to some degree, but mostly regulated by market mechanisms.

It is noticeable that, in Japan, higher education is characterized by two sectors – public (and national) and private institutions – unlike many European countries, where most institutions are national or state universities regulated by the national or state governments. The Japanese system is similar to the American system in that it has both public and private sectors, but the balance between the two sectors is quite different: the share of the private sector in the US is about 30 per cent whereas in Japan it is about 75 per cent.

Global trends in marketization and privatization are clearly discernable owing to constraints on national and public expenditure on higher education. If we examine these trends, it is reasonable to suggest that the Japanese system was a front runner many years ago and, as a result, it has been successful to a considerable degree in sustaining the massification of higher education.

Second, higher education institutions constitute a hierarchy which was the intention of the national government in its policy of developing a modern higher education system. Burton Clark points out that the Japanese hierarchical system is similar to the UK system, where Oxford and Cambridge constitute the elite, and the French system, where the Grandes Ecoles occupy a similar position (Clark, 1983).

This landscape is different to that in the American system with its intermediate levels, and also to the German and Italian systems with their flatter structures. In this international comparison, it is interesting to note that the Japanese system is similar to that of the UK and France, which have about 800 years of higher educa-

tion history and tradition after its establishment during the Middle Ages, whereas it is only 130 years since the founding of the first modern university in Japan.

The institutional hierarchy was gradually formed during the historical development of higher education since the Meiji Restoration, when the modern higher education system was established through the adoption of advanced models from other countries. In this process, the stratification of institutions was shaped through government control and market mechanisms. Amano Ikuo has referred to the structure of "two sectors and two strata", in which the national (and public) sector is regarded as superior to the private sector and, in addition, the university is viewed as superior to the professional school (Amano, 1986). This process took place in the prewar period.

In the postwar period, the hierarchy consisting of the former imperial universities, the national universities, the public universities, and the private universities was established. In addition, the junior colleges joined the bottom end of the hierarchy during this time. It is evident that there is a huge gap in the allocation of resources from the government to the national and private sectors, and to universities and junior colleges.

Among 744 four-year universities operating in 2006, probably about 4 percent, (30), belonged to the category of "research university". Among these top universities, the former imperial universities belong to the first group including Tokyo, Kyoto, Osaka, Tohoku, Kyushu, Nagoya, Hokkaido, etc. followed by some national universities including Hiroshima, Tsukuba, Hitotsubashi, Tokyo Kogyo, Kobe, and some private universities including Keio, Waseda, Doshisha, and Ritsumeikan.

5.   The Academic Profession in Japan

5.1 Definition

Taking a broad perspective, the academic profession is defined as consisting of full professors, assistant professors, lecturers, and assistants who usually work for a university, specialize in an academic discipline, engage in academic work, and possess their own culture (Arimoto, 2005a). In Japan, the criteria for becoming a professor are included in article fourteen of the university charter: "(1) to have a doctoral degree or its equivalent abroad, together with additional academic achievements; (2) to have academic achievements comparable with the first criterion; (3) to have experience of the career of a professor; (4) to have experience of being an assistant professor and, in addition to this, to have achievements in research and teaching, (5) to have excellent skills and experience of teaching in the fields of arts and athletics; (6) to have excellent knowledge and experience.

Since this is a very general definition of the academic profession, a more detailed description is needed.

First, academic work is one of the vocations. Harold Perkin even described it as a "key profession" that educates people not only for the academic profession itself, but also for other professions (Perkin, 1969).

The profession has the following characteristics. "(1) The profession exclusively offers a service and is based on highly organized knowledge and skills; (2) The offer of the service is conducted primarily for the public good rather than for profit; (3) Autonomy in its activity and self-regulation as a professional association are recognized to a considerable degree by society" (Arimoto, 2005a).

Second, the academic profession is delineated by the academic disciplines and related to the functions of knowledge. In other words, academic work is associated with the discovery, dissemination, application, and control of knowledge and it is performed through research, teaching, service, and management and administration, respectively.

Teaching is one of the functions which was institutionalized by the university when it was established in the Middle Ages. Research was institutionalized in the modern university and the academic profession had its origins at this point, especially if we take the view that research is necessary for an academic career, which is the view of Donald Light (1974).

The Japanese academic profession also emerged at this stage, with the importing of several advanced ideas from European countries, especially from Germany, emphasizing a research orientation above teaching. The first chair system was introduced in Teikoku Daigaku in 1895 as previously described, ensuring that the successful candidates were researchers who would advance the academic disciplines they specialized in. This tendency to emphasize research and a research orientation above teaching has been carefully maintained until today, through the commitment of academic staff to the chair system, the disciplines, research activity, and the academic profession itself.

Third, the academic profession believes in, and has a culture of, reflection on the effects of knowledge and the disciplines. Academics usually seek to uphold a series of principles such as academic freedom, freedom of teaching, freedom of research, freedom of science, and academic autonomy.

These principles and philosophies, however, are bringing about differentiation among academics as illustrated by the diversity of academic associations. In the field of higher education research, for example, there are at least four large associations: Daigaku Kyoiku Gakkai (the Liberal and General Education Society of Japan); Daigaku Kanri Gyosei Gakkai (the Japanese Society of University Administration and Management); Kotoh Kyoiku Gakkai (the Japanese Association of Higher Education Research); Daigakushi Kenkyukai (the Research Association of University History). In the field of education research, there are at least 100 associations. Burton Clark's description of the academic profession as "Small Worlds, Different Worlds" is particularly true of Japan (Clark, 1987).

Fourth, in higher education, expansion and stratification are taking place simultaneously, and the key concepts that help us to understand these processes are massification, differentiation, and complexity. For example, if we look at the postwar statistical trends we can see the extent of expansion (Table 2). There were 201 universities in 1950, 446 in 1980, and 744 in 2006. The totals for students enroled in universities were 224,923, 1,835,312, and 2,859,207 respectively. Academics numbered 11,534, 102,989, and 164,483 in each of these years. Among the junior colleges, the numbers for each category increased by similar amounts. As far as the universities were concerned, comparing the statistics in 2006 with those of 1950, the number of institutions increased by a factor of 3.7, students by 12.7, and academics by 14.35.

It is clear that expansion progressed rapidly during the last half century. It also appears from other data that differentiation accompanied this massification.

Table 2: Numbers of Institutions, Students, and Academics, 1950 -2006

Academic year	Universities	Junior colleges	University students	Junior college students	University academics	Junior college academics
1950	201			15,098	11,534	2,124
1980	446	149	224,923	371,124	102,989	16,372
2006	744	469	2,859,207	202,197	164,483	11,279

Source: MEXT

In 1955, immediately after the war, there were 38 thousand academics, of which 59.7 per cent belonged to the national sector, 11.6 per cent to the public sector, and 28.7 per cent to the private sector. In 2006, there were as many as 164 thousand academics, of which 36.9 per cent were employed in national universities, 7.1 per cent in the public sector, and 56.0 per cent in the private sector. It is apparent that, between these dates, the national sector decreased in relative size, while the private sector increased. In addition to these permanent academics, there are 164 thousand part-time academics, of which 20.5 per cent are in the national sector, 7.3 per cent in the public sector, and 72.2 per cent in the private sector. It is clear that a minority of part-time academics are employed in the national and public sectors, while the vast majority can be found in the private sector.

If we turn to the number of academics in graduate schools, there are 88 thousand, or 56.6 per cent of all academics.

The proportion of academics in the national sector in graduate education is high (36.9%), although the statistical proportion of academics in this sector out of

the total number of academics is no larger than their counterparts in the private sector (56.0%).

Differentiation is observable not only between the various sectors within the higher education system, but also in the balance between male and female academics. The proportion of females among the total number of academics increased from 5.2 per cent in 1955 to 17.4 per cent in 2006. The proportion had been 8 per cent in the Carnegie international survey which was conducted in 1992, and this figure was the lowest of the 14 countries that participated in the survey (Altbach, 1996; Arimoto and Ehara, 1996; Arimoto, 2005b). The situation has improved to a considerable extent in the past fifteen years but, even so, the proportion still needs to be improved. Although the average is 17.4 per cent (28,597 out of 164,483), there are relatively fewer female academics in the national sector (11.4%) than either the public (24.5%) or private (20.4%) sectors. Some national universities are reportedly intending to establish a target of approximately 25 per cent for the proportion of women academics.

As shown in Table 3, if we analyze the 164 thousand permanent academics in more detail, it is apparent that the proportions in different positions vary considerably: among 712 presidents, 7.6 per cent are female; 5.5 per cent of 672 vice presidents, are female; out of 66,128 professors, 10.5 per cent are female; among 38,845 associate professors, 17.7 per cent are female; 25.2 per cent of 20,762 lecturers are female; and out of 37,374 research assistants, 25.2 per cent again are female. Clearly, there are fewer females in higher positions, and more females in lower positions. At national universities, the figures reveal even smaller proportions of female academics.

The law of "higher and fewer" is obviously working. The share of female academics who are teaching in graduate schools is 10.8 per cent, compared with 17.4 per cent of all academics.

The proportion of the academic posts held by foreign academics is also at a low level. In 1995, there were 3,858 foreign academics teaching in Japanese universities and colleges, and by 2003 they numbered 5,724. This amounts to an increase by a factor of 1.48, which is probably not a sufficient expansion at a time of globalization in higher education.

A glimpse of the data on the academic profession can help to illustrate the increasing massification, differentiation and complexity in the world of academics. Actually, the situation is more complicated at the level of individual institutions, organizations, groups, etc. expanding within the national system.

Table 3: Number of University Academics by Positions 2006 (permanent staff)

	Total	Total male	female	National total	male	female	Public total	male	female	Private total	male	female	Foreigners (recitation) total	male	female
Total	164,483	135,886	28,597	60,712	53,762	6,950	11,739	8,862	2,877	92,032	73,262	18,770	5,724	4,323	1,401
President	712	658	54	87	85	2	76	64	12	549	509	40	4	4	-
Vice president	672	635	37	252	247	5	40	34	6	380	354	26	4	3	1
Professor	66,128	59,154	6,974	21,932	20,493	1,439	4,028	3,416	612	40,168	35,245	4,923	1,646	1,373	273
Assoc. professor	38,845	31,960	6,885	17,569	15,543	2,026	3,142	2,384	758	18,134	14,033	4,101	1,777	1,342	435
Lecturer	20,752	15,523	5,229	4,825	4,010	815	1,656	1,110	546	14,271	10,403	3,868	1,595	1,083	512
Research assoc. (re-citation)	37,374	27,956	9,418	16,047	13,384	2,663	2,797	1,854	943	18,530	12,718	5,812	698	518	180
Graduate School	94,532	84,337	10,195	51,529	46,608	4,921	7,194	6,068	1,126	35,809	31,661	4,148	-	-	-

Source: MEXT 2006.

Perhaps more diversified and complex conditions will be observable as we study the Japanese academic profession in the higher education system from various perspectives including at the system, sectoral, institutional, organizational, group, and individual level. At the level of the institution, for example, there are various kinds of differentiating factors: faculty, school, department, chair, institute, center; graduate school, undergraduate education; university, four-year college, two-year junior college; research university, graduate-level university, comprehensive university, professional university, liberal arts university; status, age, academic discipline, and field of specialization.

The academic profession is likely to be segmented by these individual factors so that their cultures, climates, behavioral patterns, and consciousness display few uniform characteristics. In other words, no single picture of the academic profession will emerge. We can recognize in this situation the image of "small worlds, different worlds".

5.2 Four Levels of Academic Positions

Before 1 April 2004, academic faculty in both the national and public sectors were civil servants, while in the private sector faculty were governed by contract. At this time a new occupational classification was introduced throughout all sectors, consisting of four levels: assistant (Joshu), assistant professor (Jokyo), associate professor (Junkyoju), and professor (Kyoju) (CEC, 2004). The positions of Koshi and Kyoju were retained without any change. In the new system, the former Joshu was separated into two parts: Jokyo which is a career researcher leading to Kyoju; and Joshu, whose main task is to assist research and teaching.

The new position of *Jokyo* was established on the basis of a contract, lasting approximately five or seven years, depending on the individual institution, and leading to promotion to the position of Junkyoju, which is almost equivalent to Kyoju in terms of responsibility for academic work.

Before this new system was introduced, the Jokyoju was expected to support the Kyoju, but this duty was abolished so that both positions are now almost equal. The former Jokyoju was defined by the School Education Law as "assisting the Kyoju's work" and internationally it was regarded as an assistant role. As a result, it was changed to Junkyoju. At the same time, the former Joshu was divided between the roles of Joshu or Jokyo which leads to Kyoju. This new nomenclature was agreed in order to retain the original title, but also to distinguish it from the former *Jokyoju*.

It is interesting to point out that the title 'Jokyo' was used for an academic position in the old university some 1500 years ago. After the Reformation of Taika in 645, the first school, in Otsukyo near Kyoto and attached to the government, was established in approximately 667, introducing an education oriented towards Confucianism (Takahashi, 1978, p. 65). Following the establishment of this

school, a series of universities were founded in the capital and other localities on the basis of a "school order" set in the law of Taiho (Taihoritsuryou) in 701. These universities were quite different from their modern equivalents. An ancient university, called a Daigakuryo, was a bureaucratic place in Shikibu-sho (Ministry of Shikibu), consisting of clerks, called Kami, Suke, Ju, Zoku, and academic staff, called Meikyo, On, Sho, San, and also known as Hakase (doctor), being equivalent in status to a modern professor, and, at a lower level of academic staff, the post of Jokyo (Takahashi, 1978, pp. 68-69). Accordingly, the name *Jokyo* was reintroduced in 2004 as the title of one of the grades in the new classification of university academic staff.

6.   Concluding Remarks

(1) Japanese higher education has its own characteristics associated with its origins and heritage. In particular, there was no history of higher education immediately prior to the Meiji Restoration, about 130 years ago. Advanced ideas about higher education were extensively imported, particularly from Germany, because they were thought to be the leading higher education models.

(2) The national government invested in the most prestigious higher education institutions on the basis of these imported models, providing them with as many resources as needed to catch up with the advanced countries and to educate human resources to the highest level. These universities occupied the most prestigious places in the hierarchy of higher education institutions.

(3) Highly educated people who studied in the universities, particularly in the Teikoku Daigaku, could choose between so many attractive professions and vocations outside academia that they hardly ever selected an academic career. Consequently, the first chair system was introduced into the Teikoku Daigaku in 1895, and this has become the model for the academic profession throughout the country for the last century. These origins of the Japanese academic profession have reinforced a research, rather than a teaching, orientation.

(4) After the World War II, the American model of higher education was adopted and significant academic reforms were introduced. Some reforms were successful so that general education and various other kinds of innovation were realized in the higher education system and within institutions. However, some traditional ways and cultures were resistant to change. For example, in spite of the influence of the American model, a balance between research and teaching was not achieved for half a century, until 1998 when faculty development was institutionalized in universities and colleges by a law aimed at enhancing teaching.

(5) Today, Japanese higher education is in transition to the universal stage of access after a period of massification. The system and the academic profession has been confronted with expansion, differentiation, and complexity. The academic profession has had to deal with the reconstruction of academic occupations

through the creation of new positions, such as the Junkyoju and the Jokyo. The transformation of the chair system, which was originally introduced more than a century ago along the lines of the German model, to a departmental system more akin to the US model after World War II has been another change. Scholarship has also been reconsidered in order to strengthen teaching in relation to research. Within such a changing environment, it is important that Japanese academics construct a new vision and identity for the profession.

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Australia:
Adjustment to the New Management and
Entrepreneurial Environment

Grant Harman and Lynn Meek

1. Introduction

Using national survey data and a variety of secondary sources, this chapter explores key challenges facing the academic profession in Australia today and how academics have responded. Particular attention is given to how academics have responded to a more managerial university administration and culture, with a much stronger emphasis on entrepreneurial activities within departments and faculties and enhanced university-industry links. The chapter summarizes major Australian policy and contextual changes, explores how academics in general have reacted, and documents aspects of the impact of changes on academic qualifications, work roles and practices, job satisfaction and academic values.

Internationally, the academic profession in many countries has gone through a series of sudden shocks, rapid change and confronting pressures that have challenged many traditional academic assumptions, work practices and how academic work is conceptualized and pursued. In many cases, a sense of crisis has been clearly evident, with complaints voiced by leading academics and strong attacks made on government policy and how universities are managed (Altbach, 2000; Enders and Teichler, 1997). Massification has led to rapid growth in the number of academics, raising issues about quality and bringing into question many of the privileges that academics enjoyed in the much smaller elite university systems. Fiscal constraints have impacted on higher education in both rich and poor countries, with major implications for academic workloads and productivity. The search for societal relevance has challenged many more traditional values about knowledge and the freedom of academics to choose their own research topics. Higher education institutions are now expected to provide more equal access for students from all social groups and, at the same time, offer courses highly relevant to workplace needs. In many cases, the academic profession has become increasingly fragmented, with academics suffering reductions in their political standing

and income levels, leading to a marked increase in their sense of alienation (Enders, 2006).

The situation in Australia is very similar to that observed in other developed nations, although some observers consider that Australia's higher education system has moved further than most comparable nations down the path of entrepreneurialism and managerialism. The extent of these changes and the general reactions of Australian academics have been well documented in a number of studies (e.g. Marginson and Considine, 2000; Universities in Crisis, 2001). Not surprisingly, a considerable amount of academic writing by both higher education specialists and others about the recent changes in the Australian higher education system and their impact on academics has tended to be strongly negative. Studies by higher education specialists have reported in detail on the complaints of academics and their critical perceptions of how government policy and the new managerialism have impacted on their work. For example, based on over 2000 responses to a questionnaire distributed electronically in 12 representative universities, Anderson, Johnston and Saha (2003) provide a disturbing picture of the perceived threats to academic work and values, and the frustrations with higher work loads, increased bureaucracy, and inability to give adequate time to teaching and research. Social scientists and humanities academics have been particularly vocal in their criticism, The philosopher, Tony Coady, for instance, refers to "absurd and damaging (Government) reforms" (Coady, 2000, p. 5) while a leading political scientist complains of the damage to collegial relations, the erosion of the specific rights and privileges of academics, and the new managers who see "collegiality entirely as a practice of institutional self-management derived from universities medieval foundations and so fail to see the centrality of collegiality not only to traditions of university organization but to the disciplinary traditions within which academics produce knowledge" (Brett, 2000, p. 146). In this chapter, we will present a somewhat different but complementary view of how major changes have impacted on academic life. Our argument is that, while in many respects the adjustment to the new commercial and managerial environment has been painful and damaging, not all aspects of this transition have been negative. Rather, in a number of respects, many academics have made surprisingly impressive adjustments or accommodation to the new order. Australian academics today are better qualified than two decades ago. They work harder, are more productive in research, and continue to be keenly interested in academic roles. Many are highly successful in establishing research links with industry and other entrepreneurial activities.

To illustrate our argument, data will be drawn from surveys of academics generated by one of the authors (Harman, 1999, 2000, 2001, 2003, 2005, 2006). In particular we will utilize data from a sample survey in 2000 of science and technology academics in five "Group of Eight" (Go8) research-intensive universities (University of Sydney, Monash University, University of Western Australia, University of Queensland, and the Australian National University) and a 2002 na-

tional sample survey of social scientists in twelve universities representing the four main groups of universities (Go8, other pre-1987 universities, universities of technology, and new universities). Both surveys were undertaken primarily to explore research links with industry and research commercialization. We will also draw on 1977 and 1997 national data on academics (Harman, 2000) and a 1997 survey of science and technology academics in three "Group of Eight" universities (Harman 1999). All these surveys were directed to full-time teaching and research academics.

Table 1 provides summary information on respondents from the two surveys of science and technology academics in 2000 and social scientists in 2002. Some sharp differences will be noted between the two groups. This is partly a result of disciplinary differences, but also a reflection that the science and technology sample was drawn only from five research-intensive universities while the social science sample was a national sample. In both populations senior staff are over-represented, to a certain extent as a result of the staff lists used, and partly because questionnaire items may have attracted stronger interest among senior staff.

Table 1: Characteristics of Respondents in 2000 and 2002 Surveys
(percentages)

	Science and technology academics	Social scientists
	N=224	N=263
Gender		
Male	85.5	54.4
Female	14.5	45.6
Age		
Under 35 years	30.4	
Under 40 years		15.4
60 and over years	12.9	8.2
Rank		
Professor	25.3	14.3
Associate professor	34.4	17.6
Senior lecturer	31.2	29.7
Lecturer	7.7	32.6
Associate lecturer	1.4	5.5
Employment		
Full-time	93.7	91.3
Research only	5.1	5.4

Table 1 continued

	Science and technology academics	Social scientists
Field of teaching and research		
Science and technology		
Agriculture/vet. science	7.6	
Biological sciences	20.6	
Engineering	25.1	
Earth sciences	4.0	
Mathematics/computer science	12.1	
Medicine/medical sciences	11.2	
Physical science	16.2	
Other	5.2	
Social scientists		
Economics/business/management		16.6
Education		29.2
Geography/planning		5.2
Psychology		14.0
Social work/social policy/government		5.9
Sociology/anthropology/linguistics		6.3
Other		22.9

2. Academics and the Policy and Management Context

In 2004, according to official statistics (Department of Education, Science and Training, 2004) Australian universities employed a total of 37,387 academics. Of these 61 per cent were male and 39 per cent were female, with females being mainly concentrated in lower academic ranks. Almost 23 per cent of academics were in the two senior ranks of professor and associate professor, while over 18 per cent were in the lowest rank of associate lecturer. Almost 34 per cent were aged between 50 and 64 years and so can be expected to retire in the next few years. While a high proportion of academics held full-time positions, some 12 per cent of full-time equivalent work effort was carried out by part-time or casual employees. About one quarter of the total number of academics held 'research only' positions (usually funded by external research grants) while the remainder held teaching and research appointments or, in few universities, 'teaching only' appointments. Of the total academic staff, 55 per cent held doctorates while another 20 per cent held masters degrees as their highest qualification. However, as

will be shown later, the proportion of full-time staff with doctorates is considerably higher.

Since the late 1980s, the Australian higher education system has experienced dramatic and far-reaching changes that have touched numerous aspects of university life. Particularly important have been:

– substantial increases in total student enrolments and international student enrolments, and the development of stronger, larger and more comprehensive institutions;
– a more market-oriented and competitive regulatory environment, with less institutional dependence on government operating grants and substantial increases in institutionally-generated revenue and more dependence on student fees;
– a more student-focused approach to course offerings and student learning, and new access and equity initiatives;
– major expansion in research activity and research training, with closer university-industry research links, and an increased emphasis on competition in research allocations;
– new quality assurance initiatives, improved monitoring and evaluation mechanisms, and a more international orientation; and
– within universities, a more corporatist and entrepreneurial approach to institutional management and governance.

The most important and far-reaching developments were the adoption of the more market-based funding environment and implementation of policies leading to substantial growth in self-earned income by universities. This has changed quite fundamentally the operation of universities and their relationships with the state. Universities have not only been pressured to become increasingly self-sufficient financially but the structural relations with government have changed from being academic referenced in a traditional form to being state referenced and then to being market referenced (Gallagher, 2000). Universities were given greater discretion to respond to changes in student demand and encouraged to expand both overseas and domestic fee-paying courses, with the result that today almost 25 per cent of total students are fee-paying international students. Today many universities derive less than 40 per cent of their total annual income from direct government grants for teaching and research and, with falling funding per student, staff:student ratios have deteriorated to a marked extent. While the number of students increased by almost 50 per cent over the period 1995 to 2004, academic staff numbers increased by only 7.3 per cent.

3. Academic Qualifications and Work Roles

Australian academics today clearly are much better qualified than they were in the 1970s. Table 2 provides detail on the highest academic qualifications held by respondents in both the 1977 and 1997 national surveys and for the 2000 survey of science and technology academics and the 2002 survey of social science academics. The proportion holding doctorates increased from about 54 per cent in universities and 15 per cent in colleges of advanced education (CAEs) in 1977 to about 62 per cent in 1997 in the consolidated universities which included former CAEs. Even higher proportions with doctorates were reported in the 2000 and 2002 surveys, although junior staff members were under-represented in both these surveys.

Table 2: Highest Academic Qualifications of Respondents (percentages)

	Doctorate	Masters	Grad Dip/Bach	Other	
1977					
Universities	53.5				N=1368
CAEs	15.2				N=1134
Total	36.2				N=2502
1997					
Group of Eight Universities	75.3	15.0	8.1	1.6	N=217
Other Pre-1987 Universities	65.1	20.5	12.6	1.9	N=215
Universities of Technology	58.6	31.3	10.2	0.0	N=128
New Universities	38.2	50.0	11.5	1.3	N=156
Total	61.5	26.7	10.5	1.3	N=746
2000	94.4	1.9	1.0	2.7	N=215
2002	74.5	21.2	4.0	1.0	N=275

Despite concerns about deteriorating staff: student ratios and working conditions, respondents in both the 2000 and 2002 survey populations showed themselves to be surprisingly strongly committed to their roles as teachers and researchers. Table 3 reports responses with regard to the degree of interest in key work activities, and also compares this with limited data available from the 1977 and 1997 national surveys. By far the highest degree of interest was in research and writing and various forms of teaching, with a decided increase over time in interest in research.

Table 3: Percentages who Rated the Following Activities as 'Very Interesting' and 'Interesting'

	Academics 1977	Academics 1997	Science and technology 2000	Social scientists 2002
Research and writing	78.0	86.3	91.3	94.8
Supervision of research students			81.5	83.7
Administration	14.3	7.5	12.9	18.3
Committee work	11.4	8.8		
Leading a research group			61.6	66.9
Teaching	78.4	72.8	70.4	82.2
Consulting with students	78.4	85.5		
Working with profession/industry/ government department			43.8	56.4
Preparing research grant applications			15.2	20.1

In view of the high degree of interest in academic work, it is not surprising that most academics on average work long hours each week. Table 4 reports on average hours spent per week during the semester in different work activities for respondents from the 2000 and 2002 surveys and also provides comparative data from national surveys of Australian academics in 1977 and 1997 (Harman, 2000). What stands out is that the average working week for Australian academics generally has increased by about five hours per week since 1977 and that, despite these changes, academics are spending about the same time each week in research activities. With regard to teaching, it is more difficult to draw conclusions since the questionnaire items used varied somewhat between surveys, but it appears that the total time spent in various teaching activities did not vary greatly – 1977: 19.9 hours; 1997: 19.8 hours; 2000: 18.1 hours; and 2002: 18.2 hours. However, time spent on administration increased from under 4 hours in 1997 to 7.8 hours in 1997 and to between 9 and 11 hours more recently, reflecting the extra load of regulation and reporting requirements.

Table 4: Hours per Week Spent by Full-time University Academics on Different Work Activities during the Semester

	All academics 1977	All academics 1997	Science and technology 2000	Social scientists 2002
Undergraduate teaching	-	-	10.6	10.9
Lectures and tutorial groups	7.0	7.7	-	-
Preparation of new courses, lectures, tutorials	6.6	6.5	-	-
Laboratory classes	2.7	1.7	-	-
Student appointments	3.6	3.9	-	-
Postgraduate teaching including supervision of postgraduate students	-	-	7.5	7.3
Administration including research project Administration	3.7	7.8	8.8	10.7
University/Faculty Committees	1.9	2.9	2.8	3.3
Interaction with colleagues	-	-	5.0	4.1
Research and writing	10.2	10.9	10.6	11.4
Consultancies/professional work	3.8	4.1	3.3	3.3
Total	44.3	49.7	48.7	49.5

Respondents were asked to rate their own performance in key academic activities and the results are summarized in Table 5. Of particular note are the high ratings given to performance in key academic work roles, with the highest ratings being given to teaching undergraduates, postgraduate supervision and research and writing. These data provide reassurance that, despite bitter complaints and frustrations, academics work harder than ever, continue to find high levels of interest in core academic activities and judge themselves to be performing at high levels in these activities.

Table 5: Percentages who Rated their Performance in Key Work Roles as 'Very High' and 'High'

	Science and technology	Social scientists
	N=224	N=269
Teaching undergraduates	71.5	86.0
Postgraduate supervision	67.9	78.3
Research and writing	64.3	72.6
Writing external grant applications	43.3	29.5
Administration/committee work	39.9	57.1
Securing external grants	42.3	27.4

4. Teaching and Judgements about Students

In both the 1977 and 1997 national surveys, respondents were asked about their teaching responsibilities for the current semester in terms of student course levels. The results are summarized in Table 6. Not surprisingly, the overall balance has changed markedly over the twenty-year period reflecting major expansion in post-graduate studies. In 1977, some 48 per cent of academics were involved entirely in undergraduate teaching while by 1997 this proportion had declined to 27 per cent. While only about 3 per cent were involved entirely in postgraduate teaching in 1977, by 1997 this proportion had increased to almost 10 per cent.

The 2000 and 2002 surveys included items about postgraduate supervision. Just over 85 per cent of respondents from the five Go8 universities were involved in supervision with the number of students being supervised ranging from 1 to 15, but with 85 per cent of those involved in supervision working with between 1 and 5 students. Respondents in the national survey of social scientists from all types of universities reported supervising between 1 and 20 students, with 78 per cent of those working with between 1 and 5 students.

Table 6: Teaching Responsibilities of Respondents 'this Semester'
(percentages)

	Entirely under-graduate	Under-graduate and graduate	Entirely graduate	Not teaching	
1977					
Universities	34.0	60.0	3.7	2.3	N=1394
CAEs	62.8	31.9	2.2	3.1	N=1245
Total	47.6	46.8	3.0	2.7	N=2639
1997					
Sandstone Universities	22.6	61.1	11.3	5.0	N=239
Other Pre-1987 universities	26.7	62.6	14.2	5.8	N=206
Universities of technology	25.0	55.0	14.2	5.8	N=120
New universities	36.0	51.3	9.3	3.3	N=150
Total	27.0	58.5	9.7	4.9	N=715

Typically, academics in modern higher education systems express considerable concern about the language and mathematical skills of incoming students and this concern tends to increase particularly in times of rapid expansion in student enrolments. In both 1977 and 1997 national surveys respondents were asked to indicate whether in recent years the ability of incoming students to write clear expository prose had improved, deteriorated or remained unchanged. The results are summarized in Table 7. While a slightly higher proportion of staff in 1997 compared with 1977 thought that student competence had deteriorated, the most interesting conclusion is that, overall, the pattern of responses remained largely the same, with very small proportions judging student competence as having improved, while well over half thought there had been deterioration and about 40 per cent thought that competence was unchanged. Moreover, despite substantial increases in participation rates and enrolment growth over the twenty-year period, the percentage that judged competence to have deteriorated increased by only 7.3 per cent.

Table 7: Staff Views on the Ability of Incoming Students to Write Clear Expository Prose (percentages)

	Improved	Deteriorated	Unchanged	
1977				
Universities	3.9	54.9	41.1	N=1288
CAEs	7.6	49.5	42.9	N=1173
Total	6.6*	50.9*	42.4*	N=2461
1997				
Sandstone universities	4.3	53.4	42.2	N=236
Other Pre-1987 Universities	2.4	60.8	36.8	N=209
Universities of Technology	4.9	52.8	42.3	N=123
New Universities	2.6	66.2	31.1	N=151
Total	3.5*	58.2*	38.3*	N=715

* Differences are statistically significant ($P < 0.05$)

5.   Research Activities

Data from the surveys of science and technology and social science academics paint a picture of high levels of research activity and research productivity, active participation in conferences, and high levels of team research, and an increasing trend towards multi-author publications. Many respondents also are active in working with industry and/or government agencies, and in attracting external research funds.

Publication rates today are considerably higher than those reported for Australian university academics generally in the 1977 Williams committee national survey (Harman, 2000). As demonstrated in Table 8, the mean total number of refereed journal articles published throughout academic careers doubled between 1977 and 1997 and appears most likely to have increased substantially since then. Book production also more than doubled between 1977 and 1997. In the last three years, on average, science and technology respondents reported that they have published 12.6 referred journal articles while social scientists reported having produced 6.0 refereed journal articles.

Table 8: Average Number of Journal Articles and Books Published by Academics

	Total articles	Total books	Articles in last 3 years
All university academics 1977	17.1	0.6	
All pre-1987 universities 1997	35.4	1.4	
Science and technology academics 2000	85.4	1.2	12.6
Social science academics 2002	23.6	3.8	6.0

Despite strong beliefs that social scientists generally pursue their work individually, about three quarters of social science respondents report that they collaborate with other researchers on current research projects, although such research collaboration often tends to be on a fairly non-hierarchical basis within informal, small teams. Not surprisingly, joint authorship is more common among science and technology academics than social scientists.

Research collaboration with academics in other Australian institutions and overseas is common and is not surprising in view of the high level of conference attendance. Well over 90 per cent of social scientists regularly attend at least one Australian conference annually, while a surprising 75 per cent report regular attendance at overseas conferences. The high rate of conference attendance raises fascinating questions about university funding for conferences and about the extent to which conference attendance is funded by support from external research grants and consultancies, or from private sources, especially as only about 40 per cent of science and technology respondents and about 27 per cent of social scientists reported that internal funding to attend conferences was 'satisfactory' or 'very satisfactory'.

Another important dimension of research activity is why academics undertake research and what their research aims to achieve. Table 9 summarizes responses to identical items that were used in both 2000 and 2002 surveys. For both groups, the major motivation is personal or intrinsic interest, followed by inputs to teaching, and research activity leading to publications. Over 64 per cent of social scientists say that helping with social problems and policy development is 'important' or 'very important', but only 45 per cent see helping the disadvantaged as being 'important' and 'very important'. These results are something of a puzzle since the social sciences have been traditionally concerned with helping with social problems, contributing to public policy, and addressing issues related to disadvantage.

Table 9: Reasons that are Regarded as Being 'Very Important' for Doing Research (percentages)

	Science and technology	Social scientists
	N=224	N=268
Motivates and interests me	90.5	94.0
Enhances department's profile	40.2	47.4
Helps with social problems and policy development	NA	64.1
Improves my chances of promotion//career advancement	45.0	50.3
Helps the disadvantaged	NA	45.2
Provides inputs to teaching	59.9	75.1
Leads to publications	63.2	72.0

6.   External Research Funding and Links with Industry

Despite complaints from academics about university pressures to attract external research funds and work collaboratively with government agencies and industry, impressive proportions of respondents from both groups in the 2000 and 2002 survey populations are, in fact, actively involved in these activities. Table 10 summarizes the main sources of external research support for both groups and demonstrates impressive rates of success. Significant proportions of both groups attract research support from national research councils (i.e. the Australian Research Council (ARC) and the National Health & Medical Research Council (NHMRC)) and from government departments/industry/business. While science and technology academics are clearly more successful than social scientists in attracting research support from the national research councils, surprisingly the level of support from the combined category of government/industry/business is only marginally higher for science and technology academics than social scientists.

Table 10: Sources of External Funds Attracted by Science and Technology and Social Science Academics in Group of 8 Universities (percentages)

	Science and technology	Social scientists
	N=224	N=263
Individual Sources		
ARC Large/discovery grants	47	15
ARC Collaborate/Spirt grants	31	9
NHMRC grants	11	6
Grants/contracts with government departments	24	39
Grants/contracts with industry/business	35	18
Private foundations	11	-
International organizations	13	-
Summary Categories		
Total national research councils	62	17
Total for government/industry/business	47	44

The sums attracted by both groups are considerable. Of those science and technology academics with external funding, about 52 per cent of respondents with government grants and contracts and over 60 per cent with company funding attracted more than AUD$250,000 in total over the past three years. The sums won by social scientists tended to be smaller, but 50 per cent of those with external funding had attracted AUD$100,000 or more in the past three years.

While almost 70 per cent of social scientists agree that university entrepreneurial efforts threaten academic values, 40 per cent of these respondents report having conducted research in the past three years with funding from a government agency. Most commonly, government department research funding comes as a result of a direct approach to researchers by the sponsor, but almost as important is funding which results from researcher responses to public advertisements, and direct approaches to sponsors. Social science respondents report a high degree of overall satisfaction in working with government departments. Over 61 per cent express a 'high' or 'fairly high' overall level of satisfaction in working with the particular government department for their last project, but only 41 per cent report a 'high' or 'fairly high' level of satisfaction with utilization of their findings.

Table 11 reports on the perceptions of science and technology respondents about their experience with university research links with industry. Respondents see the effects as highly positive in terms of enhancing career opportunities for students, attracting additional resources, opening new lines of research, and enhancing the university's or department's prestige. On the other hand, only about

one third of respondents think that these links will diminish publication productivity, and only about one in five think industry links will diminish the scholarly prestige of the researchers involved.

Table 11: Percentages of Science and Technology Academics who Said 'Agree' or 'Strongly Agree' to the Following Statements with Regard to Industry Links

Provide resources for research unavailable elsewhere	62.8
Result in the decreased publication productivity for the researchers involved	35.2
Enhance the university's or the department's prestige	50.5
Lead to an emphasis on 'quick-fix' solutions rather than long-term basic research	46.1
Diminish scholarly prestige of involved researchers	19.8
Enhance career opportunities for students	68.7
Open new and promising avenues of research	54.9
Contribute to breakthroughs in basic science	24.5

Science and technology academics produce considerable amounts of research outputs of commercial value. Respondents to the 2000 survey as well as an earlier 1997 survey of science and technology academics in three Group of Eight universities (Harman 1999) were asked whether their research had resulted in various outcomes and the results are summarized in Table 12. About 20 per cent in both groups said that their research had resulted in patent applications and between half and three quarters of those said that patents had been granted and licensed to companies. About one in five respondents said that the results had been a product or service being marketed, but only 5 per cent or less said that their work had resulted in a start-up or spin-off company. Results for both years are highly similar.

Table 12: Percentages of Science and Technology Respondents who Reported that their Work had Resulted in the Following Outcomes

	1997	2000
	N=196	N=222
Patent applications	19.5	21.5
Patents or licenses	11.7	16.1
A product or service that is currently being marketed	20.5	22.7
Software with commercial applications	20.9	13.6
A start-up or spin-off company	3.2	5.4
Trade secret (information kept secret because of its proprietary/other value)	13.0	12.0

One concern sometimes expressed is that industry research funding can adversely affect academic behavior leading some academics to neglect their teaching, publishing and service to their department and university. However, on the basis of our work, this appears to be far from the case and, in fact, science and technology academics with industry funding tend to supervise larger numbers of doctoral students, spend more hours per week in post-graduate teaching and have appreciably better publication records than their colleagues without industry funding. On the other hand, they are less supportive than those without industry funding that research should be investigator driven rather than target oriented, but express greater interest about working with industry and admit that their choice of research topics is often influenced to a greater extent by the likelihood of commercial applications and of funding from industry sources (Harman, 1999, 2001).

Another consequence of working with 'industry' is that academics are sometimes not free to publish research results without the consent of their sponsor. This issue was explored with the year 2000 science and technology respondents, although the same issue had been explored in a 1997 survey of science and technology academics in three Go8 universities. Somewhat surprisingly, 19 per cent of respondents in the 1997 survey and 28 per cent in the year 2000 reported that they had at least once deliberately delayed publication for more than six months. This figure is higher than often assumed, although similar results were found in an American study where almost 20 per cent of biotechnology scientists reported that over the past three years publication of research results had been delayed for more than six months (Blumenthal et al., 1997). However, our survey results indicate that protection of self-interest is as important a reason for delaying publication as protection of the property of the sponsor.

7. Academic Values and Orientations

Our data from the 2000 and 2002 surveys together with earlier data confirm that Australian academics hold fairly traditional academic values and are highly critical of substantial elements of Commonwealth Government policy, the new managerial environment, and many aspects of current university workplaces. National survey data collected in 1997 indicate that only one in five respondents thought that the Dawkins reforms had been needed while 70 per cent disagreed with the proposition that coursework postgraduate students should pay tuition fees. Over 80 per cent of respondents agree that Vice-Chancellors today are primarily CEOs and not academic leaders, 72 per cent say that academic freedom is being eroded while only about 30 per cent think that senior management in their university is competent. On the other hand, many respondents reported that they personally were involved in commercial activities, 40 per cent being involved with external consultancies and one quarter in recruitment of fee-paying international or domestic students.

Of the social scientists surveyed in 2002, 67 per cent said that university entrepreneurial efforts threaten academic values, about 55 per cent that charging domestic students tuition fees is wrong and over 70 per cent were opposed to university efforts to commercialize research findings. Only 28 per cent said they support university efforts to commercialize research findings and only one quarter rate highly staff morale and opportunities for academic involvement in policy development. On the other hand, 82 per cent rate as 'high' or 'very high' their university's emphasis on staff winning external research grants.

Science and technology academics surveyed in 2000 demonstrated similar traditional values related to research. Despite the fact that some 40 per cent of respondents had industry research funding, only 27 per cent disagreed with the proposition that creating knowledge for profit is less important than creating knowledge for its own sake, while 40 per cent agreed that basic research is more important than applied research.

With regard to job satisfaction, only 37 per cent of 2002 social science respondents reported that morale in their department or school to be satisfactory or very satisfactory while only 42 per reported favorably on the quality of department or school management. Similarly science and technology respondents in 2000 gave low ratings to the encouragement and support of colleagues. Taken together these data suggest a serious breakdown in social relations within departments. On the other hand, the 1997 national survey of academics found that 76 per cent of respondents said they were satisfied with the courses they taught and 62 per cent rejected the proposition that, if they had their time over again, they would not be an academic. The Carnegie survey in the early 1990s produced similar results, with 77 per cent of Australian academics saying that they were satisfied with the courses they taught and 66 per cent disagreeing with the proposition that if they had their time over they would not become an academic (Altbach, 1996, pp. 15-17).

At the same time, it should be noted that in our 1997 survey 82 per cent of respondents said that academics at their institution work much harder than five years ago, 59 per cent said that their department has insufficient administrative support, and 62 per cent said that at their institution promotion opportunities were too limited. Based on national surveys of academics, McInnis (1999, p. 1) reported a deterioration of general job satisfaction from 67 per cent in 1993 to 51 per cent in 1999 while Anderson, Johnson and Saha (2003, pp. 96-97) reported that two thirds of their respondents thought that there had been a change in job satisfaction for the worse, with many respondents attributing declining job satisfaction to not being able to perform core work activities to the extent to which they are able, lack of rewards and recognition, and changes in the way universities are managed.

8.   Conclusions

This chapter documents major challenges that have faced academics over the last two decades and provides data to show some of the ways in which academics and the academic community have responded to these challenges. In particular the chapter deals with the influence of a more entrepreneurial and market-oriented policy framework and a more managerial university administration and how these factors have impacted on academic work and values.

The chapter provides a somewhat different but complementary view of the academic profession today in Australia. It does not contradict the dominant view that major changes in the policy and management environment have had major adverse impacts on academics and that transition to the new order has been painful and damaging for individual academics as well as the academic profession, with many individuals feeling deeply frustrated, disillusioned and angry. Academics clearly have had to cope with decidedly higher workloads, heavier administrative duties, more demanding levels of regulation and reporting requirements, management incompetence at both university and departmental levels, and deteriorating social relations within academic departments. They report relatively low levels of morale both across their universities and in their departments, and see their academic colleagues as being less supportive than they were in the past.

Yet the other side of the coin is that many academics appear to have made remarkably successful transitions to a more entrepreneurial and managerial environment. They demonstrate a high degree of interest in and commitment to their teaching and research. They work long work hours per week and report impressive levels of research productivity and substantial involvement in attracting external research funds. High proportions undertake research jointly with colleagues or work in small teams, rather than research individually, and often publish jointly with colleagues from their own university and elsewhere. Many report that their research is primarily driven by intrinsic interests and a desire to generate inputs for teaching, rather than by more utilitarian motives about social and policy reform. Many are involved in generating external research income and working with government agencies and companies.

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9

Malaysia:
New and Diversified Roles and Responsibilities
for Academics

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1. Introduction

The new global learning environment is increasingly characterized by rapid change and development. Today's world, characterized by intense technological and social changes, expects university graduates to function in an increasingly complex milieu. Such requirements are particularly true in the case of Malaysia, which in turn puts immense pressure on the academic community and the university system in general. Malaysian academics have continuously been urged by the government and society (especially the business and private sectors) to respond positively to changing times. Malaysian academics have responded to internal and external pressures fairly well, identifying areas where they can adapt and change accordingly. However, they remain strongly against the idea of turning public universities into profit-making entities per se. Indeed, the original 'idea of a university' is entrenched among members of the Malaysian Academic Staff Movement (see Persatuan-Persatuan Kakitangan Akademik IPTA Malaysia, 2006).

These opening comments bear upon the question of the roles and responsibilities of universities, which in turn impacts upon the work of academics. The concern here is on the nature and impact of the wider changes on universities and the responses of the academic community to such changes. These changes bring about paradoxes and tensions for the academic community.

2.   Changing Academic Profession - Relevance

2.1 The Traditional Role of Universities

The history of universities is intertwined in the histories of societies and regions. The same is true for Malaysian universities. Universities have frequently been regarded as key institutions involved in processes of social change and development. Malaysian universities have realigned towards goals like creating a 'knowledge society', an 'achievement society', a 'democratic society', a 'global society' or, more likely, a combination of all of the above. The roles played by universities in the development period are varied, multiple and contradictory; sometimes reproductive and sometimes transformative (Brennan and Lebeau, 2002). The main focus of a 'traditional university' in the Malaysian context is viewed in terms of its three primary roles: education, research and service to the community.

2.2 Shifting Currents in the Educational Landscape

Recent years have seen marked changes in what we understand as university education and the academic profession to be. The new emphasis is expressed in phrases like 'the knowledge economy', 'knowledge workers', 'knowledge management', and 'the knowledge society'. Driving such changes in the university are the following factors:

− Changing demographics. Longer lives, longer work days, larger urban areas, more diverse populations and more frequent moves.
− The restructuring of employment. It has been predicted that the average work life in the future will consist of six or seven different careers carried out sequentially. Lifelong learning is becoming a necessity rather than the enrichment opportunity it may have been in the past. Increasingly, students who already possess a degree are looking for vocational courses to improve their job or career skills.
− Telecommuting may significantly influence the delivery of higher education.
− Technological change. The rate at which new technologies are penetrating businesses and especially homes is increasing. One possible impact of changing technologies is a move away from site-based delivery of education to a more flexible, learner-selected mode of learning.
− Cultural change. Human needs have been transformed to the point where, in the marketplace, consumers focus on representations as much as they do on physical entities – design, aesthetics, concepts, brand associations and service sensibilities.

The above forces have led to the generation of new academic roles and the diversification of the existing ones. With the market emphasis and government steering characteristic of the knowledge society, much is made on the importance of train-

ing in multiple-skills, flexible career paths, lifelong learning and learning in the workplace (Malaysia, 2006). There appears to be a shift away from an emphasis on knowledge elitism and knowledge for its own sake as typified by the traditional university in a discernable move towards the integration of the subject discipline with professional and vocational education.

The attention on academic roles is becoming critical. In this vein, exciting discussions are taking place: about the curriculum; about how to teach and learn; about the experiences that are essential for an educated person; about the appropriate balance between education for a career and education for its own sake; and about 'time to degree' (i.e. how soon students graduate). Malaysian academics are currently being urged to initiate a paradigm shift in terms of their teaching responsibilities, from teacher-centered to learner-centered. At the same time, there is the important question of the balance needed between the tensions of market driven, narrow and technical outcomes in terms of the mastery of, and proficiency in, the practice of a discipline or field, and a broad education in critical citizenship in the context of transforming societies in which the professions have to be prepared.

2.3 The Emergence of New and Expanded Roles for the University

On top of innovative teaching and research, universities are confronting a new set of roles, with the emphasis on promoting the usefulness of knowledge and the scholarship of application. The primary source of this change is the growth of knowledge in science and technology emerging from research activities, headed by corporate research and development. Universities in Malaysia are also experiencing similar expansion in roles and functions. Another source of the change is the move to engage in the discourse of for-profit education, typical of the private institutions in Malaysia, which propels the third set of roles for these universities with the aim to focus on course goals that are tactical, focusing on the knowledge and skills that have immediate payoff – the competencies their customers need right now and for their next career move – popularly termed lifelong employability competencies.

According to Newton (2002), many institutions of higher learning become educational corporations depending on expertise in finance, accreditation, marketing and customer relations to survive in an increasingly competitive environment that simultaneously sees diminishing resources granted by the Government.

3. Internationalization and its Impact on the Changing Academic Profession in Malaysia

The process of internationalization in Malaysia has its roots in history. Starting with the period of colonialization, the British insisted on supporting the establishment of a university with English as the medium of instruction. Inevitably, higher

education in Malaysia was very much a replica of the British higher education system (Kassim, 1989). With the increasing demand for higher education, the only university in the country simply could not provide a place for everyone.

From 1970 onwards, education was given a bigger role as a key element of the development process, particularly in eradicating poverty and restructuring society and Malaysia experienced an education boom with a tremendous increase in enrolment at all levels of education. The increase in the number of students who qualified to enroll in local public universities continued to grow considerably but there were capacity limitations in local higher educational institutions. Thus, many went overseas to pursue higher studies (see Morshidi, 2006).

The enactment of the Private Higher Education Act, 1996, expedited the development of private higher education as more private colleges and universities as well as branches of foreign universities were set up in the late eighties and nineties. In part, internationalization resulted from the economic crisis that hit Malaysia in 1997, which weakened the Malaysian currency and made the cost of studying overseas more expensive and unaffordable to many.

3.1 Issues in the Internationalization of Higher Education and the Changing Academic Profession

As the internationalization of higher education has taken new forms (including staff mobility, curriculum and linkages) and accelerated especially in recent years (see IAU, 2006; Kameoka, 1996), the challenges and issues pertaining to it in the Malaysian context need to be explained.

Academic endeavour or income generating business? Internationalization and the exportation of higher education generate monetary gains and foreign exchange. However, the preoccupation with income may conflict with issues of quality and academic excellence. An excessive focus on gains can affect the academic quality and the reputation of institutions of higher education at international level. There has to be a careful balance struck between a focus on such gains and the excellence of academic achievement. This is particularly important largely because future graduates will be competing in a highly competitive global job market.

The intercultural challenge: Internationalization has brought cultures into contact and interaction and with it, the possibilities of intercultural learning. However, there are tensions around cultural interaction. For example, some may see the vast liberalization of knowledge via the use of an international language like English as threatening local cultures and ways of knowledge-making. Further, uncertainties arise as to how a nation-state is to maintain its identity, language and values. The perceived threat however, may be viewed as an essentialist view of culture, privileging its primordial and pure origins and its static role in meaning-making.

Academics may problematize internationalization in terms of challenges and opportunities. In this respect, Koo (2003, 2004) has posed what she sees to be a reflexive framework of intercultural literacies for both local and international academic-vocational spaces where the intercultural dimension is inevitable. At least three strands are integral to this perspective. First, making visible the operations of local literacies and modes of accessing them to local and international students. This visible marking and movement between cultures emphasizes the fact that the ways of performing particular academic discourses are not naturally acquired. Indeed, they have to be consciously learned. Second, re-articulating the interface between international literacies and local literacies to explore new ways for redressing the silencing and disempowerment both of which can affect heterogeneous voices and perspectives. Academics need to engage their academic partners, including their students, dialogically within and across national, ethnic, gender, class, ideological, religious, generational and academic settings. The international environment requires the careful negotiation of cultural variation especially in settings likely to be different, for example, those that might be characterized as collectivistic or individualistic cultures, position orientated or person oriented cultures, among others. There is a need to consider the likely tensions around assumed values, beliefs and behaviors related to religion, class, gender, ethnicity, ideologies and academic/learning styles.

In terms of academic cultures of learning, academics need to situate the diverse teaching and learning styles which are practiced in different contexts. Academics need to reflexively adapt their teaching styles including, what in international contexts are described unproblematically as, 'autonomous learning' approaches or independent study approaches. These are, of course, approaches that need to be understood, deconstructed, and mediated in terms of the cultures of learning within the local classrooms and within the broader social life-worlds of learners now brought together with other students in an international learning environment. It seems reasonable to suppose that careful transitions between diverse teaching styles should be reflexively linked to those of teaching-learning styles in situated contexts of learning and social life. These transitions are not easily made by stakeholders in internationalization processes and pose difficulties for, what may otherwise be, enriching intercultural encounters.

Such intercultural dialogues reveal deeply embedded, socially situated constructions of values and beliefs privileging particular perspectives, ontologies and ways of making meaning. In this regard, educational systems that are considered to be developed, especially those in the first world, tend to be privileged. They may pose a threat to local ways of knowing-doing that may have their own value in transforming educational spaces, which are now both local and international.

The development of academic human resources: As preparation for the internationalization of higher education, there is a need for continuous professional deve-

lopment programs for staff at all levels. In view of the fact that English is a global language, especially in science and technology, the competency of English amongst staff should be improved. Academic staff should be given the chance to expose themselves to a favorable learning environment through the exchange of lecturers between institutions of higher education at both the domestic and international levels.

Internationalization of the curriculum: The internationalization of higher education should involve the internationalization of the curriculum. The Organization of Economic Cooperation and Development (OECD) states that a curriculum which is internationalized should be a curriculum which is internationally orientated in its contents and which prepares students to function professionally and socially in an international context with diversified cultures (Olsen, 2002). Cooperation and close networking between local institutions of higher education and international institutions of higher education is needed for the establishment of such a curriculum. This can be attained through the harmonization of the curriculum of local institutions of higher education with that of international institutions of higher education, the quality of which is accredited at the international level. Flexibility in the curriculum, involving the transfer of credits from well known international institutions of higher education to a local institution and vice versa, will expedite the internationalization of the curriculum.

To ensure that the quality of the internationalized curriculum is up to international standard, the institutions of higher education should perform continuous academic quality assurance exercises and benchmark their curriculum with highly ranked international universities. They should strive to obtain international recognition such as the International Organization for Standardization's (ISO) quality standard.

It is important to ensure, in the rush towards 'the international curriculum', that local knowledge is not marginalized, that local knowledge itself is seen as enriching the new elements. This is particularly important when international knowledge is often perceived, wrongly, to be outside of national borders and especially resident in first world contexts. This is not surprising given the entrenched and institutional power of international universities which are ranked as 'world class' with their publishing networks and access to research facilities, and given their relatively greater political, economic, social, and symbolic power.

English as the Lingua Franca for meaning-making: benefits, risks and possibilities: With internationalization, English has become the lingua franca for academic interaction among academics and scholars. Access and empowerment issues in international education would have to consider greater political, social and educational tolerance for native varieties such as those represented in the generic term 'World Englishes' (Kachru, 1996). Firstly, this perspective would prevent the

marginalization of the speech communities they represent and enable a broader understanding of the contexts within which these varieties have emerged, contexts in which some speakers have become predominantly and unproblematically 'non standard' speakers of English. Secondly, it is important to allow for knowledge-making in international education to be made through English as the lingua franca without labeling users as problematic because they use non-native varieties of English. This is an important point since a constant striving for native varieties can silence the voices and knowledge-making discourses of non-mother tongue speakers of English.

As academics and stakeholders in internationalization, how do we deal with the issue of English as the new lingua franca of the international academic community? Firstly, there is the issue of how knowledge is created in and through English as a lingua franca. Secondly, how do we imagine English as a lingua franca in terms of standards and acceptable variations, such as is presently coded in 'World Englishes' (Kachru, 1996), from previously normative standards set up by Anglo-centric bodies such as the International English Language Testing System (IELTS) or the Test of English as a Foreign Language (TOEFL)?

This point is important for two main reasons. Firstly, to allow non-native speakers of English who now have to operate in English as a lingua franca to forge knowledge from where they are situated, within the arena of world communication. Secondly, this will help provide for the survival and maintenance of native first languages to be sustained within the ecology of their contexts. This is already a very difficult struggle indeed as individuals, communities, nation states and global organizations, including international discourses on education, unproblematically conform to the 'hierarchy of languages' and arguably, privilege normative standardized English as an 'international' language. In this regard, variation as represented in the terms 'World Englishes' or 'Asian Englishes' should contest such unproblematized notions of standard English which are still entrenched in the testing academies behind the discourses of TOEFL and IELTS.

Setting variable standards in English as a lingua franca in keeping with new linguistic and communication realities: In relation to the second question above, for admission to an institution of higher education, candidates have achieve a standard qualification like TOEFL, IELTS, the General Certificate of Education Ordinary (GCE-O) Level English or others. However, it is questionable whether these normalized codes of testing are sufficiently progressive or in touch with current linguistic and communication realities arising from the use of English as a lingua franca. In this respect, the academic profession in Malaysia could consider establishing a range of standards of English proficiency and communication that are resonant with the varieties of linguistic and academic realities at ground level.

4.   The Changing Role of Graduate Studies, Training and Work as a Challenge to the Academic Profession

4.1 Graduate Studies in Malaysia

The first university to provide graduate studies was the University of Malaya (UM), founded on 8 October 1949, in Singapore, to serve the needs of the Federation of Malaya and Singapore. The rapid development of the UM in its first ten years of existence led to the setting up of two autonomous campuses in 1959, one in Singapore and another in Kuala Lumpur. In 1961, a law was passed in the then Malayan Parliament to establish the University of Malaya in Kuala Lumpur as an independent entity on 1 January 1962. UM remained as the only university at the time Malaysia was formed in 1963. Later on, universities that were established in the late sixties and early seventies such as The Universiti Putra Malaysia (UPM), Universiti Sains Malaysia (USM) and Universiti Kebangsaan Malaysia (UKM) embarked upon graduate education around the late 1970s or early 1980s. At that time, a large number of academic staff in these universities was sent abroad to study for advanced degrees, in preparation for future roles in graduate teaching and supervision. Most of these universities would probably have felt more comfortable conducting graduate training if their academic staff possessed doctoral degrees. The PhD was deemed essential for an advanced degree supervisor since the graduate programs at that time were achieved through research, rather than by coursework.

As early as the 1980s, many lecturers were returning home to Malaysia with their PhDs, and this enabled the graduate programs of local universities to gain momentum. Moreover, more candidates (mainly school teachers) were applying to take their graduate degrees locally in the Arts. Universities arranged weekend and evening classes to cater for these teachers pursuing their higher degrees on a part-time basis. One advantage of the local universities to these teachers was the liberal policy of allowing the use of the national language as well as English as the medium of instruction at the graduate level. As most of the new students on the graduate programs would have been previously educated wholly in the national language, the use of the national language at the graduate level was attractive to these candidates.

Currently, enrolment at the post-graduate level, for Masters and Doctor of Philosophy programs accounts for 16.2 per cent of enrolment at all degree levels in public institutions of higher education and 3.8 per cent in private higher education institutions, as shown in Table 1. This table also shows that the number of graduate students has almost doubled since 2000. Under the Ninth Malaysia Plan, enrolment for the post-graduate level is expected to reach 25 per cent of the total enrolment at all degree levels in 2010.

Table 1: Graduate Students in Public and Private Universities, 2000 and 2005

Types of Higher Educational Institutions	2000	2005
Public	27,366	41,178
Private	2,305	4,342

Source: Ministry of Higher Education Malaysia, 2006.

Since the 1997 economic crisis in Asia and the September 11, 2001 terrorist incident in the U.S., many international students have enrolled in Malaysian graduate programs. The main advantage of graduate study in Malaysia is the relatively low tuition fees charged by universities in Malaysia. Another advantage is the low cost of living and low inflation rate experienced in the country. Muslim students also feel it is safer to study in Malaysia.

The last twenty years has seen enrolment in graduate programs rise gradually at first and quite dramatically in the last few years. These programs not only attract many local students, but also international students from as many as forty countries. The impetus for the growth of foreign student enrolment is the low tuition fees and cost of living in Malaysia, and the frequent promotional programs conducted overseas. The projected increase in enrolment for graduate programs will mean that universities in Malaysia will have to be developed further, not only in terms of physical facilities but also in terms of human resources. This is to ensure the universities will be able to provide quality graduate education for both local and international students.

It is worth noting that Malaysia is facing an acute shortage of well-qualified academic staff in both private and public universities. In 2000, out of a total of 13,033 academic staff in public universities, only 21.6 per cent were PhD holders, 72.1 per cent were Master's degree holders and the rest had bachelor's degrees. In the private universities, the situation is even less encouraging. Out of a total of 8,928 academic staff in all private higher education institutions, only four per cent have PhD degrees, 25.6 per cent have Master's degrees, 58.3 per cent have Bachelor's degrees, and 11.9 per cent do not have a Bachelor's degree (Ministry of Education Malaysia, 2001). All these figures point to the fact that academics have to take on more postgraduate supervision work.

4.2 Professional Development of Academic Staff

In the past, academic staff in institutions of higher learning in Malaysia attended fewer training and professional courses, their focus being on their teaching responsibilities. Increasingly, public and private universities in Malaysia have fairly

complex expectations of their staff. In response to this, tertiary institutions have provided academic staff with the following:

(1) orientation/induction programs and information about university policies, services and programs;
(2) competency-based professional courses for academic staff;
(3) departmental induction courses; and
(4) sabbatical leave.

The challenges confronting continuous professional development in various institutions of higher learning in Malaysia are often linked to financial resources and concerns about accountability and commitment. Whilst the expectations of academic staff are rising, there are concerns that support from the university, in terms of research funding, pay, promotion opportunities and infrastructural support is not sufficient. There needs to be more collaboration between administrators and academic staff to rethink what constitutes quality professional development in the workplace, as the 'one-size-fits-all' model no longer meets the complex needs for professional growth opportunities envisioned by academic staff who values the intellectual capital they offer their respective institutions.

5.   Management and its Interface with the Academic Profession

5.1 Changes Affecting the Academic Landscape in Malaysia

It can be argued that the primary driver of the changes shaping the academic profession in Malaysia can be attributed to the massification of higher education (Lee, 2004: Morshidi, 2006). Higher education is no longer the realm of the elite and the well-to-do stratum of the population. Economic progress in the last two decades has seen an enlarged middle class in Malaysia. This, together with the prevailing thinking that tertiary education is the primary means for individuals to improve their socio-economic standing has fuelled the demand for places in institutions of higher learning. This phenomenon can be seen by the phenomenal growth in the number of institutions of higher learning – both public and private institutions – as well as the size of enrolment in tertiary education, which have great implications for the governance and management of institutions at both the institutional and government levels (see Morshidi and Abdul Razak, 2006).

5.2 Impact of Governance and Management on Academic Roles

The Universities and University Colleges Act of 1971 is the legislative framework that defines the governance of institutions of higher learning in Malaysia; which vested the full authority over student enrolments, staff appointments, educational programs and financing with the government. The impact of the massification of higher education on governance alluded to at the end of the last section has mani-

fested itself in many forms, such as greater bureaucratization, the introduction of corporate culture and quality assurance, which has subsequently imposed greater demands on academics to perform non-academic roles within and without the institutions (see Morshidi and Abdul Razak, 2006).

Public institutions of higher learning rely wholly on government funding and are part of the civil service structure. As institutions grew in size and complexity, administrative expediency necessitated the standardization of rules and procedures, both at the ministry and institutional levels. The increase in the size and number of public institutions has put constraints on resources made available by the government to each institution. The increase in the number of students per program has also created new challenges for the management of student affairs with limited resources. At the same time, the need to expand to achieve a critical mass of academics in each university is another challenge in ensuring that good quality education can be provided to the ever growing number of students. Thus, government expenditure will inevitably increase annually as the demands for quality education for the next generation grow. By and large, the government has allocated about 20-25 per cent of GDP on education over the last decade or so. This heavy investment of public expenditure in education, at the cost of development in other sectors of the economy, has increased pressures for accountability on the part of institutions – submitting them to greater fiscal control, demands for improved productivity (i.e. more employable graduates and greater marketable product development), and more rules and regulations as well as rigorous assessments. In light of these, the move towards the corporatization of universities was initiated in the mid-1990s.

The Universities and University Colleges Act of 1971 was amended in 1995, to realign the governance of universities with corporate thinking. In 1998, five of the older public universities were corporatized. This corporatization exercise allowed universities to enter into business ventures with the ultimate aim of generating their own funding, with a gradual reduction of government funds to a target of 70 per cent of each university's operational requirements. Corporatization required academics to become involved in income generation through consultancy activities. Depending on the discipline, consultancies may only involve some groups of academics, while others are not contributing, which may be considered unacceptable. All these changes have put pressure on academics not only to perform their traditional roles of teaching and research, but also to take on greater administrative duties.

The latest development in Malaysian higher education is the establishment of research universities (RU). Criteria were set for recognition as an RU. This is another challenge for academics. The RUs will definitely result in significant changes in academic orientation and universities' approach to research activities which is now geared to meeting the criteria. The challenges lie in ensuring the optimum conditions for academics to balance their teaching and research.

The increasing complexity and bureaucracy both at the Ministry's level as well as at the institutional level, has also meant that more academics are taking on a greater number of administrative roles. Many more academics are now serving (on the basis of secondment or otherwise) in the government, and serving on committees within institutions. The possible solution to such a massive administrative complexity is to give greater autonomy to university management which would allow flexibility in their administrative functions.

6. The Changing Role of Work for Academics: Overview and Concluding Remarks

6.1 Overview

Traditionally, academics in Malaysian public institutions of higher learning (PIHL) are expected to be producers and disseminators of knowledge, whose duties primarily involve teaching, supervising, conducting research and publishing scholarly works. Academics in private higher education institutions (PHEI), in contrast, are mainly expected to be disseminators of knowledge, focusing primarily on teaching, but with the additional duties of marketing courses and recruiting students. Academics in PIHLs are expected to teach students on undergraduate as well as postgraduate programs. They may design the courses they teach, assign reading material and assess their students. Many academics in PHEIs, which mostly offer franchised programs, on the other hand, have no part in designing courses or even assessing the students they teach (Lee, 2002). While academics in public universities are expected to conduct research and produce publications of national and international standard and present their findings in national or international seminars and/or publish them in the form of monographs, books or articles, their counterparts in the private sector are not expected to undertake research. However, of late, some private universities and university colleges are currently moving in the direction of public universities with respect to research and publication, offering grants for their academic staff to conduct research and publish journals of their own.

Currently, services to the university and community are also important for academics in PIHL, as they are part of the criteria for promotion. For instance, they may be appointed to perform administrative duties, such as the role of chair of a program, unit coordinator, director or dean. They must also be involved in committees, for example, to organize a conference or act as a task force either at university level or school/faculty level. They are also expected to offer community service at various levels. Academics in PHEI are expected to be involved in administrative duties, but community service is less common (see Lee, 1999).

Due to the introduction of corporate culture, all academics in PIHL are now expected to offer consultancy work that benefits the university, in addition to

teaching, research and service. Corporatization has a strong impact on the way academics conduct their work today. As a result of corporatization, 'universities in Malaysia began to operate like business corporations and profit-making centers' (Lee, 2002, p. 165). In this respect the academics become not only knowledge providers but also entrepreneurs who face the challenge of obtaining funding and revenue from external sources and generating income for the universities. They are pressurized to forge links with local industry and the international intellectual community. The corporate culture also places a lot of emphasis on performance, adopting corporate management practices such as performance indicators, bench-marking and management-by-objectives (Lee, 2002, p. 167) and annual work targets which consequently promote intense competition amongst academics for rewards, recognition and promotion. One major challenge arising from this is how to compete fairly and ethically.

The need to gain funds from external sources poses another challenge, that of creating a balance between entrepreneurial activities and the many other roles that academics have to perform. Pressing problems such as rising graduate unemployment, the declining quality of graduates, inappropriate curricula (Morshidi, 2006), and rising student numbers add more pressure on academics to 'juggle' effectively between their various roles. The ability to multi-task is now a necessity for them.

6.2 Concluding Remarks

In conclusion, the changes that have occurred in the last decade and a half are primarily driven by the phenomenal increase in demand for higher education. These changes have brought tremendous challenges for the traditional roles of the academic community. Growing bureaucratization, resulting from the enhanced complexity of the higher education sector, has seen greater standardization of administrative procedures and more centralized accumulation of decision making power, thus eroding the collegial culture of the academy. Constraints on federal resources have led to growing demands for accountability, which subsequently saw the infiltration of corporate culture with its major focus on output and productivity, and increasing demands on academics to be fund raisers and adopt greater administrative and managerial roles, taking them away from their traditional teaching and research. The issues of relevance and employability pose challenges to the academic profession in the context of competitive globalization. Specifically, how the traditional university, devoted primarily to fundamental knowledge will have to consider its role in society and, more immediately, in the workplace. For example, to what extent is it possible to balance neo-liberal economic pressures with other competing issues around sustainable communities and livelihoods?

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United Kingdom:
An Increasingly Differentiated Profession

John Brennan, William Locke and Rajani Naidoo

1. Preamble

One of the interesting experiences of working with the international Changing Academic Profession (CAP) team in the planning of the new survey has been the definitional and terminological difficulties we have encountered. Just who is to count as an 'academic' and who not? What term best describes the people we are interested in? In some countries, it seems sufficient to use the term 'professoriate' to define the focus of our interests. In other cases, a looser notion of 'academic staff' is used, which can cause both concern and some status anxiety to the former group where 'university staff' are quite different people from the 'professoriate'. The adopted term 'academic profession' appears to be an acceptable compromise, though we must note that the 'academic profession' lacks most of the characteristics ascribed to professions in the literature on the subject.

Set within this context, it is interesting to note, therefore, the title of a recent publication from the Higher Education Funding Council for England. *The Higher Education Workforce in England: A Framework for the Future* (HEFCE, 2006) is intended to be the first annual report on 'workforce trends in HE' in England. The production of such a report was at the request of the United Kingdom (UK) Government. So higher education in some countries has a 'professoriate' but in England it has a 'workforce'. What, if anything, are we to make of this difference?

In this paper, we shall comment on the three main CAP themes – relevance, internationalization and management – from the UK perspective. First, however, we set out some background characteristics of the 'academic profession' in the UK.

2. Background

Notwithstanding the 'workforce' terminology adopted by the English funding council, UK higher education is no different from other systems in employing a sharp distinction between 'academic' and 'non-academic' staff. It is a distinction

once described by an English vice chancellor as being of almost 'apartheid' proportions, affecting not just contractual and remuneration packages but rights to participate in university decision-making and even access to catering facilities. The distinction is qualified by the introduction in some universities of 'academic-related' staff to refer to those professionals working directly in support of academic activities (for example learning support, staff development (*sic*), technical support, etc.) and yet who are not regarded as *bona fide* 'academics'.

The standard academic career grades are 'lecturer', 'senior lecturer' ('principal lecturer' in the post-1992 universities), and 'professor'. There is no automatic career progression through these grades. Many academic staff begin and end their careers as lecturers. The status of 'reader' is the equivalent of senior lecturer in terms of remuneration but has more of a research focus and hence higher status. There are then a whole series of researcher grades – variously entitled research officer, assistant, fellow – which parallel the lecturer grades but are mainly used for short-term contracts and these days are typically the starting point of an academic career.

A relatively recent study (Henkel, 2000) has shown that, in general, while academics may see themselves as teachers, managers, researchers or a combination of all of these, their identities remain centered in their discipline and academic values are often embedded in concepts of the discipline and expressed in a common language.

UK academics are employed by the higher education institutions where they work. They are not civil servants and there are variations in job descriptions and conditions of work between different institutions. There are tensions between institutional autonomy and individual academic freedom in the UK system, which are probably not found in quite the same way in systems where the coordinating role of the state is stronger. As we shall see, the growth of market competition between institutions in UK higher education and a more 'consumerist' approach to regulating the system underlie many of the changes experienced by UK academics in recent years. However, lacking many of the direct controls possessed by its counterparts in continental European countries, successive UK governments have taken recourse to ever more complex mechanisms of 'steering at a distance'. The principal tools have been funding formulae and evaluation/accountability mechanisms. These have the effect of creating quite elaborate bureaucratic procedures within institutions and of producing greater competitiveness between both HEIs and individual academics (to secure positional advantage in various grading schemes and funding streams). They consume a lot of time and energy and create a considerable amount of stress.

2.1 The Profile of the Profession

There were over 160,000 academic staff in all UK higher education institutions in 2004/05 as shown in Table 1. 83 per cent were in England, 10 per cent in Scotland, 5 per cent in Wales and 2 per cent in Northern Ireland. Within England, the Funding Council identified some 130,010 staff with 'academic roles only', i.e. not combining this with a professional/support role. Not all were full-time and the figure shrank substantially to 96,966 when the number of 'full-time equivalents (fte)' was calculated. This represented just 44 per cent of the (fte) 'workforce', the rest comprising staff with a 'professional/support role only' who represent 54 per cent of the total, plus a further 2 per cent who combine 'professional/support and academic roles'. It is not clear whether the latter group includes vice-chancellors.

Table 1: Academic Staff (excluding atypical) by Location of HEI and Mode of Employment

Mode	England	Wales	Scotland	Northern Ireland	All UK HEIs
Full-time	88735	5690	12540	2655	109625
Part-time	45395	2350	2770	520	51030
All	134130	8040	15310	3175	160655

Source: HESA, 2006.

The figure for academic staff represents an increase of 16 per cent since 1995/96 in the 'core' academic staff: these are staff on permanent contracts (lecturer/senior/principal lecturer and above). The overall growth rate over this ten year period has been 20 per cent, indicating a steeper growth in the numbers of staff on short-term contracts. The latter are mainly people on researcher grades. 72 per cent of academic staff are on lecturer scales, the balance being researchers.

Large growth areas in terms of subjects are 'subjects allied to medicine' (which experienced a 78 per cent increase since 1995/96), 'computer science, librarianship, information science' (60 %), 'creative arts and design' (50 %), 'business and administrative studies' (37 %) and 'biological sciences' (36 %). Over the same ten year period, there has been a decline in subjects such as 'engineering, technology, building and architecture' (minus 13 %), chemistry and medicine/dentistry (both minus 11 %). The academic profession in England is an ageing profession with the proportion aged over 50 having risen from 34 per cent to 41 per cent in the last ten years, being particularly high in education (51 %), mathematics (48 %), social and related studies (45 %), physics, engineering and related subjects, plus business (all 44 %) and humanities and languages (both 43 %). The proportion of professors over the age of 50 has risen from 59 per cent to 66 per cent (HEFCE, 2006: 12-

13). However, the academic profession in England is not as old as its counterparts in other English-speaking countries.

Across the UK, 40 per cent of academics are female and more than a quarter of these work part-time, compared with 16 per cent of male academics, and they are more likely to be on fixed-term contracts. On average full-time female academics earn 86 per cent of the pay of their male colleagues (AUT, 2005a). While female academics hold 41 per cent of all full-time posts in UK HEIs, the proportion of females holding professorial posts is only 16 per cent and senior lecturers and researchers 31 per cent (HESA, 2005).

10.5 per cent of academics are from black and ethnic minority (BME) groups, which is similar to the population of BME postgraduates in the UK population as a whole. However, they tend to be concentrated in particular institutions (Ramsden, 2006) and those with UK nationality are seriously under-represented. BME academics earn 88 per cent of the pay of their white colleagues, although this gap narrows for those of UK nationality (AUT, 2005a). Only 4.9 per cent of senior academics are from BME groups (HESA, 2006).

There has been a substantial growth in the proportions of foreign nationals among the academic staff of English higher education institutions, the largest growth rates being from eastern and central Europe (193 %), Western Europe and Scandinavia (146 %) and China, Japan and East Asia (108 %) over the ten year period. However, the vast majority of movement takes place among junior post-doctoral staff, and this is largely positive for the UK, with much less movement among staff later in their careers, allaying any residual fears of 'brain drain' (Bekhradnia and Sastry, 2006). Nevertheless, there is a growing dependence on non-UK nationals, now accounting for 13 per cent of core academic staff, a growth from 8 per cent in 1995/96 as shown in Figure 1 overleaf, broken down by grade. The proportion of professors who were not UK nationals has risen from 6 per cent to 13 per cent and of other senior academic staff from 7 per cent to 11 per cent. However, almost half of all non-UK academic staff are researchers, with Chinese nationals particularly prominent. Indeed, researchers constitute three-quarters of all Chinese staff in UK HEIs. Of those non-UK nationals employed to teach and research, academics from the United States, Ireland and other European and English-speaking countries are most prominent (Ramsden, 2005).

HEFCE has recently predicted an increase in academic staff recruitment by as much as 25 per cent across the UK between 2004 and 2011 (HEFCE, 2006). It notes the three main entry routes into academic careers as being (i) newly qualified PhD students, (ii) staff joining from the private sector or other parts of the public sector (very important in certain subject areas), and (iii) staff recruited from overseas. Of those recruited from outside higher education in recent years, over 40 per cent were aged over 40, which implies a substantial influx to the sector from beyond the traditional doctorate/post-doctoral route. The report also indicates low turnover and no major recruitment difficulties in recent years.

Figure 1: Proportion of Permanent Academic Staff who were Non-UK Nationals
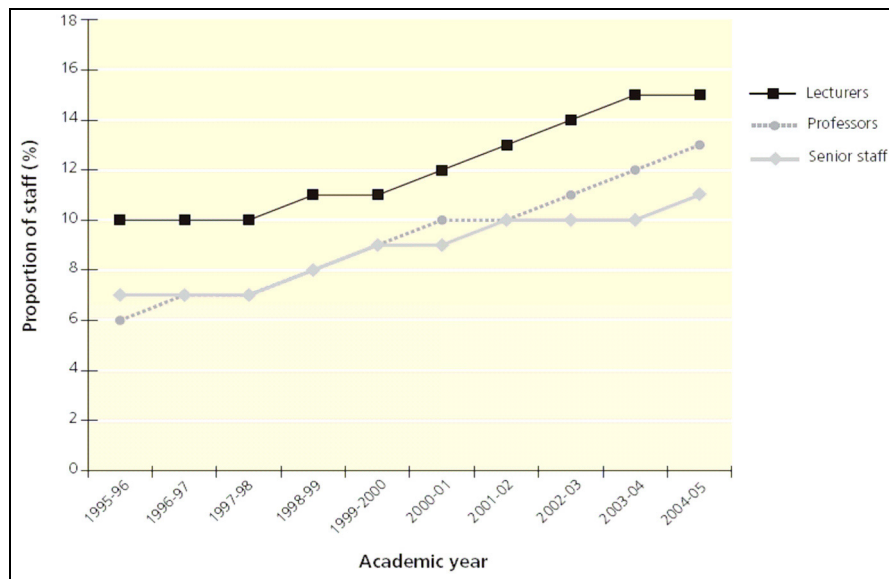
Source: HEFCE, 2006

2.2 The Conditions of Academic Work

Academic pay is relatively low compared with other highly qualified jobs in the UK. However, UK academic pay compares favorably with that in Sweden, Japan, Australia and New Zealand, and is similar to that in Denmark, France and Canada. Unsurprisingly, it is lower than the US, and this difference is particularly marked among the top earners (Metcalfe et al., 2005).

A recent study suggests that academic staff are somewhat less satisfied with their jobs than those in the UK workforce as a whole. The factors influencing this appeared to be salary and other earnings, qualitative aspects of the job and longer-term factors such as promotions and job security (Metcalf et al., 2005). Research was a major source of satisfaction, although it was also the area where staff feel under increasing pressure (Kinman and Jones, 2004). Support from peers and opportunities to participate in the wider academic community were also positively cited. Whilst teaching was not the most important factor in becoming an academic, most would prefer a job that involves teaching. Student assessment and administration (including quality assurance) tended to be viewed negatively, and being

on a fixed-term contract significantly reduced satisfaction (Metcalf et al., 2005). Another study concluded that job stress and demands have increased significantly in recent years while job satisfaction and levels of support have declined. Several sources of stress were identified that were related to features of national educational policy. High levels of psychological distress were found in comparison with academics in other countries and with other professional groups and the general population in the UK (Kinman and Jones, 2003).

Other background characteristics of higher education in the UK include the increasing differentiation of higher education in general and of universities in particular, over the last couple of decades. There are now around 168 universities which differ substantially in terms of reputation, resources and functional mix. In particular, there has been a national policy of concentrating research spending on 'centers of excellence' which has seen the growth in numbers of 'teaching-only' academics in some institutions. Approximately 24 per cent of academics in the UK were employed on teaching-only contracts in 2003/04, 22 per cent on a research-only basis and 52 per cent of academics were employed to teach *and* research (the latter two being declining proportions). The remaining 2 per cent were not employed to teach or research (HESA, 2006). It has been suggested that the rise in teaching-only contracts may be partly due to the re-designation by institutions of 'underperforming' researchers as a strategy for improving success in the periodic Research Assessment Exercise (AUT, 2005b).

The relationship between research and teaching is currently a 'hot topic' in some quarters with concerns being expressed about the impact on university teaching and academic standards of the removal of a research underpinning. The debate was stoked by the revision of the criteria for 'university' title in England following the 2004 Higher Education Act, which removed the requirement for HEIs to have research degree awarding powers. Even among existing universities, there are many that categorize around a quarter to one third of academics as teaching-only (AUT, 2005b). It is difficult to avoid the conclusion that the separation of research and teaching is itself the result of policy and operational decisions made over some time to distinguish the way these activities are funded, managed, assessed and rewarded (Locke, 2004).

The proportion of academics on fixed-term contracts is also increasing, with only 55 per cent employed on an open-ended or permanent basis (AUT, 2005b). Two-thirds of academics on teaching-only contracts are employed on a fixed-term basis, and 91 per cent of those on research-only contracts were fixed-term. By contrast, only 16 per cent of academics employed to teach and research were on fixed-term contracts. It is interesting to note that the proportion of academics on permanent contracts is lower in the high-status research-led universities - as few as 25.8 per cent at the University of Cambridge (Kim, 2006).

3. The Three CAP Themes

This section comments on the three main CAP themes – relevance, internationalization and management – from the UK perspective.

3.1 Relevance

At the head of a section entitled *Capacity and Composition of the Workforce,* the English funding council report, already referred to, removes any doubts about government priorities for higher education. In bold letters that fill the whole of a page, the report notes that:

> "Increasingly, governments view higher education as an important driver of economic growth, both through the graduates that it develops and the new knowledge created by research. With increasing competition from developed and developing nations, and given the possibility of locating business operations anywhere in the world using communications and information technology, nations will need, through investment in people, to equip themselves to compete at the leading edge of economic activity" (HEFCE, 2006, p. 11).

Thus stated, this is the reason why universities receive public funding, why academic jobs exist, and why universities and the 'higher education workforce' are quite important.

'Relevance' in research and teaching are required in order to justify the flow of public resources into higher education. But increasingly, public resources are being augmented – if not actually replaced – by private funds, whether from students in the form of tuition fees or from enterprises commissioning research or, more broadly, 'knowledge' transfer. What is 'relevant' here reflects the objectives of higher education's 'clients'. If students are concerned about their job prospects after graduation, then universities and their academic staff must attend to these concerns in the design and teaching of their programs. If an organization funds a piece of university research to solve a problem in its 'space utilization', then the resultant research will be judged in terms of the 'solution' to the problem. The demand for relevance is frequently heard but its definition can vary substantially. Relevance is not necessarily 'short-term', although frequently it is. It is not necessarily about wealth creation – whether for the nation, a region or an individual – although, again, frequently it is. Relevance also embraces a social justice agenda through the expectation that higher education will contribute to social equity and mobility through widening and expanding access and creating links with communities.

The point about 'relevance' is that it is generally defined by other people. Academics may claim it for their teaching or research, but it will be for others to assess the validity of these claims. There are a growing number of mechanisms within UK higher education through which relevance is assessed and promoted.

Some of these have to do with markets – the need to attract students to courses and the need to obtain research funding. Others have to do with the 'machineries of steerage' that have been introduced by the agencies of the state in recent years. And insofar as most academics would prefer to see their activities as being 'not entirely useless', the debate about relevance is perhaps best seen as a battle over its definition than about its overall desirability.

Several of these concern the criteria used in the various national systems of e-valuation and quality assessment. In teaching, there has been a growing emphasis on the articulation of learning outcomes – and the value of these to future (working) lives. Curricula are described and justified in these terms. In research, the various research councils – also needing to justify their receipt of public monies – dispense increasing proportions of their research grants through special schemes and initiatives created to meet some perceived public need. Research projects identify 'user groups', have 'dissemination strategies' and their steering groups contain rather more users and policy makers than researchers and academics. One of the few remaining counter pressures to this is the evaluation of research by discipline-specific peer review, although even this is now in jeopardy.

There are strong interdependencies between the goals of higher education, the rules for distributing resources, and the nature of academic work. The changes associated with movement from the 'traditional academy' with its stress on basic research and disciplinary teaching to the 'relevant academy' are largely uncharted and are likely to have unanticipated consequences. There is a need to understand how these changes influence academic value systems and work practices and affect the nature and locus of control and power in academe. There is a need to investigate how these tensions work out in higher education institutions of different types and in countries with different economic, political and cultural traditions and contemporary circumstances.

3.2 Internationalization

National (and local and regional) traditions and socio-economic circumstances continue to play an important role in shaping academic life and have a major impact on the attractiveness of jobs in the profession. Yet today's global trends, with their emphasis on knowledge production and information flow, play an increasingly important part in the push towards the internationalization of higher education (Marginson and Rhoades, 2002). The international mobility of students and staff has grown, new technologies connect scholarly communities around the world, curricula and credentials are required to have international currency, and English has become the new *lingua franca* of the international community. Competition between higher education institutions extends beyond the borders of the nation state. In particular, the research elite of institutions sees its rivals and refer-

ence groups in institutions across continents. Many institutions face the challenge of balancing the international with the local, the regional and the national.

International activities are an important business to UK HEIs. The total income to institutions attributable to overseas sources is a little over £1.5 billion, representing 10 per cent of the total income of the UK HE sector in 2003/04. This is made up largely of student fees (70 %) and research grants and contracts (13 %). But institutions benefit differentially from these overseas income sources, with approximately one-third of HEIs receiving less than 5 per cent of their income and a small group earning more than a fifth of their total income from overseas (Ramsden, 2005).

International students, in particular, are a vital part of UK higher education, with some institutions virtually dependent on them for their survival. On postgraduate courses in some areas, students from other countries can often constitute a majority. Such students need to be recruited, sometimes their language skills need to be improved and sometimes courses may need to be adapted to take account of the wide range of student backgrounds. Collaboration in Erasmus and other student exchange schemes is a further way in which many academic staff become involved in the internationalization of the teaching function. A related aspect of internationalization is the pressure to harmonize qualifications, systems and procedures. Within Europe, this is the 'Bologna process'. It is probably fair to say that UK higher education and academics have paid rather less attention to these processes than have their continental European counterparts.

Research has always had a strong international element to it, although more so in some subjects than others. It is now more important than ever with the national Research Assessment Exercise offering the greatest recognition and reward to those whose achievements are deemed to possess international excellence. There is some evidence to suggest that increases in research students in the UK are modest in comparison with those of non-research students (HEPI, 2004).

Much of the above could probably be said of academics working in many other countries. Some specifically UK aspects worth noting include the role of English language. This makes it much easier for UK academics to internationalize themselves and it is also one of the reasons for the popularity of the UK as a destination for international students. But another aspect of language is the role it sometimes plays in creating a somewhat narrow definition of 'international' as comprising a very small number of English-speaking former colonies. Some 'international' conferences and entire journals can be found that limit themselves to the UK, Australia, Canada and New Zealand with an occasional American squeezed in. Shared histories and traditions can provide some explanation of this phenomenon although it rather flies in the face of other globalizing trends.

3.3 Management

The UK reflects the worldwide trend towards funding and accountability systems based on neo-liberal market mechanisms and new managerialist principles (Naidoo, 2003). Such frameworks are based on the assumption that market competition within and between universities will create more efficient and effective institutions and that management principles derived from the private sector which monitor, measure, compare and judge professional activities will enhance higher education functioning. There has therefore been a decline in state funding, an exhortation for universities to develop closer links with industry and a focus on income generation. In addition, external control over core aspects of academic life has been become stronger through external quality assurance bodies and through a range of market mechanisms. A relatively recent development is the conceptualization of the student as a 'consumer' of higher education. Various consumerist levers to enhance student choice and control over the education process have been introduced or strengthened over the last ten years. Examples of such levers include the requirement that universities publish detailed information on academic programs so that students can be assured of what they are to receive at the outset of their studies and the publication of performance indicators evaluating institutional functioning. Most recently there has also been the introduction of a National Student Survey of all final year students. In addition, consumer rights have been strengthened by the elaboration and institutionalization of complaints and redress mechanisms (Naidoo and Jamieson, 2005).

These developments have significant implications for how universities are managed, how decisions are made and the locus of control and autonomy in higher education. We will outline three dimensions.

First, the encouragement of quasi-market forces has led to greater competition and insecurity within the academic profession and greater differentiation in relation to roles, status and conditions of service. These differences have become more explicit in differential contracts and levels of remuneration. There is also evidence of increasing stratification of the HE workforce. The HEFCE report already referred to (HEFCE, 2006) indicated that institutions are increasingly using financial incentives to recruit or retain staff whom they perceive to be of high market value which include salary bonuses and retention payments. While salaries for Vice-Chancellors soared by a quarter in three years, academic salaries in general have deteriorated against other benchmark occupations.

Second, the implementation of elements of new managerialism as well as the threat of litigation by student consumers has led to academics experiencing tensions between what Power has termed 'first order' professional activities such as teaching and research to 'second order' activities which are related to documenting and accounting for professional work (Power, 1999). These developments are linked to 'performativity' by which we mean that the quality and relevance of

academic work has to be continually made visible and translated into a generic form so that managers with little specialist knowledge can monitor and evaluate academic work across all disciplines.

Third, relationships within higher education change. In one sense, UK universities have always been more managerial than their counterparts in many other countries because authority has been vested at the institutional level rather than with the state or with individual professors. Compared with other systems, professorial authority has been relatively weak and became more so following outbreaks of academic democracy in the 1960s and 70s.

However, the increasing bureaucratization of academic work has meant a greater shift in the relationships between academics and administrators. There are signs that a new generation of administrators has entered higher education to undertake strategic administrative and management functions such as quality assurance and marketing. Rather than merely servicing academics, they exercise independent judgment and exert influence on the structures and cultures with which they interact. They may also perceive of themselves as 'translators' between the academic and external context. For their part, academics may feel that their professional judgment and authority is being weakened. They may feel that rather than administrators meeting academic needs, it is academics that are in fact being coerced into meeting administrative goals.

A recently discerned trend is the growth of a cadre of 'academic managers'. Whereas there has been a tradition – especially in the older universities – of management tasks being assumed by senior academics on an elected, rotating, short-term and frequently part-time basis, this pattern is increasingly being replaced by appointment to full-time, 'permanent' management roles. This inevitably changes both the nature of the role and the relationships of the role-holder with academic colleagues. It is also a new element in the career options open to academic staff, providing opportunities to 'jump ship' from traditional teaching and research roles in order to focus on administrative and management tasks. Significant financial rewards frequently attach to these roles.

The re-conceptualization of students as consumers is also likely to alter pedagogical relationships. If education becomes re-conceptualized as a commercial transaction, the lecturer as the 'commodity producer' and the student as the 'consumer', previously integrated relationships between academics and students are likely to become more disaggregated with each party invested with distinct, if not opposing, interests. There is evidence of increasing student complaints, including threats of litigation. This change in climate is likely to impact on learning and teaching in both positive and negative ways.

Governance arrangements are also changing. Increasingly 'business-like' management styles have tended to go hand-in-hand with more corporate-style governance arrangements in HEIs, with a reduction in the size of governing bodies which now feature a majority of external members drawn largely from business sectors.

In parallel, academic self-governance has been weakened, the influence of academic senates has declined and the academic community marginalized (Shattock, 2002).

The changes in the style of management in UK higher education have been characterized as a shift from *professional oligarchy* to *managerial oligarchy*, which is claimed to be re-defining the academic profession, weakening its professional influence, reducing job security and economic attractiveness, and stratifying it so that "ordinary academics are now tightly managed as *employees*" (Kim, 2006). The columns below illustrate how institutional structures have been affected by this shift.

Professional Oligarchy	**Managerial Oligarchy**
Collegial structure	Management structure
− Professors (Chair); Research Professor	− *Manager-academics:* Vice-Chancellor, Pro-VC, Principal Rector, Director, Provost, Dean
− Reader	− *Middle manager-academics:* Dean, Associate Dean, Head of Department
− Senior Lecturer − Lecturer Research Lecturer	− *Ordinary academics:* Teaching-only staff; Research-mainly staff
− Contract research officers; Contract Part-time Lecturer (Teaching staff)	− *Contract research officers; Contract part-time teaching staff*

(from Kim, 2006)

The managerial trend is frequently 'blamed' on the increasing pressures and complexities of 'running' academic institutions. To do it competently requires specialist knowledge and experience that can take some time to acquire. It becomes difficult to combine with the other elements of an academic career. Senior academic managers frequently complain about 'losing touch' with their disciplines and having 'nowhere to go' but to another management job if and when their current term of office comes to an end.

Managerialism is also becoming increasingly internationalized, with the appointment of several vice-chancellors from English-speaking countries to some of the most prestigious universities in recent years, including Oxford, Cambridge, Manchester and Warwick, as well as the 'middle-ranking' Brunel University, the

School of Oriental and African Studies and the Open University. 'Relevance' is also an issue for the headhunters, with the current 'chief executives' of the London School of Economics and Imperial College both recruited from high level positions in the business sector. Perhaps these are signs of interplay between our three themes, but are they the tip of the iceberg or a passing phase?

4.   Conclusion

Academics are faced by many (and sometimes competing) pressures related to the themes of relevance, internationalization, managerialism and marketisation. Many aspects of deeply entrenched professional practice continue while minor shifts and major changes occur through the sector. This is partially because academics differ in their degrees of embrace or resistance to such trends and may adopt a range of strategies including subversion and accommodation. Differences may of course reflect status within the academic hierarchy, subject characteristics and generational differences through younger academics entering higher education with different expectations and experiencing different forms of socialization into the profession. There is of course also plenty of compliance to be found in UK universities in response to external pressures.

In relation to the 'shape' of the profession, some elements of traditional hierarchies such as status based on age and length of service may be eroding while other elements, such as placing a high value on 'entrepreneurial' skills, are emerging. Other elements, including institutional reputation and status, are being reinforced and recast in different ways.

The picture thus emerging in the UK is of an academic profession facing increasing change but also much continuity and transforming relatively rapidly into a diversified and increasingly stratified sector.

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Norway:
The Principal-Agent Relationship and its Impact on the Autonomy of the Academic Profession

Agnete Vabø

1. Introduction

The universities and academic profession are (more than ever) entrusted with the role of a driving force in society. These institutions and groups are expected to support processes important for regional development and global competitiveness, in terms of supplying society with an adequate labor force as well as research-based innovation. In recent years in Norway, this development has − among other things − lead to increased attention to the role of universities in the national inno-vation system. Also, having to relate to new modes of rewarding and controlling their work, as well as going from a mass to a universal system of higher education, the academic profession has been faced with major challenges concerning its structures and values: What should be the nature and status of the work of this profession, and how should it seek new organizational solutions (e.g. regarding the occupational hierarchy)? Should it for instance maintain the teaching/research nexus, or introduce more stratified career tracks that distinguish between teaching and research-oriented posts?

This chapter discusses four issues representing key challenges to the academic profession in Norway; the quest for internationalization, managerial practices, relevance, and the changing role of doctoral training. These issues are analyzed with regard to the autonomy and power of this group to control academic work.

In line with the definition of the international comparative study − the Chang-ing Academic Profession (CAP) project − the use of the term 'academic profes-sion' refers to the scientific employees at universities and university colleges. The chapter aims to contextualize the abovementioned issues in preparation for the national survey to be carried out during 2007 in connection with the CAP project. The data and discussions presented in this article are mostly based on National Research and Development statistics, relevant white papers and previous empirical

studies on the internationalization of higher education and the academic profession in Norway.

2. An Academic Profession?

Scientific employees are not united in the same sense as in established professions like medicine and law. In studies of scientific employees in higher education, the idea of 'an academic profession' should rather be taken as an open question for investigation (Høstaker, 2000, p. 103).

The ideal type professions are holders of monopolistic control over their own work and knowledge base, and are furthermore marked by common education and training, as well as common standards. Such features contribute to a common identity and sense of unity among members of the profession (Freidson, 2001).

Affiliation to particular institutions, disciplines, formal positions and at the national level are considered by many to comprise four important factors of differentiation within the academic profession with respect to power, status and self understanding (Välimaa, 1995, 1998; Teichler, 1996; Clark, 1983). It is a widespread perception that the discipline represents the very core with respect to the organization of academic work and that membership of this unit is therefore essential to identification with the group (Henkel, 2000).

Transnational comparisons of the working conditions of this profession disclose great variations between the countries with regard to the traditions, history and politics to which the higher education system and its research institutions have been subjected (Altbach, 1996; Maassen and Van Vught, 1996). There are also national differences with respect to status hierarchy between institutions and working conditions for professional staff.

There may be considerable differences between the higher education institutions regarding their targets, and which functions and tasks they have been assigned by the authorities (Välimaa, 1995, pp. 77-80; 1998). Each university lecturer or each professional community has a number of different points of connection contributing to their identity. However, it is widely agreed that there are certain values linking this profession across such boundaries. A genuine interest in seeking the truth, and believing that research, writing, publishing and teaching are the wheels that keep this activity going, that the university and the academics there should have as much autonomy as possible in deciding how the activities should be organized, that they should contribute to society, to intellectual honesty and integrity and that the students should be treated objectively (Merton, 1973).

Also, considering that professional staff in the university and state college sector have been allotted a legal and social status in the community giving them the right to practice without much interference from other "non-members", along with the autonomy to certify students, protect degrees etc., it has been claimed that university academics may be counted as a profession in its own right. Unlike other

teachers, they are characterized by combining the roles of researcher and teacher and by being responsible for educating professions mostly different from their own (Clark, 1987). They have great personal freedom and, as distinct from other public services, they are involved in the core activities of research and teaching despite being of a high formal rank. Teichler (1996) points out that this profession is characterized by uncertainty. Involvement in research activities is no guarantee of success, but at the same time this characteristic provides a common self understanding and *raison d'être* within the profession.

As holders of the abovementioned privileges and characteristics, I will analyze the challenges for the academic profession in Norway, with specific reference to the autonomy and power of this group to control academic knowledge work.

3. The Norwegian Higher Education System

The Norwegian higher education system is made up by three kinds of institutions: research universities, scientific colleges and state colleges. In 2003, of 51,000 individuals involved in research and development activities in Norway, 22,000 were employed in the higher education sector.

The University of Oslo was established in 1811, the University of Bergen in 1948, the University of Trondheim in 1969 and the University in Tromsø in 1972. Last year, the state college in Stavanger and the Norwegian College of Agriculture were granted university status, and many other colleges are in the process of qualifying for university status.

Usually, disciplinary areas such as medicine, law, the humanities, social sciences and natural sciences constitute separate faculties. Each faculty is divided into departments that make up the basic units of the faculties. University studies are generally divided into different tracks, and a main division may be drawn between professional education (medicine, dentistry, law, psychology) and liberal arts studies in the humanities, social sciences and natural sciences.

There are seven scientific colleges, such as the Norwegian School of Economics and Business Administration. Twenty-five state colleges include, among others, colleges of teaching, engineering, social work, nursing and a number of smaller educational programs. These state colleges have increasingly been organized in accordance with the Norwegian university model, with faculty-like subdivisions and departments as primary units. The types of education offered are more varied than is the case within universities and scientific colleges. However, a rough distinction may be drawn between vocational education (teaching, engineering, nursing, social work) and other kinds of education (Bleiklie et al., 2000).[1]

With the exception of the Norwegian School of Management (BI) with more than 10,000 students, most of the private institutions are quite small. This situation indicates that the state is an important actor for the whole system, both as the resource provider and as the actor that regulates and steers the system.

4. Recent Reforms

In line with the Bologna Declaration of 1999, the bachelor's/master's study struc-
ture (3+2 years) was implemented for most study programs of Norwegian univer-
sities, scientific colleges and state colleges in the autumn of 2003.[2] The duration of
studies and the quality of teaching and learning had been a concern since the mid-
1980s in Norway due to the increased number of students at all levels and the
simultaneous rise in the percentage of failed exams (Vabø, 2003). For the educa-
tional authorities, the Bologna process represented a legitimate opportunity to
abolish the old study structure and replace it with a degree system more efficient
at dealing with the needs of a mass system of higher education. The wish to par-
ticipate in European student exchange programs had also created a need for more
internationally standardized studies and degrees. The aim is that 50 per cent of the
students should conduct part of their studies abroad and that all students should
have the right to be offered suitable programs for partial studies abroad by their
university or college.[3]

In Norway, the introduction of this new degree system is part of a larger reform
process called "Quality Reform". This reform represents an attempt to achieve a
higher degree of efficiency through devolution of authority to the higher education
institutions, the provision of stronger leadership, increased emphasis on interna-
tionalization, the formation of an autonomous central institution for quality assur-
ance and accreditation and the development of criteria for institutional audit, new
pedagogical designs as well as a new funding model that is supposed to provide
stronger incentives for improvement.

The new credit point system (in line with ECTS), the grading scale (ABCDEF),
modularization, the international study period and the model of intermediary and
final examination have become the norm, and are explicitly related to the Bologna
process.

It has been a major political concern that the new Bachelor's and Master's pro-
grams should lead to better teaching and learning. They are accompanied by a
greater emphasis on group work, problem based learning, written work, more
regular feedback to students, and the use of portfolio assessment, among other
things. Educational institutions are to enter into agreements with students concern-
ing courses, clearly outlining the rights and responsibilities of the institution and
the student in relation to each other. A common criticism from academic staff is
that higher levels of teaching-related activities mean less time to do research,
something that in the long run will lead to a decrease in the quality of higher edu-
cation teaching and learning (Michelsen and Aamodt, 2006).

5. Relevance

In Norway, the often conflicting interests linked with the development of basic versus applied knowledge, have been balanced and solved organizationally with a binary system for higher education as well as a so called "institute sector" with the main responsibility for applied research within target areas. Of a total of 51,000 individuals involved in research and development activities in Norway in 2002, nearly 20,000 were employed in the industrial sector and 9,000 in the institute sector.[4]

Norwegian universities have earned substantial social legitimacy by providing academic candidates for the labor force as well as research deemed necessary for the well-being of the nation. The considerable degree of academic autonomy of the academic staff working at universities and colleges could previously be understood in light of this.

It appears that this type of contractual relationship no longer solely legitimates the autonomy of the academic profession, as we observe shifting conceptions and demands of academic relevance. This relates *inter alia* to the value of interdisciplinarity, the increasing power of stakeholders, business involvement and funding, the growing importance of HE as a credential bestowing exercise as well as an increasing practical orientation. A committee was appointed by the government in 2006 to, for example, suggest how to develop an infrastructure for an efficient regional system of collaboration between colleges/universities and local/regional businesses and communities.

There is a growing concern for the role that research and the academic profession is forced to maintain an economically sustainable development. In contrast to neighboring countries like Denmark, Finland and Sweden, Norway is still highly dependent upon a raw materials based economy (oil, gas and fish). The natural resources are expected to be exhausted within the next two generations and it is therefore crucial to rearrange the business structure accordingly (Arthur, 2006). A national infrastructure for the support of innovation and entrepreneurship (in principle) is under development – including Technology Transfer Offices ("TTOs") at the universities. It is argued that research staff at Norwegian universities and research institutes are first and foremost motivated by the dynamics of the scientific hierarchy. With some exceptions (in medicine, technology and the sciences), the academic profession is characterized by a lack of commercial thinking about the potential for developing patents (Gulbrandsen et al., 2006, pp. 57-78).

Higher education institutions are now expected to take more responsibility for collaboration with employees and business. Study courses that are "clearly vocationally relevant" should be developed. Institutions are required to increase the applicability of scientific methods and results as well as stimulating innovation. This mandate may be read as a follow up to the national legislation for universities

and colleges of 2002, stating that they should assume greater responsibility for collaborating with society.

Above all, one very important part of the Higher Education Quality Reform in Norway was the formation of an autonomous central institution for quality assurance and accreditation (NOKUT) in 2003, and the development of criteria for institutional audit. Authority was devolved to the new body, securing its formal independence from the Ministry.

The universities and colleges have allocated considerable resources to the development of new lines of study and the professional circles have demonstrated great creativity in developing new study programs with, in part, brand new subject combinations. This development is often understood as the most typical stratification pattern in higher education, distinguishing between academic and Vocationally-oriented studies. A closer investigation of the profile of the new study programs developed recently in Norway, however, calls for a more differentiated theoretical understanding. There are numerous examples of new bachelor's and master's programs not directed towards specific occupational or practical fields such as master's in entrepreneurship and innovation, gender and development, or African and Asian studies. This illustrates the role of higher education also in allocating people to the economic, political, organizational, personal and familial spheres of society, and not only to the vertical occupational structures and social systems of stratification. Trends in curricular change are often better explained by broader global processes of social change rather than by local functions and interests. Curricula that emphasize topics like international society and human diversity also illustrate how more and more domains in society, both socially and politically, are understood to require social management (McEneaney and Meyer, 2000).

In recent years much public attention is paid to the general need in society for the knowledge of basic disciplines, particularly within the sciences, such as maths. Simultaneously, interdisciplinarity is regarded as a prerequisite for innovation and collaboration between industry and the overall needs of the knowledge society.

In contrast to the traditional role of higher education in the Nordic region (both in the post- and pre-war periods) of educating civil servants in traditional professions and disciplines, it now seems that problem-oriented master's programs will increase at the expense of the traditional disciplinary based study programs.

The module structure means less (disciplinary) control; both with respect to the content (syllabus) and the socialization of the students. A common criticism of the Quality Reform has been that modularization and more frequent assessment of students conflicts with the time needed to develop a deeper and more general understanding of the knowledge base of disciplines. In the political lobbying processes, the university boards typically supported the new study structure, however claiming that fresh resources were needed in order to realize good intentions such as improving the quality of teaching. The board of the Norwegian Association of

Research Workers (26.04.02) claimed, however, that the new master's programs would weaken quality and lower professional standards.

Thus the integration within the EU, in particular, has dramatically undercut the old sovereignty and protection provided for professions by the nation states and the national community (Freidson, 2001). This, and many other related, developments pose challenges for the academic profession concerning how to handle research and education in general, as well as practical professional knowledge (Abbot, 1988) (Høstaker and Vabø, 2005, pp. 237-238).

6.   Global Competitiveness through Principal-Agent Relationships versus Academic Rationale[5]

To take part in international relations is generally considered to be of great importance for a small advanced country like Norway, particularly in increasing the breadth and quality of research. During the last two decades, internationalization of higher education and research has become a major political issue, at the national as well as the institutional level.

In contrast to the old internationalization typically initiated and managed by academic staff on an individual basis, the new internationalization has a more formal, institutional and collective character (Trondal et al., 2001). Nevertheless, it seems that the new internationalization affects most aspects of academic work and careers, from student mobility to modes of scientific publication. Many of the efforts are marked by practical obstacles. Others may challenge the academic profession's values, ideology and power, especially since the new internationalization is saturated with new steering ideologies and measures of academic performance.

Having initially mainly emphasized the mobility of students and staff, recent efforts within the new internationalization are marked by a more competitive edge. The academic profession is expected to take part in the international competition over students and financial resources; e.g. through organizational reforms like the establishment of centers of excellence and new study programs taught in English.

Although Norway is not a member of the EU, a major aim for the Norwegian research and higher education community, according to the most recent national white paper on research, is to play an active part in the European Research Area. The ambition is to advance the development of research cooperation with the U.S., which has always been of great importance to Norway, and also to make closer links with Canada and Japan. Other important aims are to strengthen bilateral research cooperation, to develop Norway as an attractive host to foreign researchers and as a global partner in research.[6] Recently, attention has been drawn to the need for closer collaboration (including higher education and research) within the northern areas, including North West Russia, e.g. on Arctic research.

Due to close historical, cultural, and linguistic ties, the Nordic region of small nation states (Denmark, Finland, Iceland, Norway and Sweden) has traditionally been an important arena for cooperation within education and research. There is also growing concern about the need for extending Nordic collaboration on education, research and innovation in order to reach the critical mass necessary to fulfill national goals of educational and research excellence in relation to EU policy and the increasing global trade in higher education.

As more and more resources aimed at internationalizing academic activities are organized within programs directed at targeted areas, topics and regions, the internationalization activities of the academic staff have, to an increasing extent, been reduced to a principal-agent relationship (Gulbrandsen et al., 2006) where various principals like the national research councils and ministries for research and education, the EU and the Nordic Council of Ministers (NCM) are giving tasks to their agents (academic staff).

Recent investigation reveals that arguments for internationalization of the academic profession are (still) embedded in academic rationale whilst, in the public policy for higher education and research, economic and strategic justifications for internationalization are becoming more dominant (Frølich, 2006). Undoubtedly there is, in the Norwegian context, competition between different discourses on how to internationalize education and research, with respect to the languages used and the rationale for cooperation, but also with regard to region – for instance to what extent it should be directed towards aid and solidarity with more underdeveloped regions (Frølich and Stensaker, 2005).

Nevertheless a recent study of the effects of EU 6th framework programs among researchers based in Norway shows that these framework programs create conditions for research projects dependent upon international cooperation in order for them to be carried out. Many researchers also report that program participation provides opportunities for positioning themselves internationally. They also benefit from participation in terms of international networking. Participating in EU-programs is challenging since the funding is low and the program organization is highly bureaucratized (Langfeldt, 2006). It is also my impression that many scientific employees in Norway, particularly within the humanities and social sciences, are sceptical about participating in EU programs due to the low standard of academic quality and the effort required compared with the possible outcomes and benefits.

Regarding the use of English as a standard academic language, some argue in favor of the need for maintaining a Nordic scientific language from a democratic perspective as a mean to secure common access to scientific knowledge. There is also a debate about the level of academic work at which the use of English should be supported, and how this should be done (Simonsen, 2006).

National Research and Development statistics show that the volume of international publications has increased, articles in scientific journals have become the

dominant mode of publication, and co-authorships are becoming more common. In 2004, 53 per cent of all scientific articles published by Norwegian researchers were co-authored by international colleagues, a significant increase since 1981, when this figure was 16 per cent. The collaboration profile has broadened in recent decades; there has been a strong increase in collaboration with Russia, Poland, Japan, China and Australia. In descending order, the five most frequent countries in the collaboration profile are the USA, Sweden, the United Kingdom, Germany and Denmark.[7]

Co-authorship between European and Norwegian researchers has increased whilst co-authorships between American and Norwegian researchers are (slightly) decreasing. This may be interpreted as an effect of the effort put into research collaboration within the EU (Kyvik and Sivertsen, 2005). Co-authored research articles with African colleges have also increased (Frølich, 2006).

Academic staff and doctoral students are expected to have sojourns abroad, particularly during researcher training, as part of doctoral training and as postdoctoral fellows. From 1991 to 2000 there was a substantial increase in all types of professional trips (conferences, guest lectures, study and research visits, peer reviews, research co-operation), although these are mostly related to conferences and research collaboration (Kyvik and Smeby, 2004).

There are examples of a mismatch between the standards of internationalization approved by principals and the different needs in different disciplines and fields of science with regard to internationalization and whether, when, for what academic purpose, for how long and where one should have a period abroad during researcher training (Vabø, 2002).

7. Internationalization and Higher Education

Internationalization, student exchange and mobility have become an important part of the strategies of the institutions and lead to closer collaboration with institutions abroad. The "new" internationalization activities within higher education are affected by many challenges and obstacles. The barriers to, for instance, programs for student and staff mobility (Nordplus, Erasmus) are many, both private and professional, and it often takes a considerable amount of resources for such programs to reach their goals in a satisfactory manner.

It is the intention that the bachelor's and master's programs should lead to an increase in international student mobility; all bachelor's students have the right to spend a semester abroad during the study period. So far, the increase in student mobility has been rather modest. The lack of administrative capacity at the institutional level as well as the lack of state incentives encouraging institutions to increase mobility is considered to be a major reason for this (Tjomsland, 2002).

Nevertheless, an increasing number of formal agreements about staff and student mobility have been made with HE institutions abroad, and a range of study

programs now use English in the syllabus and as a teaching language. It is therefore interesting to observe that in a recent survey of academic staff in Norway where the respondents were asked to rank the mobility of staff, institutional cooperation, the mobility of students and stronger market competition, only 13 per cent considered student mobility as the most important factor for quality enhancement in higher education.

8. Managerialism

In the 1990s, extensive reforms inspired by so-called New Public Management (NPM) were carried out in the Norwegian public sector. Almost two decades later, a performance based funding system is linking grants with the production of study points and research publications: research funding based on the number and type of publication is justified according to the need for transparency, to avoid political interests influencing research funding, to enhance internationalization and to improve the quality of Norwegian research.

Challenges also arise when internationalization is used as a measure of the performance of academic staff. A new incentive based funding system allocating resources to researchers according to the production of doctoral candidates, the degree of external funding (from the EU and the National research council) and scientific publication in well-respected international journals. The latter criteria are heavily criticized by professors in the humanities arguing that the funding system assumes a positivistic perspective since it aims to quantify quality. It is argued that it is particularly problematic when applied in the humanities, since this field is characterized by opposing views as well as criteria for scientific quality, and furthermore includes many disciplines in which the native academic language is the most important (Johansen and Hagen, 2006). The incentive based funding system is also criticized since an established system for academic promotion favoring high quality publishing already existed, and since it does not favor other forms of academic dissemination (Frølich, 2006). The big problem, according to Holme (2006), is that this makes researchers think like managers and administrators in the field, valuing other researchers according to bibliometric data rather than examining the actual quality of their research (Chronicle in Dagbladet 7th July 2006).

It has also been claimed that the academic profession is hampered since many professional activities no longer give any financial and/or formal professional credits, such as a committed attitude to teaching and supervising, reading colleagues' manuscripts, participation in professional associations, and reviewing articles (Høstaker and Vabø, 2005). All these activities are important for the survival of an academic profession as such, as well as for the transfer of tacit knowledge to students and younger colleagues.

The number of administrators increased during the 1980s and 1990s (Gornitzka, Kyvik and Larsen 1998). This is explained by a rise in student numbers and an increasing number of tasks for universities and colleges to fulfil, among other things as a consequence of performance based steering systems and internationalization. In addition to playing a more important role as planners and organizers on behalf of the academic corps and the academic institution, the administrators are also becoming more powerful by means of the processes of professionalism, as they are now holders of more educational capital, creating their own organizations and interest groups. In the university debates in Norway following the implementation of NPM from 1989 onwards, the administrators were (typically) criticized for exercising too much power over academics. Empirical investigations into the actual workings of institutions showed that academics involved in institutional leadership may also be holders of administrative power. Criticism of administrative power serves to symbolize distance from certain political movements as well as to symbolize a strong academic identity (Bleiklie et al., 2000, pp. 262-267).

The governance structure of universities has also been changed to fit with the notion of a knowledge enterprise. The university boards now include external members, representing various groups of stakeholders (Larsen, 2006). Since the abolishment of the chair system (1955), the universities had been governed by academics whether or not they had a tenured position, as well as students and representatives from the administrative/technical staff. In addition to democratic reasons, this system was primarily justified on the basis of academic qualifications, so that academic staff with tenure always comprised the majority (Bleiklie, 2005).

The universities and state colleges have had some degree of freedom to choose a model of governance within this new regime, for instance the extent to which they should stick to the old arrangement, with leaders (department chairs, rectors and deans) elected among the academic staff, or whether such leaders should be appointed and whether this should include the possibility of recruiting external candidates.

Most academics support the old system of election. However, the majority also report they are satisfied with, and have confidence in, their leaders. This type of experience particularly applies to academic staff in close relationships with their leaders, something which may be explained by the importance of informal networks for the exchange of information and decision making. The authors conclude that the governance model for the academic profession in Norway seems to have changed in favor of strategic management. In particular, the state colleges have chosen to strengthen governance at the faculty level at the expense of the departmental level (Bleiklie et al., 2006).

9.   The Positional Hierarchy and the Changing Role of Doctoral Work

From marking the "zenith" of an academic career (1970), since the early 1990s doctoral work and the doctoral thesis have gradually been transformed into a rite of passage for obtaining a tenured academic position at a university or college (Bleiklie and Høstaker, 1994). The number of doctoral students has risen. Over the past fifteen years, the number of doctorates awarded annually has almost doubled. In 2004, 782 doctoral dissertations were defended at Norwegian higher education institutions, compared to 393 in 1990 (Research Council of Norway, 2005, pp. 45-46). Typical policy arguments for this expansion are: that doctoral training is necessary as one of many attempts to improve the quality of the work of the academic profession, for demographic reasons; the need for replacing many vacant positions due to an imminent "wave of retirements", and for the sake of international competitiveness; to keep the research volume including the number of doctoral candidates produced, up to the OECD standard.

The transformation of the role of doctoral work in Norway has, however, met with many challenges. The number of doctoral students actually completing has been rather low and in many cases the period from start to defense ("disputas") extends many years beyond the required 3-4 year duration. A transformation of the "old" doctoral degree system into the PhD may be expected to solve these problems to some extent: in connection with the Norwegian follow up to the Bologna Declaration, the doctoral titles of various (13) academic fields were replaced with the PhD. The old dr. philos. degree has nevertheless been retained for those who want to pursue a doctoral degree independently of tutor, time schedule and course requirements (Research Council of Norway, 2005, p. 47).

Vacant positions due to retirement are not expected to wholly solve the imminent demand for scientific positions. So far, minor unemployment is experienced by doctoral candidates in Norway, but it is reasonable to believe that, as in most western countries, doctoral work will also change its role and no longer be solely preparation for scientific positions. There has been a recent agreement to develop national programs for industrial PhDs.

Challenges to the role of doctoral work in a scientific career are also related to changes in the logic of the positional hierarchy. The situation is characterized by inflation in the criteria to be met in order to be considered eligible for a tenured scientific position. In addition to a doctoral degree, today one or two periods holding postdoctoral fellowships are often necessary in order to compete for a tenured position. Such a prolongation of the waiting period implies inflation in recruitment criteria; more publications, experience of leading research projects, etc, are frequent requirements (Bruen-Olsen et al., 2003).

It has become more common to recruit applicants (to tenured positions) from other countries (not only "home grown"). Furthermore, universities are expected to recruit more foreign PhD students – also due to the fact that Norway has now

signed the EU declaration on collaboration on researcher training. This has led to increased attention to the need for establishing an adequate system for admitting PhD students from abroad. For the institutions, this impacts on practical matters such as making international "calls", providing information and appropriate facilities. From an academic point of view, a more expansive international recruitment of PhD students represents a challenge, since it results in a more mixed body of PhD students needing guidance through a university system with particular national traditions. The new standards of researcher training imposed on the academic profession through the introduction of the PhD degree system, triggers the latent tensions between different fields of science regarding modes of researcher training. Whereas the researcher training in the soft sciences, the humanities and social sciences has been a highly privatized, individualized relationship between patrons and their clients, working with a doctoral thesis was referred to as a lonely process of analyzing discrete empirical material. The amount of time invested was not predictable. The relationship to one's supervisor had the character of an epistemic meeting.[8]

While the Norwegian academic system has been characterized by brain drain, with more outgoing than incoming researchers, it has now become more common to recruit foreign academic staff. Also, the number of foreign doctoral students in Norway has increased significantly during the last few years; for instance between 1991 and 2005, the number of foreigners completing their doctoral degrees in Norway increased from 7 to 22 per cent (see Doktorgradsregisteret Oktober 2006 NIFU STEP, Oslo).

The positional hierarchy is in many ways characterized by a system dynamic stemming from the late nation building era of the higher education sector in the 1960s and 1970s, with a focus on growth and equality both in terms of the spread of institutions, research and study programs offered among the national regions, as well as internally between ranks. The universities still have a recruitment policy that works in favor of "homegrown" candidates where applicants to academic positions with a background from other Norwegian universities or from foreign countries (up to recently) had less chance (Vabø, 2002). Since recruitment strategies can no longer solely be justified by practices of inbreeding, academic staff from abroad may win in the competition with local candidates. Nevertheless, a challenge for universities and academic groups is how to keep the most talented foreign doctoral candidates as well as how to become attractive for the better qualified applicants − this goes for academic as well as social conditions. Centers of excellence are supported, both at a national and at a Nordic level in order to attract foreign researchers, among other reasons.

The fact that Norway is a fairly young and small nation state with its first university established in 1811, and that the main development of universities and university colleges took place in the post war period, are important reasons when explaining why Norwegian universities rank fairly low in the international reputa-

tional hierarchy. In comparison with its neighboring country Sweden for instance, Norway has few Nobel Prize winners. The Nordic language and culture may be hard to crack, and steps to facilitate the integration of researchers' families also represent a challenge.

10. Concluding Remarks

From being a highly privatized affair organized on an individual basis, during the last two decades the internationalization of higher education and research has become a major political issue in Norway, both at the national and the institutional level. The new modes of internationalization of higher education affect all aspects of academic work and the course of careers: as a student, through participation in mobility programs, during researcher training, as a criterion for recruitment to academic positions, and regarding modes of academic work, both with respect to teaching and research. The academic profession has to an increasing extent become subject to a principal-agent relationship as more resources aimed at strengthening international cooperation in higher education and research are channelled into strategic programs of various kinds. International activities have become a measure of performance in the national and institutional management of universities and individual academics. In Norwegian higher education, recent reforms, such as a new degree structure, pedagogical reforms, as well as new routines for external quality assurance and accreditation, have not only affected the traditional modes of teaching and assessment of the academic profession. They have also reduced their power to control the content and nature of their work. This development relates to the lack of trust in professional self regulation and of the academic profession in general (Enders, 2005).

Developments highlighted in this article also raise the question of what strategies the academic professions in Norway should employ in order to maintain status and control (their) market conditions (internally/externally), as well as to develop and/or maintain the internal stratification of the positional hierarchy (Bourdieu 1988; Murphy 1988; Collins 1990). For instance, we see the tendency for academic credentials to become inflated. In addition to a doctoral degree, experience from teaching and supervising, one or two postdoctoral fellowship periods along with requirements for several international publications and research management experience seems to become a new "rite of passage" (replacing the doctoral degree) those aspiring for an academic career at universities. Since recruitment strategies can no longer solely be justified on the grounds of inbreeding, it has become more common to employ academic staff from abroad, and these may succeed in competition with local candidates.

These and other developments identified in this chapter, such as the reduced representation of scientific employees on governing bodies, the greater emphasis on external representation and the potential for increased autonomy of governing

bodies, a continuous assessment of the "quality" and efficiency of research and teaching, a new definition of the role of administrators, and finally the influence of students as consumers, make it reasonable to suggest that the academic profession is being transformed from a group that defined the institution to one interest group among others (Høstaker and Vabø, 2007).

Notes

1 The total number of students at Norwegian colleges and universities is approximately 210,000. In the spring term of 2004, the total number of full time students at Norwegian universities was 70,258 (UiO: 29022, UiB: 16557, UiTø: 5,907, NTNU: 18772); at the scientific colleges, 6,891; and in the state college sector 86,204. In addition, a steadily rising number is studying abroad: 20,000.

2 Following proposals in a Storting (the Norwegian parliament) white paper on higher education submitted by the Government in March 2001 (White paper No. 27 to the Storting, 2000-2001).

3 White paper No. 27 to the Storting, 2000-2001.

4 Source: NIFU STEP, Statistics Norway/R&D statistics 2005.

5 This section is based on the presentation "Challenges of Internationalization for the Academic in Norway", given at the UNESCO-ENA workshop in Kassel, Germany 4-6 September 2006.

6 White paper no. 20 (2004-2005) *Vilje til forskning*. [Will to research] Oslo, The Royal Norwegian Ministry of Education and Research. (In Norwegian.)

7 Source: NIFU STEP, Statistics Norway/R&D statistics 2005, p. 54

8 Opinions expressed at the conference on researcher training arranged by the University of Bergen, Geilo 23-24 October 2006.

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12

Finland:
Massification, Steering-By-Results and
New Divisions of Labor

Timo Aarrevaara and Seppo Hölttä

For the academic profession research is the universal focus, and the universal definition for the development of the profession. Academic work is structured and organized around knowledge based disciplines and faculties. Beyond the academic organization every country has created peerless preconditions for academic organizations. In this chapter, we define the preconditions and peculiarities of academic work in Finnish higher education. The chapter presents an overview of the higher education system, the driving forces affecting the academic profession and its role in innovation.

1.   The Finnish Higher Education System

The Finnish higher education system comprises two parallel sectors: universities and polytechnics (the non-university sector, AMK). There are 20 universities in Finland: ten multi-faculty institutions, three universities of technology, three schools of economics and business administration, and four art academies. All universities are research universities and have the right to award doctorates. The university network covers the whole country, including the sparsely populated areas in the Northern and Eastern parts of the country.

   The first university degree, bachelor's, can generally be attained in three years of full-time study, amounting to 180–210 credits in the European Credit Transfer System (ECTS) and the master's degree, 120–150 ECTS credits, normally in two years. Full-time studies for a doctorate take approximately four years following the master's degree.

   The polytechnic system was established in the early 1990s, and the Polytechnics Act (2003/351) decrees that a permit for managing a polytechnic institution can be granted to local authorities (municipalities) or a joint municipal body (municipal federation), to the state or to private organizations (a registered Finnish Limited Company or Foundation).

The first polytechnics gained permanent status in 1996. Polytechnics are professionally oriented higher education institutions with a responsibility to conduct applied research and development which serves teaching and working life. Today there are 29 polytechnics. Polytechnic degrees are bachelor-level degrees with a professional emphasis and take 3.5 to 4.5 years to complete. The largest fields are engineering, business and health care (for the establishment of this sector see Hölttä, 2000).

The provision of higher education in Finland is extensive. The annual student intake in the system as a whole is equivalent to about 65 per cent of an average 19-21 age cohort. In 2005, in the Finnish university system there were about 160,000 undergraduate students and approximately 20,600 postgraduate students, about 80,000 in open university programs organized by the universities and over 131,000 students in polytechnics.

In total, in 2005 universities employed some 29,300 people, of whom about 6,900 were teachers, and the ratio is 20.4 students per teacher (in 1994 the respective number was 16.6). The number of professors was 2,255. That year there were 17.6 full-time undergraduate students for each university teacher, and about 2.6 new students are admitted annually per teacher. There were 1.6 master's degrees awarded per teacher and 0.6 doctorates per professor annually. In the same year, the overall polytechnic workforce was 11,150, of whom 5,950 were teaching personnel and about 950 principal lecturers. The student teacher ratio in polytechnics is higher than in universities (Ministry of Education, 2006).

All Finnish universities are state-run institutions and primarily financed from the national higher education budget. The polytechnics are either municipally or privately run and co-financed by the government and local authorities. By law, the institutions of higher education are not allowed to charge tuition fees. Parliament passes educational legislation and decides on the overall direction for education and research policy. The universities are governed by the Universities Act and polytechnics by the Polytechnics Act. The main policy guidelines and development targets are determined at a general level in the Development Plan for Education and Research, which is adopted by the Government for a six-year period and revised every four years.

2.　External Conditions for the Academic Profession in Finland

Historical Developments of External Conditions

Finland was a part of Sweden for a period of approximately 700 years, up to 1809 when it was incorporated into Russia as an autonomous grand duchy. The country did not gain independence until 1917, but the structures of developed independent states already existed in the country at that time. Universities have been independ-

ent operations within the state for as long as there have been universities in Finland.

The first university in Finland was founded in the 1640s in Turku. Education was already held in high esteem in Finland in the Middle-Ages and Finns had been studying in many European universities. The basis for building a strong academy was based on the experience of many Finns, some of whom had actually held important academic positions in European universities. The Turku Academy had the kind of independent structures and finances developed in European universities, and their governance was independent of the city administration. It complied with European academic traditions and its administrative autonomy meant that the Turku Academy had the right to establish its own organs, elect officials, and set its own objectives.

In 1809 Russia conquered Finland and it became an autonomous grand duchy. This status brought Russian administrative practices into Finland, and the position of the ruler became much more emphasized than in the Swedish system. It should be pointed out that St. Petersburg was the capital of Russia in the 19th century and was an international city with a higher education that was the best in the world at the time. These features were to influence Finland, which promoted the development of the university.

When the capital of Finland was transferred from Turku to Helsinki in the 1820s, the Turku Academy was also transformed into the Alexandrian University with the responsibility for providing education for the highest officials and clergy. A strong connection with the state was guaranteed by the fact that an heir to the throne acted as the Chancellor while the Vice-Chancellor was an academically qualified professor. The university had educational autonomy but the administration was internally subordinate to the state administration.

Since the country gained independence in 1917, the universities and academe have taken a visible role in the social, economic, and cultural development of the country. The status given to higher education and the academic profession by the state is illustrated by the fact that the right of autonomy was granted to the University of Helsinki in the constitution of independent Finland in 1919. During the early years of independence, the academic profession was heavily involved in the leadership of the nation: in particular, many of the national leaders were recruited from among the ranks of university professors. This historical tradition explains, too, the important role given to universities in the post-war national development (Klinge, 1983; Hölttä, 1988).

The Finnish university system did not expand until the twentieth century. The Technical University of Helsinki was founded in 1905, and the Swedish-speaking Åbo Akademi in Turku and the first Finnish-speaking university in Turku in 1922. The latter two were private universities. Although all Finnish universities today are public institutions, Finnish higher education has a strong tradition of private

higher education. The universities established during this *first phase* of expansion were not, however, private alternatives in the qualitative sense.

Since independence, Finland adopted a continental higher education model. However, its steering system reflects a state supervision model of governance with strong national ministry level steering and strong autonomy of universities (see Maassen, 2003, pp. 42-43). The main actors have been state officials at the national level and senior professors at the university level, and the freedom of higher education is guaranteed by the Finnish Constitution (section 16). Universities are self-governing, as provided for in Acts (Constitution, Section 123).

In the 1950s and 1960s, many provincial universities were founded with the purpose of securing regional development. Most of the new universities were multi-disciplinary universities rather than mono-disciplinary, in the terms used by Ulrich Teichler (2004, p. 5). For example, the University of Tampere was founded in 1960 as a multi-disciplinary university, when the School of Social Sciences established in 1925 in Helsinki moved to Tampere.

The expansion of the Finnish higher education system continued in the 1990s and at a time when the status and functions of professional education were being assessed. As a result, a new polytechnic sector was established. This will be discussed below in the context of four main drivers affecting the changing academic profession in the 1990s and 2000s, i.e. massification and the increase in institutional diversity, government steering and higher education policy, and internationalization and globalization. What characterizes all these different driving forces in Finland is the dominant role of government and the welfare society context.

Since 1995, the Republic of Finland has been a member of the European Union, which from 2006 had 25 member states, each of them with their own administrative system based on national traditions. There is widespread agreement among researchers that European integration has brought practices in the member states closer to each other, especially in the 2000s. Although agreement has also emerged within the European Union to develop the European higher education area, researchers' interpretations are quite different when it comes to the depth of European integration and the extent of its development.

3. Current Drivers Effecting Change in Academic Profession

3.1 The Welfare Society Context

Today, Finland is one of the countries, which have kept the welfare society principles as a corner stone of its economic and social development. This means that within the educational sector, for example, education is free up to university level, and government subsidizes quite heavily the living costs of students through a package consisting of a grant, a housing subsidy and a loan (Hölttä, 2000).

Recently, there has been a lively political discussion about tuition fees, in particular, in the context of internationalization and globalization, but Parliament has not been ready to take the step of introducing tuition fees even for non-European students. The principle of free tuition is also based on a conception of the role of students as members of the higher education community and of the university instead of being treated as customers.

This welfare framework still strongly influences the academic profession, although recently there have emerged signs of a shift in the balance between the roles of servant of society, independent academics having their main commitment to their disciplinary communities, and entrepreneurially-oriented independent professionals.

A special characteristic of Finnish higher education policy development, reflecting the importance given to higher education and research in the welfare society, has been that the growth of resources has been guaranteed by legislation since the mid 1960s.

3.2 Massification and Increase of Institutional Diversity

It has been a long term feature in Finnish higher education policy that it has been more and more closely integrated with national and, in particular, economic policy. In the 1960s, this was realized in regional development policy; in the 1990s higher education and research were selected as the main instruments of the national recovery policy after a deep recession caused by international fluctuations and the simultaneous collapse of the Soviet Union, with which Finland had traded extensively (Hölttä, 1999a; Hölttä and Malkki, 2000).

The means for national recovery were a program of upgrading the educational level of citizens, the reallocation of resources to support high technology industrial development and the diversification of the provision of higher education.

The political target of providing access to higher education for at least sixty per cent of age groups was implemented. The establishment of the polytechnic sector was the main means for achieving this.

Expansion of the higher education system was very rapid in the 1990s. In 1990, the total number of entrants to universities was 16,000 and the corresponding figure in 1998 was 19,400. The growth has not continued at this pace during the current decade, as the national target of the provision of a study place at university or polytechnic for 60 per cent of the relevant age group was reached. In polytechnics, the number of entrants in 1997 was 15,587 and the corresponding figure in 2005 was 33,259.

The number of entrants in universities in 2005 was about 20,800. Enrolments in the field of engineering grew from 3,000 to 4,200 in the 1990s and those in the natural sciences from 1,100 to 2,300, reflecting the changing focus in higher education policy. In 2005, the number of entrants in engineering was 3,900 and in the

natural sciences 3,500. The variation in figures is partly a consequence of the special funding and development programs in these fields in the 1990s, and partly the result of a growth in the targets for degrees awarded, agreed by the Ministry and universities. In 2005, the university system awarded about 13,000 master's degrees and about 1,400 PhD degrees – the corresponding figures were 8,423 master's degrees and 490 PhD degrees in 1990 and 11,515 master's degrees and 1,156 PhD degrees in 2000 (sources: AMKOTA and Statistics Finland – Finnish Central Statistical Office). The growth of PhD degrees can be explained by the extension of the graduate school system established in 1995, which improved the quality of PhD studies and made postgraduate education more systematic (Ministry of Education, 2006). Candidates defend their PhDs at an average age of 38 years.

As discussed, the *third stage* of the expansion of the national higher education system in the 1990s took place mainly through the establishment of the polytechnic sector. By the early 1990s, Finland was one of the few European countries with a uniform higher education system consisting of universities only. The main reasons for the late establishment of the non-university sector of higher education can be found in the academic tradition of Finnish higher education and in the policy decisions made in the 1960s and 1970s concerning the regionalization of universities (Hölttä, 1999b). The idea of higher education based on the Humboldtian notion of the research and teaching nexus is deeply rooted in the Finnish academy. It emphasized the importance of academic freedom and students' moral growth, and thus the university model adopted in Finland was not based on the French idea of higher education (Välimaa, 2004, pp. 32-33).

As already seen, this view has had concrete implications for the institutional structure of the system throughout the history of Finnish higher education. The Finnish solution of establishing a mass higher education system in the sixties and seventies was different also from its Nordic neighbours with similar regional characteristics, i.e. large sparsely populated and less developed areas outside the southern industrialized region. Using the same regional policy arguments as Finland in its university reforms, Sweden and Norway set up the non-university sectors composed of regional colleges without a research function in the 1960s and 1970s to extend higher education to the less developed areas in the north (Höltta, 1999b).

At the outset, polytechnics were considered mainly as teaching institutions but their roles in research has increased very rapidly over the past few years, and currently research and development is included in their statutory tasks. Nevertheless, they still have two main problems in undertaking research. The first is lack of basic funding for research activities. The second is lack of a tradition. Genuine research communities in polytechnics are only slowly emerging. The regional development programs in the context of the creation of regional innovation sys-

tems, where the universities have a major role, are however providing them with a basis for applied research for advancing local industry.

The establishment of a polytechnic sector was an important milestone in the development of the academic profession in Finland, leading to the emergence of a vocationally-oriented profession having strong links with professions like engineering and nursing and the business communities.

3.3 Government Steering Policy – Management by Results

The framework of management by results implemented since the late 1980s has had direct consequences for the academic profession and the working conditions and goals in Finland. This set of goals, agreed in the late 1980s and early 1990s for the development of government steering instruments for the higher education system was in line with the ideas of New Pubic Management (NPM), and the corresponding measures were developed in all sectors of public administration in Finland. Higher education policy, and the development of government steering policy instruments in general, was based on the restructuring of the welfare state rather than the alternative discussed, an extreme market-oriented "New Zealand model", as it was called. The chosen strategy was based on the need to develop a national infrastructure and, in particular higher education and research to support Finnish industries to increase their competitiveness in global markets. A central element of subsequent Government policy was to take high technology and knowledge-intensive production as the national priority in the economic recovery program (Hölttä and Rekilä, 2003).

The policy instruments, which were developed on the basis of the *Decision of Government*, were a mix of deregulation and centralized steering instruments in line with other European countries, and characterized by the conditions of self-regulation (van Vught, 1989).

The main policy instruments used in the implementation of the new higher education policy goals were *contracting* between the Ministry of Education and universities, and a *funding* model which linked the agreed goals to funding. Also, a quality assurance system was established, and a high priority was given to the development of an infrastructure for the provision of information for the new kind of interaction and dialogue between Government and universities (Hölttä, 1998; Hölttä and Rekilä, 2003).

The core of the new steering and planning practice is the model of *steering-by-results.* Based on the national policy goals contained in the national *Development Plan for Higher Education and Research* submitted by the Parliament for a period of six years, the three-year plans of universities and the offers by institutions concerning the institutional goals, the representatives of the Ministry and the rector of each university negotiate and eventually sign a performance agreement, which

specifies both the goals for the institution and its funding (Hölttä and Rekilä, 2003).

The most important goals for universities are the annual average numbers of master's and PhD degrees to be awarded during the contract period. The goals are set for each 'broad study field' like humanities, social sciences, natural sciences and engineering. The master's degrees goals – and performance – are aimed at reflecting the educational productivity of universities. The PhD goals are designed to reflect research productivity at universities. More qualitative national goals are also agreed upon. They are related to the main political goals, based on the *Development Plan*, and are set for the whole higher education system. Development programs and projects of national importance, nowadays, based on the implementation of national programs and their funding are also part of these contracts. These represent *program steering* and they are, in some cases, linked to more general national policy goals and cooperation with other ministries. The funding system for universities is closely connected to the contracting system, and the majority of funding to individual universities depends on the degree goals, and finally also on the actual master's and doctoral degrees awarded (Hölttä and Rekilä, 2003).

These lines of development have molded the role of academics in the system quite profoundly, in particular, in two respects: through the need to redesign the role of academic leadership and the incorporation of the academy into the national system of quality assurance. After the administrative reform of Finnish universities in the 1970s, the power of administrators had been increased and, for example, the rector had quite a traditional role with little decision-making or managerial power. In the present system the rector represents the university in the negotiation on the performance contract, signs it and is responsible for its implementation at the institutional level. The contracting system is applied internally, within institutions, also making the role of Dean and Head of Department more managerial. The heads of department are not just managers of their units but, primarily, representatives of their colleagues, standing for the democratic values of the working community and maintaining the traditional faculty norms (Fairweather, 1996, p. 202). The establishment of the national quality assurance system and institutionalization of this in the Higher Education Evaluation Council has introduced additional duties to the academic community (Hölttä and Pulliainen, 1991; Hölttä and Rekilä, 2003).

The national and institutional contracting and funding system has increased the pressure towards more performance-oriented behavior at the individual level also, and there has been quite extensive public debate in Finland recently about the purpose of academic work and values. This gathered pace when a performance based salary system was introduced in 2005. It replaced a system which was based on quite rigid salary grades guaranteeing, in practice, equal salary to all members of the academic community who were at a similar level or position in the aca-

demic hierarchy. The reform affects about 50,000 state employees, about half of those who work in the state institutions (Aarrevaara et al., 2005). This has been in line with general developments in government pay.

In the new salary system, all posts and their holders are evaluated in performance review meetings between individual staff members and their supervisors. The amount paid is a sum of the job requirements and the performance of the individual staff member. All these reforms are being implemented simultaneously and may influence the working practices of academic teachers and researchers, and especially the management and organizational cultures of universities.

A characteristic of the performance system in Finnish universities is the staff member's ability to influence the evaluation process. The most important mechanisms for this purpose are the performance review meetings for determining workload and the division of labor. Universities and most polytechnics have adopted a system in which teaching staff are expected to work 1,600 hours annually, although in practice working hours are longer. The number of hours per day or per week is not specified or controlled by the employer, and it is normal for academics to work more than the hours allocated. Obviously, the performance review meetings are important for feedback between the organization and staff members and also for co-ordination and collaboration (Aarrevaara et al., 2005). In the polytechnic sector, the salary system varies according to ownership. In polytechnics, each professional ought to be able to evaluate their use of time on an individual basis in relation to their annual work time. These include the use of performance incentives, such as the personal salary supplement to be introduced in polytechnics owned by municipal authorities (Aarrevaara, 2005).

The government has introduced several other competitive elements into the management by results steering system affecting academe. Examples include centers of excellence both in research and education and the program funding system in which universities and their units can compete for resources for targeted research or educational programs (Ministry of Education, 2004).

The increased accountability and performance orientation has been accompanied by increased autonomy for universities and the departments. The introduction of the lump sum budgeting system in the mid-1990s was the beginning of the development of financial autonomy. Today, there is an ongoing review of the financial autonomy and legal status of universities that may improve their opportunities for operating in the markets for higher education.

The reform directly affecting academic work is the system of flexible workloads implemented in the second half of the 1990s. Instead of rigid annual *teaching loads*, different for each category of teaching staff, the annual *workload* for each teacher is 1,600 hours per year. The heads of academic departments negotiate with each teacher the annual work plan, where the planned allocation of work for different purposes is set out. The use of time is not controlled in any way, but the main purpose of the system is to improve the commitment of individuals to the

departmental goals (Hölttä and Karjalainen, 1997). The academic profession seems to welcome a culture which emphasizes results, in which organizational control is not focused on how the work is done but on results achieved.

3.4 Internationalization and Globalization

The internationalization of Finnish universities and polytechnics has a strong European focus. The introduction of the new higher education and research policy in Finland has been closely linked, in particular, with the creation of the European Higher Education Area and the introduction of the degree stricture following the Bologna Agreement, and to the process of the creation of the European Research Area.

Today, the development of degree programs takes place in the context of the Bologna process. This has meant, in particular, the introduction of uniform degree structures based on the two cycle model, the first cycle ending in the award of a bachelor's degree which is relevant to European labor markets, and the second cycle consisting of master's and doctoral degrees; the establishment of a European system of credits; increased mobility; and the promotion of European cooperation in quality assurance. This has introduced new challenges for academics in Finnish universities and polytechnics in program development. In addition, new programs taught in English were created. The number of international exchange students has increased recently by about 10 per cent a year and, by 2005, consisted of about 4,300 students. During Finland's membership of the EU, teachers' mobility has also increased and focused on more target-oriented goals both in university and in the polytechnic sector. Active student and teacher exchange has increased the preparedness of Finnish tertiary education to mount joint academic degrees with partners. The most recent initiative is the joint European master's degrees developed in cooperation with European universities.

Other European countries are currently redefining their higher education and research policies in the context of the Lisbon strategy, meaning, in particular, greater integration with economic and industrialization policies designed to make them more competitive globally. This has meant increased investment in research, but also new targeted funding programs and structural reforms redefining the role of higher education institutions and the research undertaken at universities. The national and regional innovation systems are the key developments around which the new higher education and research policies are being built.

In addition to national policies, the European Union has been developing policy and instruments for EU-wide transformation, recently in the context of the Lisbon strategy. Since 1984, the research and innovation activities of the European Union have been grouped in one large initiative called the *Framework Programme*. This is the EU's main financial and legal instrument for implementing the European Research Area (ERA), which is now high on the policy agenda and

part of the strategy for meeting the goal of increasing investment in research and development to three cent per year of the EU's total GDP by 2010. The Framework Programme is serving two main strategic objectives: to strengthen the scientific and technological bases for industry and improve its international competitiveness while promoting research activities in support of other EU policies. However, recently the importance of basic research has also been raised in discussion.

As discussed earlier, higher education and research have continuously been in focus as national development strategies have been established. For more than ten years, the Finnish policy has been to build up an extensive system of *research and innovation*, in which universities have a central role as the producers of basic knowledge. The last fifteen years or so is characterized by the development of an extensive mediating system of actors and programs aimed at transforming and disseminating this basic knowledge in a form which is usable by national business and industry. In the terms of modes of knowledge production, the emphasis has clearly moved in the direction of Mode 2 knowledge production (Gibbons et al., 1994), where the questions for research increasingly come from society, and research itself is characterized by trans-disciplinarity and cooperation between universities, research institutions and the research departments of private companies.

The coordination of the national innovation system in Finland is in the hands of political leadership at the highest level. The national science, technology and innovation policies are formulated by the Science and Technology Policy Council, which is chaired by the Prime Minister. The Council advises Government and its ministries on questions relating to science and technology, the general development of scientific research and research training, and Finnish participation in international scientific and technological cooperation. The national authorities primarily responsible for science and technology policy are the Ministry of Education and the Ministry of Trade and Industry. The Ministry of Education is in charge of matters relating to higher education and research, research training and science policy and the Academy of Finland. The Ministry of Trade and Industry deals with matters relating to industrial and technology policies, the National Technology Agency, TEKES, and the Technical Research Centre of Finland, VTT. Nearly 80 per cent of government research and development funding is channelled through these two ministries.

In its reviews, the Science and Technology Policy Council has stressed the importance of higher education institutions cooperating with business. According to the Council, effective contacts and flexible forms of cooperation have a significant impact on the spread of research findings and on the emergence of knowledge-intensive business. According to the Council, universities, research institutes and polytechnics must develop as active and dynamic partners to business and industry as part of a balanced development of research organizations' resources. The terms of cooperation must be clarified and developed to improve incentives. These prin-

ciples have also conditioned the development of academic research in universities in recent years (Ministry of Education, 2005).

Historically, scientific research has been concentrated in universities. During the last few years, the research role of universities has been subject to vigorous public debate. This is partly due to international ranking lists, such as the Shanghai Jiao Tong University *Academic Ranking of World Universities*, which show that Finnish universities do not appear near the top. The University of Helsinki is 72nd on the list. However, there is also a strong belief that intensifying research is key to the economic success of the country. In this context, questions have been raised about the development of world class research universities and whether this should become a focus for national higher education policy and institutional development in Finland. Representatives of industry have also expressed concern about the competitiveness of Finnish universities in research.

4.   The National Research and Innovation System

As can be seen from the above, Finland's strategy since the early 1990s has been that Government has a major role in the process of building up a comprehensive research and educational infrastructure for the nation and its industries. Finland is a global example of central and regional governments' involvement in the development of a national infrastructure for innovation.

The universities comprise, naturally, the core of the national research system, and the quality and volume of research is the key issue for the higher education system in the context of improving the competitiveness of the Finnish economy and in the broader European framework of the Lisbon strategy. The main actors, as well as their policies and programs for the development of higher education and research, have been discussed in this chapter. The Finnish approach to building excellence in research and world class universities is very much grounded in the context of a national innovation system.

In the long run, it is clear that the independent academic profession has a central role in the development of the nation and has been gradually integrated with government through many ties. The massification of the higher education system, through the establishment of the regional university system, was accompanied by the development of a comprehensive system of centralized government planning and control meaning, for example, that all academics were given the status of civil servants, and the administration of universities was reorganized to fit with the bureaucratic government machinery.

The 1990s saw a new higher education and government steering policy aimed at aligning higher education and research at universities and polytechnics more closely with national efforts to increase the competitiveness of Finnish economy. Again, although the higher education system has become more market-oriented, it is government policy and steering mechanisms that are positioning the system and

the academic profession as the main driving force for change. The idea of a wel-fare society still dominates these developments, although the goal of equality has been replaced by the welfare goals of a knowledge economy based on the com-petitiveness of high technology production.

5.   Emergence of the New Academic Profession?

The massification of the university sector since 1993 can be illustrated by the increasing student numbers. For example, the number of master's degrees con-ferred annually grew from 9,439 in 1993 to 12,920 in 2005. The impact of new government steering and management-by-results can be seen in the reduction in the ratio of teaching staff to the number of academic degrees awarded. However, the massification of the Finnish higher education system has mainly taken place through the establishment and development of the polytechnic sector. The whole higher education system provides study places for more than 65 per cent of the relevant age group.

The growing importance of operating within the national and regional innova-tion system is reflected in the growth of non-teaching staff in universities. An essential part of institutional development strategies has been to establish and develop interfaces with society and support services to enable academic units to collaborate with external partners in the industrial sector and public organizations involved in advancing the innovation system.

Chart 1: Increases in Degrees Conferred and Budget-funded Staff at Finnish Universities
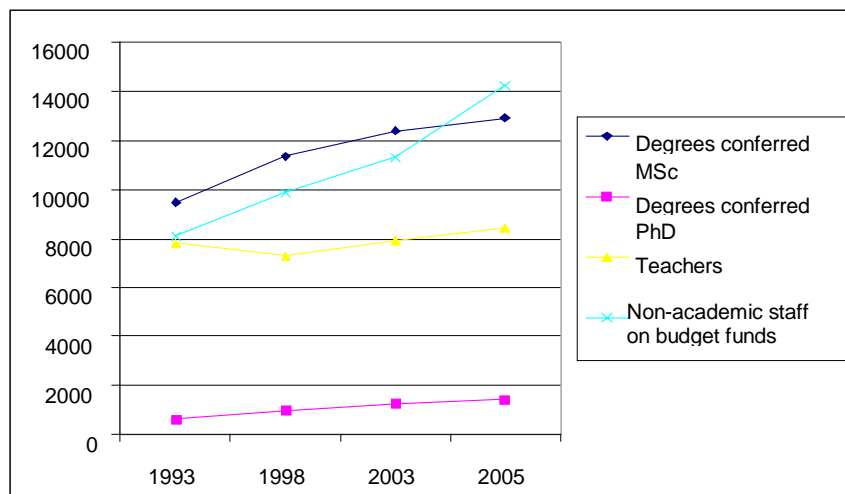
The increase in non-academic staff has been part of discussions about Finnish higher education during the 1990s and 2000s. Critics from the teachers' trade unions argue that the focus should be on increasing the number of teaching posts in order to secure the quality of higher education study. On the other hand, there has been a clear improvement in productivity in teaching due to the improved infrastructure, new support services and huge investments in the use of ICT in education. In all probability, the current level of productivity would not have been achieved by increasing the number of teaching posts. Co-operation between educational programs and higher education institutions and reforms in education require enhanced management, administration and financial planning rather than teaching capacity. The efficient division of work between professions is needed to improve productivity.

A new kind of academic profession will develop as a result of the growth of external funding. In market conditions the increase in non-academic and support staff gives academics opportunities to focus on their core areas: teaching, research and promoting the social impact of academic and cultural activities. An alternative is a new combined academic profession, which moves between expert roles, core activities and support services. In an expanding higher education sector, new divisions of labor are necessary and will give rise to a new kind of academic profession, and this will be the subject of the Changing Academic Profession study that includes Finland.

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Portugal: Adapting in Order to Promote Change

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1. Introduction

Higher education is one of the oldest enterprises known to civilization. It is steeped in traditions and cultural heritage that defy and sometimes actively resist change. Throughout the world, one can identify instances where higher education stood firm while the world moved on. The resulting disconnection between the system and its environment leads to a rapid and sometimes chaotic scramble to catch-up. Such crisis management gyrations are never sufficient. Portugal has a long, rich and diverse history. During this enormous expanse of time, very little advancement was seen within Portuguese higher education before 1974. For centuries, stability and barely discernable change defined the system. In the latter half of the Twentieth Century, an explosion took place that shook the system to its core. Thus a sudden waterfall of change began to unfold for Portuguese higher education that continues today.

With sudden growth and abrupt change come many unknowns that must be dealt with strategically. Like higher education institutions (HEIs) throughout the world, Portugal continues to struggle with its expansion. Accomplishments and improvements are numerous and easy to recount, but so are problems and challenges. What must now be monitored is whether Portugal can leave the calm waters of its past and enter the turbulent rapids of the present and future in order to evolve in synchrony with its changing environment. First and foremost, this will place enormous strain and responsibility on academics. Without a clearly defined role of leadership and openness to change among academic leaders, nothing of substance can happen. The academic profession will have to adapt in order to promote change.

This chapter briefly follows the history of Portuguese higher education and examines the state of the academic profession as we find it today. It then takes a more critical view of the present by examining a recent report issued by the OECD, the Bologna Process and efforts toward international assessment, and how

these factors are impacting the academic profession. Finally, the paper will provide thoughts on the future. Here the emphasis will be on the multifaceted role of the academic professional in addressing system challenges, potential change drivers and structural reform for system-wide prosperity.

2.   The Portuguese Higher Education System

2.1 Background and Context

Pre-1974: Portugal was one of the first countries in the world to have higher education (Crespo, 1993). The origin of Portuguese universities dates back to the middle of the 13th Century. The first Portuguese university was founded in 1290, by a royal decree issued by King Dinis (Serrão, 1983). However, as pointed out by Crespo (1993, p. 28), Portugal "[…] entered the XX century with only one university – the University of Coimbra." The Republic created the Universities of Lisbon and Oporto in 1911 (Crespo, 1993; Santos, 2002). However the nature of higher education in Portugal has changed significantly over past decades. The number and types of institutions have increased dramatically. In the 1970s, there were four public universities and the Catholic University.

A great reform of the Portuguese educational system came in 1973, with the Minister Veiga Simão. At this time, a new legal framework for higher education was approved (Law 5/73 and Decree-Law nº 402/73 of August 11, 1973). Under this new framework, new universities, polytechnic institutes and *escolas normais superiores* (teacher training schools) were created. The creation of polytechnic institutions as stated by MCTES (2006, p. 95) "…is aimed at assessing future needs of skilled labor in five Mediterranean countries (Italy, Greece, Spain Yugoslavia and Portugal)". The new polytechnic institutes were placed in cities where no universities already existed.

Post-1974: The Portuguese system of higher education has been growing significantly in the decades following the April 1974 Revolution. The 1970s and 1980s represented the expansion of the public higher education system and the emergence of the private sector. As stated by Amaral and Teixeira (2000, p. 246), "Until the mid-1970s, the Portuguese higher education system was clearly an elite system. It was characterized by low enrolment levels, despite some attempts to increase the overall participation rate. Moreover, the political and social changes brought by the 1974 democratic revolution enhanced the pressure for expansion of the public system. In the mid-1980s, the idea of significantly expanding the role of the private sector gained political support, as this expansion would allow for an increase in enrolments with a minor cost to public finances."

The publication of the Comprehensive Law on the Education System – Law nº 46/86, and amended in certain clauses by Law nº 115/97, formally established the two sub-systems of higher education, universities and polytechnic institutes, orga-

nizing Portuguese higher education into the binary system as it is known today that comprises public and non-public higher education.

The System Today: Today, Portuguese higher education (PHE) is organized into public and non-public higher education. Under public higher education, there are universities, polytechnic institutes, and military and police schools. Private higher education includes universities and "other establishments". There is also a multi-campus Catholic university with a unique status. Based on the latest available data, there is a total of 160 higher education institutions distributed by category as shown in Table 1 below.

Table 1: Number of Higher Education Institutions in Portugal, 2006

	University		Polytechnic	
	Universities	Other Schools	Polytechnics	Other Schools
Public	14	5	15	16
Private	13	35	2	60
Total	27	40	17	76

Source: MCTES, 2006.

The university and the polytechnic sub-systems are differentiated. Polytechnic institutions are more vocationally-oriented. Universities and polytechnics can award the degrees of *bacharelato* (i.e., three year degrees) and of *licenciado* (i.e., four to five year degrees). With respect to postgraduate degrees, polytechnics can award a professional *mestrado* (master's degree). Only universities can award the degree of *doutoramento* (PhD). Data from MCTES (Ministry of Science, Technology and Higher Education) show that institutions offered 1,932 *licenciaturas*, 80 *bacharelatos* and 622 master's degrees in 2005/06. The Bologna process is in progress starting with the present academic year 2006/07, with the introduction of some changes in the degree structure. According to the new structure introduced by law (Law 49/2005), the degree of *bacharelato* will be discontinued and the 3-cycle structure will correspond to the degrees of *licenciado, mestre* and *doutor*.

   Student enrolments have shown enormous growth in recent decades. The population expanded from 49,461 to 392,291 between 1970 and 2001. However, in recent years, there has been a definite decline in the number of students. This decrease was first experienced in private higher education in 1998, reaching public higher education in 2003. In the last academic year 2005/06, students totalled 367,934 with 75 per cent enrolled in public higher education.

   The different sectors – public universities, public polytechnics and private higher education institutions – have diverse degrees of autonomy. This is having an influence on the recruitment and career advancement of the academic profession.

3.   The Academic Profession Profiled

3.1 Career Profiles by Sector

Careers differ substantially between the public and private sub-systems. Too little is known about the private system. While the authors tried to obtain further information, it was not readily available officially. Therefore most of the following is about academic careers in public institutions. However, it is important to note that the public system enrols 75 per cent of all students and constitutes 70 per cent of all teaching staff in Portuguese higher education (OCES, 2005 a, b).

The legal framework of academic careers is quite different in public and private institutions. The government defines the size of the teaching staff and creates the rules for career advancement within public institutions. The academics of public institutions are civil servants unlike those that work at private institutions. Within private institutions, there are no established regulations about the academic profession. Furthermore, the size of the body of academics, career advancement and remuneration are defined by the institutional decision makers.

The legal provisions of academic careers in public institutions have not changed in a long time. The legal documents regulating academic careers are from 1979 (Decree Law 448/79) for the university academic staff and from 1985 (Decree Law 185/81) for the polytechnic academic staff. The academic university and polytechnic staff differ in positions, career advancement and remuneration. Table 2 shows the academic ranks recognized in public universities and public polytechnics.

The categories described above have endured for decades and as stated by Meira Soares and Trindade (2004, p. 354) "The features of the university career (...) have not changed much during the last 30 years, despite the fact that, at different times, many educational authorities recognized that it may have become slightly obsolete." Furthermore the authors stressed that this many categories would be adequate in times when fewer persons held a PhD, but that is not the situation today.

Table 2: Basic Categories of Academic Staff in Public Institutions

Universities	
Professor Catedrático	Full Professor
Professor Associado	Associate Professor
Professor Auxiliar	Assistant Professor
Assistente	Assistant
Assistente Estagiário	Junior Assistant
Monitor	Monitor
Polytechnics	
Professor Coordenador	Coordinator Professor
Professor Adjunto	Adjunct Professor
Assistente	Assistant

Mobility between the sub-systems is possible; however, it is not very common. The rigidity of policies and regulations, and the lack of a legal framework supporting any kind of mobility inhibit such moves.

The growth of the public system in the 1990s meant a large expansion of teaching staff, particularly in the newly born public polytechnic sub-system. For instance, in the polytechnic sub-system, the coordinator professors grew in some institutions by as much as 1.600 per cent between 1993 and 2004. For this same period at the public universities, there was an increase of academic staff from 61 per cent to 385 per cent, with one relatively young university reaching 3.350 per cent (OCES, 2005 a, b).

Data from OCES (2005 c) reveals that only 59 per cent of the teaching staff (December 2004) are regular permanent professors with 23 per cent being full professors and 36 per cent associate professors. The number of permanent professors is much lower for polytechnics at 6 per cent.

Besides the permanent categories above, there are others. People with special skills can be invited for academic positions that are "invited" permanently or part time in all categories. Foreign professors can also be invited on a temporary basis at any rank and they are called "visiting" (Meira Soares, 2001; Meira Soares and Trindade, 2004) (see Table 3).

Table 3: Working Regimes and Special Categories of Academic Staff

General Working Regimes	Special Categories (Universities)	Special Categories (Polytechnics)
Full-time & exclusive dedication	**Invited* Assistant or Professor (all categories)**	*Equiparado* a* **Assistant or Professor (all categories)**
Full-time regime	**Visiting Professor (all categories)**	
Part-time regime	*Leitor* **(for foreign languages & cultures)**	
Temporary contract	*Invited and *Equiparado a* (meaning, with a category comparable with) Assistants and Professors may have a slightly lower level of access qualifications than the equivalent category would require. Their experience and professional curriculum may be the decisive factor for the category assigned to them.	

Source: Meira Soares and Trindade 2004.

Within the private sector, each institution defines in their statutes the categories and required qualifications for academic staff. Some institutions opt to establish parallel categories to public institutions, while others assign categorical rankings such as Professors A, B or C depending on whether they hold a PhD, master's or

licenciatura. The advancement of careers within private institutions depends upon the leadership of each institution. Usually, academics start with an annual contract.

Remuneration within public institutions is determined by the government. There is criticism because salaries are rigid and there are no mechanisms to appraise professors (Meira Soares and Trindade, 2004).

Within private institutions, salaries are also determined by the respective institutional leadership. Meira Soares and Trindade (2004, p. 355) note, "As there is not a teaching career established for private higher education (HE) institutions, the terms of individual contracts are freely established between the institution and each teacher, it being frequent that they are paid by the number of hours of classes effectively taught."

In the past, academic careers were seen as very distinguished and rewarding. The top grades received salaries among the highest. The situation has changed in recent years (Meira Soares and Trindade, 2004). The situation for academics might change in the future because of government policies designed to reduce the number of civil servants. Also with a larger number of individuals achieving a PhD degree, it is becoming more difficult to gain a job and achieve career advancement.

3.2 Academic Qualifications, Promotions and Tenure

The faculty members are recruited among persons holding a minimum of the *licenciatura* (see Table 4). However this degree is not enough to progress in an academic career. Career advancement differs in universities and polytechnics. Once again private institutions have their own rules from institution to institution as decided by the institutional leadership.
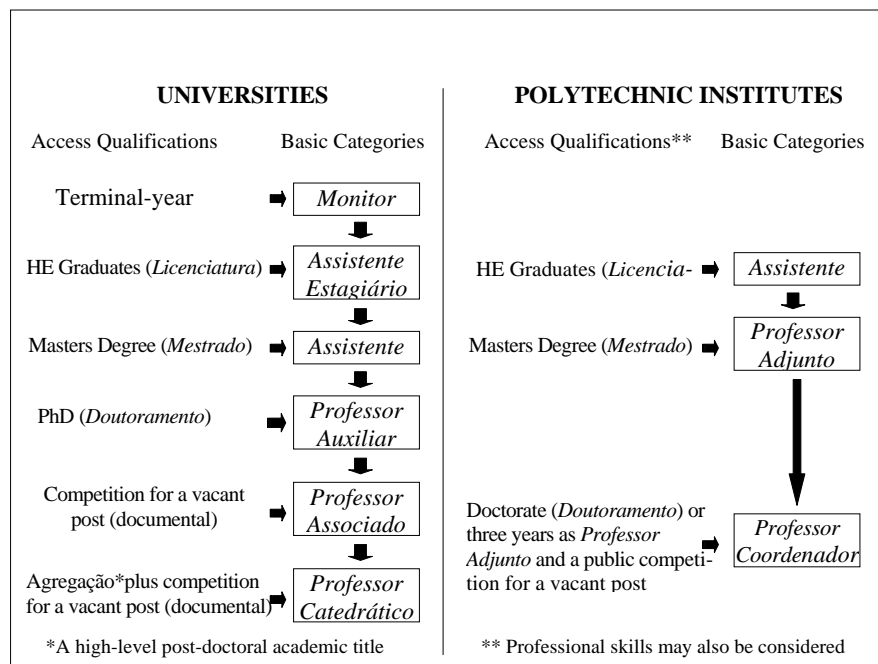
At the universities, to advance to the category of professor, one must hold a PhD degree. In order to reach the position of *Professor Catedrático* (Full Professor), the candidate needs to pass a high-level examination – *Agregação* – with a court constituted by other peer professors from the same and other HE institutions.

Career advancement for the polytechnics requires a master's degree. Data show that, in 2006, there were only 860 PhDs in public polytechnics (MCTES, 2006). However, more and more polytechnics are ruling internally on the need for a PhD to achieve Coordinator Professor. Since some polytechnic institutes want to become universities, they have developed internal policies more like those of the universities. In 2006, a new funding formula was adopted. This new formula is based on quality indicators such as the educational level of the academic staff, or the percentage of the academic staff holding PhDs. As a result, more HEIs are looking for qualified academic staff.

In recent years, due to national policy efforts on qualifications, more and more people are earning a PhD. Therefore, more qualified individuals are eligible and applying for faculty openings. Even with this positive trend, the percentage of

faculty members with a PhD remains low when compared with international standards (MCTES, 2006 a)

Table 4: Access Qualifications for Mobility in Higher Education Careers

UNIVERSITIES			POLYTECHNIC INSTITUTES		
Access Qualifications	Basic Categories		Access Qualifications**	Basic Categories	
Terminal-year	➡	*Monitor*			
HE Graduates (*Licenciatura*)	➡	*Assistente Estagiário*	HE Graduates (*Licencia-*	➡	*Assistente*
Masters Degree (*Mestrado*)	➡	*Assistente*	Masters Degree (*Mestrado*)	➡	*Professor Adjunto*
PhD (*Doutoramento*)	➡	*Professor Auxiliar*			
Competition for a vacant post (documental)	➡	*Professor Associado*	Doctorate (*Doutoramento*) or three years as *Professor Adjunto* and a public competition for a vacant post	➡	*Professor Coordenador*
Agregação*plus competition for a vacant post (documental)	➡	*Professor Catedrático*			
*A high-level post-doctoral academic title			** Professional skills may also be considered		

Source: Meira Soares and Trindade 2004.

The academic staff of public universities have a higher degree attainment, with 57.7 per cent holding a PhD. By contrast, the PhD has not been a requirement for career progression in the polytechnic sub-system where only 11 per cent of the total academic staff have acquired a doctorate. However, those with aspirations to become universities have introduced institutional policies promoting the acquisition of PhD degrees among their faculty members. Within private universities there are significant differences, with some universities like Fernando Pessoa and Catholic University reaching 47.7 per cent and 35.1 per cent of faculty members, respectively, holding a PhD degree (MCTES, 2006).

When analyzing the qualifications of academic staff for all types of HEI, it can be seen that only 32.4 per cent hold a PhD and 28.1 per cent hold a master's degree. Public universities have the highest rate of academic staff holding a PhD (see Table 5).

Table 5: Qualifications of Academic Staff by Institutional Type, December 2005

| | Academic qualifications | | | |
| | PhD | Master | Graduation | Other |
	N (%)	N (%)	N (%)	N (%)
Public Universities	8,480 (57.7%)	2,721 (18.5%)	3,344 (22.7%)	161 (1.1%)
Public Polytechnics	1,201 (11.0%)	4,157 (37.9%)	4,976 (45.4%)	620 (5.7%)
Private Universities	1,857 (26.2%)	2,166 (30.6%)	2,968 (41.9%)	87 (1.2%)
Polytechnic Private	457 (11.1%)	1,322 (32.2%)	2,250 (54.8%)	76 (1.9%)
Total	12,106 (32.4%)	10,490 (28.1%)	13,810 (37.0%)	965 (2.6%)

Source: MCTES- Annexes (2006).

In recent decades, the number of PhDs has increased significantly. Nevertheless, before the April 1974 revolution the majority were obtained abroad. The 1980s showed a huge surge in the number of PhDs awarded (see Table 6).

The tenure of academics is the object of some criticism in Portugal, as elsewhere. In Portugal, it is an issue within the public HEIs, since the private institutions have a less well-defined process. In public universities, a professor with a PhD is eligible for an appointment for life (tenure) after five years of service, if recommended by a competent scientific board of the HEI. In the public polytechnics, the period is three years. In both cases, however, the number of eligible tenure-granting appointments is fixed. Therefore, not everyone who claims to meet the criteria may find an opening for which to apply. Once awarded, tenure can only be lost by request of the holder or through moral turpitude.

Table 6: Number of PhDs Awarded by Portuguese and Foreign Universities

	1970-79	1980-89	1990	1991	1992	1993	1994	1995	1996
Portugal	293	1,247	250	223	245	378	319	432	459
Abroad	477	818	87	96	106	115	133	137	149
Total	770	2,065	337	319	351	493	452	569	608

	1997	1998	1999	2000	2001	2002	2003	2004	Total
Portugal	467	480	575	693	699	799	836	926	9,321
Abroad	120	236	196	161	206	175	174	142	3,528
Total	587	716	771	854	905	974	1,010	1,068	12,849

Source: MCTES (2006).

It should be noted that another area of criticism is the inbreeding of faculty members. The faculty members usually stay in the same institution where they were

awarded their PhD. Mobility of faculty members between institutions is almost non-existent. This has implications for promotions. It has been argued that departments inbreed their own faculty members independent of their real competencies (Marçal Grilo, 2006).

4   Issues of Relevance and Management

4.1 The 2006 OECD Report

Several management issues challenge the academic profession. Recently the government asked for an international assessment of the Portuguese system of tertiary education by the OECD. A background report and a review report were produced.

The OECD report on the Portuguese higher education system recommends that it should expand over the long term, and that additional resources for the sector are needed. In particular, it stresses that enrolment numbers need to increase, as Portugal lags behind other European countries in this regard, and identifies as important inefficiencies in the system, the existence of program duplication and low enrolment in many courses, as well as the insufficient use of cross-campus collaboration. In fact, the evidence shows too little cross-institutional cooperation aimed at sharing facilities and consolidating programs.

Another critical issue is the decline in student enrolments over the last few years, and especially since 2000. Enrolments in private HEIs, in particular, have declined two and one-half to three times more than is seen in public institutions. Moreover, the youth population in the country is projected to decline by 20 per cent over the period 2005-2020 according to estimates from the MCTES (2006). In particular, the 15-29 age group, which dominates student demand for higher education, is expected to fall at an average annual rate of 30,000 over the same period. However, despite the decline in enrolments over the last few years, there has been an expansion of places available in higher education institutions, and academic staff have increased in number. As a result, unit costs are unduly high.

The report suggests that attention should be focused on increasing cost effectiveness prior to increasing funding. Arguably, this requires the elimination of low enrolment courses; increasing the use of shared facilities; and improving student mobility between institutions. In parallel, it recommends improvements in upper secondary completions as a means to increase initial enrolment in tertiary education.

Funding is another big issue impacting on the academic profession. It should be noted that the activities of Portuguese public higher education institutions are mainly funded by the state budget. Should the demand for higher education expand in a significant way in the near future, the additional resources required cannot be provided by the public sector due to the constraints affecting the national economy, the report suggests. As students in public institutions are currently pay-

ing, on average, around 15 per cent of the cost of a course, which is significantly lower than in other European countries, it is expected that their contribution will rise towards 40 per cent on average over the next decade.

As for academic careers, the report suggests a new system should be designed and implemented in order to eliminate inbreeding and to enhance teachers' and researchers' mobility. Moreover, it advocates that the promotion and recruitment decisions should be based solely on research and teaching merit, and that evaluation should be performed by external peers. In the current situation, permanent appointments rely on evaluations by internal peers only, and promotions also strongly involve the participation of internal peers. The official regulation of the academic career is expected to be reformed during 2007, and it appears that these recommendations will be considered. The report also recommends that the system needs to be more closely linked with the wider community, the labor market and the business sector.

4.2 Academic Freedom

Considering the definition of academic freedom as the "freedom of the individual scholar in his/her teaching and research to pursue truth wherever it seems to lead without fear of punishment or termination of employment for having offended some political, religious or social orthodoxy" (Berdahl, 1988, p. 7, drawing on Ashby, 1966, *apud* Meek, 2003, p. 7). We shall discuss whether the academic profession in Portugal is characterized by such freedom. If, formally and legally this freedom exists, the contemporary academic seems to be obliged to consider in his/her work things other than *just* the "pursuit of truth". When planning academic activities, in a so-called "knowledge society" like ours, relevance has to be considered. What an academic does or plans to do has to be somehow relevant to aspects of our society. As such we can ask if academic work can still be "free" even when it is conditioned by such factors and when the possibility of funding is apparently related to the obligation of utility of the academic work.

An interesting characteristic of higher education institutions that holds true for Portugal is the generalized idea of academic and/or scientific freedom. It is held as a basic value that academics should have the authority to decide what they teach and should be free to do independent research (Clark, 1983). As stressed by Sporn (1996, p. 42), "The professionals [i.e., professors] […] tend to be experts with a strong wish for autonomy and freedom." According to Lub (2003, p. 12), "There is a shared understanding in higher education that academic freedom is important to the organizational field." Clark also adds the value of liberty (1983, p. 247), stating, "The central idea in this complex is liberty, connecting to traditional values expressed in Western political thought and emphasizing freedom of action as the basic condition for exercising choice, encouraging initiative, engaging in innovative behavior, sustaining criticism and inducing variety."

Academic freedom or "liberty" is understood as a cultural pillar within Portuguese higher education institutions. According to Magalhães (2001, p. 112) "[…] the Western European systems – either continental or British, either Jacobin or Humboldtian […] have taken 'autonomy' to mean mainly academic freedom (freedom to teach, freedom to learn, freedom to search for the truth wherever it takes one) the state being not a menace to that exercise but its main guarantee" (*ibid,* p. 112). There is a shared understanding that norms and values need to grant academic freedom. Recent documentary analysis by CIPES identified autonomy as a main question requiring attention and needing to be addressed in future policies (Amaral, 2003).

4.3 Bologna Process

Today, the national agenda is focused on the Bologna Process. Higher education institutions are expected to start to implement the new system related to the Bologna Process in 2006/07 (Ministry of Science, Technology and Higher Education, 2006). According to the government, the major implications of the implementation of the Bologna Process to Portuguese higher education, and consequently to Portuguese academics, relate to issues such as changes in legislation. Specifically, the Education System Act (Law 46/86 of 14 October) on the Bologna degree structure was modified and a decree to regulate implementation was passed (Decree-Law 74/2006 of 24 March). With respect to quality, "An accreditation system will be implemented in order to meet the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (EHEA) as adopted by ministers in Bergen in May 2005" (*ibid.*).

The Bologna Process was intended to serve as a process that increased the appeal of a higher education by raising the quality and relevance of training, and promoting mobility and internationalization. Its overall goals to increase international competitiveness, employability and mobility have the support of the academic community.

According to Meira Soares and Trindade (2004, p. 370), the same cannot be said in relation to the instrumental objectives of the European Higher Education Area: "(1) adoption of a system of easily readable and comparable degrees, (2) adoption of a system based on two main study cycles, (3) establishment of a system of credits, (4) promotion of mobility of students, academic staff and non-academic staff, (5) promotion of European cooperation in quality assurance and (6) promotion of the European dimensions in Higher Education."

4.4 Academic Shifts

Clark (1983) refers to the multiple academic and institutional cultures found within a higher education institution. Portuguese HEIs are no exception. Some authors contend that it is not clear how the institutional culture works within HEIs

(Sporn, 1996). Furthermore, the author refers to cultural diversity as a challenge for higher education institutional management. Moreover, the goals within higher education institutions are vague and conflicting (Baldridge, 1983).

Therefore one can observe some tension within higher education institutions between management and academic goals. For instance, Meek (1995) notes that all professional organizations face a tension between their attraction for having their own independence and, on the other hand, their desire to be managed in an efficient way. The process of reaching decisions within an HEI is significantly different from other organizations. The higher education culture influences the decision-making process in unique ways (Tierney, 1988).

According to Goedegebuure, de Boer and Meek (1998, p. 104), "academia clearly is a species of its own, with traditions that go back centuries, and obviously cannot be run like a car-factory, post-Fordism or not." The professors are the core of the higher education institution. They must be involved in a way that is positive both for their academic freedom and the institution's development. This constitutes a critical, yet formidable challenge.

One of the shifts commonly observed within the cultural and internal environment of Portuguese HEIs is the tension between academic values and governmental and administrative values. HEIs have rectors or presidents elected; they also have other governing bodies like senates, councils, and faculty and student committees with varying levels of responsibility and power. Clearly, the distribution of power is complex, and complicated by cultural differences and individual expertise. The academic staff tend to operate with relative autonomy within fairly independent academic departments, often rendering top-down decision-making ineffective.

4.5 Concerns About Academic Staff in the Private Sector

The management of private institutions is quite different from public institutions. Private higher education institutions have maximum autonomy in administrative and financial areas but they have no pedagogical autonomy. They therefore depend on the Ministry of Science, Technology and Higher Education for the approval of their study programs. Institutions are financed mostly by tuition. The institutions are free to determine the levels to be charged.

Private institutions take an entirely different approach to management with a very distinct stance on hierarchy, collegiality, and sharing. Decision-making is firmly in the hands of the leadership. As mentioned above, appointments and tenure also differ from public institutions. Portuguese private institutions are at the lower end of the prestige hierarchy. Criticism towards private institutions is expressed because they offer programs in areas with low running costs using less qualified academic staff. There is a tendency to hire part-time professors either from public institutions or from the business sector to enhance overall quality.

From a critical perspective, public authorities and governments, as stressed by Teixeira and Amaral (2001, p. 391), "[…] must be blamed by having at least some responsibility for the partial failure of privatization in terms of diversification of the system. In fact, several of these cases indicate that governments have not yet attained a good balance between intervention and co-ordination of the private sector and the autonomy of private institutions. Governments either controlled too much, due to their mistrust towards private initiative in education, or they assumed a too relaxed behavior, allowing mushrooming of private institutions without sound academic and financial criteria."

The governance of private HEIs is also a matter of some concern. As stressed by MCTES (2006, p. 100), "The relationship between founders and their higher education institutions is very heterogeneous, ranging from cases of sample scientific and pedagogic autonomy that fosters the independence of thought and of teaching, to examples of strong decisive intervention from the founder in the academics bodies of the institution."

4.6 Increasing Feminization

Female students are in majority in Portuguese higher education. The number of women started to grow in the 1990s in all subsystems of higher education (MCTES, 2006a). Data show the numbers of female students growing from 29.1 per cent in 1961 to 55.8 in 2004 (Barreto, 1996, and OCES in MCTES, 2006). Areas like "Education" and "Health" register 85 per cent and 78 per cent of female students and the areas of "Engineering" and "Sciences register more male students with rates of 72 per cent and 54 per cent (OCES, 2004). According to OCES (2004), referring to data from Eurostat, Portugal registered the biggest rate of female graduates in Europe in 2001, with 67 per cent of all students.

The number of male academics is larger, representing 59 per cent in the years 2000, 2001 and 58 per cent in 2002. There are more male academics in "Engineering" with rates of 78 per cent in 2002. In areas of "Education" there is a dominance of females with 65 per cent in 2002. The percentage of women in academia since 2000 indicates that it will continue to increase (OCES, 2004). Those figures place Portugal in a leading position for gender parity within OECD countries (OECD, 2006). Data show that Portugal and Finland were the two member states in the EU-15 with more than two women for every ten men in the top echelons of academia (EC, 2004).

It is interesting to note that the average of women graduates within the EU-25 in 2001 was 30 per cent with Portugal reaching the highest percentage of 42 per cent (Götzfried, 2004). The proportion of women earning a PhD degree in the same year was 44 per cent, compared with 46 per cent in 2004 and 48 per cent in 2005 (OCES, 2006). Therefore one can see the tendency for growth. Moreover,

between 1970 and 2005, 39 per cent of all PhDs awarded or recognized by Portuguese universities were received by women.

5. Strengthening Internationalization

5.1 Academic Profession and Internationalization

Portuguese higher education has always valued and sought international links with higher education institutions (HEIs) in other countries. However, the true benefit of such networking was not fully realized until the second half of the Twentieth Century when professorial involvement was elevated to a higher level. This came about as a result of a government desire to improve the nation's research efforts by increasing the number of PhDs within the Portuguese higher education system. In the 1960s, the Portuguese infrastructure was insufficient to accommodate this demand for PhDs, thus a great many did their studies abroad, primarily in the United States, the United Kingdom and France. Thus, existing governmental and institutional international networks were expanded at the level of the individual researcher. Subsequent post-doctoral study opportunities in foreign countries further strengthened collaborative international partnerships. This "international positioning" was of great benefit to Portugal's ability to fully participate in the research arena when it entered the European Union (Meira Soares and Trindade, 2004). Between 1970 and 2005, 26 per cent of the PhDs awarded were received abroad from countries in the following order starting with the most frequent: United Kingdom, United States, France, Spain, Germany, followed by others (OCES, 2006).

Since the 1990s national policies have been launched in order to improve research and promote international cooperation. For instance, MCTES (2006) reports the significant increase in academic research with 52 per cent of the scientific publications in 2003 (registered in ISI Journals) in international co-authorship. It was not until 2001 that Portugal become part "of the countries of excellence that contributed to the share of the top 1 per cent of the worlds highly cited publications" (MCTES, 2006, p. 134). Moreover, recent partnerships with the Massachusetts Institute of Technology (MIT) and Carnegie Mellon University are strengthening the internal networks of Portuguese HEIs.

All of this is not intended to paint a picture of perfect growth and transition. Overall, Portugal remains behind the average for Europe for researchers within the population. The country is inherently at a competitive disadvantage due to its size within the greater scheme of European countries. Efforts to expand the research base must be tempered by the reality that Portugal can only support so much. Its critical mass to lead networks of excellence is limited. Critical mass, however, should be measured in terms of impact rather than volume. By this is meant the

higher the quality, the smaller the membership needs to be. The strategy needed, it would seem then, is clearly one of quality over quantity.

5.2 International Assessment

The 2006 OECD report was produced in response to a Portuguese government request in order to "[…] examine the performance of Portuguese tertiary education by reference to other OECD countries and provide recommendations for its improvement" (Ministry of Science, Technology and Higher Education, 2006, p. 3). The overriding goal was to examine the Portuguese system against a rigorous set of international criteria. This examination was then intended to provide valuable input into the rationalization and reorganization of the system. Simultaneously, the European Network for Quality Assurance (ENQA) is conducting a national review with the goal of providing advice on the creation of an accreditation and evaluation agency along European guidelines. In addition, the European University Association (EUA) is in the process of reviewing Portuguese higher education. The overall exercise, according to the Portuguese government, "…was designed to ensure that the tertiary education system and its stakeholders gain maximum benefit from comprehensive evaluations by teams of experienced international experts and that the procedures and processes in place in the Portuguese tertiary education system can be benchmarked against best practice internationally. The Government will use the results of the review as a contribution to the decision-making process of reforming Portuguese tertiary education" (*ibid.*).

The process of international assessment referred to above seems to be a major sign of the importance given to the role of internationalization in higher education by the Portuguese government. What must follow, of course, are action plans designed to advance the system and realize the goals identified as necessary and important.

6.   Concluding Thoughts

In general terms, one would have to say Portugal has shown substantial growth and improvement over the past half century and continues to progress in a positive manner. This is not to suggest, however, that the higher education system is not faced with legitimate challenges and obstacles. As noted earlier, the system is below the European average on many fronts.

Regulations governing careers are extremely rigid and inhibiting. An inordinately large proportion of the individuals currently in an academic career are relatively old. This suggests openings and advancement opportunities are currently limited, but will be increasing for young academics that now must wait in line for senior professors to move on or retire. At the same time, it means a heavy economic burden will soon be placed on a reduced workforce as the demand for re-

tirement benefits increases. While this is clearly a policy in need of modernization for the public HEIs, the situation is exacerbated in the private sector by the fact there is no policy at all. Portuguese higher education is also notorious for "inbreeding," where students who earned their degree are then placed in employment at the same HEI. In many cases, former students become junior colleagues within the professorial ranks. Some argue that the worst effect from inbreeding is the absence of different ideas and approaches to professional conduct. It can probably be stated that the system needs broader and more comprehensive orchestration and coordination at the national level in order for individual HEIs to have a framework of support from which to progress systematically and strategically.

On the positive side of the ledger, as stated earlier, the growth of PhDs is increasing the country's competitive advantage and improving the overall quality of the higher education system. Portugal also continues to advance a strong international agenda that reflects its understanding of the borderless nature of nation-states and the need to network on a global scale. Finally, the rise of feminization must not be overlooked. This will no doubt have major implications for the direction of change and the overall culture of higher education in Portugal.

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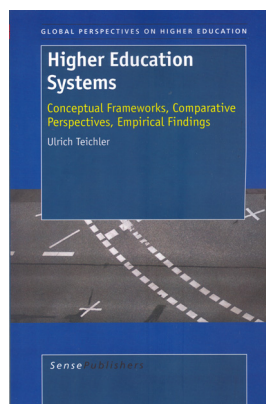
Ulrich Teichler:
HIGHER EDUCATION SYSTEMS. Conceptual Frameworks, Comparative Perspectives, Empirical Findings.
Rotterdam: Sense Publishers 2007
ISBN 978-90-8790- 138-7; 300p

In economically advanced countries the shape and the size of higher education systems vary substantially. In some countries, access becomes almost universal whereas in others, only about one third in the corresponding age groups enrol. All higher education systems are diversified, but formal dimensions, such as types of institutions or levels of study programmes and degrees play different roles and informal dimensions are by no means irrelevant.

This book, based on more than three decades of research, aims to show actual trends in the development of higher education systems. It describes the policy debates in an broad range of countries. Moreover, it provides an overview of varying concepts aiming to explain the dynamics of structural developments. The author shows that comparative perspectives and the search for an internationally "best" or "most modern" solutions at times lead to convergent trends. However, specific policy options dominating and specific traditions of higher education tend to reinforce an international variety of patterns of higher education systems. This book invites readers to look beyond the idiosyncrasies of national debates and beyond the "Zeitgeist" of currently fashionable international debates and to consider both persistent tensions and changing conditions underlying the extent and the kind of "diversity" opted for on individual countries.

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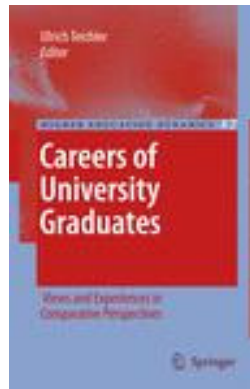
Ulrich Teichler (ed.)

Careers of University Graduates
Views and Experiences in Comparative Perspectives

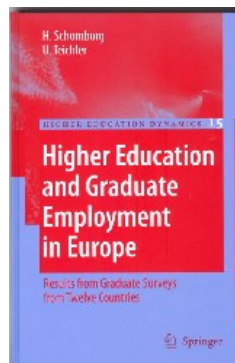**Springer: Dordrecht 2007**

Series: Higher Education Dynamics , Vol. 17

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Graduates from institutions of Higher Education do not only hope to get employed and be better paid. Study can also have an impact on employment and work in many respects: facilitating transition to employment, opening up opportunities for demanding, interesting and responsible professional assignments, increasing remuneration and job security, providing opportunities for continuing learning and leading the way to international mobility and visibly international assignments. The book provides a series of detailed analyses of graduate employment and work in comparative perspective. It draws from the survey of graduates from 11 European countries and Japan first published in H. Schomburg und U. Teichler "Higher Education and Graduate Employment and Work" (Dordrecht: Springer 2006). In this volume, scholars from twelve countries show how transition to employment, job assignments, employment assessments of the quality of employment and work vary by the graduates' socio-biographic and educational background. It also focuses on experiences during the course of study and competences acquired, international experience, regional background and regions of employment. It demonstrates more substantial differences of the relationships between study and subsequent employment between various countries than previous debates and analyses have suggested.

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Ulrich Teichler and Harald Schomburg:

Higher Education and Graduate Employment in Europe
Results from Graduates Surveys from Twelve Countries

Springer: Dordrecht 2006

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For the first time, a major international comparative study was undertaken providing detailed information on the employment and work situation of graduates from higher education institutions in a large number of countries. With the help of a questionnaire survey more than 40,000 graduates from 12 countries reported about their study experiences, the transition from Higher Education to employment and their early career up to four years after graduation. The interviewees from Austria, the Czech Republic, Finland, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, the United Kingdom and Japan are a unique source of information on Higher Education and graduate employment in Europe.

The book indicates a noteworthy variety among economically advanced countries in the competences fostered by Higher Education and the emphasis placed either on laying a broad basis of knowledge or direct preparation for professional tasks. While universities in some countries are strongly involved in ensuring a rapid transition from study to employment, in other countries a long period after graduation is widespread for the search of a suitable career. Graduates from some countries appreciate their study experiences though they criticize a weak preparation for their subsequent assignments, while others less satisfied with higher education in their retrospective view note a satisfying preparation for the world of work. Study often turns out useful to lead to challenging tasks even though remuneration and status remain below expectations.

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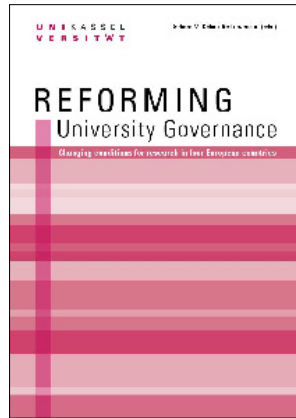
Barbara Kehm/Ute Lanzendorf (eds.)

Reforming University Governance Changing Conditions for Research in Four European Countries

Bonn : Lemmens 2006

ISBN 978-3-932306-81-5

Paperback
212 pages

University governance reforms have been spreading across Europe since the early 1980s. The introduction of management concepts into the university sector brought about a major reorganization of state-university relationships as well as intra-institutional decision-making. The focus of this book is to systematically identify reform objectives and reforms achieved in individual European countries. Four country studies trace the implementation of managerial governance regimes for universities in the two countries which were the first in Europe to embark on such reforms (the 'forerunners' England and the Netherlands) and in two countries which had a relatively recent start in implementing change (the 'latecomers' Austria and Germany). The book concludes with a comprehensive comparison of reforms and of their results in the countries studied and provides an outlook on their possible consequences for research.

The book constitutes a first outcome of a project entitled 'Comparing management and self-governance models of universities – An international comparison of university decision-making processes and their consequences for research in practice'. This project forms part of an interdisciplinary research group which receives funding from the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG). The overall focus of the research group is on identifying the consequences of a new model of university governance for the international competitiveness and innovative capacity of university research, primarily in Germany but also in internationally comparative perspective.

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