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Higher Education Looking Forward:

Relations between Higher Education and Society

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Introduction

This report contains five papers prepared as part of the ESF Forward Look on 'Higher Education Beyond 2010: resolving conflicting economic and social expectations' (HELF). The papers provide overviews of the state of our knowledge relevant to themes central to the future structure and functioning of higher education within Europe and beyond as well as to the economic and social factors shaping them. They also identify gaps in our current knowledge and suggest some of the elements of a future research agenda for an interdisciplinary investigation of the changing relationship between higher education and society. The Forward Look's synthesis report, to be published later in 2007, will develop this agenda further and attempt to locate it within wider research agendas for the social sciences.

Higher education institutions have, in recent years, been subjected to a variety of pressures that have sought, primarily, to enhance higher education's contribution to the successful creation of so-called 'knowledge economies', together with, and receiving only slightly less emphasis, the achievement of greater equity and social justice. These pressures have led to a differentiation between 'elite' and 'mass' functions, to changing and differentiated notions of 'graduateness' and 'expertise', to changing relationships between research and teaching functions, to a shifting balance between pre-career and 'lifelong' learning, and to changing relationships and boundaries between higher education institutions and the communities they serve — locally, nationally and internationally. The pressures have challenged traditional structures and cultures of governance and steering of higher education systems and institutions.

The above issues are explored in this volume in terms of the Forward Look's five themes as follows:
• Higher education and the needs of the knowledge society
• Higher education and the achievement (or prevention) of equity and social justice
• Higher education and its communities: interconnections and interdependencies
• Steering and governance of higher education
• Differentiation and diversity of institutional forms and professional roles.

Each of the papers has benefited from expert critiques held between September 2006 and March 2007 at workshops in Kassel, Helsinki and Paris and at a conference in Brussels. Together with the synthesis report to be published following the Forward Look's final conference to be held in London at the end of October, 2007, we hope that these papers will contribute to the strengthening of higher education research as a legitimate field of inquiry within the social sciences and that they will be of interest both to existing specialists in the field and to social scientists working in other fields for whom higher education might provide a profitable extension of their research interests.

John Brennan,
Chair, HELF Organising Committee
September, 2007

Higher Education and Knowledge Society Discourse

Jussi Välimaa and David Hoffman

"Contemporary society may be described as a knowledge society based on the penetration of all its spheres of life by scientific knowledge."

(Stehr 1994, 9)

1. Introduction

The growing importance of knowledge, research, innovations and the training of experts is changing the social role of universities. One of the most relevant concepts which describes this change is the 'Knowledge Society' together with a number of other conceptualizations (like Information Society, Learning Society, Knowledge-Based Economy) aiming to illuminate the same phenomenon. However, the imprecision and variety of ways these concepts are used in academic research, political spheres and popular media create a need to clarify focal points and objects of analysis. A useful starting point for understanding the many dimensions of the changing role of universities in contemporary society is to characterise the knowledge society as an imaginary space, a discourse which is based on certain intellectual starting points in the analyses of social realities of modern societies. As a concept, it tends to create its own images, expectations and narratives (Marginson *personal communication*). Knowledge society as a discourse, therefore, tends to create an imaginary social space in which everything related to knowledge and/or knowledge production can be included and interconnected, regardless of whether the discourse concerns individuals, organisations, business enterprises or entire societies. In this sense 'Knowledge Society discourse' describes the current situation in which the knowledge society is both the objective of policies and debates and an agent promoting policies and debates concerning its potentials (see Latour 1988).

Knowledge society discourse takes place in the context of globalisation which may be defined as 'the widening, deepening and speeding up of world wide interconnectedness' as Held et al. (1999) contend. Knowledge society discourse also is rooted in the fact that higher education institutions are more important than ever as mediums in global knowledge economies. In the age of globalisation, higher education institutions are integral to the continuous flows of people, knowledge, information, technologies, products and financial capital (see Marginson 2006).

The aim of this paper is not, however, an attempt to analyse the globalisation of higher education, even though these concepts and social phenomenon are simultaneous and overlapping. Globalization as an analytical device focuses attention more on the changing relationships between organisations (like higher education institutions, NGOs, business enterprises) or political entities (like nation states vs. global and regional actors) and their changing power relations, social and commercial interactions. In Europe, the debates on globalization and higher education have been related to two different debates. On the one hand, trade liberalisation and

aims to commodify higher education (through WTO and GATS) where global competition is perceived as opening up new opportunities for higher education institutions and systems which are under pressures from decreasing public funding. On the other hand, many academic communities see these notions of economic globalisation as alien, or even conflicting, with traditional values of higher education (Marginson *personal communication*).[1] However, focusing attention on globalization can be somewhat misleading to the community of higher education researchers. According to Teichler (2004, 23) "it is surprising to note how much the debate on global phenomenon in higher education suddenly focuses on marketisation, competition and management in higher education. Other terms, such as knowledge society, global village, global understanding or global learning, are hardly taken into consideration." Bearing this in mind, we will try to analyse the kind of roles higher education is expected to play with regard to various knowledge society discourses. This aim, in turn, calls for understanding how the knowledge society has developed as an intellectual device and been defined as a social phenomenon. After having discussed knowledge society as a social phenomenon and as an intellectual device we will reflect on how changes in higher education are related to knowledge society discourses in national, regional and global levels. In the final section we will reflect on current challenges and expectations generated within these discourses for higher education and the implications these expectations have for higher education research.

1.1 The Knowledge Society as a Social Phenomenon and as an Intellectual Device

The notion of the knowledge society is a multi-dimensional and debated topic in a post-industrial and post-modern world. It is often understood as emerging from the 'simultaneous growth of the Internet, mobile telephony and digital technologies with the Third Industrial Revolution – which, at first in the developed countries, has seen much of the working population migrate to the service sector – has revolutionized the role of knowledge in our societies' (see UNESCO 2005, 18). Furthermore, knowledge society as a notion is and has been used globally in the media and in academic research as a term which needs neither introduction,

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1. A third term *'Europeanisation'*, should also be introduced since it is often used together with internationalisation and globalisation. According to Teichler (2004, 4) 'Europeanisation' may be understood as 'the regional version of internationalisation or globalisation'. The nature of Europeanisation is therefore somewhat different from the above mentioned because the phenomena of Europeanisation is often referred to horizontal mobility and cooperation (notably "ERASMUS") and subsequently standardisation of study programmes and degrees ("The Bologna process")' (Teichler 2004, 23).

nor explanation; while politically knowledge society has been defined as the objective towards which both nation states, regions (The EU) and the global community (as defined by UNESCO) should aim to develop.

The role and importance of knowledge in the development of economies and societies has emerged over time. Daniel Bell (1959) was among the first to note that between 1909 and 1949 in non-agricultural sectors, skills contributed more to economic growth than labour and capital. According to Bell (1973, 212) post-industrial society can be characterized as a knowledge society in a double sense: "first, the sources of innovation are increasingly derivative from research and development (and more directly, there is a new relation between science and technology because of the centrality of theoretical knowledge); second, the weight of the society -measured by a larger proportion of Gross National Product and a larger share of employment- is increasingly in the knowledge field. The same notion has been repeated by Castells when he analyses the difference between previous modes of development with the mode of development of the digital world (Negroponte 1995). According to Castells (1996, 17) "in the new, informational mode of development the source of productivity lies in the technology of knowledge generation, information processing, and symbol communication."

As a concept knowledge society, in turn, has its own history. According to Nico Stehr[2] the term 'Knowledge Society' was first used by Robert Lane (1966), whose concept of 'Knowledgeable Society' describes the 'great optimism of the early 1960s which suggests that science would somehow allow for the possibility of a society in which common sense would be replaced by scientific reasoning' (Stehr 1994, 5). Peter Drucker (1969 in Stehr 1994, 5), in turn, saw that knowledge was central to society 'as the foundation of economy and social action'. The use of the term 'Knowledge Society' began to expand with the studies of researchers like Robin Mansell (1998) and Stehr (1994) in the 1990s (UNESCO 2005). While Mansell (et al. 1998) focused attention mainly on ICT as a driving force of the 'Knowledge Society' or 'Information society'[3] in a 'source book' of the knowledge society, the aim of Stehr was, in turn, to create a social theory based on the notion of the knowledge society. As a sociologist he responded to the disciplinary challenge of 'the need for a theory of society that resonates with the new social realities'.

According to Stehr, conceptualisations of society based on the relationships between labor and property (capital) no longer provided the intellectual insight necessary to describe, understand and explain modern societies. According to Stehr (1994, viii):

'as labour and property (capital) gradually give way to new constitutive factor, namely knowledge, older struggles and contests, centered for instance on ownership of the means of production, also make room for rising sentiments of disaffection with beliefs and values once firmly associated with labor and property and ultimately result in very different moral, political and economic debates and conflicts.'

Stehr does not argue that labour and capital dynamics disappeared. He also points out that previous social structures are not necessarily eliminated with this extension or enlargement. However, his assertion is that societal relationships cannot be explained without integrating the primacy of dynamics related to knowledge. In creating his own theory of modernization, Stehr suggests that modernization is not as deterministic as Marxism would suggest, rather 'modernization essentially involves multiple and necessarily unilinear processes of 'extension' and 'enlargement' (Stehr 1994, 29-32). The sociological question is: does the nature of knowledge production change societies, cultures and economics? The popularity of the term 'Knowledge Society' is evidence in and of itself that understanding modern society as knowledge-based indicates that traditional understandings within societies are changing.[4]

Knowledge itself and the uses of knowledge are nothing new for humankind which understands itself through languages which are themselves symbolic systems for cultivating and transferring knowledge. In fact, it could be said that the capacity to gather, analyse and use knowledge has been a crucial element throughout the history of humankind (see McNeill & McNeill 2006). What makes the idea of the knowledge society exceptional is the quantity of knowledge (and information) produced daily and the use of information technologies in the data-intensive processes. It may well be as Stehr notes (1994, 27-29) that classical sociological theories of society are limited by zombie categories (Beck 1992) which may obscure as much as they originally clarified. However, it can be argued that the modernization processes within the knowledge society are processes of extension rather than social transformation that define a fundamentally new era of human existence. This type

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2. See Stehr (1994) for the comprehensive discussion on the origins of the concept 'Knowledge Society'.
3. Mansell refers to Machlup (1962) and Porat (1984) when he writes that 'for three decades or more, people have been discussing the major transformations that are possible through harnessing electronic information processing technologies to the social and economic priorities of industrial societies. These new technologies are vitally important for 'information economies' or information societies' (Mansell 1998, 12).

4. Internet search through Google (in October 2006) gave about 81 700 000 entries for the concept 'Knowledge Society'. In social sciences of ERIC database there could be found around 600 academic books and articles on the topic of 'Knowledge Society'.

of assertion can be seen in the reactions to topics associated with globalization noted by Held et al (1999). Specifically their classification essentially divides actors who perceive forms of (positive and negative) *hyper-globalization*; s*ceptics* – who see nothing new in current discussions which cannot be explained by resorting to existing theory and *transformationalists*, who perceive social transformation (Held et al. 1999). When focusing specifically on higher education, it is likely that all positions adopted by persons speaking about the knowledge society can be found in all areas of this typology. More importantly, as Held et al. (1999) note, the complexity of analyzing phenomena associated with globalization, like the knowledge society, is exacerbated by the fact that the typology they developed does not neatly map onto many paradigmatic approaches to social research.

The idea of social change based on extension and enlargement is also familiar to higher education researchers. Martin Trow's assumption that the social role of higher education changes with the expansion of the student body has been accepted as an insightful conceptualisation of mass higher education (Trow 1974). Through this conceptualisation it is evident that mass higher education is the social form of higher education in the knowledge society. A similar trend has been noted by Burton Clark (1983) who maintains that the main source of social dynamics in higher education is the expansion of knowledge. Following the reasoning of Clark, the expansion of knowledge leads to new research fields creating a demand for new chairs and professorships to be established for emerging fields of research and disciplines. It also creates the need to establish new training programmes and new higher education institutions. To put it briefly, the logic of expansion both in research-based knowledge, the number of students, staff and higher education institution is creating a situation where this expansion changes the social dynamics of the higher education institutions and national systems of higher education. This expansion has taken and is taking place simultaneously with the development of modern knowledge societies. Stehr's interpretations indicate that the emergence of the knowledge societies and the expansion of higher education have a causal relationship. This is because knowledge production in and of itself supports growth in industrial production and creates new business activities in knowledge societies. However, knowledge society discourses themselves highlight the fact that Clark's 'Durkheimian' explanation for this may prove somewhat problematic. The assertion that higher education systems are driven by differentiation which in turn creates a need for balancing social forces of integration through state, academic oligarchy and markets presupposes a need for balance, which may not exist.

Associated concepts

In addition to the knowledge society, a number of related descriptive and prescriptive concepts which reference potential relationships between knowledge and change in society have been introduced. The most important of these are 'Learning Society' and 'Information Society'. The discussion on 'Learning Societies' and 'Lifelong education for all' coincide with the expansion of the knowledge society (UNESCO 2005). These terms are interrelated in their attempt to prescribe points of departure as well as the need to use and learn from knowledge in all spheres of societies. Originally the concept of learning society referred to a new kind of society in which the old distinctions between formal and non-formal education were no longer valid (Hutchins 1968, Husén 1974). In this new context lifelong learning becomes indispensable because there is a need to change workplaces and often professions and update knowledge during one's career. Crucial new skills in a learning society also include the ability to 'learn how to learn'. Furthermore, learning is no longer the privilege of an elite or one age cohort but it tends to cover the whole community and the lifespan of an individual (UNESCO 2005). The notion of the learning society also supports many discourses of the knowledge society because both emphasize the centrality of knowledge production and lifelong learning of the labour force.

The distinction between 'Information Society' and 'Knowledge Society' is rooted in the difference between knowledge and information. According to Bell (1973) knowledge is "a set of organized statements of facts or ideas, presenting a reasoned judgement or an experimental result, which is transmitted to others through some communication medium in some systematic form". Following the argument presented by Castells (1996, 17) information is "the communication of knowledge", or more precisely: "data that have been organized and communicated". Therefore, information remains a fixed stabilized form of knowledge, tied to time and users. For this reason information may be used, in many cases, as a commodity and, specifically, information by it's' nature can be commodified, bought or sold.

The knowledge society discourse is simultaneous with discourse about the 'Information Society', which began in the 1960s. However, according to a number of writers (Stehr 1994, UNESCO 2005) 'Information Society' as a concept or notion tends to give a more limited and technically-oriented description of the challenges in a modern society. One of the central problems with the term 'Information Society' is the fact that it is mainly concerned with the 'production, processing, and transmission of a very large amount of data about all sorts of matters – individual and national, social and

commercial, economic and military (Schiller 1981; 25 in Stehr 1994; 12). The main critique against this (limited) perspective to changes in societies acknowledges the fact that knowledge always has a social function which is rooted in the production, distribution and reproduction of knowledge. The nature of these issues is political, not technical, because the quality of information and knowledge are related to social structures and the use of power in society.

Knowledge as a private and a public good

Marginson (2006) discusses the nature of knowledge when he criticises the problems of traditional liberal distinctions (see Samuelsson 1954) between private and public (goods) in higher education.[5] According to Marginson: "For example, language and discourse, and knowledge as 'know-how', as distinct from knowledge expressed in particular artefacts such as texts, are about as close to natural public goods as we can get. The mathematical theorem retains its value no matter how many people use it. Nor are its benefits confined to individuals for long: knowledge can only ever be a temporary private good" (Marginson, 2006, 50). Marginson's assertion that questions the ownership of knowledge need to be taken seriously in global knowledge societies where intellectual property rights are one of the issues at stake. Furthermore, the commodification of knowledge is crucial not only in research (as knowledge production) but also in teaching as Naidoo and Jamieson assert (2005). They argue that "attempts at the commodification of information are probably less problematic than attempts to commodify knowledge, pedagogy and assessment" (Naidoo & Jamieson 2005, 45). The commodification of knowledge requires standardisation which is possible to a certain extent whether it be a textbook, audio-visual material etc. whereas the standardisation of pedagogy would basically require the standardisation of human interaction. This is neither sensible nor possible within the domain of education, as it is understood today.

The debate on private and public goods in higher education is a typical example of the emerging problems in the era of the knowledge society. There are two interrelated issues here. The first concerns the ownership of innovation(s). In a number of countries, the problem has been addressed through legislation which regulates the intellectual property rights of academics and universities. The first such act was the 1980 Bayh-Dole Act in the United States which gave ownership of

intellectual property, arising from federally funded research, to universities (Etzkowitz et al 2000). However, the idea of intellectual property rights is challenged by the ethical basis of the open source development process, which envisions information and communication technologies as public goods, in which anyone is welcome to participate and all are invited to benefit. The second issue is related to student tuition fees. The question of 'who benefits' from higher education is often translated into the question 'who should pay' for education. When these questions are combined with budget reductions in higher education they easily tend to produce debates on the problems of public higher education institutions, which has been the case especially in the Anglo-American cultural sphere, spreading from the UK to the USA to Australia (Naidoo & Jamieson 2005). Whether this is a crucial European topic or not, is not perhaps an essential question as the discourse of public and private goods has been developed in those countries, but is now becoming prominent – and viewed as problematic – in continental European higher education discourse. An example of this argumentation, fuelled by neo-liberal reasoning, would be the demands for 'world class universities' and the emerging use of league tables in national higher education debates (Dill 2006, ASHE panel 2006).

In short, as an intellectual device knowledge society aims to describe a new situation in which knowledge, information and knowledge production have become defining features of relationships within and among societies, organisations, industrial production and human lives. Furthermore, the social theory of knowledge society aims to explain the crucial role knowledge plays in economics, culture and the politics of modern societies. In addition to being a social theory, knowledge society is a concept that has been used widely in different domains of societies including economics, politics, popular media and culture –and academic research.

This type of concept, however, tends to take on a life of its' own once introduced. The intuitive nature of the term allows a wide variety of authors in the above-mentioned domains to introduce their own interpretation of the concept. Therefore, we will not go any further into the detailed analysis of the central concepts of information society and knowledge society and their related concepts. One should, however, try to understand how the notion of knowledge society has influenced the (re)definitions of the relationship between higher education and society and how the term has been used in the political spheres of societies.

5. Classically, economists define public goods as goods that can not be sold as individualised commodities because they are non-excludable, that is, the use of a public good by one consumer does not diminish its value or potential use by another. Literally, no one, even non-users can not be excluded from the benefits of production (Samuelson 1954 in Marginson 2006).

2. The transformation of Universities and Research: 'Zeitdiagnose' vs. Empirical Analyses

The discourses of the knowledge society are supported by a number of abstract or theoretical assumptions concerning the changing role of higher education in society. Tuunainen (2005) provides a useful analysis of the differences between two main perspectives concerning the recent debate on the transformation of science and the university.

The first asserts that a radical metamorphosis is taking place in the relationship between knowledge production and university, as an institution. Authors like Gibbons et al. (1994), Nowotny et al. (2001) and Etzkowitz (et al. 2000) propose that governments have promoted national prosperity by supporting new lucrative technologies together with the universities which become 'engines' of their regions. Gibbons et al. (1994) argue that a new form of knowledge production "Mode 2" is replacing the traditional one, "Mode 1". Mode 1 knowledge has been produced within autonomous disciplinary contexts governed mainly by academic interests of a specific community, whereas mode 2 knowledge is produced within the context of its application. Mode 2 knowledge is transdisciplinary research, characterized by heterogeneity and is more socially accountable and reflexive than mode 1 knowledge. In addition, the proponents of the concept argue that universities are losing the monopoly of knowledge production, because knowledge may be produced in a variety of organisations and institutions.

The other variant of the metamorphosis thesis is the "Triple Helix" thesis which states that the university can play an enhanced role in innovation in increasingly knowledge-based societies. Etzkowitz and Leydesdorff (2000) assert that the previously isolated institutional social spheres of university, government and industry have become increasingly intertwined. This has brought academic, economic and wider networks of social actors together in new constellations known as triple helix knowledge dynamics. Based on systems theory, Etzkowitz (et al 2000, 4) assert that four processes describe the major changes in the production, exchange and use of knowledge in the triple helix model. These are internal transformation in each of the helices (academia, state and industry) followed by the influence of one institutional sphere on another. The third process is the creation of a new combination of trilateral linkages, networks, and organizations among the three helices, while the fourth describes the effect of these inter-institutional networks both on their originating spheres and the larger society.

Mode 2 knowledge production has been perhaps one of the most influential conceptualisations of change in modern societies. However, the main limitation of this characterization of knowledge production dynamics and changing universities involves being "one-eyed and reductionist", focusing on "relatively small – albeit significant and dramatically changing – domain of the diverse landscape of science in society" (Elzinga 2002). It has also been argued that the dichotomy of Mode 1 and 2 presents two discrete ideal types that probably never existed in the real world (Muller 2000). In addition, Weingart (1997) and Häyrinen-Alestalo (1999) among others have both pointed out the ideological connection between this discourse and political neo-liberalism (Tuunainen 2005).

The same type of critique has been levelled at the concept of "triple helix of university-industry-government relations" introduced by Etzkowitz (1998 in Tuunainen 2004) as a metaphor representing a close relationship between and interaction between previously separated spheres of the university, industry and government. In this vision the university is a hybrid organization incorporating economic development together with scientific research and education. The problem with this assumption is, however, the leap of abstraction that infers 21st century universities are 'entrepreneurial universities' which is an irresistible, unavoidable development (Etzkowitz 2002 in Tuunainen 2005, 278-279).

A second, more moderate view of the changing nature of knowledge production and universities holds that academic capitalism is challenging the traditional values found in higher education institutions, where an attempt is underway to substitute neoliberal values and management practices. Universities become fertile ground for entrepreneurial universities and academics (Slaughter & Leslie 1997, Slaughter & Rhoades 2004, Marginson & Considine 2000).

These different theoretical assumptions characterise higher education institutions such as "hybrid organisations" (Slaughter & Leslie 1997), "Mode-2 institutions" (Nowotny et al. 2001) or "entrepreneurial universities" (Etzkowitz 2003). The term "Entrepreneurial university" was introduced by Clark as a conceptualisation based on empirical research, which was transformed rapidly into a normative model. According to Clark (1988) entrepreneurial universities capitalize on genuine connections to the academic heartland or central missions of the university, that is, teaching, research and service. The problem in wider generalisations this notion, for example, is that the semantic field of 'mission' does not necessarily correspond to the academic heartland of other national higher education systems. In Finland, for example the word 'mission' is regarded as management jargon, while the meanings of service are open to

active and ongoing discussions. (Bernhard et al. 2005; Kankaala et al. 2004).

While these types of ideas offer a basis for analysis, they are neither social theory, nor can they be universally established by empirical research. What these various notion have in common is that they are all attempts to characterize defining features of the era in which we now live. Noro (2000) characterises this "third type of sociological theory" as the sociologically driven need to seek answers to existential questions, like 'who we are?' and 'what is the nature of our epoch?' (Giddens 1997). According to Tuunainen, these '*Zeitdiagnose'*, 'usually combine familiar materials in a novel way, are normative in nature and pursue a topical insight.' For this reason they may be used as conceptual devices and points of departure for policy making (see Tuunainen 2005, 283) as was illustrated by the use of Mode 2 knowledge in South African policy making context (see Kraak 2000). Owing to the nature of 'Zeitdiagnose' these abstractions do not only imply that higher education has changed but that society is changing. A fruitful approach to considering zeitdiagnose is empirical research, which can be used to test these assertions in theoretical terms (Brennan 2002).

According to an empirical study by Marginson and Considine (2002) it is indeed evident that there is a general pattern of modelling universities along the lines of enterprises. This new form of 'Enterprise University' may be described as follows: "it has a strategically centralised leadership highly responsive to the external setting, the wide use of corporate and business forms, the 'emptying out' of academic governance and weakening of disciplinary identity" (Marginson 2006). However, Marginson & Considine do not proclaim that mode 2 or triple helix dynamics constitute global trends, because knowledge production plays out differently in distinct types of universities. Older, established universities with strong academic and disciplinary cultures possess more field-specific power (Bourdieu 1988; 2004) and are able to resist, even generate change, while other types of higher education institutions are more vulnerable to neoliberal management ideas (Marginson & Considine 2000, in Tuunainen 2004).

On the basis of his empirical research findings Tuunainen (2004, 292) argues that "commercialization of the academic research through spin-off companies turned out to be in conflict with the other university activities, most apparently, with publicly-funded research and university teaching." Furthermore, it has been noted that universities increasingly emphasize the importance of scientific quality in the pressures of market–orientation and commodification of research outcomes (Alestalo-Häyrinen & Peltola 2006). These findings, as Tuunainen indicates, suggest that there is a "need for seeing scientific work and universities as complex and,

occasionally, contradictory entities whose developmental trajectories are shaped by multiple historical, political and cultural characteristics" Tuunainen (2004, 293).

One of the main aims of theorists who chronicle the transformation of higher education is to highlight the changing social role of higher education, and how this change is connected to changes in knowledge production taking place in universities. Furthermore, the aim is to argue (on the basis of the study conducted by Tuunainen) that empirical analysis of this topic challenges the picture painted by Zeitdiagnose. Situations in universities are complex, conflicted and routinely elude many theoretical abstractions.

3. The Knowledge Society as a Political Goal

The Knowledge Society is continually used as a slogan in a number of political contexts. While not all combinations and situations can be addressed, we will focus on three interconnected political levels: national, regional (EU) and global, to convey a wide picture of the different political dimensions of knowledge society discourse.

3.1 Nation States

At the level of nation states the Knowledge Society can be seen to have taken on distinct forms. Castells and Himanen (2001) assert three alternative routes to the knowledge society. These are: 1) Silicon Valley – a market driven, open society (USA), 2) Singapore – an authoritarian model of the knowledge society and 3) The Finnish model – which describes an open, welfare-state-based knowledge society. This typology highlights the variety of possibilities to organise a knowledge society and that the notion can be defined and approached in different ways. A fruitful suggestion made by Castells and Himanen is their assumption that the social structure of the informational age is based on networks (Castells 1996). According to Castells (1996, 470-471) a network is "a set of interconnected nodes. A node is the point at which a curve intersects with itself. What a node is, concretely speaking, depends on the kind of concrete networks of which we speak." Furthermore, "Networks are open structures, able to expand without limits, integrating new nodes as long as they are able to communicate with the network, namely as long as they share the same communication codes (for example values or performance goals). A network-based social system is a highly dynamic, open system, susceptible to innovation without threatening its balance."

Illustrative Case: The Finnish Model

For the purposes of illustration, we will shortly elaborate the Finnish model to underline the significance of analysis of knowledge society discourse at the national level.[6] Finland also provides a Nordic example of the creation of a national innovation strategy to promote cooperation between private companies and public authorities. Castells and Himanen analyse the Finnish path towards the knowledge society historically, philosophically and sociologically. This is because a form of knowledge society does not appear overnight; rather it emerges in a distinct historical context. The distinctive feature of the Finnish welfare state version of the knowledge society is the strong expectation that the state should play a key role between society and the market. The State acts as regulator via legislation, making it a flexible organiser of the development activities needed to reach the goals of a knowledge society. The strong role played by the state is rooted in four forms of legitimacy developed historically from the 19th century. The legitimacies are as follows: *political legitimacy* comes from the democratic political system, *social legitimacy* is gained through the social policies and wealth distribution of the welfare state, *cultural legitimacy* developed during the national project when Finland emerged as an independent nation state (see Välimaa 2001) and *economic legitimacy* is gained because the state supports the development of the market and aims to develop its informational infrastructure.

Networking as the social organisation of the knowledge society

When applying the idea of network analysis of the Finnish model Castells and Himanen (2002) further develop the argument that the knowledge society is organised in and through networks. By using the example of NOKIA they argue that successful companies use networking as a model to organise their industrial production, research and development activities and cooperation with other partners (including universities). They assert that networking describes the way power is organised in general, in Finland. The nation state plays a significant role through various social actors which bring researchers and business companies together in order to focus resources on problems deemed to be of economically strategic importance. These are either development agencies which support cooperation between business and research (e.g.

TEKES)[7] or public organisations which promote cooperation between the world of business and academia (like SITRA)[8]. Politically it is also significant that the National Technology Council, chaired by the Prime Minister, defines national strategies for technology and innovation. It is in this context that the role of higher education policy becomes important. In Finland, universities are seen and defined as part of the national innovation system aiming to increase the capacities of Finnish enterprises and the nation state in general with regard to the international market (see Miettinen 2002).

One of the policy instruments in the Finnish model of the knowledge society has been the establishment of centres of excellence. These reveal the connections between higher education policy-making and the idea of a national innovation system. The policy aims to reward those research units, teams or institutions which have reached an excellent level of academic quality. In addition to being a funding mechanism of high-quality research, this policy instrument also has a political dimension through the nomination process in the Academy of Finland. The centres of excellence also influence the basic funding of universities through management-by-results negotiations, where the amount of centres of excellence are regarded as indicators of each university's academic quality (see Välimaa 2006).

The open source development process and technological innovation

Another important aspect of the 'Finnish knowledge society success story' related by Castells and Himanen (2002) is the consideration accorded to the ethical basis underlying technological innovations. Castells and Himanen (2002) argue that it is not surprising that the Linux operating system was invented in Finland. The ethical basis of the *open source development process*, sometimes called 'hacker ethics' is what enabled (then) University of Helsinki student, Linus Torvalds to achieve what Moody (1997, P.1) describes as "the ultimate hack". Specifically, launching a computer operating system that binds a global community of ICT personalities whose participation in the Linux community is conditional on the acceptance of an alternative, emancipatory vision of ICT. Cutting-edge thought and action

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6. The idea of Knowledge Society has been taken seriously in Finland. On September 1994 the Finnish Ministry of Education set up an Expert Committee to prepare a national strategy for education, training and research in the Information Society (or rather Knowledge Society, because there is no real difference between the words information and knowledge in Finnish). It set the objectives for the national development plan. The implementation of the plan was begun in January 1995 (see: National Strategy 1995).

7. TEKES, the Finnish Funding Agency for Technology and Innovation is the main public financing and expert organisation for research and technological development in Finland. Tekes finances industrial R&D projects as well as projects in universities and research institutes. It aims to promote innovative and risk-intensive projects (see: http://www.tekes.fi/eng/tekes/)

8. SITRA is the Finnish National Fund for Research and Development. It is an independent public foundation under the supervision of the Finnish Parliament. Sitra aims to promote the economic prosperity and the future success of Finland. Sitra's aim is to be a respected partner in building a knowledgeable and innovative society. (see: http://www.sitra.fi/en/)

in the Linux community is based on a vision of ICT as a public good, in which anyone is welcome to participate and all are invited to benefit. The success of an alternative ethical point of departure can be observed in major ICT firms who increasingly must dedicate resources to the Linux movement, lest they become sidelined by actors (and competitors) who do (Hamm 2005). The high quality university system (including technical universities and institutes) in Finland combined with the fact that highly subsidized students have the opportunity to spend time around universities free of charge without the imperative of finishing degrees as quickly as possible, is integral to open source logic (Castells & Himanen 2002).

Learning Society in the UK

Knowledge society discourse is known to other European countries as well. It should be mentioned that the purposes of universities in the 'Learning Society' has been defined in the UK according to the Dearing Report (1997) which defines main purposes of higher education as follows: 1) Inspiring and enabling individuals to develop their capabilities to the highest levels, 2) Increasing knowledge and understanding, 3) Serving the needs of the economy, 4) Shaping a democratic and civilized society. According to Laurillard (2002) these aims describe the importance of higher education to the personal development of the individual in contrast to short-term employment and education provided by corporate training programmes. Secondly, it emphasizes the functions of teaching and research in the development of and dissemination of knowledge and furthermore expresses the economic value of both of these activities. Finally, this political report aimed at setting goals for the development of British higher education, also pays specific attention to the cultural and political value of higher education in maintaining and developing civil society.

In Europe, it is easy to find support for the idea that higher education should support national economic competitiveness in the global market place. The national level is, however, only one of the political levels in which the development of the Knowledge Society has been set as a specific political objective.

3.2. The Regional Dimension: "The Most Competitive and Dynamic Knowledge-based Economy in the World"

In addition to European nation states, knowledge society discourse has opened up an imaginary social space in the European Union itself. This argument is emphasized on the European Commission's Knowledge Society-homepage, which begins with the central objective of the Lisbon strategy: *"to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion."* (Strategic goal for 2010 articulated at the Lisbon European Council - March 2000, see http://ec.europa.eu/employment_social/knowledge_society/index_en.htm).

This citation, in and of itself, indicates the importance of the topic for the European Union. In order to reach this objective *"Europe's education and training systems need to adapt both to the demands of the knowledge society and to the need for an improved level and quality of employment"*. http://ec.europa.eu/employment_social/knowledge_society/index_en.htm).

The European Commission is confident of the potential this type of society offers for its' citizens. According to the cited webpage, the knowledge society means: *"new employment possibilities, more fulfilling jobs, new tools for education and training, easier access to public services, increased inclusion of disadvantaged people or regions.*

It would be naïve to assume that the policy of the European Union is manifests on its web pages, which merely reflect the official rhetorical goals of the EU. The web pages are, however, indicative of the objectives and the Commission's definitions and understandings of the knowledge society. Knowledge Society, Information Society and Knowledge-based Economy are used interchangeably in these documents. This indicates either a lack of need to define the concepts accurately, a lack of understanding regarding their differences or both. Furthermore, it is evident that European employment strategy is foregrounded in these documents as is the case in much European policy-making. Employment tops the hierarchy of topics in the knowledge society web pages, the main emphasis focusing on how a knowledge-based economy can promote employment in Europe. Quite naturally, education and training are prominent. It is more interesting to note that innovation and research – as topics – are more hidden in the documents. During the Finnish presidency of the European Union the lack of support for Europe's innovative capacity was defined as a problem. References to the Lisbon Strategy provoke increasingly frustrated reactions as it is becoming evident these ambitious goals will not be reached by 2010. As a reflection of this problem the European Commission has begun to formulate policy to promote innovation. According to this web site, on September 2006:

"Today, the European Commission has tabled a 10 point programme for action at national and European levels to foster innovation as a main asset of the EU economy. This will form the basis for the discussion by European leaders at the infor-

mal Summit due to take place in Lahti, Finland on 20 October 2006. The programme points the way forward to accompany industry-led innovation with public policies at all levels as a core element of the renewed Lisbon strategy for growth and jobs. …The Commission calls upon Member States to make the structural reforms necessary to deliver the results required. The Commission underlines that Europe does not need new commitments from Member States but political leadership and decisive action."

The Bologna Process

In European higher education, one of the most interesting processes related to knowledge society discourse is the Bologna Process. This is because the Bologna Process provides an empirical window into the globalization of higher education, as it is playing out in Europe. The Bologna Process has been a hot topic at all levels of the national higher education systems and it has been analysed in a number of studies (see e.g. Tomusk 2006). The importance of the Bologna Process is the fact that it simultaneously has influences – and influences – multiple levels of European higher education. National higher education policy makers aim to implement the reform at the system level, higher education institutions are developing institutional policies to implement the Bologna Process and individual academics are occupied with the requirements of adapting curricula changes which can accommodate the idea of two cycles of degrees. From the perspective of research, it is not only interesting to analyse the changes taking place in a national higher education system but also theoretically challenging to analyse how international pressures are translated in local contexts, within the traditions of academic basic units. In addition, it is challenging to analyse how the Bologna Process has been defined in the national higher education policy field and identify the central elements of the implementation strategy adopted by the European nation states and the European Union.

For the community of higher education researchers, the Bologna Process has provided a good opportunity to reflect on the processes of change in which some of us have become entangled as academics. This challenges us not only methodologically (how to conduct research projects on a rapidly changing context) but also politically (what is our relationship to these changes) and theoretically (what intellectual devices could be used in the analysis).

3.3 A Global Information Society?

In the global context, the use of information technologies, the access to knowledge resources and the political aspects of knowledge society are key issues (UNESCO 2005, Mansell 1998). It is in this perspective that a 'global information society' emerges as one of the main challenges for development, because it is evident that the global information society is a political goal which is far from being reached. Specifically, as we begin the 21st century, only 11 % of the world's population has access to the Internet. 90 % of these connections are in leading industrialised economies in North America (30%),Europe (30%) and in the Asia-Pacific region (30%). In addition, 82 % of the world's population account only for 10 % of Internet connections in the world (UNESCO 2005, 29). This disparity has been called the *digital divide* and cuts across the globe, following the contours of social and economic capital distribution (Castells 1996). The problem is not only the proximity to electricity grids but also the fact that interactive computers and Internet connections are unaffordable luxuries for the majority of people. Popular media, on the other hand is more affordable, profitable and more easy to manipulate (as communication only flows from sender to receiver.) This form of exclusion unites urban slum dwellers and the homeless, remote villagers in developing countries and persons caught up in conflict zones.

In this paper we will not go into the details with the problems related to the *digital divide* because our focus is mainly on European higher education. One should not forget, however, that knowledge society discourse is dominated by the conditions of the relatively young, well educated working age citizens geographically located in the urban areas of a few rich countries (UNESCO 2005, Castells & Himanen 2002). In other words, the stakeholders of higher education.

Social responsibilities of higher education in global information societies

The role of higher education is, however, seen as crucial in the development of global information societies. The UNESCO World Conference on Higher Education emphasized that the relevance of higher education means: 1) being politically responsive, 2) being responsive to the world of work, 3) being responsive to other levels of the education system, 4) being responsive to culture and cultures, 5) being responsive to all, 6) being responsive everywhere and all the time, 7) being responsive to students and teachers. As a conclusion the declaration says: "In these circumstances, higher education can truly help to underwrite the generalized spread of knowledge within industrialized societies and in developing countries." (UNESCO 2005, 97)

This impressive list of social responsibilities expected from higher education clearly indicates that world communities have high hopes regarding higher education. It also indicates that the social role of higher education in the global information society is seen as crucial for the development of societies. Furthermore, the list of expectations highlights the central roles universities as producers of knowledge and educated experts in knowledge societies. However, looking at these goals with a critical eye, it can immediately be seen that these multiple expectations describe higher education from the outside, looking in. There are no operational arguments saying how societies should develop their higher education to realize these comprehensive, multifaceted challenges. Furthermore, there is no indication that the limitations of universities and other educational establishments are understood. Accounting for the potential of the impact of expanding information technologies and on research, teaching and service presents considerable challenges to both present structures and ways that work actually is accomplished in higher education. The last point makes this quite clear when defining being responsive to students and teachers as follows: "institutions of higher education should be conceived and managed not as mere training establishments but as educational facilities, implying better management of teaching careers and the active participation of students not only in teaching activities, but also in the management and life of institutions of higher education" (UNESCO 2005, 97).

According to UNESCO (2005, 87) higher education institutions "are destined to play a fundamental role in knowledge societies, based on radical changes in the traditional patterns of knowledge production, diffusion and application." If that assertion is taken seriously, the privatization of higher education and the opening up of universities to forms of market-like organization and the wholesale commercialization of educational services are issues which can, and are being contested and resisted (Currie et al. 1998; Bourdieu 2004; Marginson 2006).

The networking of higher education institutions based on notions of learned societies which are losing their national character and being assimilated into international organizations provides a matrix model also for international or multinational organisations (UNESCO 2005, 92). The idea is based on the dynamics of international research projects and supported by ideas about mobile academics and their use of networks, which may be extended to higher education institutions. Consequently, it may be suggested that "the organization of research and higher education activities in international regional networks offers developing countries an unexpected opportunity to participate in the new international architecture now taking shape" (UNESCO 2005, 93).

4. Higher Education and the Needs of the Knowledge Society

Having described various contexts and types of knowledge society discourse, we now change our focus, analyzing key recent topics which highlight society, from the perspective of higher education. These topics were selected as the key challenges presented by information and communication technology (ICT), knowledge production, the training of professionals and development of civic society.

Information and Communication Technology
One of the challenges for the internal development of higher education institutions (whether speaking about teaching, research, service or the administration of these functions) is created by the implementation of rapidly changing information technologies. Higher education institutions are not only producing and supporting technological innovations but are at the same time intensive users and subject to the limitations of ICT. The ICT revolution is already having significant impacts on students' learning processes (e.g. through the availability of virtual learning environments and new sources of information) challenging both students and teachers to change their conceptions about learning and instruction (Hasenbegovic et al 2006). Therefore, the challenges related to the use of ICT are not necessarily technical but they are also related to pedagogical thinking and organisational structures (see Laurillard 2004). New technologies require new professionals not only to maintain and upgrade ICT support, but also to work in teaching development units and centres which address the pedagogical (re)training of professors (see Rhoades 1998). It is evident that ICT is restructuring the institutional fabric of higher education and influencing the academic work done by university teachers, as much as it is changing the nature of support functions accomplished by staff administrative personnel.

Knowledge production
The topic so far has been approached from the perspective of the knowledge society in the discussion on the changing role of universities in knowledge production. From the point of view of higher education institutions the main challenges may be defined as follows:
– How to organise cooperation between knowledge-intensive industries and organisations doing basic research. One the one hand, cooperation with global ICT actors literally connect related fields in global networks, continuously keeping respective research units up-to-date in recent developments. On the other hand, depending too much on the commercial interests of well-funded global actors can and does

present academics with dilemmas in which their integrity will be tested. Taken further, the promise of funding may shape the selection of research topics, students and bear negatively on teaching contents and curricula (see Välimaa 2004).

– How to integrate the increasing pervasiveness of academic capitalism within traditional tasks of the university. When saying this we would like to emphasize (following Slaughter & Rhoades 2004; Bourdieu 2004; Ylijoki 2003; Marginson 2006) that academic capitalism is not something any person or group 'does to us' as much as 'it' is something 'we do to ourselves'. With reference to academic cultures (Becher & Trowler 2002) there are significant differences between disciplines in the academic world (Slaughter & Leslie 1997, Slaughter & Rhoades 2004) as regards their relationship with society, e.g. humanities, social science, ICT, sciences, economics.

– How to appraise and organise internal administrative procedures in higher education institutions as they increasingly adopt the ethos and methods of New Public Management. These methods aim to emphasize efficiency and reduction of costs.

In addition, the topic of knowledge production is related to knowledge transfer. According to Teichler (2004) major modes of knowledge transfer include: 1) knowledge media (books, films, letters, e-mail messages, artefacts, etc.), 2) physical mobility of scholars and students, 3) collaborative research and joint teaching/learning project, and 4) trans-national education.

Higher education and working life

The notion of the learning society reveals many aspects of the knowledge society. Both emphasising the centrality of knowledge production and lifelong learning of the labour force and because the imperative of this ethos can be summed up by the phrase: 'learning how to learn'.

One of the theoretical perspectives supporting both societal and individual investments in higher education is *human capital theory*. According to Marginson (1993) human capital theory, as advanced by the Chicago school is based on two hypotheses: "First, education and training increase individual cognitive capacity and therefore augment productivity. Second, increased productivity leads to increased individual earnings, and these increased earnings are a measure of the value of human capital."

The idea of human capital theory seems to explain much of the empirical data gathered about the European labour market (Machin 2005). In Finland, it has been shown that 'education pays off', both in the form of better salaries for higher education graduates and because of lower unemployment rates (Havén 1999).

Human capital theory also assumes that that the qualifications of the labour force are crucial for economic productivity. Therefore, improving the educational level and the qualifications of the labour force has positive impact on GDP, even though it is difficult to measure the impacts of educational investments (Asplund 2005). How does the notion of human capital theory fit in the role played by higher education in the knowledge society? One possible link between these intellectual devices is based on the same economic assumptions about the nature of higher education which emphasizes the importance of higher education in promoting economic production either through producing innovation or training professionals.

The human capital aspect is seen as essential in the European Union where knowledge society discourse strongly emphasizes employment-related topics and themes. However, inside higher education institutions the discourse of the knowledge society challenges universities to develop and to adopt new collaborative teaching practices in the training of professionals. It has been noted that the development of expertise often takes place both in formal training (in higher education institutions) and in work places. This cooperation between the world of work and academia challenges higher education institutions to develop both their traditional structures and also their pedagogical practices. Various collaborative working methods may be helpful in developing more relevant, work-based learning practices, even though this suggests the need for new research about new challenges to various disciplines which have been created by working life and processes of globalization (Tynjälä, Välimaa & Sarja 2003).

There is extensive empirical and theoretical literature on the relationship between higher education and work (see Teichler 1998). However, Rhoades and Slaughter (2006) have elaborated five assumptions concerning the relationship between higher education and working life which cannot be supported by empirical research. These are as follows:

1) *Work equals private sector employment.*
   According to Rhoades and Slaughter "there is a tendency in the literature on higher education and work to equate work with private sector employment… Yet it does not reflect the empirical realities of employment in many parts of the US and globally." (Rhoades & Slaughter 2006, 18-19)

2) *Work equals employment in large companies.*
   According to the authors this equation "maps very nicely onto the pattern of academic capitalism and the new economy… But it does not reflect the realities of employment in the private sector in the US" (Rhoades & Slaughter 2006, 20)

3) *Education for work equals fitting in and assimilating to existing workplaces.*

According to the authors "the embedded presumption is that the principal role of higher education is to educate people to fit in and assimilate to existing workplaces and activities… Yet working life is changing dramatically, and it is a worthwhile question whether the sole function of higher education is to adapt to those changes." (Rhoades & Slaughter 2006, 21).

4) *Preparing for work equals developing new job skills.*
"The prevailing discourse about more closely connecting higher education and working life also tends to be premised on the belief that preparation for work equals the development of particular skills. Yet it reflects a particular theoretical perspective about education and employment that has been empirically called into question" (Rhoades & Slaughter 2006, 23).

5) *Work equals paid employment.*
According to Rhoades and Slaughter this assumption "overlooks the realities of demographic patterns and public policy challenges in most countries, particularly in the North/West" (Rhoades & Slaughter 2006 24-25).

Higher education and the changing idea of the state
The idea of a network-based society reflects the changing idea of the state in the knowledge society discourse. In the Brave New (Nation) States of the knowledge society crucial questions are: what is the role of the state? Who should the state serve? In traditional welfare states the aim of the state was to provide universal education, health and security at no cost to its citizens and permanent residents. This idea of the state has been challenged by neo-liberal assumptions about society. Following a neo-liberal reasoning the objective of the state is to produce services for customers who can pay for it rather than to secure basic services of societies to all its members. The role and position of higher education institutions in this changing ideological landscape is crucial for the state in two regards. First, as producers of innovations and new knowledge higher education institutions are seen as crucially important for the competitive capacities of nation states, whereas their role as trainers of experts is easily defined in terms of private goods of education, and therefore, payable goods.

Higher education institutions in civic society
What are the main roles of higher education in civic society? As noted in the Dearing report (1997) and the UNESCO World Conference, many of the social responsibilities of higher education emphasize the cultivation of civic virtues "shaping a democratic and civilized society". In addition higher education institutions are expected to contribute to culture and cultural develop-

ment of societies. In short, higher education institutions are expected to initiate and maintain critical discussion within societies. This is one of the traditional objectives of public intellectuals (Jacoby 1987) but it has also been defined as one of the goals of university researchers and professors in Finland (Välimaa 2004b). The list of social responsibilities can be also approached from the perspective of analysing those groups who meditate between 'knowledge workers' and 'ordinary people' or society. Traditionally these people were priests and more recently scholars with social interests. They assume the critical role of intellectuals (Sadri 1994). For higher education research, one of the obvious challenges, following Bourdieu (1988; 2004), is the analysis of the processes through which and by whom knowledge is mediated in civil societies.

5. Challenges for Higher Education Research

We began with a short overview of the knowledge society as an intellectual device, even though it is more important to note the role knowledge plays in today's societies than argue which of the possible conceptualisations provides us with the best analytical insight into recent and current social change. The essential point we underline is that these conceptualisations aim to describe how today's society differs from previous societies. For the purposes of this paper it is also important to understand what these different conceptualisations mean, in order to provide a basis for communication within the higher education research community. Creating a common ground for communication is important also because these concepts are widely used in policy-making and several other public spheres of modern knowledge societies.

By this discussion we are purposefully challenging ourselves to reflect on possible future research topics or themes in higher education research even though it is evident that this type of discussion, at best, serves only as a starting point. As such, it is our assumption that the themes suggested below would result in the additions, deletions and re-specification, which, in the end lead to a list of themes related to the knowledge society and the other major themes of this effort.

A tentative list of research topics and themes:
1. *Evidence-based policy-making.* European Union stakeholders are seriously considering the need to improve the knowledge base of policy-making. This challenges us to ask ourselves: should higher education research aim to adopt a more active role in

supporting decision-making through producing data and analysis for decision-makers and decision-making processes both at national and European levels? If so, how could the relationships between researchers and policy makers be improved? Or, on the other hand, are they optimal at the present time?

2. *Empirical analysis of 'Zeitdiagnose'*. Higher education is often seduced by zeitdiagnose, because they are elegant and intuitive and are easily adopted or adapted by policy makers, whether or not there is an empirical or theoretical basis for the juxtaposition of an idea from one context onto (or into) another. These abstractions (re)define the role of knowledge, science and universities in society. For example, "triple-helix" or "mode 2" characterizations of knowledge production easily describe higher education institutions as monolithic entities. However, realities in higher education institutions are more complex and conflicted than the suggestions made under these banners reveal. This assertion could provide a fruitful starting point also for empirical studies in and on higher education. The authors' own recent work at the level of basic units (responding to the Bologna Process) revealed a wide variety of activity in what is fairly described as a small national higher education system. Our point being that policy makers in our context were unaware of these dynamics as the management fads and substantive fashions that preoccupy them, had not drawn attention to the dynamics within their own systems, as much as they had informed them of prescriptive ideas from other continents (Hoffman, Välimaa & Huusko *forthcoming*).

3. *Knowledge transmission*. One of the challenges for higher education research is the analysis of processes through which, by who and for who knowledge is mediated in civil societies. Possible insights to this could be illuminated by studies of (national or European) intellectuals and their changing relationship with society and higher education. Teichler's (2004) analysis provides a basis for empirical studies of knowledge media (books, films, letters, e-mail messages, artefacts, etc.), or physical mobility of scholars and students, or collaborative research and joint teaching/learning project, and trans-national education.

4. *Empirical research of current topics*. One of the challenges of higher education research is to conduct studies on current and important topics like the Bologna Process. It also provides a good example on how to analyse the processes of change in which we are entangled as academics. These topics challenge us not only methodologically (how to conduct research projects on on-going processes) but also politically (what is our relationship to it) and theoreti-cally (what intellectual devices should be used in the analysis). These different aspects not only describe the problems of an applied field of research but they also challenge us to reflect on the methodological variety used on these topics and the theoretical level of abstraction which higher education researchers could utilize to provide new insights to these processes.

5. *Higher education and working life*. This is one of the major topics and well-grounded in empirical research in higher education. In spite of its popularity it does not diminish its central value in higher education research because training of experts and professionals is one of the main channels of interaction between higher education institutions and society also in knowledge society. For example; if the ageing of many European societies is considered, longitudinal designs focused on different (national or regional) manifestations connected to life-long-learning becomes interesting.

6. *Studies on networking in higher education*. One of the problems with the empirical studies of networks is defining where a network begins or ends. Therefore, an analytically sound solution to this problem of empirical research problem is to 'follow the actors' (see Latour 1988) or try to approximate points where networks become visible. However, despite the problems of empirical research to analyse networks, it is evident that networking and networks describe social realities of human beings living in the age of information. Studies utilizing social network analysis may also illuminate interesting perspectives to institutional level studies. This, in turn, may substantiate the degree to which modes of knowledge production in specific contexts are changing, or if they actually are. The networking of higher education institutions based on notions of learning societies which are losing their national character, being assimilated or, alternatively, transforming themselves into trans-national networks or international organizations provides one possible perspective to this type of research.

7. *Curiosity-driven studies on emerging issues.* "Research on higher education does not have to be driven by public concerns. Higher education researchers could anticipate changing issues and make the key actors aware of the salient issues they are likely to face in the near future. We could give greater attention to issues which are looming but have not been analyzed in the public debate." (Schwarz & Teichler 2000: 23) While this quote is as self-explanatory as it is self-evident, we would be remiss by not pointing out that the higher education research community is better equipped than most to identify, analyze and raise issues which are off the

radar screen of policy-discussion, public and general academic debate. The study of well established versus emerging topics is a tension in that the former are better funded as they've been previously identified in policy, public or academic debate. However, a research agenda which does not contemplate issues just over the horizon can be perceived as limited.

Reflecting on the role and goals of higher education research

The principle task before higher education researchers regarding the knowledge society, is the critical evaluation of a situation in which our methodological gaze has become as meaningful when turned inward – to higher education itself – as when we purport to study contexts and phenomena 'outside' our walls. While this has always been an interesting exercise, the exigencies of the present situation have been pointed out from all points on the globe in the form of critiques of academic capitalism (Leslie & Slaughter), knowledge capitalism (May 2005), neo-liberal managerialism (Rhoades & Slaughter 2004), a lack of political engagement (Torres 2006) and a looming, global impression of the universities as nothing more than "engines for economic productivity and competitiveness." (Currie & Newson et al. 1998, p. 3). However, as Marginson (2006) points out, the real weakness in many descriptions and interpretations of our present situation lies in a lack of theorisation of the dynamics on which the very essence of the knowledge society rests. And it is precisely this lack of theoretical purchase – driving to the end of explanation – which signals the type of conditions in which the most critical hypothesis which can be formulated about the university is identical to the critical hypothesises which our field of study indicates we pose about society (Bourdieu 2004).

This type of situation indicates empirical investigation of the fundamental interests of an institution capable of influencing both social reproduction and transformation (Brennan 2002). Systematically probing the *high-profile* and profitable scientific frontiers which need to be crossed necessarily involves the illumination of *no-profile* questions which characterizes the situation we – and our societies – now find ourselves. The erosion of the nature of higher education as a public good has indeed been raised from many quarters and in many contexts, but, as (Marginson 2006, p. 46) points out, the real question is: 'Why are the universities and faculty complicit in this?"

The only thing more interesting than rigorous analysis of empirical data about this question, would be the illumination of issues which are *not* raised or detected. While one could raise the objection that we cannot analyse what we have not observed, our assertion would be – following Marginson (2006) and Bourdieu (2004)

– that theoretically-driven explanation based on rigorous analysis of empirical data within robust conceptual frameworks will frequently illuminate both knowledge voids and theoretical mirror images of phenomena.

Our point here is to underline the value of systematically seeking the explanations of the driving forces behind scientific investigation and science policy in today's knowledge society. Empirical research of this type will not only point out the urgent and the obvious; the altruistic and the self-interested. It will also cast a theoretical shadow on the unanticipated and unintended; and "the games of individual bad faith (which) are only possible in a profound complicity with a group of scientists." (Bourdieu 2004, 23).

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Higher Education and the Achievement (or Prevention) of Equity and Social Justice[1]

John Brennan and Rajani Naidoo

Higher Education and the Achievement (or Prevention) of Equity and Social Justice

1. Introduction

The stated aim of this Forward Look is "to examine the relevant higher education research literature in terms of its underlying conceptual approaches and empirical findings across a number of sub-themes in order to derive a future research agenda that will address questions of long term strategic concern to the future of higher education". (*Forward Look* proposal) One of these themes is *Higher Education and the Achievement of Equity and Social Justice.* It is a theme which has been given considerable policy attention in recent years and it is the policy attention which has tended to drive research and discussion[2].

An important feature of the HELF Forward Look is the attempt to "keep policy at a distance" and to "develop a scientific agenda for the future of higher education research which can be set alongside the policy agenda" but not dominated by it. This is no easy feat. Even where it is not directed explicitly at policy agendas, research into higher education often reflects the biases and interests of those who conduct it. Unsurprisingly, higher education and many of those who work in it generally find it in their interests to appear to be 'socially useful'. Policy makers on the whole are interested in 'problem solving' and show interest in higher education to the extent that it appears to be relevant to solving current 'problems'. That is not of course to say that there is no critical literature but it tends to be dwarfed in volume by a literature that, one way or another, is geared to promoting the interests of higher education – either in general or the interests of a particular institution or subject area, for example.

We make the above point by way of an introductory caveat. In this paper, we shall attempt to strike a balance between policy and theoretical considerations and make an assessment of the messages that come out of the empirical research literature. These messages may sometimes prove to be contradictory and the boundaries between this and other themes of the Forward Look will be somewhat blurred. Policy and theory may sometimes point in opposite directions. Rather than seeing these as negative features of the field, we shall argue that they constitute a rich scientific agenda for future research.

2. The Scope of this Paper

Concepts such as equality and social justice have a 'feel good' flavour to them that can cover up the absence of precise meaning. They are frequently used without clear definition. In recent years there have been growing debates in the social sciences and humanities on how we understand the concept of social justice. However, relatively few researchers in higher education have drawn on these wider debates. Many, however , would agree with a recent contribution which has suggested that 'social justice' is the attempt to answer the following question: "How can we contribute to the creation of a more equitable, respectful, and just society for everyone?" (Zaijda, 2006, p. 13). This formulation is important since it puts the emphasis on society but much of the research literature looks inwards towards higher education itself. Thus, research considers the social composition of higher education's staff and student populations and assesses the success or otherwise of attempts to make them more socially representative. In a sense, higher education 'imports' equity and social justice agendas from the wider society and, in common with other large organisations, looks at ways of improving its performance in these respects. But Zaijda's question is much more of a question about 'export': what does higher education do for the achievement of equity and social justice across the rest of society? Here, as we shall see, the research literature is more scant, even though the policy literature is full of brave statements.

In this paper, we shall be more concerned with this latter 'export' role of higher education: its contribution to achieving a fair and just society. However, it is not possible to separate this from the 'import' role, i.e. from questions about equity and social justice *within* higher education. The internal processes of higher education, it will be argued, have implications for the shape and cohesion of societies and for the quality of life of individuals.

Much of the literature in this field concerns questions of participation in higher education and whether certain groups are excluded or under-represented. But we would agree strongly with Craig Calhoun that this is only one side of the 'access question'. The other is described by Calhoun as "making the hoard of knowledge produced or preserved by universities available to society more broadly" (Calhoun, 2006, p9). In other words, even if participation can be made socially just and equitable, there remain important questions about higher education's contributions to society in other respects, about who benefits and about who pays the costs. Thus, two rather different debates tend to go on. One concerns fairness in the allocation of the *private benefits* of higher education. The other concerns the *public*

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2. The original theme title should not be interpreted as necessarily implying that there is a positive relationship between higher education and the achievement of equity and social justice.

benefits – impacting on all – of higher education. The extension of access in this first – and most commonly used – sense is important because of the part played by educational credentials in determining personal life chances in modern societies. Used in its second sense, however, a broader set of issues are raised including the proper balance between public and private sources of funding, intellectual property rights, academic autonomy, links between higher education institutions and the communities they serve.

These two senses of 'access' will provide the structure for the later sections of the paper where we consider the research literature, first in terms of participation – 'Higher education and society: the social construction of legitimate difference' – then second in the broader sense – 'Higher education: who pays and who benefits?' Before that, we consider some of the general theoretical and policy assumptions and frameworks that underlie the theme of this paper.

3. Theoretical Assumptions

Classical sociology accorded two principal functions to education: selection and socialisation. Selection concerned the filling of positions within economic, political and social elites. Socialisation concerned both equipping the 'selected' with the necessary attributes to occupy these positions and persuading the rest that the selection was fair and ensuring that those not selected were also equipped with the different set of attributes necessary to play their own part in society. Selection could take many forms – Turner's distinction between 'sponsored' and 'contest' mobility remains useful in this respect – but the key function of justifying inequality on principles of meritocracy is always central (Turner, 1961). The details of the processes involved are strongly affected by changes in social structure – providing more or fewer elite positions and hence different opportunities for upward social mobility at particular periods of time (the 'space at the top' argument).

Accounts of these social processes can be divided into the 'liberal' and the 'elite reproduction' theorists. Moore has usefully summarised these with the liberal theorists assigning functions of progressive social change to education by

- "producing the 'human capital' required by an increasingly high-skill, science-based economy;
- promoting the 'civic' values and behaviour appropriate to advanced liberal democracy;
- developing a 'meritocratic' selection system whereby people can achieve social status by virtue of their actual abilities and contributions

rather than having it merely 'ascribed' by the accident of birth;
- facilitating an 'open' society characterised by high levels of social mobility reflecting the relationship between ability and opportunity".

Moore contrasts such accounts with those of the elite reproduction theorists who see educational processes in terms of how they

- "reproduce the privileges and dominance of the ruling class (e.g. through access to educational advantages leading to elite jobs and social positions);
- secure the legitimacy of capitalist social relations through the inculcation of the dominant ideology;
- block the development of a counter-hegemonic working-class consciousness that could effectively challenge capitalism;
- systematically prepare pupils for their differentiated future positions within the capitalist economy and social structure." (Moore, 2005, p38/9).

Although Moore is referring to all levels of education, his distinctions seem to work well for higher education specifically. As Moore points out, the two theoretical positions are not necessarily contradictory: reproduction may occur but does not have to be 'perfect'. And these are of course *theoretical* positions, not necessarily supported by the results of empirical research.

There are a number of 'elite reproduction' theorists who have made the above points in one way or another – Bourdieu, 1996, Bowles and Gintis,1976, Brown and Scase, 1994 etc. Their limitation as far as higher education is concerned is that they have tended to focus on the 'elite' – both educational and social – and have rather neglected what is going on in perhaps 90% of 'mass' systems of higher education.

There are also other important limitations to the reproduction theorists. First, their work cannot be easily applied to contexts characterised by social conflict and change where a range of external and internal socio-political and economic forces may be in play. Second there is little focus on the internal content of higher education, particularly on knowledge. Li Puma (1993) in relation to Bourdieu has stated that he holds an 'absolute substantive theory of arbitrariness' to the extent that the content of a cultural product such as a text or theoretical development is arbitrary and could just as well have been replaced by an alternative product to serve the same function. All that is necessary in Bourdieu's model is for the cultural product to produce distinction as a means of expressing and reproducing relations of class inequality. The content and internal structuring of knowledge is therefore excluded from analysis. Third, a question that needs to be posed is

the extent to which such theories remain relevant in the context of current developments in higher education. Much of the work of the reproduction theorists was developed in the context of a 'social compact' that evolved between higher education, the state and society over the last century and which led to the insulation of universities from direct market pressures. In the current context it may well be argued that the juxtaposition of elite institutions with class may be displaced by a closer relationship between elite institutions and business interests. Our sense, however, is that reproduction theories when suitably modified may still hold important insights and may be applicable to much that currently happens within higher education. One such modification would be to broaden the scope of analysis to encompass a wider notion of *social* mobility, embracing opportunities for access to middle-ranging positions in society as well as to elites. However, even when so modified, reproduction theories do not, though, provide the whole story.

Perhaps unsurprisingly it is the liberal approach that has been taken up by the policy makers. Altbach has summarised some of the achievements arising from expanded higher education systems as (i) increased opportunities for social mobility, (ii) increased income levels associated with higher education, (iii) academe opened up to women and "historically disenfranchised groups worldwide". Altbach concludes that "inequalities remain, but progress has been impressive" (Altbach, 2000, p2). Both the extent and the details of these achievements differ between societies but can be found to some extent virtually everywhere. Central to the liberal position is the assumption that higher education enhances productivity in the labour market and that, therefore, special rewards to those who possess its qualifications are justified and are functional to society.

Undeniably, the accumulation of educational credentials has been a major route to upward social mobility for many in modern industrial societies, always providing, however, that there is 'room at the top'. In the UK context, Brown and Hesketh have questioned the extent to which this remains so and express doubt about whether the children of the upwardly mobile generation of the 1960s and 70s will be able to cling onto the social positions of their parents (Brown and Hesketh, 2004). Of course, the acquisition of credentials may become as crucial to 'clinging on' to social status as it once was to being upwardly mobile. These authors and others also point out that access even to elite institutions may not be enough to ensure access to 'good jobs', especially for students from lower socio-economic groups. Possession of appropriate social and cultural capital may also be necessary in order to convert educational success into employment success, especially in some occupational fields (Brennan and Shah, 2003). In this, as in much else, we need also to be alert to the possibility of important country differences.

As we shall see, there is a substantial body of research dedicated to achieving the liberal goal of widening participation and fairer access to higher education. Much of this is focused on practices within the education system although wider features of the prevailing socio-political context need also to be taken into account.

Alongside the arrival of 'mass' higher education we have the growing dominance of a neo-liberal culture emphasising individual competitiveness and responsibility spreading through society, though more advanced in some societies than others. A meritocratic ideology is central to this culture, bringing with it the message that 'your problems are all your fault'. And similarly, 'your privileges are all your own achievement'. A piece in the Guardian newspaper (8/7/06) recently quoted Raphael Samuel on Britain's new high-achieving middle-classes:

"They are not, in the conventional English sense, snobs, because they don't feel anyone can threaten them. They have little sense of being privileged. Even if they are the sons of Labour MPs, and have been expensively educated at the ancient universities, they believe that they owe their position not to the advantages of birth or wealth, but rather to personal excellence… They believe that however inflated their incomes might appear to outsiders, they earn every penny they get."
R Samuel, quoted by Decca Aitkenhead,
The Guardian, 8 July, 2006.

Other writers have observed the effects of this increasingly dominant ideology on things like 'trust', 'co-operation' and 'community' within the 'new capitalism'. (See for example Richard Sennett's work.)

The above theoretical positions are essentially about the 'selection' function of higher education, about who gets the credentials and how lives are changed as a consequence. In a recent article, Craig Calhoun has raised the important question of what higher education contributes to social justice for the majority of people who *do not participate* in it directly, who do not themselves go to university or college (Calhoun, 2006). At an individual level, of course, the answer must be that their opportunities and life chances are reduced in a major way. For them, the 'contest' – for all sorts of 'goods' and 'positions' within society – is effectively over with the 'failure' to enter higher education. (Although in this context, however, we must be alert to the 'second chance' opportunities and lifelong learning provisions which are being increasingly emphasized across Europe.)

However, Calhoun's question directs us to consider a much wider range of social and educational issues than those of individual educational achievement. We will discuss some of these in later sections.

In considering these and other points, the research evidence is likely to prove to be both limited and contradictory. Contradictions, though, should not worry us. Higher education as a whole, as well as individual institutions and individual academics, may well be performing contradictory functions – for example, bolstering and reproducing privilege and inequality at the same time as they are creating new knowledge of benefit to all. In this context, some attention must surely also be given to the increasing differentiation of higher education systems – the focus of one of the other themes of the Forward Look. We need to distinguish between 'horizontal' or functional differentiation and 'vertical' or hierarchical differentiation, especially as different European countries seem to be characterised by one rather than the other of these. Vertical differentiation tends to come with increasing power of markets and is found in Anglo-American systems and those influenced by them. Greater state control found in many continental European systems seems to be associated with flatter hierarchies and functional differentiation in terms of the social and economic roles of different institutional types or sectors.

Differentiation certainly seems to be an important way by which higher education can pull off the 'trick' of simultaneously achieving both elite and mass functions. The elite possess a mechanism for the reproduction and legitimisation of their positions and privileges by effectively preserving space at a distinctive and privileged set of educational institutions. (It might be argued that the elite needs the support of the state to maintain this differentiation by ensuring the continuous flow of reputational data and the demonstration of 'difference' and 'hierarchy' between what might otherwise be seen as equivalent institutions and experiences; a key function of quality assurance?) For the 'mass' – or at least the expanded middle class – there is at least the promise of opportunities 'for something better' for their offspring, whether an entry route into the elite or, more probably, positional advantage within the expanded and dynamic 'knowledge economy'. But the key to simultaneously pulling off both elite and mass functions must be that different forms and institutions of higher education cannot be regarded as 'all the same'. Where once entry to higher education was the passport to power and privilege, today it may only be entry to a relatively small number of institutions that can provide equivalent opportunities. But this should not hide the fact that entry to *any* form of higher education is likely to maintain or improve a person's life chances and that this is especially the case for people from disadvantaged social groups.

As far as this paper is concerned, the 'jury' is 'out' on the different theoretical positions discussed above and we should try to be alert for differences between countries and for change over time in their applicability to empirical realities. Many national governments have been explicitly attempting to implement the liberal agenda. How far have they been succeeding? Recent events have made the classic sociological question of 'social order' look problematic again. Are there signs that problems of achieving social cohesion have been receiving greater political and research attention post 9/11? And does higher education figure as having a role to play in its achievement?

4. Policy Assumptions

Higher education has received heightened policy attention all over the world in recent decades. There are several reasons for this. A central one is the belief in the importance of the so-called 'knowledge economy', and the related expansion of most higher education systems (with increased costs to the public purse) bringing heightened visibility and accountability requirements. Globalisation is part of the story, with international competitiveness at the heart of much policy thinking – at the level of individual institutions as well as of national governments.

At its simplest, the policy message is two-fold:
- Higher education is important to the development of successful economies (regional as well as national)
- Higher education is important in providing opportunities for all individuals in a society to participate in and benefit from a successful economy.

Quite often, the second 'social equity' argument is subsidiary to the first and economic argument. Opportunities must exist for all in order to avoid a 'waste of talent' to the detriment of the economy and the interests of all. Thus 'employability' and 'widening participation' become central and linked policy themes. But more recently issues of social equity have come more to the fore, as the foci of several international conferences over the last year have demonstrated.

The meeting of OECD education ministers in June, 2006 referred to the 'dual mandate' of higher education: (i) to promote democracy, tolerance and social cohesion, and (ii) to fuel economic development through the creation of knowledge and skills (OECD, 2006). The same meeting highlighted the problems being encountered in meeting this mandate, noting that virtually all countries were struggling to ensure equitable provision of higher education, commenting that "access

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to and completion of higher education typically varies widely, most importantly by social background, minority or immigrant status, or disability" (OECD, 2006, p5). Country specific reports by OECD bring together useful comparative data on participation and related matters and are also not afraid to highlight inconvenient trends. Thus a recent OECD thematic review of tertiary education in the Czech Republic notes that "tertiary education contributes more to the reproduction of educational inequalities than to inter-generational social mobility" (CHES, 2006, p. 44).

Policy statements are frequently aspirational as the 2005 'Glasgow Declaration' by the European Universities Association on the Bologna Process illustrates:

"In refocusing the Bologna Process, universities undertake to give higher priority to the social dimension as a fundamental commitment, to develop policies in order to increase and widen opportunities for access and support to under-represented groups, and to promote research in order to inform policy and target actions to address inequality in higher education systems." (EUA, 2005, p. 3)

Perhaps unsurprisingly, many international organisations place much of their emphasis on cross-border higher education. For example, the International Association of Universities emphasizes the benefits to equity, access and quality of higher education that can come from increased international mobility of students. A statement issued in 2005 refers directly to higher education's responsibilities to "instil in learners the critical thinking that underpins responsible citizenship at local, national and global level" (IAU, 2005, p. 2).

That international mobility tends to be the preserve of students from already advantaged social backgrounds is one of the many inconvenient pieces of data that sit uncomfortably with policy intentions.

The Council of Europe is an organisation with a long history and mandate of concern with issues of human rights and citizenship. At a recent Council of Europe Higher Education Forum, the participating higher education leaders and policy makers affirmed a number of commitments. The report of the meeting stated that higher education had a role to play in, and a responsibility for, developing a democratic culture by educating the new generations in the values of democracy. It regarded it as being higher education's responsibility to foster the commitment of citizens to sustain public actions aimed at the wellbeing of society at large rather than the individual benefits. It concluded that higher education must promote the values of democratic structures and processes, active citizenship, human rights and social justice, environmental sustainability and dialogue (Council of Europe, 2006, p. 3).

It is worth noting that the above set of statements go well beyond a widening participation agenda to address directly issues of democracy, citizenship and human rights. In considering how such noble sentiments are to be put into practice, it is perhaps just a little bit of an anti-climax to read that the Council of Europe is going to 'set up a web-site'!

At a previous Council of Europe meeting, participation agendas were addressed more directly and the conference report provides a good summary statement of the state of play across Europe:

"Higher participation rates have not removed inequities based on socio-economic, racial or ethnic origins of students, and significant gaps remain within many countries and between countries in Europe." (Egron-Polak, 2004, p. 3)

The different senses of equality in terms of higher education policy and practice are summarised in the report of an International Association of Universities conference in 2004. The IAU distinguished between (i) equity of access or equality of opportunity, (ii) equity in terms of learning environment or equality of means, (iii) equity of achievement, (iv) equity in using the results of education or equality of application (IAU, 2004).

The many brave and aspirational statements made by policy bodies in recent years may succeed in influencing agendas at national and institutional levels to a certain degree but they do not face up to the wider structural social inequalities which exist and the part being played by higher education, not in removing them but in sustaining them.

What was clear from the Forward Look workshop that discussed an earlier version of this paper was that there are significant national differences in the attention given to equity and social justice issues in respect of higher education. As well as differences in the importance attached to the subject, we can note differences in

- the perceptions of the scale and nature of the problem;
- the groups that are focused on (class, ethnic, gender, regional etc);
- where responsibility is seen to lie (i.e. within or beyond higher education, with governments, within the family, within other parts of the education system, with the values and aspirations of the non-participants);
- pre-higher education educational structures (and routes into higher education);
- admissions policies and practices (for example, the use of SATs and of special entry procedures for certain groups);
- the extent and nature of the differentiation of the higher education system;
- whether the main focus is on admission, retention or outcomes;

- the quality of the student experience and the role of fees and financial support mechanisms;
- higher education traditions – with regard to factors such as professional training, elite reproduction etc;
- the existence and effects of larger processes of social change (for example, in the former communist countries).

It may be noted that most of the above factors concern widening participation and social access to higher education rather than the broader agenda of the social impacts of higher education. In the next section, we examine the participation issue in more detail and then turn to this broader agenda in the following section.

5. Higher Education and Society: The Social Construction of Legitimate Difference

We have already noted that much of the research literature is concerned with the 'import' into higher education of equity and social justice issues current in the wider society. In this sense, higher education institutions are no different from other large organisations. They must show concern for gender and racial equality among their staff and students and seek ways of improving it. They must provide facilities for the disabled. In many countries, there is a regional dimension to social equity and this also is likely to be reflected in the agendas of higher education. Research can be critical of higher education's performance in some or all of these respects – whether at system or institutional level or both – and the reasons for higher education's failings may be found inside or outside higher education itself. And there is an appropriate set of technical questions to pose about the relative success of different kinds of policy interventions to improve the performance of higher education in extending access.

The literature shows very large differences in participation rates between social and cultural groups in pretty well all countries and only rather limited improvements resulting from the various projects and policies of governments, institutions and other policy bodies (Thomas, 2001). Participation rates overall vary considerably between European countries (Otero and McCoshan, 2005, Kaiser et al, 2005) but several authors note that expanding enrolments do not in themselves do anything for social equity. Indeed, it is pointed out that in most countries recent increases in higher education participation rates among young people from lower socio-economic groups have been less than the overall rate of increase (Blondal et al, 2002, Galindo-Rueda

and Vignoles, 2003). Such conclusions might suggest that the middle classes will always find ways of reproducing their privileges and that, to be really effective, policy interventions to achieve equity would need to be directed towards the 'advantaged' as well as towards the disadvantaged. There seems little prospect of that happening!

Authors differ in the extent to which they find inequalities in participation in higher education to be the fault or responsibility of higher education or to lie elsewhere in society. On the one hand, it is sometimes argued that universities come far too late in a potential student's educational and social experience to overturn or compensate for accrued disadvantage (Hale, 2006). Woodrow presented four 'myths' commonly heard within higher education institutions as arguments against promoting equity:
- "it's not the responsibility of higher education to promote social inclusion"
- "equity is the enemy of academic excellence. Low status students will lower standards"
- "the admission of access entrants is the last resort of institutions desperate to recruit"
- "we are in favour of widening participation, but at present we just cannot afford to".

(Woodrow, 1999, p. 343)

As part of the case 'for' promoting equity, the argument is heard, therefore, that higher education institutions must themselves change if they are to meet the needs of new kinds of students. The report of a 1998 UNESCO conference report set out the need for change unequivocally:

"It is now clear that, to fulfil its mission, *higher education must change* radically, by becoming organically more flexible, and at the same time more diverse in its institutions, its structures, its curricula, and the nature and forms of its programmes and delivery systems" (emphasis in original).
(Mayor, 1998, p. 2)

Barriers to widening participation that might need to be addressed include "the cost of participation; entry qualification requirements; a lack of flexible learning opportunities (including curricula); limited availability of support services and an institutional culture" (Thomas, 2001, p. 365).

Only a few authors have seen the barriers to educational disadvantage of some groups to lie in the advantages enjoyed by other groups (Lynch and O'Riordan, 1998). Yet in that educational credentials represent a positional good, the *relative* achievements of different groups and individuals are surely central to questions of social equity. The positional worth of a credential is to a large extent a function of its scarcity

value. For disadvantaged groups to change places with advantaged groups requires some downward mobility to make space for some upward mobility, other things being equal in the labour market. Thus, getting more people into higher education does not of itself ensure enhanced life chances thereafter.

Participation in higher education is important because of its implications for an individual's life chances in the long term. This is an important part of higher education's role in the *'export'* of equity and social justice to the wider society. This role has been given rather less attention in the research literature. This is not altogether surprising. It reflects an underlying assumption that 'unequal treatment' on the basis of possession of educational credentials is both legitimate and necessary.Inequality of inputs is of concern but inequalities of output are regarded as necessary, even essential. This is basically a functionalist belief in the need to get the 'right people' into the 'right social positions', to the general benefit of all. According to this way of thinking, it is of concern if the rules of the competition are unfair – if certain social groups are excluded or disadvantaged from the competitive game. Central to the game is 'access' to higher education and progression and success within it. The outcome for society is not that there is greater social equity but that the lack of it is legitimised by the perceived existence of broadly equal opportunities. This is an argument for meritocracy, about ensuring that positions are filled by and rewards go to the 'best equipped' people to undertake them and about legitimising the resultant inequalities of wealth and status in these terms. As Calhoun comments, "people get to be elites not just because they are good – even if they are – but because there is a system that offers those elite positions and preparation for them" (Calhoun, 2006, p. 32).

Thus, higher education contributes to the emerging 'meritocratic knowledge society' in two main ways - by both providing opportunities for individuals to succeed in it and by legitimising the basis of their success. In these terms, higher education may be performing well or badly. But the 'problems' are clearly defined: lack of students from working class backgrounds in 'top' universities such as Oxbridge is a problem; better jobs for Oxbridge graduates are not. (The latter of course may or may not be justified by the special talents that the Oxbridge graduates are presumed to possess. But the point is that these talents tend merely to be assumed. It is difficult to find research which addresses them.) This is essentially an individualistic perspective with the central question being whether individuals – irrespective of their class, race, gender etc – have equal opportunities to 'succeed' where 'success' is largely to be defined in terms of the achievement of wealth and power.

The claims for 'meritocracy' made some decades ago by authors such as Daniel Bell were that "differential status and differential income are based on technical skills and higher education, and few places are open to those without such qualifications" (Bell, 1974, p30). Internationally, the middle classes appear to have heeded Bell and enrolled their offspring in higher education in massive numbers. Thus, a more recent commentator could note that "a meritocratic legitimation of the social inequality generated by a market economy is unpersuasive" (Goldthorpe, 1996).

Higher education has often been called a 'positional good' and 'credential inflation' the main product of its expansion (Collins, 1979 and 2002). As Calhoun notes, "expanded access may imply more open and meritocratic distribution of existing credentials, but of course it actually produces an inflation in credentials and a new emphasis on prestige differentiations among apparently identical credentials" (Calhoun, 2006, p9). Thus, in many countries – especially those with a steep reputational hierarchy of institutions – debates and research about widening participation have begun to focus on inequalities of access to elite institutions (Reay et al, 2001) although without, in general, questioning the basis of the credential superiority accorded the qualifications from these institutions.

From these perspectives and following Bourdieu, social difference becomes 'mis-recognised' as educational difference and is thereby legitimised. What we have termed 'elite reproduction' theories and research tend to focus on particular institutions (for example, Grandes Ecoles, Ivy League institutions, the Universities of Oxford and Cambridge) and their use by members of elite groups in society to transmit their power and privileges inter-generationally.

One criticism of the elite reproduction theorists is that they neglect the huge expansion of higher education and the emergence of 'mass' and 'universal' systems (in Martin Trow's terms). Looking at the larger society and higher education beyond the elite sectors, one finds international differences in the importance of educational credentials but the following points are probably all more or less true:

- Credentials are getting more important in the determination of life chances.
- There is unequal access to credentials.
- Credentials are a vital route to social mobility – although this requires certain labour market conditions: the possibility of 'status congestion' (Brown and Hesketh, 2004) remains.
- Credentials combine with other social and cultural factors to determine life chances and may disguise the continuing importance of these other factors.
- Mass systems and their credentials are increas-

ingly differentiated – elite sectors remain, new vocational sectors and qualifications are created for the masses; different 'classes of higher education' come to serve different social classes.

- There may be a larger 'social order' function within increasingly unstable societies where the 'appearance' at least of opportunity structures for all is essential to the maintenance of order.
- In other words, 'it's your own fault if you don't succeed' – difference and inequality are thus legitimised.

There is a considerable literature on the extent to which equal opportunities are achieved through higher education and on the factors that are important to their achievement. National differences can be noted – for example, in terms of the existence or not of binary structures which distinguish academic from vocational institutions and qualifications (Schuetze and Slowey, 2002). But other factors, such as admissions procedures, funding arrangements, and the internal cultures of higher education institutions are also important. The enormous increase in international mobility of students and graduates creates a further complexity, providing routes outside the nation state, for both mobility and reproduction.

While the elite reproduction theorists can be criticised for too narrow a focus on a small number of elite and privileged institutions and the students who attend them, a broader notion of social reproduction seems applicable to the functions of expanded mass systems of higher education. With increasing differentiation and hierarchy come newer and ever more subtle ways of maintaining positional advantage. Social and cultural capital provides know-how of where and what to study that is crucial to eventual life chances but which is denied to those from disadvantaged groups and communities. This is not to argue, we must emphasize, that a majority of students, irrespective of their backgrounds and circumstances, do not benefit substantially from attending higher education. But their advantages lie in comparison to people without any kind of higher education rather than in comparison to qualified people from higher socio-economic backgrounds.

6. Higher Education: A Wider Impact?

In this part of the paper we turn to the question of whether and how higher education contributes to social justice for the majority of people who do not participate in it directly. This leads us beyond questions of higher education as a measure of individual achievement or as the appropriation of a private good to the question of higher education's wider contribution to society. This wider function of higher education is often encapsulated in the notion of higher education as a public good and is also closely related to concerns over who pays for higher education. Contemporary discussions on these issues are also frequently linked to debates in higher education about the role of market forces, new systems of management and accountability, and the perceived erosion of academic autonomy.

These are issues that are being debated more widely at the present time (see, for example, the Council of Europe initiatives mentioned above). However, the debate is hardly supported by a substantial research literature as yet, whether in relation to theoretical frameworks or to empirical data. In particular, the identification and measurement of 'wider benefits' of higher education present major challenges for research.

We can, however, identify a strand of literature on education's effects on personal change and development – and through these on society more generally.

An example which considers education as a whole (rather than specifically *higher* education) is Vincent's 2003 book which examines the ways in which personal and group identities are formed and transformed in educational institutions. As the authors' indicate, these processes can only be fully examined in theoretical frameworks which include concepts of social capital, class and gender reproduction (Vincent, 2003). In the UK, there is a government-funded research centre that investigates the 'wider benefits of learning', mainly focusing on the analysis and re-analysis of data from large longitudinal cohort studies (Bynner et al, 2004; Bynner and Egerton, 2001; Bynner et al, 2003, with the last two focusing specifically on higher education). Various publications arising from this work suggest that graduates tend to live longer, are less likely to be involved in crime, more likely to be engaged in politics and in their local communities, and tend to be less racist or sexist. Insofar as graduates possess such characteristics, there are implications for the whole of society.

We can also find examples in the literature of analyses which relate access and participation issues to larger issues of social control. For example, Broadfoot has pointed out that moves towards greater individualism and towards rational and impersonal authority create new tensions between social integration and maintaining inequality (Broadfoot, 1996). Others provide rather more optimistic assessments, such as Barnett who writes that the university "can become a pivotal institution in this process of collective self-enlightenment" (Barnett, 2000, p69) and that it "can better assist the wider world in living at ease with Supercomplexity by itself becoming an institution for the creation of new frames of understanding" (Barnett, 2000, p146). Noble

sentiments such as these in general lack much by way of reference to the results of empirical research, although the US tradition of 'college effects' studies (e.g. Pascarella and Terenzini, 2005) does provide a measure of support for enlightened views such as Barnett's.

There are many ways in which higher education can extend wider benefits to those who do not directly participate in it. Calhoun makes the point that as well as delivering private benefits through the award of credentials, higher education also produces public benefits through, for example, the development of new technologies and contributions to local industries (issues that are taken up further in the HELF theme on the 'knowledge society') but also through "value-rational claims about the inherent virtues of knowledge, culture or religious inquiry or non-economic accounts of public contributions, such as individual self-development or improved citizenship" (Calhoun, 2006, p12). Higher education is also linked to the constitution of democratic identities although some researchers (see, for example, Sousa *et al*,1998, cited in Torres and Schugurenky, 2002) have indicated that the forms of democracy promoted are often linked to the facilitation of particular socio-economic projects.

On the research function of higher education, Calhoun makes the important distinction between those subjects which are essentially specialist and inaccessible to the majority of people (e.g. theoretical physics or mathematics) and those which are potentially relevant and accessible to all (e.g. electoral politics or social welfare). Thus, a broader distinction between 'knowledge for experts' (closed) and 'public knowledge' (open) is important when discussing social equity in respect of access to 'authoritative knowledge' (Calhoun, 2006, p. 23).

> "We store knowledge in inaccessible academic journal articles written for the approbation of a handful of colleagues or simply for a line on a vita. We treat our opportunities to do research not as a public trust but as a reward for previous studies, and we treat the research itself too often as a new examination to pass in order to enjoy additional career benefits than as an opportunity to benefit others…..Too often we invest heavily in the autonomy of disciplines at the expense of both the advance of knowledge in interdisciplinary projects and the circulation of knowledge more widely."
> (Calhoun, 2006, p. 31)

Developments such as the 'open sourcing' of knowledge on the web and higher education collaborations with the mass media are contemporary examples of the 'circulation of knowledge more widely'.

There are also references in the literature to higher education functioning as a critical and independent space to appraise knowledge claims and to provide intellectual resources for citizens to contribute to balanced and rational public discussion and debate on contested issues. Standing alongside this expectation one can also find many references to the 'moral' responsibilities of academics in exercising a critique of society and especially, 'taking truth to power'. There are clearly tensions between these different functions, particularly between higher education as a site of disinterested scholarly activity and the call for academics to act in the role of 'public activists'. And we can find many examples in current academic life of activities which seem to 'take power to truth'! The international literature approaches these tensions from a variety of different positions, as the resurgence of the 'public sociology' debate in the United States illustrates (see, for example, McLaughlin et al*, 2005).

The capacity of higher education to function as a critical space tends to be bound up with arguments for the protection of academic autonomy, guaranteed public funding and insulation from corporate forms of governance (see, for example, Van Ginkel 2002). The implementation of funding and regulatory frameworks which are introducing neo-liberal forms of market funding and governance mechanisms are reported to be undermining academic autonomy. The common critique is that this erodes the critical space and disempowers academics. However, there is also a post-structuralist literature which draws on the work of Rose (1999) to develop an analysis of how neo-liberal systems, rather than removing academic autonomy, actually re-shape academic autonomy and harness it to the idea of the entrepreneurial university (Marginson, 2005).

Moreover, it is not at all clear that higher education always acted as a critical space in previous decades when academics were perceived to be more autonomous. Research on the role of universities has indicated that universities have played multiple roles, sometimes advocating democracy and taking 'truth to power' and at other times colluding in the maintenance of unequal social and political relationships (Brennan et al*, 2004). The work of Pierre Bourdieu (1996) has also indicated that those working in higher education are motivated by values and reward systems in an academic hierarchy which may be relatively autonomous from external social, political and economic influences. Such academic interests, contextualised within various historical junctures and national settings, may or may not coincide with the development of higher education as a critical space.

These are themes that direct us towards a literature concerned with higher education and the 'public good'. The term 'public good' is often deployed with little clarification as to its meaning. It is often not entirely clear what is meant by 'public' (is there one or many

publics?) and what is meant by 'good'. One definition that tends to be used is Samuelson's (1954) political economy definition which defines public goods as non-rivalrous (consumption by one person does not impair its value for another) and 'non-excludable' (no-one can be excluded from the benefits of the good). Other related concepts include 'externalities' which refer to the actions of an individual 'economic agent' which result in positive consequences or spillover effects to other members in society (Marginson, 2004). While such definitions are useful, there appears to be limited development of these early political economy definitions. A further difficulty reflected in the literature is the assumption that public goods are outcomes of public universities while private and 'for profit' institutions provide 'private goods' (an assumption recently questioned by Calhoun, (2006)). Clearly, publicly funded institutions have the potential to produce both public and private goods and governments may develop regulatory mechanisms to steer private institutions towards the public good. This is an area that clearly requires greater research attention, as does the relationship between the public and private outcomes of higher education in relation to different forms of funding and governance frameworks. An example of how new pressures towards market competitiveness in the steering of higher education can entail changes to basic functions.is made by Calhoun. Noting the tensions between 'excellence' and 'access', he states that the former has recently been transformed from 'the quality of doing well' into a positional good of 'being seen to be better than others' (Calhoun, 2006, p9).

Apart from a focus on social exclusion, there is also little reference to the public 'bads' that higher education may produce. In addition, Marginson (2004) has drawn attention to the lack of research focus on higher education as a 'global' public good. This is an important gap, particularly in the context of the phenomenal growth of trans-national higher education.

There are a number of important points to be made about all of this. First, discussions of equity and social justice cannot be reduced to questions of who participates in higher education and what individual benefits they gain. Second, academic autonomy of itself does not necessarily deliver much by way of equity and social justice and indeed may itself be part of processes of elite reproduction. Third, and relatedly, higher education's contribution to the achievement of equity and social justice may well require both cultural change within the academic profession and new forms of relationship between institutions of higher education and the societies of which they form a part.

7. Conclusion and Research Agenda

We begin by making a number of general points before outlining some specific areas for future research. As with other higher education research themes, there appears to be a separation of mainstream social science from higher education research. While there is an extensive research literature on social justice and equity in the social sciences, in general this is not fully engaged with by higher education researchers. For their part, social scientists have tended not to give much attention to universities and other higher education establishments in their investigations of equity and social justice.

While there is some literature on participation rates and the barriers and incentives for socially disadvantaged groups to enter higher education in the various national contexts, there is limited comparative research on the extent of the differences between countries and the possible convergences via globalisation. Institutional and sector differentiation would be particularly interesting to compare cross-nationally.

As we have already noted several times, however, research on the social determinants of participation in higher education provides only a very partial examination of higher education's part in the achievement of equity and social justice. We also might note that what we have termed the 'liberal' and 'social reproduction' approaches tend to be adopted by different researchers and different studies whereas a recognition of the validity of *both* approaches and the need to investigate the ways in which the contradictions between them get worked out in different contexts could be a major focus of future research.

A related point is for research to recognise the 'holistic' nature of the phenomena we are investigating. This is perhaps a general point for the HELF project. Issues of governance, knowledge societies, of markets and so on cannot be neatly disentangled from issues of equity and social justice. And to pursue them may also call for more longitudinal research which can provide better prospects for the capture of change and impact.

Another general point concerns the potential of comparative studies. On the one hand, one can find contributions to the literature that are extremely broad and 'global' with only limited anchorage in time and place. On the other hand, a lot of research in this area tends to be very local (particular universities in particular communities).Much of it is concerned with the implementation and effectiveness of quite local initiatives to improve access into higher education for specific social groups. It is not clear how far the results of such research are applicable beyond their local contexts, nor how far they imply a need for radical change

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within higher education as opposed to better preparation and attitude change among those *outside* higher education. Investigation of the *differences* in the ways universities contribute to the achievement of equity and social justice calls, we believe, for more comparative studies, both within and between individual countries. It also calls for research that is prepared to maintain a critical perspective, ready to report on the ways in which higher education may serve to reinforce and reproduce the inequalities within societies.

Some specific, and as far as we know relatively unresearched, questions which occur to us at this stage of our thinking are the following:

- The research function of higher education, including especially knowledge transfer, and whether the benefits of this favour the powerful and advantaged or are equally distributed across society as a whole. Who outside the university gets access to knowledge produced within the university, and on what terms?
- Questions of 'what is learned' in higher education – especially in terms of values and identity. Notions of social responsibility and environmental awareness have implications for all. Are graduates likely to be more concerned than others about them? Have such notions now been lost to higher education's agenda, swamped by the pressures of competitive individualism?
- 'Taking truth to power'. How far do we see a genuine social critique being provided by higher education? Have notions of 'responsiveness' and 'relevance' replaced critique as the key driver for all but a few public intellectuals? (Or is there no real contradiction between them?)
- Does the growing importance of consumerism and markets in the regulation and steerage of higher education undermine or strengthen the 'public good' claims of higher education?
- And, very broadly, what do we know about the effects of a wide range of different types of public and social engagement by universities? Who benefits – directly or indirectly – from them and are there others (groups? individuals?) who are disadvantaged by them?

With respect of the widening participation agenda, a number of more specific areas of inquiry can be identified.

- There is a need for greater attention to be given to the 'end products' of higher education. Does greater equity at the point of entry to higher education necessarily provide greater equity at exit?
- Regional disparities are important in many countries (and also between countries). Does extending access to higher education necessarily require actions locally or is encouragement of geographical mobility required?
- Greater recognition may need to be given to the access issues relevant to particular social groups. And it should not be assumed that minority groups are necessarily disadvantaged. What can be learned from the differences in patterns of participation between different social groups?
- There are 'post-massification' issues to be examined, including the effects of increasing system differentiation and provision of lifelong learning opportunities. As well as inequalities in initial access to higher education, what are the patterns of participation in higher education over the life-course and how do these impact on equity and social justice?
- There may be insights to be drawn from the sociology of youth. What are the values and aspirations of those who do not get into higher education and how are their subsequent lives shaped by their non-participation?
- There are also intra-institutional issues and questions concerning the structure of stratified secondary education systems. Within different institutional and country contexts, are there different patterns of participation and access to be found in different subject and professional areas? And what can be learned from these differences?

We also believe it necessary to emphasize again the importance of linking issues of social equity to the theme of higher education's increasing differentiation. The idea that a single narrative or 'idea' can any longer capture the complex and often contradictory nature of higher education and its relationship with other parts of society has to be dispensed with. Within most individual countries, higher education institutions are a varied bunch of organisations and many individual institutions contain much multi-functionality within their own walls. Between countries, variations reflect different traditions and contemporary circumstances and contexts. But this should not be seen as an excuse to descend into praise of the particular and the unique. An understanding of the *different* things that higher education does is extremely important but the range of differences is not infinite, differences are bounded and they can be typologised in relation to both internal and external variables. And we should not rule out the possible existence of some unifying concept or concepts. A focus on difference may be a key route towards identifying and better understanding such concepts.

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Higher Education and its Communities: Interconnections and Interdependencies

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Higher Education and its Communities: Interconnections and Interdependencies

1. Introduction

This paper reflects on the interconnections and interdependencies between higher education, society and economy. Higher education is increasingly interacting with a multitude of communities that each has a particular demand in terms of the services they expect this sector to deliver. The diversity of communities – stakeholders or constituencies – and the diverse demands they place on higher education institutions have resulted in new relationships within and between higher education institutions and in new relationships between them and the external communities. These relationships have local, regional, national and international ingredients (e.g. Dill and Sporn, 1995; Castells, 1996; Clark, 1998; Huisman et al., 2001, Enders, 2004). Such interconnections and interdependencies relate to both the external functions of higher education, for example in terms of the economic and social functions it carries out, and the services in terms of teaching, research and knowledge transfer. The economic expectations placed on higher education reflect both the knowledge and skills needs of workers in modern knowledge-based economies and the demands for relevance in research and knowledge creation that underlie the successful development of these economies (Castells, 1996; Etzkowitz and Leydesdorff, 1997; Enders and Fulton, 2002). The social expectations placed on higher education reflect the centrality of educational credentials to opportunity and mobility structures in modern societies and the access to such structures among, for example, different social classes, ethnic groups and geographical regions (Shavit & Blossfeld, 1993; Tight, 2003).

We will place this topic within the discussion on the wider role and function of the university. The discourse on the role – or 'the idea' (see Rothblatt, 1997) – of the university has shifted since the post-war years (Geiger, 1993). In order to secure their place in the modern, knowledge-based economy, universities everywhere are being forced to carefully reconsider their role and the relationships with their various constituencies, stakeholders, or communities. This, in turn, translates into identifying stakeholders, classifying them according to their relative importance, and, having done that, establishing working relationships with stakeholders. How a university (or indeed its many constituent parts) proceeds to identify, prioritise and engage with its communities reflects a process that helps to determine its evolution and chances for survival. A careful study of such processes, the forces that drive them and their impacts on the internal workings of the university is both timely and warranted.

Such a study is also timely since the contemporary university suffers from an acute case of 'mission confusion'. Many institutions are taking on similar ideals while sub-optimally allocating their scarce human and physical capital. The multitude of communities (both traditional and emerging) with which universities now engage demand a more clearly articulated strategy for understanding and managing stakeholder (i.e. community) relationships. One plausible consequence is that such demands will require a new governance and accountability approach, highly professional management and a rethinking of the university's business concept – that is the way in which the university creates value and how it assesses its value (de Boer et al., 2007). Some evidence of this may be found in the many specialised functions and management systems that we see emerging to handle the universities' response to external demands. Such functions appear to play a bridging role between the university and particular communities. Understanding universities as complex social actors is key to building more efficiently functioning universities, but also for identifying the unintended consequences and possible pitfalls that may emerge through the adoption of new approaches. An engaged university may be a driver of innovation but it may also be one that fosters the commodification of higher education.

2. On Communities, Stakeholders and Missions

As observed by Georges Haddad (in Neave, 2000, p. 29), the term 'university' finds its origin both in legal Latin "universitas", meaning "community", and in classical Latin "universus", meaning "totality". These days, the university's communities indeed may be said to encompass a great number of constituencies. Internally they include students and staff (the 'community of scholars'), leadership and management while externally they may for example involve research communities, alumni, businesses, social movements, consumer organisations, governments and professional associations. Geographically, the university's varied communities tended to be in near proximity to the physical campus. Today though, advances in information technology have made it possible for even the remotest higher education institution to tap into communities on the other side of, or even dispersed around, the entire globe.

Implicit in this description of communities are notions of relationships, environment, expectations and responsibilities. A particular community is relevant for the university only if there is some expectation on both sides (i.e. the university and the community) that some service can be rendered or a mutually beneficial exchange (a transaction) can take place. This illus-

trates that the concept of community is close to that of stakeholder. The stakeholder concept originates from the business science literature (Freeman, 1984). The concept can be traced back to Adam Smith's "The Theory of Moral Sentiments". Its modern use in management literature comes from the Stanford Research Institute, which in 1963 introduced the term to generalise the notion of stockholder as the only group to whom management need be responsive. Originally, the stakeholder concept was defined as 'those groups without whose support the organisation would cease to exist'. A more modern definition of stakeholders is 'any group or individual who can affect or is affected by the achievement of the firm's objectives' (Freeman, 1984, p. 16). Freeman argues that business organisations should be concerned about their stakeholders' interest when making strategic choices.

The communities or stakeholders that a higher education institution is expected to respond to consist of organisations and groups of individuals. They will often posses a number of common characteristics. Most stakeholders have a human scale; the members of a group of stakeholders often share a common identity (in the sense of belonging together or sharing a common culture or location) with certain shared obligations both on the side of the members as well as on the side of the higher education institutions. In higher education, the most important, or core, community would be the students. Another important stakeholder is the government. As the main funder of higher education it would like to ensure that higher education meets the interests of students and society in general.

While we may agree that government is an important stakeholder, this by no means suggests that government represents a well-defined and clear-cut influence on higher education institutions. While the basic function of higher education may be seen as being responsible for the transmission of knowledge to the younger generation and the advancement of fundamental knowledge, the fact is that, today, higher education interacts with many other public policy domains. This implies that 'government' represents many other communities of interest. It is not a unitary stakeholder. Next to the area of training and research, higher education interacts with areas like health, industry, culture, territorial development and the labour market. Therefore, other ministries, next to the Education Ministry, affect the higher education agenda. Each of these ministries represents different stakeholder groups. In fact, one may argue that higher education is in the unique position of being the sector where the various demands are integrated – where it is all 'joined up' (Benneworth & Arbo, 2006, p. 91).

In other words, higher education institutions have a distinctly 'public' character or responsibility (Neave,

2000, p. 2) to society. To meet this public responsibility, they have historically received generous amounts of government funding and, at least in some countries, a commensurately good deal of institutional and academic autonomy. Society, through laws and government, defines their responsibilities. Today, their social responsibility (Neave, 2000) is closely scrutinized. The basic functions that higher education institutions perform are going through a process of change. Their teaching and research functions are being reassessed, in particular with an eye upon the contribution they make to the social-economic well-being of their environment – be it the region, the nation or a collective of nations (e.g. the European Union).

Higher education is not only expected to deliver excellent education and research, it also has to deliver those outputs in ways, volumes and forms that are relevant to the productive process and to shaping the knowledge society. This has been characterized by some as a fundamental change in the *social contract* between science and higher education institutions, on the one hand, and the state on the other, with the latter now having much more specific expectations regarding the outputs produced vis-à-vis the return on the public's investment (see Guston & Keniston, 1994).

As far back as 1973 there were discussions about possibly changing the social contract between higher education and society (ILO 1975). In addition to the transmission and extension of knowledge, universities at the time were being called upon to

- play an important role in the general social objective of achieving greater equality of opportunity;
- provide education adapted to a great diversity of individual qualifications, motivations, expectations and career aspirations;
- facilitate the process of lifelong learning;
- assume a 'public service function', i.e. make a contribution to the solution of major problems faced by the local community and by society at large, and participate directly in the process of social change' (OECD-CERI, 1982, p. 10).

It is striking to see how relevant this 25-year old list still is in today's discussions on the role of the university. Improving access options for a diverse student population by having universities offer an increased variety of educational opportunities is now high on many governments' higher education agendas. So too is lifelong learning – at least in words. Higher education's contribution to innovation – be it economic or social – has been a distinct theme now for more than a decade.

Present day higher education institutions are forced to be in constant dialogue with their stakeholders in society. This may lead to a number of fundamental

changes in the relationship between the institution and their environment. Co-ordination mechanisms as well as their counterpart, accountability mechanisms, may need to be re-asserted. Accountability will manifest itself in new and complex forms. In their education and research tasks, the providers of higher education will continue to have an obligation to demonstrate quality, efficiency and effectiveness, not just to those in national administration which have the legal and historic responsibility for exercising official oversight, but increasingly so to a wider range of stakeholders. To this end, many higher education systems have included 'external personalities', 'laymen' or 'regents' in their various governing bodies (Trow, 1996).

However, the notion of 'stakeholders', as opposed to 'lay representatives' or 'external personalities', redefines the conduct, role, responsibilities and thus the nature of the 'interface' between higher education and society. The term 'stakeholder' points to a major shift in the roles assigned to those who participate in higher education institutions' decision-making as representatives of 'external society', just as it points to an equally major shift in the obligation to render accounts to the general public or to agencies acting in its name.

The consequences for the higher education establishment of the rise of the 'Stakeholder Society' have been explored indirectly as sub-components of inquiries into diversification of funding sources, as a concomitant to the overhaul of higher education institution governance and decision-making procedures, as a desirable outcome of contractualisation, or as an aspect of relations between higher education institutions and their region. Given the emphasis that public policy now places upon revenue generation as a pointer to the 'entrepreneurial' dynamism of higher education institutions, it is to be expected that individual establishments have put in place formal structures with the specific purpose of dealing with stakeholders, in addition to any changes in formal governance structures intended to increase the weight of societal interests.

The issue of representation of stakeholders is directly related to that of responsiveness and legitimacy. As stated above, in recent years one can observe a change in the perception of the place the higher education institution occupies in the community. Still, higher education institutions' standing, prestige and reputa-

tion are determined by internal, disciplinary values and scholarly attainment. However, they are also intimately associated in official thinking with the appropriateness of the 'services' rendered to the 'community' – where that community can be local, regional, national, or even inter-national. This change in the mission, role and tasks laid upon higher education establishments affects the relationships between the higher education establishment and its environmental constituencies. In short, the legitimacy of higher education in society will be to an increasing degree a direct function of the nature, quality and evolving ties with the 'Stakeholder Society'.

The mission of an individual higher education institution is generally stated in terms of its teaching, research and community service obligations. Though a mission statement is usually general in its wording, it is, in part, a reflection of how the institution views its expected contributions to society. In the business world, mission statements translate into business plans, which translate into strategies, policies and budgets – the tools for achieving the organisation's goals. The mission or vision of the organisation may be defined by means of the 'existential' questions listed in table 1.

The shaping of a mission takes place in an institutional setting – in an environment that may be different for different institutions. It is important to acknowledge that higher education institutions are embedded in a national as well as a regional system – some in the neighbourhood of a large industry, others in a more remote area. Out of this, different types of higher education institutions emerge, ranging from research-intensive to teaching intensive, with a technological (or some other subject specific) character or a multi-faculty composition, with medicine or without medicine. Some higher education institutions are particularly committed to the goal of reducing social and spatial inequalities. For them social inclusion is key, while for others research excellence is a top priority. It is also important to note that for a higher education institution the choice of mission or profile and, consequently, how the higher education institution relates to its stakeholders, is never fully shaped by the communities, but also very much path dependent. History and geography – in other words, institutional contingency and regional contingency – will have an effect on the relationships a higher education institution has with its stakeholders.

Table 1: Defining the mission - key questions

Facts	Ambitions
What is our business?	What should be our business?
Who are our students?	Who should be our students?
What is our environment?	What opportunities are there?
What are our resources?	How should we deploy our assets?

The crucial message of this section is: there is diversity of stakeholders, of higher education institutions, and their missions. As the direct role of the state is reduced and both the autonomy of the individual higher education institutions and the role of the market increases, the higher education institutions become more and more integrated in society. The potential downside of this trend is that higher education institutions may become fragmented and that the civic responsibility that institutions have to society comes under threat. Steering the higher education institutions out of this dilemma and preventing them from being overburdened by stakeholder claims requires careful management. In the next section we will introduce the idea of stakeholder management as an approach to steer higher education institutions in a more structured way.

3. Stakeholder Theory

The previous section illustrated that for the higher education institution to be an effective institution in an increasingly complex environment, it is not just a matter of generating sufficient income to 'remain in business', but that it is just as essential that the institution proves its relevance to society and the various entities in society that the higher education institutions regard as important (Jongbloed & Goedegebuure, 2001). The identification of the main stakeholder groups is not straightforward or simple. In business, both employees and customers qualify as stakeholders and today higher education economists have increasingly argued that higher education institutions share this peculiar behaviour (Winston, 1999). However, different employees and different customers can have different stakes in, or a different influence on, organisations. The stakeholder approach to management (Freeman, 1984) can be seen as a tool that assists organizational actors in dealing with their environments through selectively perceiving, evaluating, and interpreting stakeholder attributes. Mitchell et al. (1997) use Freeman's stakeholder concept and provide an approach that helps identify "who or what really counts" and to assess the degree to which managers pay attention to their stakeholders.

Table 2 (adapted from Burrows, 1999, p. 9) presents the various stakeholder categories of a higher education institution. It provides examples of specific groups within the various stakeholder categories that exert pressure on a higher education institution's actions, behaviour and policies. The table lists the actors or groups of actors to which a higher education institution will pay attention. Surely, the degree to which each actually will receive attention will vary.

Table 2: Stakeholder categories and constitutive groups

Stakeholder category	Constitutive groups, communities, etc.
Governing entities	state & federal government; governing board; board of trustees, buffer organisations; sponsoring religious organisations
Administration	president (vice-chancellor); senior administrators
Employees	faculty; administrative staff; support staff
Clienteles	students; parents/spouses; tuition reimbursement providers; service partners; employers; field placement sites…
Suppliers	secondary education providers; alumni; other colleges and universities; food purveyors; insurance companies; utilities; contracted services
Competitors	direct: private and public providers of post-secondary education potential: distance providers; new ventures substitutes: employer-sponsored training programmes
Donors	individuals (includes trustees, friends, parents, alumni, employees, industry, research councils, foundations,…)
Communities	neighbours; school systems; social services; chambers of commerce; special interest groups…
Government regulators	Ministry of Education; buffer organisations; state & federal financial aid agencies; research councils; federal research support; tax authorities; social security; Patent Office
Non-governmental regulators	foundations; institutional and programmatic accrediting bodies; professional associations; church sponsors
Financial intermediaries	banks; fund managers; analysts
Joint venture partners	alliances & consortia; corporate co-sponsors of research and educational services

Source: after Burrows, J. (1999).

In order to increase their pressure on the institution some stakeholders may build coalitions with others in order to maximise their collective gains. In order to explain the degree to which organisations give priority to competing stakeholder claims, Mitchell and his colleagues formulate their theory of *stakeholder salience.* This theory distinguishes between three attributes of stakeholders (see Mitchell *et al.*, p. 869):

1. the stakeholder's *power* to influence the organisation – here power defines a relationship among social actors in which one social actor, A, can get another social actor, B, to do something that B would not have otherwise done. In the case of higher education, one can think of the growing pressure from students, parents and legislators to force universities to adopt more cost-conscious operating principles.
2. the *legitimacy* of the stakeholder's relationship with the organisation – legitimacy is defined as a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions. Today, the university's traditional stakeholders (e.g. students and governments) have been supplanted by, amongst others, local industry.
3. the *urgency* of the stakeholder's claim on the organisation – urgency represents the degree to which stakeholder claims call for immediate action. A good example would be the greater emphasis put on research in health fields at the expense of research in other basic hard sciences.

It is beyond the scope of this paper to explain the origins of these attributes or the rationale for using them as the foundation for a theory of stakeholder identification and salience. When mapping the relationships with their external and internal communities (constituencies, stakeholders, etc), these three attributes can be of use for institutional managers. They may help identify which are the crucial stakeholders to deal with and, therefore, which relationships are to be maintained.

The presence or absence of the attributes power, legitimacy and urgency translates into a simple typology of stakeholders. Classes of stakeholders can be identified by the possession (or attributed possession) of one, two, or all three of the attributes. Figure 1 below (from Mitchell *et al.*, 1997, p. 874) shows that stakeholder classes differ in terms of their degree of salience, or, in other words, the degree to which institutions give priority to competing stakeholder claims. Stakeholder salience is positively related to the cumulative power of the three attributes that the managers *perceive* to be present, which in turn triggers managerial actions.

It is also important to note that power, legitimacy and urgency can change – they are not static, but dynamic. This implies that particular stakeholders can move from one class to another by gaining or losing particular attributes.

Figure 1 shows seven classes of stakeholders; the eighth constitutes the non-stakeholders. The seven classes can be subdivided into three groups:
Latent stakeholders (classes 1, 2, 3) possess only one attribute:
- class 1: dormant stakeholder (the relevant attribute is power)
- class 2: discretionary stakeholder (legitimacy)
- class 3: demanding stakeholder (urgency)
Expectant stakeholders (classes 4,5,6) possess two attributes:
- class 4: dominant (power & legitimacy)
- class 5: dangerous (power & urgency)
- class 6: dependent (legitimacy & urgency)
Definitive stakeholders possess all three attributes:
- class 7: definitive (power, legitimacy, urgency).

Stakeholder theory may be useful in higher education to help explain the attention paid to the various communities in the environment and the relationships between a higher education institution and its communities. Since the government is the most important source of funds for higher education institutions it is a *definitive* stakeholder. However, other stakeholders are moving from a latent to an expectant status. For example, increased demand for retraining and retool-

Figure 1: A stakeholder typology

Stakeholder salience is *low* for the group of latent stakeholders, *moderate* for expectant stakeholders and *high* for definitive stakeholders.
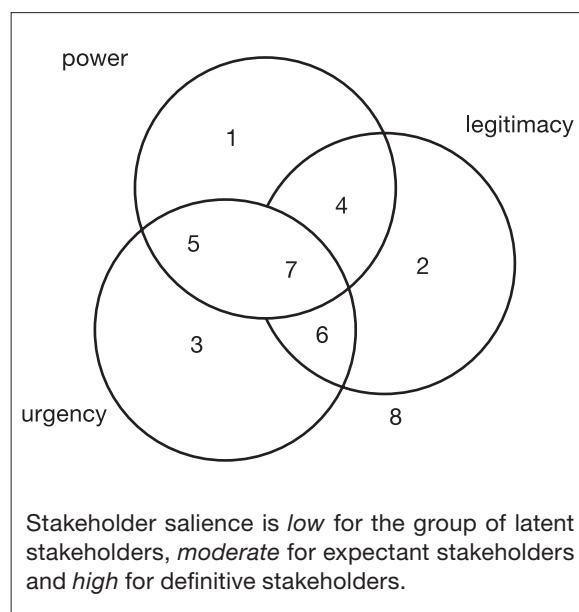
ing their employees moves businesses and employers' organisations toward definitive stakeholder status. The emergence of the new, knowledge-driven economy has added the attribute 'urgency' to the attributes legitimacy and power that this stakeholder already possessed because of the representation that businesses and industry have on boards of trustees, faculty boards, accreditation committees and professional associations. Combined with the fact that an increased share of higher education institutions' funds come from contract research and that government expects higher education institutions to contribute (through teaching and research) to economic development and society in general, this transforms some businesses into definitive stakeholders.

Applying this perspective to a higher education setting adds another dimension. As we know from the characteristics of a higher education institution as an organisation – professional domination, fragmentation of decision-making and diffusion of power – stakeholder identification takes place not only at the central institutional or management level but at other levels as well. So the identification and the subsequent salience of stakeholders may also very well differ depending on whose perspective is taken as the starting point. This implies that the matrix presented in Table 2 ought to be three dimensional, the third axis representing higher education institutions' internal actors. In terms of institutional management this adds to the complexity of strategic decision-making. Not only must attention be paid to the identification of external stakeholders (by the central managers), also the possibly different outcomes of similar identification processes within other parts of the institution need to be taken into account when developing an adequate stakeholder strategy. One logical consequence of this is the need for a fairly continuous dialogue between the different constituents (internal stakeholders!) within the institution on the implications of this for the overall strategy.

If the institution identifies a particular stakeholder as 'dangerous' (in terms of the typology presented earlier) one strategy might be to intensify the relationship by engaging in a specific form of *strategic partnership*. There are many manifestations of partnerships and strategic alliances, from corporate venturing and licensing to franchising, all the way to downright mergers and acquisitions. The alliances differ according to how interwoven the organisation and its financing is (see Huyzer, 1990).

The university's academic departments, since they are discipline-based, often show more affinity to similar departments at other universities than to different departments at their own institution (Alpert, 1985). Researchers, first and foremost, see themselves as belonging to a disciplinary community and often seek alliances, recognition and support in their disciplinary field – that is, among their peers. Strategic partnerships between university departments therefore are not confined to a university's immediate region, but increasingly extend even beyond national borders.

Where the *teaching and learning* function of the university is concerned, regional firms may obviously form a first candidate for partnerships. Local and regional firms provide internship (student placement) opportunities for students and express a demand for re-training and re-skilling their employees. Authors like Goddard (Goddard *et al*., 1994) and Garlick (2000) have extensively written about this subject.

As table 2 has shown, the stakeholders of a higher education institution are many, and stakeholder theory may assist in determining which stakeholders are the most important ones. The stakeholders may be classified as internal or external; individual or collective; academic or non-academic. The community of scholars may be seen as an important internal stakeholder category. For a university, the academic community represents the nucleus of scientific production. It is the basic internal constituency without which the university cannot function properly. While some may argue that this part of the scientific system would need to be detached as much as possible from external influences, there are fields like law, medicine and engineering where the academics are in a more continuous dialogue with professional associations to uphold the relevance and legitimacy of their field in society.

Another key stakeholder category is the students. Since higher education is a customer-input technology (Rothschild & White, 1995), this observation is all the more true. Students, being the customers of higher education institutions, are an essential input into the teaching process. It is not only through lecturers, professors, or other efforts of higher education providers that students are educated but also through the contributions of other students. Students are partly educated through their peers; it is the quality of the peers that co-determines the outcome of learning. What is more, students drive a lot of the activities in the field of engagement with external communities.

External communities or stakeholders also can come in many shapes. When the institution regards their claims as important, their voice may be heard through the external representation in the internal governance. In that case an interesting question is whether the external representatives are representing themselves or representing a wider group. Who can speak for and represent external stakeholders, for instance the small and medium-sized enterprises? This touches on the individual – collective dimension. Later on in this paper we will return to this issue when we discuss higher education governance reforms.

When it comes to stakeholders, one can observe a growing importance of the non-academic part of academe. As we will also argue later on, the role of the finance department, the human resources/career services department, the technology transfer office, the international relations office or the office for fund raising is becoming increasingly important. These are influential gatekeepers between the institution and its external stakeholders; acting also as a bridge between the management and the academic staff. In many institutions, these functions undergo a professionalisation and have emerged as an important internal force or constituency to be reckoned with.

4. Community Engagement, the Third Mission

The intensification of exchange between higher education institutions and their stakeholders or communities invokes a different kind of commitment that extends well beyond financial relations or fiscal responsiveness. Academics and policymakers have long made reference to higher education's *third mission,* yet it remains an ethereal component of what higher education actually does. It is supposed to be a third role beyond teaching and research that centres specifically on the contribution to regional development (Goddard, 1999; Chatterton &Goddard 2000; Charles & Benneworth, 2002). Some call it 'outreach' while others call it 'community service' which includes everything but traditional teaching and traditional research, which does little to help frame it as a task that can be shaped.

The basic problem with analyzing the third mission is that it entails a good deal of mission overlap. Concepts like lifelong learning or professional development often translate into the provision of short- or highly-specialized courses that meet the needs of highly specialized groups of individuals. Nevertheless, it is still an education activity in its most basic form. In the same way, concepts like industry-university partnerships or commercialization translate into mechanisms that exploit knowledge capacity or maximize financial rewards so as to promote further innovation. Again though, both are rooted in the exploitation of discovery, which is research in its most basic form. In short, one might argue that the third mission is not so much its own mission as it is a reflection of the unique stakeholders that fall outside of the traditional purview.

Today a greater weight is placed upon the commitment to community service in terms of providing such training and research, investigation and advice, as well as such services as consultancies, technology trans-

fer, lifelong learning and continuing education (Neave, 2000). New partnerships at local and sub-national regional level follow from the need to diversify support and funding. As institutions seek to increase external revenue sources, they develop closer links to industry and demonstrate entrepreneurship through the setting up of science parks, spin-off firms and business ventures. The potential role that higher education institutions can play as drivers of economic development is well espoused in OECD reports (OECD, 2006) and Communications from the European Commission (EC, 2003). They increasingly are incited to provide teaching and research that is nationally and regionally relevant or applicable.

The growing chorus over the role of higher education and research as economic engines has elevated the debate beyond rhetoric and into the realm of policy actions, particularly in the United States. Paytas et al. (2004) offer one of the most comprehensive and contemporary literature reviews studies on universities' abilities to stimulate regional economic development and support their background research with detailed analysis of multiple case studies.

The linking up of higher education institutions and their regions through teaching and research has pushed 'engagement' as another dimension on which these institutions are judged by governments as well as other stakeholders. Engagement here involves a set of activities through which the institution can demonstrate its relevance to the wider society and be held accountable. The rise of a community engagement movement offers a range of possibilities to function as sites of citizenship. These include contributing to community social and economic infrastructure, supporting equity and diversity within higher education, and education for democratic citizenship. In other words, higher education and research are playing – and according to some *should* play – a broader and more important role in the educational, social and economic well-being of local communities and the nation.

Benefits of community engagement include the building of social capital, contributing to the resolution of local issues, the well-being of the community, local support, and economic growth. The third mission therefore consists of a knowledge transfer function as well as a more general community function. Community engagement then is an umbrella term that refers to a wide variety of principles and practices, including:
• community-university partnerships to address questions of mutual concern;
• strategies of economic and social regional development;
• teaching and learning for civic participation (including service learning);
• collaboration with local business and industry;

• support for social and cultural initiatives, and;
• locally relevant and applied teaching and research.

This list illustrates again the fact that community engagement or third mission activities are difficult to separate from the teaching and research activity – they cannot be put in a separate box. When striving for a truly engaged higher education institution, the challenge for those in charge of the institution is to achieve a situation where community engagement is realised through the core activities of teaching and research and not have it regarded as a residual activity.

Implicit in the list above is that the issue of engagement or third mission is less about relationships and more about 'partnerships'. The focus is laid on mutually beneficial relationships. In this type of relationship an academic and an external entity recognize that each can gain from working on a common project. This is a different type of relationship compared to one that is focusing on *outreach*. In an outreach-oriented relationship the balance of power tilts towards the academic entity.

5. Expanding the Research Mission: Outreach to Business and Communities

In the wake of the Lisbon agenda, a lot of attention has been given recently to government policies and incentive schemes encouraging institutions to become more entrepreneurial and to interact more closely with their outside (business) world, thereby stimulating the innovative capacity of a country/region. An often heard concern is that the interaction between the public knowledge infrastructure and society is not optimal (known as the 'knowledge gap'). Among other things, this has resulted in an increased attention for 'relevance' as a criterion in the assessment of academic research (see Jongbloed, 2006).

The demands for a more intense interaction originate partly from within the institutions of higher education and the domain of science and partly from outside the scientific community. With respect to the latter, the trend of reaching out to business and community is partly the outcome of efforts to seek compensation for decreasing state funding. Yet another force that is supposed to contribute to closer interactions lies in the changing modes of knowledge production (Gibbons *et al.*, 1994). Mode 2 research is expected to involve greater external connectedness, collaboration across organisational boundaries and more frequent interaction between public research

organisations and organisations from business and industry. Such attempts certainly challenge our thinking about a well-established order for science and research in proposing a qualitative transformation of its role and functioning in society. Their novel approach to explaining these phenomena, the lack of empirical evidence provided and the explanatory power of the analytical model developed (Weingart, 1997; Shinn, 1999; Gläser, 2000) have, however, also stimulated quite critical reactions.

What is clear though is that the linear model of technology transfer is gradually replaced by a network model, meaning that contract research and consultancy services are taking place next to collaborative work within strategic alliances. Many institutions have developed closer relationships with the external world and a more applied approach to research. Reach-out units are established and (financial) incentives are introduced alongside reforms in governance and organisational structures in order to improve the links between public sector research and the business sector. These changes have made the traditional picture of higher education fuzzier around the edges.

There are many forms of higher education-business interactions, some of a formal others of an informal nature (see Appendix 1). Until recently, publications, public meetings and conferences, informal information, research contracts, using faculty as consultants, sharing equipment and support for graduate students have been the dominant channels of knowledge transfer. However, after having learned that intellectual property rights represent commercial wealth, institutions have become more aggressive on the market for knowledge and – in conjunction with firms – developed new linkage structures and new types of interaction channels. From 1980 on, more formal, contract-based relationships – joint equity-based ventures (i.e. spin-offs) or co-operative ventures, patents – have become more common. Many universities and colleges have set up their own intellectual property offices or technology licensing offices to manage their intellectual property rights. They have worked on campus-based industrial extension services that are primarily aimed at the local (or state) business community.

There are many other forms of facilitation and incentive mechanisms to increase interactions between universities and industry (see Chatterton & Goddard, 2000, p. 488/489). Some universities have also developed special independent structures such as science parks and incubators to facilitate academic start-up firms and newly established licensees of university patents. Many universities have introduced offices of technology transfer and are developing policies and structures for facilitating the commercialisation of discoveries, with particular regard to regional spin-

offs. These initiatives especially facilitate activities like contract research, consulting services by faculty, and agreements with firms whereby annual fees are charged to each industrial member in exchange for access to state-of-the-art knowledge. And, finally, universities and industries have also joined in new organisations like university-industry shared research centres. Through strategic alliances and research consortia, university and industry aim at collaborative R&D and the joint commercialisation of R&D-products.

The exact type of research-based interaction between universities and the non-university environment heavily depends on the discipline in question. Medicine, life sciences and engineering have a different type of interaction compared to arts and humanities and social sciences. It is also important to note that the issue is not just a demand side pull phenomenon, but also a matter of science push. Business (including the service sector) is becoming more academic and academics are becoming more business-like. Students (i.e. graduates) and staff are still regarded as the prime and most effective technology transfer mechanism. The number, quality and level of the graduates working in a particular firm or branch of industry heavily determines the intensity and effectiveness of the knowledge flows between university and research-oriented firms (see Cohen *et al.*, 2002). In addition, the spatial configuration of the partners from university and industry is essential – whether they are located on the same spot, have opportunities to interact, et cetera.

However, not all policy efforts and institutional reforms to encourage greater interaction between higher education institutions and their stakeholder communities are necessarily warranted, even in the face of intuitive appeal. The Bayh-Dole Act (1980) provides an excellent example as it gave academics whose research was being funded by federal dollars newfound flexibility to reap the financial rewards of their work. Politicians have long trumpeted Bayh-Dole's success as an example of well-developed policy and the rhetoric has led some to suggest that similar legislation would be useful or even necessary to strengthen links between higher education institutions and industry in European countries (Mowery & Sampat, 2005). In reality though, the Act is too often given too much credit. Commercializing university research has been done since the beginning of the 20th Century and was well underway prior to 1980. What is more, most US government departments and agencies already had their own regulations on faculty patenting of federally-funded research by the early-1970s. Bayh-Dole did not open the floodgates for American university scientists to suddenly patent their own research findings nor did it suddenly encourage faculty members to pursue stronger industry-university interactions. All

it really did was consolidate the wide array of existing arrangements into one single piece of legislation. As some researchers suggest, faculty patenting and university-industry research partnerships in general would have likely experienced the same growth that has taken place since the early-1980s, without the Act (Mowery, *et al.*, 2001). A more likely explanation for the growth was the parallel development of computing power (and use) and the surprising success of life sciences research in creating marketable pharmaceutical products for an ageing population.[1]

Turning to the demand side of the equation – to the demands of business and industry for the outputs of academic research – it needs to be noted that this demand will have to be properly articulated for any interaction or knowledge transfer to take place at all. In particular when it comes to the sector of small and medium-sized enterprises (SME), one may point at a lack of awareness on the side of SME about what universities have to offer. However, when looking at those businesses that do work with universities, a survey of some 400 industry-university partnerships conducted by Lee (1996) can shed some light on the industry participants' reasons for collaborating with universities. The study shows that the top reasons were: 1) access to new research, 2) development of new products, 3) maintaining a relationship with the university, 4) obtaining new patents, and 5) solving technical problems.

In stark contrast, the top two priorities for university participants in industry-university partnerships were: 1) obtaining funds for research assistance, laboratory equipment and their personal research agendas, and 2) being able to field test theory and empirical research. This conclusion was already mentioned in section 6, where we quoted the Lee (2000) study. It is not surprising then that even though many in Europe are calling for further private investment in academic R&D, conflicting motives work against such efforts. If we accept industry's longstanding reluctance to exploit university research in favour of other sources (Cohen, *et al.*, 2002) and the polarized expectations of both partners, then developing such linkages will require considerable effort not only from industry but also from the higher education institutions and, more specifically, their faculty members.

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1. A recent report on technology transfer of federally funded R&D by PCAST (2003) questions the impact Bayh-Dole has had on technology transfer and also suggests that life sciences research has been the more likely catalyst for the remarkable growth in patenting and commercialization. As evidence the report references the intellectual property problems universities have had in semiconductor research.

6. Indicators for Community Engagement

There is a rich literature on the topic of indicators for community engagement and proposed sets of indicators that might be useful in evaluating the benefits, costs and otherwise of university-community interactions (e.g. Adams *et al*.; 2005; Ball & Wilkinson, 1994; Charles & Benneworth, 2002; Molas-Gallart *et al*., 2002). Indeed, community engagement as measured through research performance has become increasingly important in several European countries (Jongbloed, *et al*. 2005). The Russell Group of Universities in the United Kingdom commissioned a report by the University of Sussex to provide advice on "…an analytical framework and a comprehensive set of indicators that may assist in the tracking and management of university Third Stream activities" (Molas-Gallart *et al*., 2002). *Third Stream activities* are defined as knowledge exchange and productive interactions with business, public sector organisations and the wider community, for the benefit of the economy and society. The research report came up with more than 30 indicators representing measures of knowledge transfer to the wider community. The indicators were placed in a framework diagram (see figure 2).

In the UK, the Higher Education Innovation Fund (HEIF) supports higher education institutions in knowledge exchange and productive interactions with business, public sector organisations and the wider community, for the benefit of the economy and society. It represents a so-called third stream of funding component which may be seen as a reward and encouragement for knowledge transfer alongside research and teaching. The majority (about 75 %) of the HEIF funding is allocated by formula to universities on the condition that they submit plans for its use. A smaller amount (approximately 25 %) is available through a competition, for particularly innovative projects. The formula funding part is partly driven by data collected in a survey known as the Higher Education-Business and Community Interaction (HE-BCI) survey (see http://www.hefce.ac.uk/reachout/hebci/).

The data relate to external income from different sources: contract research, consultancy and equipment services; regeneration and development income;

Figure 2: The Russell Report: A conceptual framework for analysing Third Stream activities
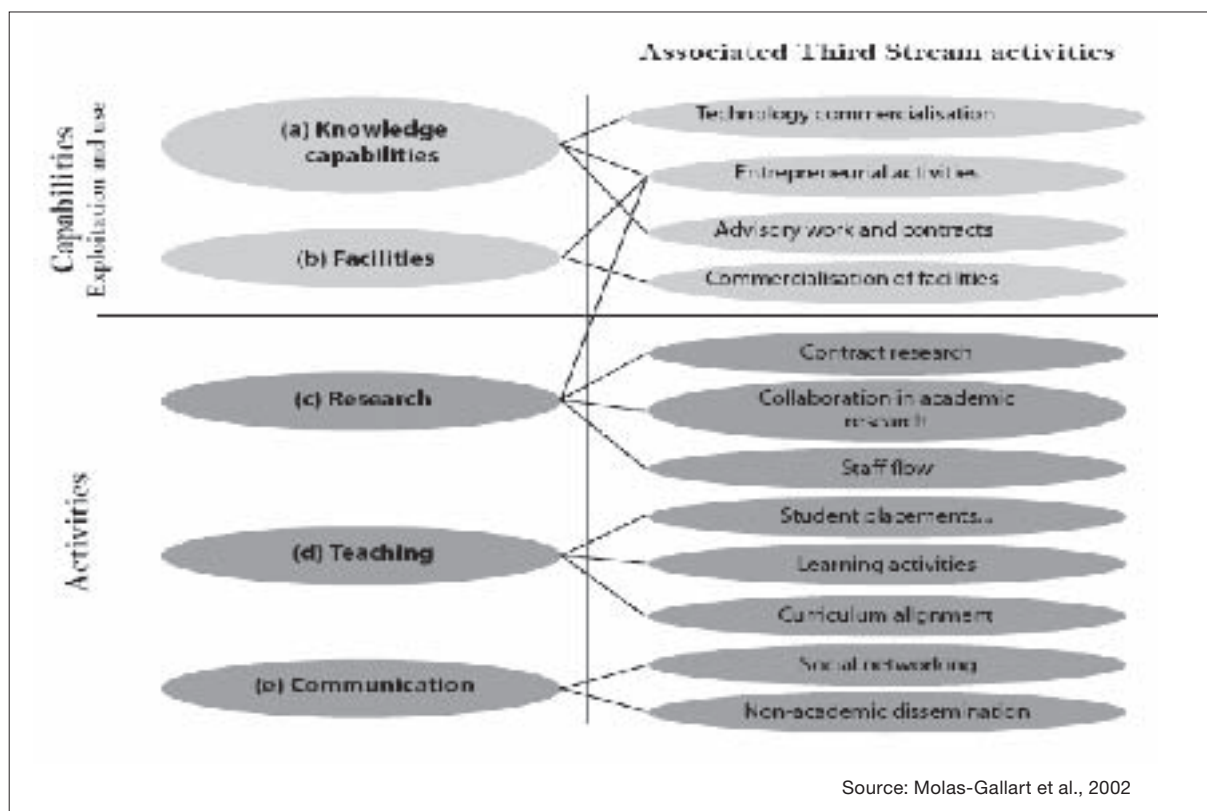
Source: Molas-Gallart et al., 2002

income from non-credit bearing courses; income from intellectual property; income from knowledge transfer partnerships. Another part of the formula is driven by data relating to the number of academic staff, since the staff of an institution is seen as embodying much of the institution's resource for knowledge exchange or transfer and innovation. The component therefore gives a scale-dependent baseline of funding to every institution to reflect its capacity and potential. For the third component of formula funding a basket of four items is used: the number of dedicated third stream staff, the level of engagement with small and medium-sized enterprises, the level of engagement with non-commercial organisations, and the number of student placements.

The UK though is quite exceptional in having a funding stream for third mission activities. Other countries (e.g. Australia and the Netherlands) are currently planning to introduce similar initiatives, but struggle with finding adequate indicators to objectively underpin third stream funding allocations.

In discussing the Australian case, Goedegebuure & Van der Lee (2006) argue that there is insufficient information reported by universities to even begin to understand the level of community engagement (p. 29). There is reason to believe that the situation is not very different in other countries. Therefore, a structural effort is needed to collect data on the many forms of the universities' interaction with its communities. The OECD, through its Institutional Management in Higher Education (IMHE) programme, is currently undertaking a comparative study on the regional impact of higher education institutions (OECD, 2006).

Any effort to quantify interaction would need to focus in particular on the many forms of mobility of staff and students between higher education and the outside world. A large part of this knowledge transfer takes place through informal interactions. Naturally, the formal interactions will be easier to quantify, but the importance of informal channels should not be underestimated because informal interaction often lies at the base of more formal interaction. However, if the view is supported that the role of higher education in the innovation system needs to be fostered, it is important to know about the intensity of both types of interactions and to monitor them. Of course, questions about definitions and collection methods will need to be addressed for this.

If indicators of community engagement are used for informing the funding decisions the Matthew effect may arise, meaning that there is a risk of reinforcing inherited performance. Institutions that do well in terms of community engagement will receive more funding, whereas those that have not yet built up a demonstrable track record in third stream activity get less.

In particular if funders/policy makers are interested in changing the system and encouraging institutions to become engaged in knowledge transfer to the wider community, an indicator-driven formula may not be the most appropriate approach. Instead, a contract-based – that is: a forward-looking approach, using *leading* indicators instead of lagging indicators – may be more suitable. Such an approach is oriented on building capacity (i.e. investment) in partnership working. Investment decisions can never be based on (lagging) indicators alone and need to be based on criteria that involve a good deal of 'soft information'. For this, the option of having experts (peers) judge proposals may be worth exploring.

7. Barriers to Community Engagement

The previous sections may have given the impression that community engagement is something that every higher education institution should be involved in. However, from day-to-day practice we know that institutions mostly engage in interactions with the traditional communities of students, fellow researchers, funding organizations, research sponsors, et cetera. There may be barriers to the wider type of community engagement that was discussed in the previous paragraph. Since behaviour of organisations is to a large extent shaped by their institutional environment, it is natural to pay attention to the set of rules, regulations, quality assessment procedures, accountability standards and incentive (e.g. funding) schemes that affect behaviour. Such framework conditions may be identified on the national (or system) level, but surely the institutions themselves also shape their own internal framework conditions.

Many of the barriers that stand in the way of an active interaction can be traced back to historical origins and regulatory characteristics. The question is what is the dominant influence in the environment that shapes interaction? Is it the government, is it competition, is it the region? Surely, the situation is different from country to country and – to some extent – from institution to institution. If there is a mismatch between goals and reality, the next question is how it can be understood and rectified. To increase community interaction, the institutional barriers that prevent an effective knowledge transfer need to be studied. Three types of barriers may be identified:

1. the determination of the research agenda and the educational offerings;
2. the internal reward structure;
3. the lack of an entrepreneurial culture.

Ad 1.

Most universities and colleges are structured along the lines of academic disciplines. Traditionally, the developments in the disciplines and the scientific criteria maintained in the disciplines determine the research agenda and the contents of the curriculum. The way in which financial resources are allocated across and within disciplines determines to a large extent the research portfolio and the curricular options. Interaction between the various disciplines is not as frequent as it perhaps should be, given the calls made to increase flexibility and interaction in terms of teaching and research. In other words, the public research agenda and the supply of educational programmes may be very different from the demands expressed by the private sector. There may be a quantitative mismatch as well as a qualitative mismatch – for instance in the divergence between the university's research portfolio and the private sector's research agenda. Demand for more applied (or relevant) research may draw in much needed funding for institutions that are not capable of securing large-scale grants, but it also forces them to sacrifice the traditional notions of what kinds of science are performed within universities.

On the education side, pressures to adjust curricula to better meet the local economy's needs may run counter to the institution's preference (or need) to draw in a more national or even international clientele. Accreditation criteria for the degree programmes offered often see very little attention paid to community engagement.

Aligning the institutional mission with the demands of external communities would require close interaction between the higher education and its stakeholders. Today, many institutions have a great deal of autonomy when it comes to carrying out their public responsibilities in terms of education and research. Some operate in a supply-driven fashion, dominated by the disciplines, while others are more led by external demands.

Ad 2.

Another institutional barrier to strengthening community interaction is connected to the reward system of academics and lecturers. Firstly, the funding parameters that determine the public budget often do not include rewards for regional engagement or community interaction. Secondly, criteria for the assessment of academic research still largely incorporate the traditional academic criteria determined by the academic community. An academic's chances of getting a salary increase or promotion will often be centred on his/her research production in terms of refereed publications or the volume of competitive grants brought in from research councils. The criteria largely do not take into account engagement with non-academic communi-

ties. This 'publish or perish' culture may be found in the prestigious universities. In the more teaching oriented institutions it is the lecturer's workload and responsibilities in terms of teaching, and not necessarily the extent of an academic's community engagement, that determine the terms of employment, salary and promotion opportunities.

Ad 3.

The lack of entrepreneurial culture in academia is a third barrier to a lively knowledge transfer to business and industry. Whereas the previous two barriers mentioned tend to focus on the level of the institution as a whole and touch on aggregate metrics, typologies of transactions and structural approaches, we now turn to the individual level – that is the individual academic and the individual university manager. How have they approached the demands placed on them to become more involved with external communities? According to Gunasekara (2006), theorization on the topic of dilemmas surrounding regional engagement has neglected the individual level of analysis. Apart from the institutional dilemmas already discussed under the previous two headings, the study points to dilemmas related to individual identity issues, notably the role of academic staff in universities and perceived threats to these roles. Several academic staff define their identity as characterized by an independence of thought and action and they do not want to be driven by external demands in the sense of consulting or contract opportunities. Community engagement was seen by them as conflicting with existing norms, including cultural ones (Gunasekara, p. 160). They feel that research commercialisation is not a part of their job as an academic researcher. The same may hold for lecturers. They may be more interested in transferring textbook knowledge to students instead of teaching them the wider potential of knowledge.

Siegel *et al*.'s (2003) study of university–industry technology transfer found that, in some cases, academics had a poor understanding of the technology process and had little interest in dealing with private companies. Many academic researchers are unaware of the commercial potential of their research findings or lack the required business attitude to develop their concepts and ideas further into products or prototypes. Lee's (2000) study of collaborative relationships between universities and industry found that the primary motivator for academics was alignment with their own research agendas, rather than entrepreneurship, outreach or improved pedagogical practice.

All this means that the undertaking of a 'third role' of community engagement is still faced by many institutional barriers. However, apart from institutional and motivational barriers, there are also practical barriers

that negatively affect the extent of community engagement. If higher education institutions are to pay more attention to a third mission, they would first of all need to map their regional links in terms of teaching, research and participation in regional public affairs and other forms of community interaction. Since students play such an important role in knowledge transfer and engagement activity, it would be crucial to embark on the monitoring and tracking of student flows. Institutions then would have to establish mechanisms and incentives for tracking students on a longitudinal basis (including their home origin, what academic programmes they participate in, the destination of students/alumni), their various research partners (in terms of geography, type of knowledge flow, financial impact), and their other communities (e.g. employers' organisations, politics, media, voluntary sector, the arts, other educational institutions).

These practical concerns, together with the institutional barriers to engagement, imply that the acceptance of a third mission is not a straightforward action – many actors have a voice in this – policy makers, managers, and academics.

8. On Governance, Accountability and Corporate Social Responsibility

The acceptance of a 'third mission' by the higher education institutions places additional weight on its shoulders. As stated by Watson (2003), universities are expected to be excellent and relevant (in their teaching and research); to be entrepreneurial and caring (in their approach to students, communities), to be competitive and collegial (in dealing with other knowledge providers); and to be local and international in focus (in teaching and research) at the same time.

Thinking in terms of partnerships with communities has some important repercussions on the institution, its governance and the way in which it fulfills its accountability requirements. Let us now carefully construct our argument here, which is inspired by the work of the Dutch Social Economic Council, an important advisory body of the Dutch government (SER, 2005).

We start with the observation that higher education institutions that have a public mission. This means: they produce services that produce benefits to the wider society and because of that they are funded (at least partially) from the public purse. Moreover, the government imposes some standards with respect to the quality of the services provided and the access to the services. However, to a large extent the state leaves a large degree of freedom to the universities to determine the contents of teaching and research, thus granting the

academic professionals enough room to realise their ambitions within the framework set by the state. From the 1980s onwards, the neo-liberal steering philosophy that many states adopted to realise reforms and cutbacks in sectors consisting of organisations with a public mission has meant that the state stepped back from micromanaging these sectors. In such a context of deregulation, institutions have been placed further away from the state. This has had implications for their legitimacy. One may say that when the role of government in terms of financing and regulating is diminishing, the institution will have to find its legitimacy in how its services are accepted and evaluated by the various communities in society. Institutions earn and maintain their social legitimacy through the ways and means of quality assurance and the mechanisms through which they are accountable to their clients.

The need for building trust and being socially accountable is in particular urgent in times characterised by 'marketisation, deregulation and decentralisation'. During such times, it is no longer enough to show excellence in the traditional (i.e. academic) sense of the word. Strive for excellence is gradually complemented – some will even say overtaken – by their search for relevance. Increasingly higher education and research are asked to prove their contribution to the 'knowledge society' and have their teaching and research play a more visible role in strengthening the innovative capacities of the economy. This trend undeniably is part of a general trend towards what may be called 'accountable governance' (Considine, 2002). By this we allude to the fact that higher education institutions are not only expected to act responsibly (i.e. pay attention to democratic and ethical values), deliver value for money (and improve performance where possible), but also to work on their *corporate social responsibility* (CSR).

The terms corporate responsibility and corporate social responsibility are frequently used in discussions on business companies' efforts to develop socially and environmentally aware practices and policies. In a broader sense, CSR may be understood as the need for organisations to consider the good of the wider communities, local and global, within which they exist in terms of the economic, legal, ethical and philanthropic impact of their way of conducting business and the activities they undertake. In higher education, CSR amongst other things, relates to universities and other higher education institutions contributing to the solving of important problems faced by our society – problems that call for innovation of various kinds: social, economic and cultural. One may argue that in such an environment, higher education institutions can secure their claims on the public purse and generate private support only by acting in ways conforming to notions of accountability and CSR.

If institutions wish to act in line with this definition of CSR, this is not a matter of vertical control alone. Surely, control is a crucial issue in designing coordination mechanisms for situations where the government 'steers from a distance'. For higher education, vertical control then relates to the mechanisms that, for instance, a minister of education uses to oversee the activities. In (higher) education, there will always be a role for the parliament or minister in guaranteeing that public goods like access, quality and efficiency are not neglected by the publicly supported institutions.[2] However, there are other forms of control and oversight. And where the government has stepped back, other forms and agencies of control have come to the fore – some would even argue that the net effect of this has not been less but more interference. We would be going beyond the boundaries of this paper if we were to discuss the pros and cons of the various forms of control here, but we do want to stress that for organisations that produce public goods it is important that control along vertical lines is always balanced with mechanisms ensuring *horizontal accountability*. The environment – the stakeholders, or communities – is by definition important for any organisation that has a public mission.

Real commitment to stakeholders is more than just maintaining contacts with clients. It means the organisation is seeking and using ways of engaging in a dialogue with its various stakeholders in order to learn about how its services are valued and to encourage how it can do even better. Horizontal accountability includes mechanisms to ensure transparency about choices made and communicating the performance of the organisation. The word 'horizontal' stresses the fact that the higher education institutions not just render proof of their performance to a principal that is placed higher up in the hierarchy, but to all groups, bodies, agents that have an interest – that is its stakeholders. There are various interest groups that may be mentioned (see table 3), and how the horizontal accountability is shaped will depend on the type of stakeholder in question. Here, the stakeholder categories and their degree of importance ('salience') as discussed earlier may be helpful.

After identifying the stakeholders and the degree of commitment to them, the next step is to determine how lasting relationships with key stakeholders can be built into the organisation in a structural way. Relationships with communities or stakeholders can be manifested in the governance structure of the institution. An example is having representatives from communities in a governing board. Doing this is not just a matter of efficiency

or effectiveness, but also a matter of democracy. An obvious form of horizontal accountability to the wider community is annual reporting. A less common form is through organising debates between members of the internal communities and representatives of external communities. More formal arrangements for showing engagement with communities are through contracts and agreements. In this way, relations between higher education institutions, public sector funding bodies, and external communities are reorganised in terms of customer-contractor relations. Other forms of horizontal accountability are installing platforms and advisory bodies for consultations with stakeholders and agreeing on procedures for the handling of complaints and disputes.

For higher education, the instrument of *peer reviews* is a familiar way of making the relative performance more transparent and thereby complying with demands for horizontal accountability. Such peer reviews may be extended beyond the familiar evaluations in which academics from other universities judge the quality of teaching and research in a university department. An option is to extend the composition of the review teams and include representatives from other communities or to have peer review teams/panels judge the quality of other parts of university activity (e.g. community services, technology transfer, student services, etcetera). This may lead to a kind of benchmarking exercise where different universities learn from each other. Surely, if the outcomes of peer reviews or benchmarking are used to deduce budgets for the university the chances are that the (horizontal) accountability function may suffer. All of this illustrates that more research is needed on the design and working of new mechanisms for horizontal accountability.

Our message is that in a higher education system that produces public goods and is characterized by volatility and unpredictability in terms of demands it is worth exploring how the institutions in their management and primary processes can place their stakeholders in a more central position. As far as the governance of such a system is concerned one may explore the concept of networked governance (Benington & Hartley, 2005) to balance the needs of a diverse set of communities/stakeholders. Networked – or citizen-centred – governance would help avoid both government failure and market failure, which are accompanying bureaucracies, respectively markets.

In discussions on the 'proper management model' for higher education it is easy to concentrate on the managers and the leadership of academia. However, one will have to realise that it is the academics (higher education's core community) that play an important role in running the system – they are the traditional workers. In any case, further research is needed to ex-

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2. We can also refer to the role of an Inspectorate or a similar oversight agency here.

plore the effects and design of different governance models – or the proper mix of models. To a large extent, many of these questions will be of an empirical character, but conceptual work on concepts like networked governance and horizontal accountability will be equally important.

9. Conclusions and Suggestions for Further Research

As the set of stakeholders has expanded, so too has society's expectations of what their public obligation is. If we take a leap through history from the days of the early universities that provided education for the church and other elites, to the present times of massified higher education systems, we may conclude that nowadays higher education has become inextricably linked to the notion of progress both at an individual and a societal level. The spread and democratisation of higher education means that many organisations and individuals have a stake in higher education and want to have their say. In this sense, Benneworth & Arbo argue:

> "the institutions are becoming more socially embedded. The consequence is that both the higher education institutions and national governments are facing a growing multitude of expectations. As knowledge is sought for as the solution to every-

thing, demands of the environment are penetrating higher education. Typically, the institutions respond by additive solutions. They are appending new layers of academic specialties, study programmes, services and administrative units to the organisation in order to meet the challenges." (Benneworth & Arbo, 2006, p. 30).

The reaching out to communities and the taking on of civic responsibilities conforms to a trend to design higher education and science policies in ways that make teaching and research more publicly accountable and relevant to society. New forms of market-based, customer accountability are restructuring the context of degree programmes and scientific research and contribute to a reorientation of long standing academic norms and values. These changes are designed to make academic research and curricula more responsive to the demands of various paying customers.

These calls on higher education institutions to be responsive and accountable in a more broad way have been discussed at length in this paper. It has been argued here that responding to these calls affects the way in which institutions render proof of their excellence and relevance, the way in which they manage and control their internal operations, maintain close links with their stakeholders and develop strategies for their organisation. These days, the corporate social responsibility extends beyond producing graduates and research outputs. It requires them to engage in public

Table 3: The Warwick model of competing paradigms of governance

	Traditional public administration	New public management	Citizen-centred governance
Context	Stable	Competitive	Continuously changing
Population	Homogeneous	Atomised	Diverse
Needs/problems	Straightforward, defined by professionals	Wants, expressed through the market	Complex, volatile and prone to risk
Strategy	State- and producer-centred	Market- and consumer-centred	Shaped by civil society
Governance through …	Hierarchies	Markets	Networks and partnerships
Actors	Public servants	Purchasers and providers, clients and contractors	Civic leaders

Source: Benington & Hartley (2005)

debates, to enter into close working relationships with private actors and to be part of multiple networks and alliances with multiple actors on various levels. In this paper, we have argued that in today's network society, providers of higher education and lifelong learning will have to be in constant dialogue with their many communities/stakeholders, including government agencies, students, business, research sponsors, communities and regional authorities. This linking up with external stakeholders and communities is strengthened further by state policies aimed at de-regulation and marketisation.

The first question we wish to identify here is thus of a conceptual nature:

1. How can concepts like stakeholder theory, corporate social responsibility or horizontal accountability be framed for the field of higher education and research?

We have tried to show that theories and concepts developed so far – to understand phenomena taking place in other sectors and organisations, namely in the business world – help us to conceptualise the field of higher education as well. Any analogy between the world of higher education and the world of business has, however, potential limits given the multi-functional role of universities as deeply fragmented organisations in the provision of public goods. This calls for a re-framing of existing concepts as well as for the development of genuine concepts for the study of higher education.

Second, we have argued that the number and variety of external interests with which the higher education institutions deal with, seek support from, and, ultimately, rely upon has literally exploded. This produces the risk of running into problems of 'mission overload' that institutions 'try to be all things to all people'. To fulfil their obligation towards being a socially accountable institution producing public goods therefore urges the institutions to carefully select their stakeholders and identify the 'right' degree of differentiation. This raises questions about mechanisms of stakeholder identification, governance, management and accountability. It also leads to questions about the design of the interface between the higher education and its stakeholders – both the external stakeholders and the internal constituencies.

2. Do higher education institutions go about prioritising their different functions and stakeholders and how do they do so? What are the functional and structural add-ons that the institutions may create to handle the growing complexity in terms of stakeholder demands?

Third, for the institutions, increased stakeholder involvement and external demand come down to the issue of strategic choice. The issue relates to the changing bal-ance (and sometimes tensions) between the state and the market, the global and the local, public and private, massification and individualisation, cooperation and competition, autonomy and accountability. This may not only give rise to tensions within the institutions and throughout the academic system at large but also raises questions on organisational and systemic performance:

3. How do we establish whether higher education and research are actually becoming more 'relevant', more closely linked to societal needs and stakeholder demands? What evidence is there? What indicators are suitable? And what are the costs and benefits in terms of 'old' and 'new' functions of higher education and research?

Earlier we mentioned that when the state steps back the institution has to find its own legitimacy in how its services are accepted and evaluated by the various communities in the society it seeks to serve. But then the question becomes whether a set of individual institutional selections can deliver the required outcomes of equity and efficiency in the public interest. This does not only lead to performance questions addressed above but also to questions about the (supervisory) role of the state; how it looks upon the structure of a higher education system characterised by more profiling and specialisation. These are more policy-oriented questions addressing the system level:

4. How can the government, as the body responsible for the overall co-ordination and well-being of the higher education system best shape its tasks of guaranteeing diversity, access and quality in the academic system?

Systematic scholarly examination in this field is rare while there are excellent reasons for opening this area to scholarly scrutiny given the intentions to increase the weight of societal interests in higher education and research.

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Appendix 1

Typology of interactions between a higher education institution and Business & Industry

	Formal Interactions	Informal Interactions	Facilitation Mechanisms
Information transfer	Codified knowledge (papers and publications); Conferences, seminars; Demonstration facilities	Professional associations; Personal networks; Alumni bodies	Research councils; Information services; Participation of 'outsiders' in university boards & committees; Advisory councils
Skills enhancement	Graduate training; Short courses; Long term training programmes (contract education); internships	In-house seminars and demonstrations	Tax facilities; R&D subsidies; Individual learning accounts
Skills transfer	Academic and industry secondments; Career moves	Meetings, informal contacts	Business and technology precincts
Access	Industry access and use of specific university facilities, networks and equipment	Informal, ad hoc mechanisms, e.g. use of equipment	
Corporate contributions	Gifts and bequests for buildings, chairs or awards; Financial contributions as members of research centres		Regional business associations & foundations; Chamber of Commerce
Research collaboration	Co-operative research centres; Other university-industry research projects or programs	Consultations and preliminary investigation	R&D support schemes; University-industry research centres
Contract services	Research-based consultancies; Commissioned research projects; Firm-specific research strategic alliances		R&D subsidies; Collaborative research programmes; Govern't-supported research institutes; Incentives in univ. budgeting mechanism
Commercial operations	Sale of university generated intellectual property (e.g. manuals, data sets); Patents & licensing; Spin-off companies; Joint ventures		University technology transfer (liaison) offices; Incubators; Venture capital; Business & Science Parks; Teaching entrepreneurial skills; State development organisations

Source: CHEPS, based on: Coordination Committee on Science and Technology (CCST) (1999), *Interactions between universities and industry*. http://www.isr.gov.au/science/ccst/CCSTInteractions.pdf

The 'Steering' of Higher Education Systems:
A Public Management Perspective*

Ewan Ferlie, Christine Musselin and Gianluca Andresani

The 'Steering' of Higher Education Systems:
A Public Management Perspective

This paper focuses on the 'steering' of higher education systems, considering wider patterns of public sector 'reforming' (here we note that the term is problematic and normatively laden) and how they have been applied to higher education systems within the EU. As with other Forward Look papers of the HELF project, its purpose is to identify the academic 'state of the art' in terms of existing analytical approaches and suggest further perspectives to be developed. It will use frameworks derived from the review of the broader academic literature to describe and analyse key organisational developments across European higher education systems.

This paper will argue that although most higher education systems in Europe, but also in the US, are publicly funded, admit many more students than private universities and, by contrast with the US benefit from a higher reputation than many private institutions, higher education has rarely been studied as a public policy or management topic and so has not been one of the traditional areas covered by generic political scientists or public management scholars. It has largely remained an issue for higher education specialists, and even if many of them have been trained as political scientists, few are simultaneously involved in the community of higher education research and in the community of political scientists and more latterly the emergent community of public management scholars. This history probably explains why many studies on higher education governance use many of the established tools or concepts of political science and public management but few if any have contributed to their development.

'Bringing in' more generic concepts from political science and public management more fully into the study of Higher Education Institutions (HEIs) is a promising avenue to explore academically and may reinvigorate the study of higher education institutions. Often the higher education sector is seen as a 'stand alone' sector which is not directly or easily comparable with other types of organisation, even within the public sector. The ideology of academic and institutional autonomy as described by Merton which is so well developed within the higher education sector supports this sectoralist approach. There may be some evidence to support this notion of difference even at the organisational level: for example, UK universities retain more self direction and less central control than some other UK public sector settings, such as the National Health Service (the very name describes a national rather than a local service). Yet at a more fundamental level, the organisational similarities with other professionalised public sector settings such as health care are more important than the differences: European universities are largely dependent on the state for financing; the state is concerned to regulate their behaviour as they influence citizens' life chances significantly; they contain a mix of professional and bureaucratic elements and they operate within strongly structured institutionalised fields. There are many fundamental similarities with other public service settings such as health care. Within organisational analysis, they fit well with the more general archetype of the professionalised organisation developed by Mintzberg (1979).

Adopting this wider approach enables us to reconnect the micro world of higher education institutions with developments within the macro world of the state. We will also argue that there has been a move away from the traditionally Mertonian concepts of higher education autonomy: the state is now seeking to shape higher education systems more actively. The use of more generic perspectives is evident in some recent studies of higher education (Hood et al, 2004; Reed, 2002; Maassen and Stensaker 2005): we here add to it through an analysis of system level steering which draws on three distinct narratives of public management reforming.

By 'steering', we here mean the externally derived instruments and institutional arrangements which seek to govern organisational and academic behaviours within higher education institutions. They are usually but not always emanating from the state. This paper will highlight the role of the state in seeking to shape increasingly strategic higher education systems towards national policy goals through the use of reformed 'steering' systems.

We will therefore argue:
1. The state increasingly seeks to govern and 'steer' higher education systems as it does its other publicly funded services;
2. These steering patterns can be linked to underlying narratives of public management reform which apply to higher education subsystems as well to other public service subsystems;
3. Steering patterns vary considerably from one European nation state to another, reflecting attachment to alternative narratives, conditions of path dependency and localised reform trajectories.

This paper draws on current work on the steering of University systems being undertaken by the authors and other colleagues in the SUN-PRIME collaboration which is part of the PRIME network of scientific excellence funded though the EU. Later work frm SUN PRIME will also be published in Paradeise et al (2009).

1. How Higher Education Governance has been Analyzed

During the 20th century, higher education was generally studied as a specific sector of state intervention. Education and research were thus considered as public goods so that the recourse to specific policies and instruments by essentially public authorities was justified.

On the one hand, an important part of the literature (developed in 1.1) focused on higher education public policies in terms of public reforms and decision-making, in order to analyse (and also often prescribe) what the role of the state was and also should be in this specific domain. Within this literature, one conception long prevailed. According to this tradition, state intervention in higher education is expected to be limited: the fundamental understanding of science as an autonomous sphere argued in favour of a "Republic of Science" (Polanyi 1962) leaves steering and governance in higher education first of all in the hands of academics. But two alternative conceptions have more recently developed.

On the other hand, another part of the literature (addressed in 1.2) instead tried to identify the (collective) actors involved in the higher education sector, to describe the relationships they have one with another and to analyse the mode of regulation prevailing among them. Studying public policies and their content is here less important than discovering and understanding the policy network[1] or the policy regimes[2] producing them. These approaches focus much more on the description of higher education systems and are more interested in routine or day-to-day practices and relationships within them.

1.1 Three Main Conceptions of Higher Education Governance and Higher Education Policies

When looking at higher education public policies and state intervention in this sector, we note that a first organising concept is strongly related to the Mertonian sociology of sciences referred to above which considers that the role of the state, if any, is to ensure the autonomy of higher education (or science more precisely). The higher education subsystem is here characterised by a high degree of autonomy and insulation from governmental steering[3], despite its dependence on the public purse. Some authors characterise this as "policy for science" (Rouban 1988) or "regulation by the community" (Paradeise 1998). The German idealist tradition built around the Humboldtian model, and the American functionalist sociology of professions[4] both idealised this conception. Academics are described as producers, users and owners of an esoteric knowledge whose quality or costs cannot be assessed or controlled by "profanes" (public authorities, members of the civil society, etc.). Academics therefore receive a monopoly from the state to exercise their function. The state agrees to protect them from the external influences, as long as the academic community implement norms, values and practices preventing an abusive use of their knowledge. This conception relies on an ideology of academic freedom and strong faculty control over key work practices in both domains of research and teaching. This has long been the dominant analytical and normative framework.

The British higher education system until the end of the seventies provided a good example of this conception: the state allocated a public budget to the UGC (University Grant Committee), a purely academic body which then distributed it to highly collegial higher education institutions (Halsey 1992, Shattock 1998, Kogan and Hanney 2000).

One result of this perspective is that organisational and governance reforms are conceived of as endogenous to an autonomous higher education subsystem and not as related to wider public policy goals or reform processes.

A second conception attributes to the state an important role in mediating the interests of the society and orienting the development of higher education. The state is expected to drive scientific activities to command and control them. Why should there be a trend to this alternative configuration? First, there is increased suspicion of the performance of traditional publicly funded service systems by publics, politicians and policy makers. The higher education system, like any other, is seen as vulnerable to capture by producer dominated interest groups (here academics and scientists) so that government may need to exercise its countervailing power to counter excessive endogeneity or to champion powerless consumers. From this perspective, higher education is no different from other publicly funded services (e.g. health care; criminal

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1. The notion of policy network is used here in its descriptive heuristic meaning (following Rhoades and Marsh for instance) and not as an alternative model to pluralism and neo-corporatism to rethink state society relationships (as suggested by Lehmbruch 1995 for instance).
2. As defined by I. Bleiklie (2000: 54): "the network of patterns of influence that are particular to a policy area or an entire polity".

3. At the national and at the international level: G. Mallard (2006) for instance shows how some scientists in the US claimed an academic international control over nuclear research after the second World War, but finally lost their battle.
4. We agree with the distinction by I. Bleiklie, R. Hostaker and A. Vabo (2000) between the idealist and the functionalist approaches but in this paper we want to stress their convergent conceptions about the role of the state.

justice) where the state may put pressure on publicly funded providers to meet broad public policy goals (for example) to cut costs, improve quality or ensure social equity (Van der Meulen 1998).

Secondly, the higher education subsystem is bigger, more expensive, politically more visible and economically more strategic than a generation ago. As the higher education system massifies, so these external and governmental pressures on the higher education subsystem may be expected to increase. Within the knowledge based economy, the connection between the HEI subsystem and policy goals of economic growth become sharper. The invention and diffusion of new science based technologies (e.g. recent emphasis on clinical genetics technologies) which brings together University science, venture capital, hi tech forms and government is a critical arena. The interventionist state may often be more concerned with Big Science than wider higher education policies and this has led to an emphasis of the role of public authorities in commissioning such items as big equipment.

A third conception has stressed the role of the market in higher education governance (Dill 1996). The idea that teaching and research may be commodities rather than public goods gained attention and developed while traditional notions of academic freedom have been redefined and the image of the scientist protected from the world in an ivory tower condemned[5]. In the literature on higher education governance this is most of the time presented as a rupture with the "command and control" conception and as a drift from interventionist to "evaluative" governance (Neave 1986; Van Vught 1989 et 1995; Neave et van Vught 1991 et 1994): from dirigisme to supervision, from ex-ante control to ex-post evaluation, from rules to regulation (Amaral, Meek and Larsen 2003):. This conception therefore does not herald a reduction of the state but argues for a state expected to achieve one or both (depending on authors) of the following missions: to stimulate the strength of market forces on the one hand but also to detect, prevent or repair market failures on the other. The first mission would encourage students to start to behave more like consumers. Such consumer pressure would in turn act as a helpful spur to greater quality and competition among higher education institutions would increase. The role of public authorities is here to facilitate the development of a market and this may be difficult, given the weak market orientation of many HE systems and lack of effective competition (historically there is no market entry or exit and strong planning systems). With respect to the second mission, the state is here expected to set and defend broad principles (equality of access for instance) and to intervene if threatened by the increase in market-forces.

Whatever the prevailing conception, the academic works interested in higher education public policies and the role of the state mostly focus on two types of issues. On the one hand, they describe the measures included in the reforms and analyse the nature of the change at which reform objectives are aiming (for instance: is this reform a move towards the evaluative state?) (cf. for instance Goedegebuure et al. 1993, Teichler 2005a and 2005b). On the other hand, they consist in implementation analysis in line with the studies led first by L. Cerych and P. Sabatier (1986). But, by contrast, few studies carefully reconstruct how such policies arrive on the agenda, the political entrepreneurs and the interest groups involved[6], the way the problems are defined and constructed, how solutions are developed and the narratives attached to them (Radaelli 2000, Stone 1997). In brief, they rarely address the wider political economy of higher education 'reforming' (we note that reforming is an ambiguous term).

1.2 The Study of Higher Education Systems is Often Limited to State-university Relationships

Looking now at the literature which is interested in the description and understanding of higher education systems, it is first of all important to notice that higher education shares an institutional specificity with a few other public sectors such as health and justice for instance: they all consist of public institutions and a strong profession. This provides public authorities with two possible means of intervention: one focusing on universities and the other on academics.

Most publications analysing how higher education systems work and are transformed emphasize the first possibility and pay exclusive attention to the state-universities relationships. Two reasons explain such an orientation. First the content of recent public policies aiming at transforming higher education systems is salient: they often consist of reconfiguring the status, internal structures, governing bodies, field of responsibilities, decision-making processes, and scope of action of higher education institutions (Braun and Merrien 1999). Secondly, this is reinforced by the existing trends towards the devolution of more institutional autonomy to universities and the constitution of more governed, accountable and responsible institutions.

This all leads us to look first of all at the state-university relationships and their in-depth transformation.

Less attention is paid to how this affects the relationships between the state and the academic profession. Two main reasons nevertheless should lead us to investigate this alternative but complementary focus. First, in many European countries, faculty staffing was (or still is) not managed by universities but by the state, or at least, the state may have an impact on academic careers (cf. for instance Enders 1996 and 2001 or Musselin 2005). This, of course, influences the nature of the link developing between each academic and his/her institution[7]. Second, even in countries (like France for instance) in which all important reforms attempt to transform universities, the state may have developed more, and stronger, relationships with the representatives of the academic profession than with higher education institutions. This model, which prevailed (or still prevails) in countries influenced by the Napoleonic model, led to a co-management of the system by the ministry and representatives of the profession.

Consequently, the description, understanding and analysis of higher education systems cannot be reduced to the unique state-university relationship. In the case of France for instance, this relationship and its recent evolution is highlighted by the existence of weakened but still active interactions between the ministry and representatives of disciplines or other academic groups (Musselin 2001/2004). Furthermore the relationships between the state and the universities on the one hand and between the state and the profession on the other, may be of a different nature. In Germany for instance universities have frequent, intense and at times constraining interactions with their Land ministry which are partly based on ad-hoc negotiation and partly on bureaucratic exchanges. The relationships which the Land ministry develops with the academic profession are completely different. They are rare and concentrated on a specific event: the recruitment of elite professors[8] and the negotiation of their hiring "start-up" fund. The Land Ministries then act as buyers in a market for professors. Considering state-academics as well as state-universities relationships therefore leads to reframing the coordination triangle developed by B. Clark (1983). In particular we need to distinguish the type of coordination needed to manage higher education institutions with the type of coordination used to manage the academic profession.

This is a call for a more complex understanding of higher education systems taking into account the fundamental potential tension they experience between organisational and profession-based forces and the way states are "coping" with this (Musselin 2001/2004). It suggests we should not analyse only one part of higher education systems but rather emphasize their duality (organisations and profession). The too strong focus on the state-universities relationships also leads to a neglect of research on how ministries, and also intermediary bodies such as agencies, research councils[9] etc. make current decisions, develop their activities, and interact on a daily basis with actors inside the sector.

Last but not least, the correlation between, on the one hand, the type of policy network/regime (which exists in each country and characterises its higher education system) and, on the other hand, the type of public policies (in terms of content and impact) and state intervention prevailing in this country, is hardly discussed and analysed, with only a few exceptions (Kogan, Bauer, Bleiklie and Henkel 2000, Musselin 2001/2004).

2. Three Possible Redefinitions of the Role of the Nation State which Affected Higher Education

We will now develop the argument that European nation states are increasingly seeking to steer their higher education systems, along with other key public services, in directions which are consistent with national policies.

There are three possible redefinitions of the role of the nation state evident since the 1980s, which may play out differently in different jurisdictions.

2.1 A Stronger Management of the Public Sector

A first redefinition consists of the transformation of the public sector into a more restricted and managed sector. In the UK, where this redefinition had a large

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7. In a comparison between academic labour markets in France, Germany and the United States, C. Musselin (2005, chapter 7) argued that French universities first of all work as shelters for French academics, while German universities (at least until 2001 and the progressive introduction of merit salaries) behave as investors betting on their professors when they recruit them, and US universities are engaged in a employer-wage earner relationship.

8. This only happens for professors (Professoren), not for assistants (Wissenschaftliche Mitarbeiter) and the ministry intervenes in the negotiation when extra-funding is needed to attract a top level academic. For others, the role of the ministry is to control the conformity of the hiring process. It can, and sometimes does, decide to modify the ranking established by the hiring commission.

9. The research led by M. Lamont with other colleagues on how some American research funding bodies make decisions and select the project to be funded shows the interest such "internal" studies can have (Mallard, Lamont and Guetzkow 2002; Guetzkow, Lamont, Fournier, Mallard, and Bernier, 2002).

impact, it might be called the *New Right or Thatcherite reform strategy.* But, even if to a lesser extent, such a trend affected all European countries and led to reforming the public sector and to a departure from the preceding period. Between the 1940s and 1980s, a number of European countries substantially increased the size of their public sector and welfare states (de Swann 1988), for example, expanding social security, health care and education programmes. The massification of Higher Education was one part of this wider trend, usually financed through public taxation and free to the student. At this point, the Mertonian concept of higher education autonomy in some countries and the interventionist conception in others, remained strong. From the late 1970s onwards, however, political pressure to reduce the burden of taxation associated with the large Welfare state led to concerted efforts to reverse this long term pattern of public sector expansion and to ensure greater value for money, privatise nationalised industries, reduce trade union power and to increase productivity in the extended public sector. There was now a political desire to shrink the size and power of the public sector. Given the presence of well organised producer interest groups within the public sector (trade unions; professional associations), these changes were strongly resisted and led to a strong top down and confrontational management style. So there is here a reinforcement of hierarchy and of command as a mode of governance. Power was being concentrated at the top of the state and indeed firms and other organisations in order to reduce the governability deficits of the 1970s. While the UK remains the index case of the *New Right reform strategy*, aspects of such a radical redefinition may be seen in other countries such as Sweden and even the Netherlands. Even in countries where this strategy had less impact, large reforms of the public sector were launched (see Bezes 2001 and 2005 for France for instance, Pollitt and Bouckaert 2004 or Page and Wright 2006 for a comparison of diverse European countries) in order to improve its performance and efficiency.

High profile student unrest, the post 1968 'long march through the institutions' of Marxist groupings and trade union strikes put universities firmly on the radar screen of the New Right. Efficiency, value for money and ensuring strong management were concerns for politicians and policy makers in the University sector as in the other public services. universities were asked to increase their productivity, to develop new missions and in particular to achieve a leading role in technology transfer and innovation, to reduce their operating costs, to improve their drop-out rates, to match the demands of the job market, to pay attention to the societal needs (Dill and Sporn 1995), etc. Increasing the autonomy of more strongly governed universities

has repeatedly been affirmed as the best option to achieve such objectives. Reforms (such as those led in the Netherlands, de Boer, Denters and Goedegebuure 1998; de Boer and Goedegebuure 2001) therefore aimed at reinforcing the executive leadership of universities and reducing the power of deliberative bodies and collegial governance (Braun and Merrien 1999, Braun 2002, Stölting and Schimank 2002). Such universities were equipped with managerial instruments (strategic plans, audits, etc.), tools (management software for instance), indicators (Cave, Hanney and Kogan 1991) and practices.

As can be seen, the effects of these 'reforms' led to significant changes in the balance of power within the higher education sector. Senior management and non-executives' power bases were strengthened. On the other hand, public sector trade unions and rank and file faculty lost power. The state intervened more actively in the higher education system and in a more self confident manners. Supporters of such reforms would also argue that the use of market like mechanisms increased consumer 'voice' and challenged public sector producer capture of the institutions.

In parallel, the role of the state in the provision of higher education has been redefined in various ways. In some countries, like Portugal, the development of the private sector has been encouraged in order to cover the lack of capacity in higher education and many private institutions have been created. In others, reductions in public funding occurred (in 1981 for instance, deep and very visible cuts were made in the budgets of some UK universities as a national policy decision to shock the system into radical change), leading to reducing the number of academic positions despite the increase in student numbers (in Germany for instance, according to Enders (2000), the number of students rose from 232% between 1975 and 1995 while the number of academic positions rose by 130%). This led universities to search for other forms of funding, while some countries (the United Kingdom again, but also Germany and Austria for instance) stimulated the participation of family funding by increasing or introducing fees. In all countries except perhaps the UK, finally, the balance between the ministry and higher education institutions has been modified in favour of the latter.

This redefinition of the role of the state in providing and funding higher education has been accompanied by attempts at transforming the modes of action of the ministers. As highlighted by I. Bleiklie (2000), the traditional tools did not disappear: governing by rules remain current in higher education and many countries (Italy and Norway among others) for instance decreed the introduction of the Bachelor-Master scheme in their universities. But many new instruments of governance also flourished. Some of them aim at delegating

decision-making to new kind of bodies: this led to the creation of intermediary bodies such as agencies of all kind. Others, like contracts for instance, aim at introducing ad-hoc negotiations. Still others consist in abandoning ex-ante control in favour of ex-post evaluation: this provoked the irresistible expansion of assessment/evaluation bodies all over Europe (Campbell 2003, see Schwarz and Westerheijden 2004 for a complete panorama of this trend on 20 European countries).

This movement is sometimes described as a disengagement of the state. But it rather reflects a new form of state engagement in higher education. Universities are being increasingly identified as "key actors" (as knowledge diffusers, research producers and innovation inducers) in "knowledge societies", European governments have never been as attentive to higher education and research than today. Universities are on the policy agenda in every country and governments search for means enabling a less expensive and more efficient management of the sector.

2.2. The 'Hollowing Out' of the Nation State

A second redefinition consists of the *'hollowing out' of the nation state* (Rhodes, 1997; Pierre, 2000; Frederickson, 2005) and the emergence of network governance mode of public management. In this account, the nation state is losing functions, legitimacy and authority to an increasing range of alternative actors: Multi national Corporations (such as British Petroleum) have long acted as alternative power centres to the nation state, now reinforced by conditions of economic globalisation and the rapid move of capital across borders. New electronic systems of communication also pay little attention to national borders. Functions move from the nation state upwards to the EU level (including the Lisbon process) or downwards to 'strong regions'. In many countries, the regions received more prerogatives through decentralisation Acts. In France for instance, two laws, the first in 1982 and the second in 2003 reinforced the scope of action of the *régions*, the *départements* and the cities in many domains (social services, vocational training…). As a result the number of public actors directly involved within the management of a public sector increased. Furthermore, routine service delivery functions are contracted out to a range of non-state providers. Political parties are in decline; but social movement organisations (such as Greenpeace and Oxfam) grow. Legitimacy deficits lead state actors to consult with non-state actors and to form coalitions to secure political support. Command-led control systems give way to network based forms of management.

While in many European countries, the Post Second World War period has been characterised by quasi monopolistic relationships between the national authorities and their higher education systems, profound changes occurred in the 1980s and beyond. Higher Education is one important function which may be devolved from the national to the augmented regional level, but which also operates at the EU level. The role of regional/local public authorities in higher education increased[10]. This move has been allowed either by the devolution of prerogatives on higher education to specific territories (United Kingdom, Spain), by an increase in autonomy on these issues to already decentralised units (Germany[11]) or by the voluntary action of some local actors to be recognised[12] (France).

The implication of supra-national actors in higher education is somewhat more complicated as the European Commission formally has no competence on this issue. Nevertheless, as clearly and precisely shown by A. Corbett (2005), it does not mean that there exists no European policy on higher education (cf. for instance the Erasmus programmes, the creation of the ECTS…). Furthermore the European Commission has competence over research and has developed for more than 20 years Framework Programmes, which impact on European universities through the funding of collaborative research projects. Last, but not least, intergovernmental initiatives such as the Bologna process, even if not led by the EU[13], affected the national systems of the signing countries (Alesi, Bürger, Kehm and Teichler 2005, Krücken et al. 2005, Witte 2006, Musselin forthcoming) and cannot be ignored by the national education ministries. To these rather direct influences, one could finally add the more indirect role of actors such as the OECD in the development of international benchmark and good practices.

Consequently, higher education institutions operate in regional, national and international networks simultaneously and have to engage with a wide range of different stakeholder groups. The distribution of power

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10. In many countries this recreated the situation prevailing before the Second World War when the development of universities was deeply intertwined with the trajectory of the local territory where they were located.

11. See for instance Kehm and Lanzendorf 2006.

12. In France the laws of decentralisation did not concern higher education which remains a national issue. But since the mid-eighties, local actors (regions, departments or cities) claim involvement in decisions pertaining to higher education and affect part of their budgets to fund equipments, buildings, fellowships, research projects and even some faculty positions. If higher education is still not decentralised, some procedures, such as "Universités 2000" or the contracts regularly signed between each region and the state have offered windows of intervention to local public actors, and to regions in particular.

13. But the EU, and more precisely the Commission, is part of the process and C. Racké for instance argues that this process, although intergovernmental, facilitates the (indirect) intervention of the Commission on higher education and legitimates the production of "commission papers" on this topic (Racké 2006).

is more diffuse and pluralist than in the reforms in public management. Indeed the proliferation of different networks may become bewildering, leading to a sense that there is no one actor who can be held effectively accountable. There is no crude concentration of power in the hands of the upper echelons or disempowering of public sector trade unions or academic faculty who remain important stakeholders. The state 'holds the ring' rather than intervening directly within the sector. Further analysis is needed to discover whether some higher education network actors are nevertheless more powerful than others: this may be linked to control over finance or the possession of a central or nodal position within the network (networking skills themselves become an important form of social capital). Networks may also be dominated by closed social elites rather than being open to democratic forces.

2.3. The Democratic Revitalisation

A third redefinition of the state concerns attempts to ensure the *democratic revitalisation* of pathological and over bureaucratised traditional forms of public administration. In many South American countries, for example, writers on the post military governments which have emerged over the last twenty years stress the importance of the democratic basis of the state where the individual is seen as a citizen and not an object (see Bresser-Pereira 2004 on developments in public management in Brazil). DeLeon (2005) sees the development of more participative forms of public management as a strategy for responding to falling levels of trust in government. This argument is close to that of Manin (1996) who explains the rise of the deliberative democracy through an experience of the limits of the representative democracy.

Consequently, the monopoly on expertise previously recognised in public servants has been discussed and critiqued as well as their capacity to define public interest. This led to a stress on more participation from various stakeholders in the construction of public decisions. Profane knowledge was recognised as a form of expertise in its own right while new devices were created to multiply the opportunity for participation and deliberation in the direction of larger circles (i.e. not just for politicians, public servants and academic experts). Such trends are observable in comparable public services arenas such as health care where recent public policies have been developed to construct an informed public opinion which can act as a countervailing force to the views of clinicians and scientists. For example, technology assessment arenas in such areas as evidence based health care (e.g. the sophisticated public consultation processes developed by the UK National Institute of Clinical Excellence to supplement the sci-

entific base in relation to explicit health care rationing decisions), consensus conferences (Joss and Durant 1995), hybrid forums (Callon, Lascoumes and Barthes, 2001), and deliberative bodies at the national level (for instance the Commission nationale du débat public in France) have all expanded.

Within the University context, this democratising redefinition would suggest strong staff and student and stakeholders participation in the governance of the institution. This took different forms. Some countries (Germany, Netherlands, Norway…) passed new laws and created university boards (Mayntz 2002), consisting partly or exclusively of non-university members, expected to play the role of an American board of trustees and to set priorities, approve the budget, validate strategies etc. Others, like the United Kingdom introduced non-academic members in their national research councils.

Democratising would also lead to a stress on the social function of the University as a key part of local civil society and strong interactions with local stakeholders. Teaching may be delivered through non-traditional modes and research is likely to include a strong applied and 'useful' emphasis. Some authors (Gibbons *et al.* 1994, Novotny *et al.* 2001) announced a transition of knowledge production processes from Mode 1 to Mode 2, i.e. (among other things) a drift from research agendas defined by academics according to their discipline to research agendas defined in order to solve multidisciplinary societal needs and problems.

In terms of the distribution of power, the democratic revitalisation redefinition can be seen as distinct both from managerialisation and the closed forms of networking which may be associated with at least some forms of network governance. There is here a strong scepticism about according too much power to senior leaders and a demand for traditional forms of democratic accountability (including elections of Rectors). The base becomes more important vis-à-vis the apex. Universities also become more subjected to influence from their local publics and less endogenous. Elected representatives become more assertive in higher education policy making, locally as well as nationally. Higher education institutions become less bureaucratised and more 'vital' as the development of active systems of externally facing dialogue influences and broadens the well developed and inward facing organisational apparatus located within higher education institutions. Market based mechanisms (such as quasi markets and customer choice) are rejected in terms of the development of a collective voice. So power may shift to those with political skills and bases, and those able to engage in acts of collective organisation.

3. Three Main Narratives of Public Sector Reforming and How They Apply to Higher Education

In the previous section, three principal redefinitions of the role of the state were outlined, which can be observed in all European countries and affected all their higher education systems. Each nevertheless occurred with more or less intensity from one part of Europe to the other. They also combined in a different manner. While the hollowing out of the state often happened along with some concerns for democratic revitalisation, countries more focused on reinforcing the management of their public sector were less affected by the two other types of redefinition. Finally the same transformation may have taken different forms. For instance, the transformation of the public sector has been strongly associated with managerialism in some countries and with modernisation in others.

In order to make sense of these diverging implementations and analyse the transformations experienced by different countries and their higher education systems, it is suggested that we should link them to three main narratives of public services reform: the New Public Management, the Network governance and the Neo-Weberian narrative[14]. They are called narratives because they are not pure analytical frameworks aiming at comprehension (in the Weberian sense): they all mix technical and also political and normative elements. They each tell a policy and management story, which has been more or less influential in each country. Each time, the manner in which the narrative applies to higher education sector will be developed.

3.1 The New Public Management (NPM)

The NPM is a well known public sector reform wave that emerged in the UK under the Thatcher governments of the 1980s but which has also been influential internationally in places such as Sweden and New Zealand (Hood, 1991; Hood, 1995; Ferlie et al, 1996). The UK has exported some NPM reform instruments globally (privatisation; devolved executive agencies) so the NPM was more than a narrow UK trend. The NPM relies on (1) markets (or quasi markets) rather than planning, (2) strong performance measurement, monitoring and management systems, with a growth of audit systems rather than tacit or self regulation and (3) empowered and entrepreneurial management rather

than collegial public sector professionals and administrators (Andresani and Ferlie, 2006). The NPM seeks to produce a smaller, more efficient and more results orientated public sector. It is influenced by ideas in organisational economics such as principal agent theory which stress incentives and performance. There is a concentration on goals of efficiency, value for money and performance rather than democracy or legitimacy. There is a suspicion of monopoly public sector producers (including public sector professionals) and a desire to shift power to consumers and managers. There is a desire to increase the strength of hierarchy, either directly through line management or indirectly through strong contracts within a principal/agent framework. Here the centre sets the strategic framework and governance instruments ('steering not rowing'); and the periphery is given operational freedom to deliver but only within this strategic framework. NPM ideas are often 'owned' by the Ministry of Finance or the Prime Minister's/President's office rather than the spending departments such as the Ministry of Education and are imposed on public services at the field level in a top down fashion.

There may be some tension between these 3 underlying principles and different NPM subtypes have emerged (Ferlie et al, 1996). For example, NPM may be associated with principles of 'liberation management' and the enhancement and empowerment of managerial action – as in the Gore Reinventing Government reforms in the USA of the 1990s – or alternatively with the proliferation of ex post audit systems (Power, 1997) which led to defensive and risk averse management (as in the UK case). Contrary to the institutionalist view that public sector reforms have only superficial impact, Ferlie et al found that at least in the sector of UK health care, the impact of NPM reforms on intermediate indicators of organisational process had been considerable.

There is currently a debate about the international breadth of the NPM (is it a Anglo Saxon construct to which many other jurisdictions are averse or has it diffused more widely?) and its longevity (whether or not we have moved into a post NPM era of network governance). A recent overview (Ferlie et al, 2005) found substantial evidence of NPM breadth and depth and concluded that it would as yet be premature to conclude that the era of NPM was over. Even late comers such as France finally adopted NPM reforms, without using this labelling nevertheless: the recent introduction of new public budget procedures (the LOLF, loi organique sur la loi de finances) follows the main principles described above.

In terms of the application of NPM ideas to the higher education sector, we would predict the following 'signs and symptoms':

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14. The perspective adopted in this third section is close to D. Braun's contribution and analysis of different rationales in of S&T policies (Braun 2006). In particular what he calls the "modernisation cluster" can be associated to the NPM narrative while the "postmodern cluster" can be related to the network governance narrative.

a) market based reforms: stimulation of competition for students and research funding between higher education institutions; role of the state is to develop the 'thin' higher education market; policy stress on diversity and choice rather than integration and planning; encouragement of private sector providers to enter the market; market exit of failed public providers is acceptable;

b) development of real 'prices' for teaching fees and research contracts as a basis on which trading in this market can take place;

c) a hardening of soft budgetary constraints: stress on financial control, recovery from budget deficits, efficiency and value for money;

d) introduction of higher student fees to empower students as consumers and drive up teaching quality levels;

e) elaboration of explicit measurement and monitoring of performance in both research and teaching; development of audit and checking systems (auditisation variant of NPM);

f) concentration of funds in the highest performing higher education institutions (incentivisation of the supply side);

g) the Ministry and its agencies attempt to steer the system vertically, through setting explicit targets and performance contracts;

h) in the realm of governance, the development of 'strong rectorates' and non-executive members drawn from business; move to appointed rather than elected senior posts; reduction in the representation of faculty and trade unions in higher education institutions's governance; reduction in influence of local government (Reed, 2002);

i) development of stronger and more overt managerial roles by senior academics at Vice Chancellor and the Head of Department level (Jarrett, 1987; Reed, 2002); development of 'management must manage' doctrines and practices (liberation management NPM subtype);

j) growth of performance related pay for faculty and private sector style Human Resource Management.

The UK remains a key index case for NPM and an exporter of NPM reforms. Within the UK, specific public services varied in the timing of the importation of key NPM ideas and in the capacity of the centre to impose them on the field. Health care can be seen as an early mover: it was politically sensitive and visible; and the Department of Health had national level control over the system. Higher education can be seen as a medium mover, following somewhat behind Health (e.g. Griffiths, 1983, on NHS general management; Jarrett, 1985, on strengthening the executive role of the Vice Chancellor) and with a lower capacity of the centre to impose change. Nevertheless, the capacity of the planning council to incentivise and persuade individual higher education institutions is considerable and should not be underestimated. Criminal justice was a later mover still, but came on stream in the 1990s.

Nevertheless the influence of NPM goes far beyond the UK. Some of the "signs and symptoms" described above are observable in other countries and some (as the "a") in almost all. Just to take a few examples, the higher education system in the Netherlands has been strongly influenced by the NPM narratives and meets at least 6 of them (c, e, g, h, i and j) and some partially (b, for example). In a country like Germany, where the NPM narrative had less success, 5 signs (c, d, f, g and j) are present nowadays, while many of the measures of the recent Norwegian "Quality reform" meet the NPM symptoms.

3.2 Network Governance Narrative

Political scientists in the 1990s pointed to the 'hollowing out' of the traditional nation state as functions moved upwards or downwards (Rhodes, 1997) away from the national ministerial level, or had to be negotiated with many social actors within the implementation phase (thus often relying on more deliberative democracy). Understanding and indeed reconceptualising 'implementation deficits' through the development of more bottom up and emergent models of implementation was an early contribution of this literature.

But the creation of the Hollow state raises a governance problem (Klijn, 2005). Given an outsourcing of direct responsibility for production through privatisation, outsourcing and agentification, the state now had to steer through contract, alliance building and partnership and persuasion rather than hierarchy. Contracts could be weak or difficult to enforce in practice. The concept of multi level 'governance' emerged to make sense of these new conditions. 'Governance' was a deliberately looser term than the old concept of 'government' (Le Galès 1995, Borraz and Le Galès 2001, Kooiman, 2003). It not only refers to network based forms of organising -which were already emerging in the private sector (Pettigrew and Fenton, 2000) and found analogous developments in the public services- but also to allow more balance among the involved actors, more deliberative democracy and, consequently, the co-production of public policies among more numerous, more diverse and more equal actors.

Some sympathetic writers saw this as an emergent post NPM organisational form (Newman, 2001), better able to cope with high levels of social complexity and uncertainty than the top down, 'silo based' and state centric approach of the NPM. Within the UK, this

was associated with the Third Way ideas of the early Blair governments and policy level reflection in the late 1990s on the weaknesses and also the strengths of NPM based reforming which should be retained (such as its stress on performance improvement).

Within this later analysis, the NPM was poorly adapted to coping with complex or 'wicked' policy issues which cross traditional boundaries and demand lateral working (e.g. anti drugs policy). Increased policy complexity may be characteristic of later modern governmental systems (eg climate change; food safety). The network governance model builds on other criticisms of the NPM. Building linkages across public policy actors in order to deliver complex change is a key theme (Klijn, 2005). There were excessive transaction costs associated with escalating and often substantively pointless NPM driven audit systems (Power, 1997) which also led to a dangerous disengagement of public sector professionals (doctors; teachers; academics) from the official change agenda.

Within the network governance narrative, a greater range of actors and interactions emerges, and the central state plays more of an influencing and less of a directing role. It governs with society and not above it (Padron, 2006). There is a shift from vertical to lateral forms of management. There is devolution of power downwards from the centre of the nation state to lower tiers and also upwards to higher including European tiers. In such systems, coordinating power is shared between social actors, possibly operating at multiple levels of analysis. Knowledge and 'best practice' spread across the network, based in high trust, repeated interactions and a 'clannish' culture. There is dense interaction and inter dependency between network partners. The network develops self organising and self steering capacity. The role of the state is distinctive only as a relationship facilitator : it brings actors together, builds trust, arbitrates and verifies interactions (Padron, 2006 ; Klijn, 2005). 'Joined up' policy needs to bring together various executive agencies and other non-governmental actors as co producers of a complex good. Accountability relationships are a way of 'giving account' to local publics and not an ex post state driven system of checking. This narrative builds on the pioneering work of a number of French and Dutch public policy scholars on network based forms of public management (Le Gales 1995; Kickert et al, 1997; Klijn, 2005).

Instead of the NPM policy mix of hierarchies plus markets, the public management network becomes within this narrative the prime instrument of coordination. Within the UK, the network narrative includes novel concepts of networks, collaboration, diversity, inclusion and devolution. There are some strong similarities with the science policy literature on so called Mode 2 knowledge production (Gibbons et al, 1994, Novotny et al. 2001) which stresses co production of knowledge between the higher education institutions and an extended range of non-traditional actors. However, some networks form integrated and cohesive 'policy communities' which are captured by a narrow range of powerful interest groups (Rhodes, 1998).

No country appears to be an index case for the network governance narrative but most countries display evidence for the development of larger networks and for the introduction of new actors in many sectors.

In terms of policy and management implications for the higher education sector, the network-governance narrative implies:

a) there is little emphasis on the market based reforms, price setting or hard budgetary constraints found in NPM; rather the development of higher education networks between higher education institutions and between higher education institutions and other social actors is an alternative policy instrument which is used rather than markets or hierarchies;

b) these networks are not simply managed from above, but develop substantial self steering and self organising capacity;

c) leading edge knowledge, organisational learning, joint problem recognition and solving capacity and 'best practice' diffuse through these networks and drive up quality across the system;

d) there is a damping down of the audit based control systems found in NPM and a move back to lighter touch systems of regulation and even 'reformed' systems of professional self regulation;

e) higher education institutions are located within an increasingly complex multi level governance system; in terms of governmental actors, they relate not only to the national Ministry and its agencies, but increasingly to tiers of regional and local government and also up to the EU level ; these tiers also seek to steer higher education institutions;

f) higher education institutions increasingly relate to a range of non-governmental stakeholders such as firms and civil society as well as governmental agencies; some non-governmental stakeholders (sponsoring firms) may also seek to steer universities towards commercially helpful forms of teaching and research (empirically, there may be important variation between open and closed networks here);

g) the Ministry of Education and its higher education agencies adopts an indirect and shaping role: it 'holds the ring' between many different actors as the ultimate guardian of the public in-

terest; there is a retreat from national level target setting and planning; there is a more 'hands off' style of system management at national level;

h) there is the development of collaborations, consortia and strategic alliances between higher education institutions which can be hybrid states between stand alone status for each higher education institution and mergers;

i) higher education institutions's governance systems are recast to become more pluralist, participative and less directive; notions of accountability as 'giving an account' to other stakeholders through face to face dialogue;

j) In terms of senior management style, there is an emphasis on softer leadership skills, visioning and networking based approaches; there is an emphasis on distributed leadership and team based approaches rather than the highly individualised management typical of NPM;

k) HRM systems reward high performing teams rather than individuals; there is only limited salary differentiation in order to preserve collective purpose within the network.

As mentioned above, no country can be described as an index case, but some signs can be found in different cases. In France, for instance, four symptoms are present (a, b, c, and h) and two are partially observable (e and g). In particular, the recent opportunity for French higher education institutions to join into a common super-structure called PRES (pole of research and higher education) is very typical for sign "h". In Germany the emergence of various accreditation agencies provides a good example of the development of an increasing indirect role of the state ("g"). And sign ("e") is relevant to most European countries with the development of higher education and research policies at the European level and the strengthening of infra-national levels (regions, *Länder* etc.) in many cases.

3.3 The Neo Weberian Narrative

The New Weberian narrative may be seen as an operationalising of the principles of democratic revitalisation within public management reform. Within European public management, Pollitt and Bouckeart's (2004) discussion of public management reforming suggested that there was a subtype of so called Weberian or *Rechtstaat* states (such as Germany and France) which were characterised by a well developed civil service with special legal status and an elaborate body of administrative law. These conditions led to a high degree of bureaucratisation of the public sector, which became inwards facing and emphasized procedural rather than substantive rationality. At the same time, there was an

underlying attachment to the procedural equity and attachment to due process which this form also provided. Under these conditions, Pollitt and Bouckeart (2004) argue that so called Neo Weberian reforms have tried to combine a reassertion of some fundamental Weberian principles:

a) reaffirmation of the role of the state as the main facilitator of solutions to new social and political problems; in the higher education system, this implies that the state should continue to steer the higher education sector strongly as it is of strategic significance to society as a whole; a fear of loss of state control to private actors and finance, particularly of an international narture; policies may be adopted to limit the liberalisation of the higher education market in the national interest;

b) reaffirmation of the role of representative democracy (central; regional and local) as the legitimating apparatus in the state apparatus; in the higher education system, this implies enhanced scrutiny and debate by elected politicians at all these three levels of higher education policies and budgets; internally, this implies the use of elections for senior management positions such as rectors and Heads of Department and also non-executive advisory roles within the higher education institutions' own governance structure;

c) reaffirmation of the role of administrative law – suitably modernised – in preserving basic principles in the state-citizen relationship; in the higher education system, this would imply a rejection of highly individualised, charismatic and hence potentially oppressive and unstable forms of top down leadership and a retention of strong notions of 'due process', albeit in a simplified and less juridified form;

d) preservation of the idea of a public service with a distinctive status, culture and terms and conditions; in the higher education system, this implies restrictions in the move of senior personnel from the private into the higher education sector; the protection of a tenured academic 'core' and limits on the use of a contract based and flexible academic workforce; the upholding of academic 'honour code' and effective self regulation; and the preservation of a distinct and protected HRM system.

With 'Neo' elements such as:

e) shift from an internal orientation towards bureaucratic rules to an external orientation in meeting citizens' needs. This is not so much through market like mechanisms but through developing

a professional culture of quality and safety; this would imply in the higher education system the development of 'outwards' facing service planning and quality assurance systems mechanisms which have academic ownership but also refer to citizens' (as well as students) needs and preferences; it also implies the development of 'citizen' focused academic faculty or 'new professionals' who look beyond internal reference groups;

f) supplementation (not replacement of) representative democracy by a range of devices for consultation with citizens; this would include the creation and use of focus groups, stakeholder fora and more elaborate consultation processes which feed into strategy making;

g) a modernisation of laws to encourage a greater achievement of results rather than the correct following of process; shift from ex ante to ex post control systems; within the higher education systems, this implies a streamlining of rules and regulations and a greater results orientation (NB there may also be a link to NPM here);

h) a professionalisation of the public service so that the 'bureaucrat' is not just a legal expert but a professional manager, orientated to meeting the needs of citizens; similar effects may be expected as with indicator (a) above.

The progressive growth of the regional governmental level in France since the 1980s – with competence in the higher education sphere – is a good example of this type of reforming, as is the enhanced politics of higher education policy making (linked to a debate about public finance) apparent in the newly devolved UK territories of Scotland and Wales.

4. Further Perspectives

As shown in the preceding pages, questions of steering and governance in higher education, and its recent transformations have already been frequently addressed. But we also highlighted some missing or promising issues. In this last section of the paper, we will elaborate on some of these issues and discuss their possible implications.

Three main perspectives will be suggested. The first relies on the hypothesis that public/political governance of higher education will remain influential and important but tries to analyse how it will evolve. The second also builds on this hypothesis to question the outcomes of higher education governance. The third and last point, on the contrary, suggests the potential emergence of other forms of regulation of the higher

education sector, escaping the control, steering and political influence of any levels of public authorities (regional, national or supra-national) and proposes the development of further research on these interstitial changes which are already observable.

4.1 Deepening the Reflection on the Three Narratives

The first perspective consists in further developing the reflection based on the three narratives presented above into three directions: understanding how narratives combine and evolve over time at the national level; studying the instruments pertaining to these narratives. We can use these narratives as a framework to analyse European and EU policies as well as Europeanisation processes.

4.1.1 Alternative long term tracks of change in higher education governance narratives

Both the NPM, network governance and neo-Weberian narratives can be seen as 'ideal types' of public sector organisation. In empirical cases, on the other hand, there may often be found to be a mixture of the three at the same time within a 'hybrid' form. In terms of theoretical emplacement, Hinings and Greenwood's (1988) (also Hinings et al, 1999) work on "organisational archetypes" and alternative tracks of organisational change in such sectors as accounting firms is useful here and we draw on some of their thinking.

– There may be hybrids: a mixture of NPM, network governance and neo-Weberian forms. The UK, for example can be seen as a NPM rich hybrid but with some presence of network governance. France on the contrary is closer to the neo-Weberian narrative but traces of NPM and network governance signs can be observed in this country too. One question is whether such hybrids are stable or whether they contain internal contradictions, so that eventually there will be movement back to one pure form; can there be 'sedimented' as well as transformational organisational change which involves movement from one archetype to another (Hinings et al, 1999)?

– Oscillations: over time, a system may oscillate from one narrative to another and back again. For example, the UK may have moved from a NPM towards a network governance form and then back again more recently with the revival of quasi market forces in higher education.

These first two points plea for reconsidering the existing studies and interpreting them in the light of the three preceding narratives (rather than only one) and over a long time period.

A further issue raised from Hinings and Greenwoods

deals with the prospect of radical change (vs) superficial adoption: these authors suggest that these are important configurations of interaction so that systems which move towards a pure form are more likely to experience rapid and simultaneous change to structure, systems and ideology alike (Barnett 2003). An institutionalist perspective associated with some influential American and Scandinavian writers (Meyer and Rowan 1977, DiMaggio and Powell 1983, March and Olsen, 1989) would by contrast suggest that only superficial adoption of reforms is likely. The professional bureaucratic 'core' of higher education institutions insulate themselves from external pressures by 'decoupling' the centre of the University from policy demands. For example, policy pressure to improve PhD training stimulates the creation of Doctoral Schools which are however 'decoupled' from the core academic departments and which therefore find it difficult to reshape academic working practices (Padron, 2006). The limited diffusion of reforms from the macro to the micro level was also one of the main conclusions of the Norway-Sweden-United Kingdom comparative project on the transformation of their respective higher education systems (Kogan, Bauer, Bleiklie and Henkel).

This last point stresses the need for more ambitious research looking simultaneously at structure, systems and ideology, but also at different levels (policy regimes, institutions, actors) and different dimensions (practices, identities, relationships) in trying to explain how and why some reforms may affect all forms, levels and dimensions while others provoke decoupling between the different aspects.

4.1.2 Instruments and tools pertaining to these three narratives

In many countries, higher education has been an important substantive field for the introduction of new tools for public management and governance pertaining to the three narratives reviewed above. Looking more closely at these instruments in terms of the theory they incorporate (Foucault 1998, Lascoumes and Le Galès 2004), and of course in terms of their (expected and non-expected) effects would be very interesting. At first approximation, these new instruments can be organised in different categories and related to different narratives[15].

Among the more interesting instruments, those linked to evaluation occupy an important place. Within this category, the introduction in the mid/late 1980s of QAA (teaching) and RAE (research) in the UK can both be seen as classic NPM based instruments of steer-

ing. Both have remained up to the present and were not abolished with the change of government in 1997. While the transaction costs around escalating QAA systems (Power, 1997) led to increased disquiet amongst Vice Chancellors and were damped down in the early 2000s in favour of 'lighter touch reviews'; RAE has continued and even accelerated.

A second category concerns the new formula developed for the allocation of budget and human resources. They are also mostly NPM based. They generally aimed at increasingly taking results into account, but on the other hand, may rely on different bases. Some (based on contractual relationships and compatible with the network governance narrative) intend to better acknowledge the specificity of each institution, while others first of all rely on formalised formula acting as economic incentives, aiming at transforming individual behaviours. Among this category of tools, one can find rather atypical instruments aiming at identifying a very small number of winners to which large amounts of resources are dedicated. The only examples we know are German. A first example consists in the Bioregio programme led in the mid nineties. Territories were expected to compete for three main prizes (budgets) aiming at rewarding the best projects to develop the biotechnology industry. A second example, on a larger scale is the on-going *Excellenzinitiative* which will identify the 10 best German universities[16] and allocate to them huge amount of resources. The impact of such instruments has hardly been studied but may be surprising[17].

A third group consists of good examples of network governance. The devolution of responsibility for higher education policy making to the newly devolved assemblies in Scotland and Wales after 1997; the stress of academic leadership development and the more recent encouragement of inter higher education institutions's strategic alliances and collaboration by the funding council (HEFCE) would be good illustrations for the UK. In France, one can mention the PRES (Pôles d'enseignement supérieur et de recherche) and their ambition to enhance cooperation among higher education institutions located in the same territory.

A last category of new instruments deals with the institutional creation of intermediate bodies in charge of new missions or of existing ones previously achieved

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15. It is again close to Braun's approach (Braun 2006) when the author questions the link between the instrument link in S&T policies and the mix of policy rationales.

16. But also the 40 best graduate programmes and the 30 scientific clusters. 1, 9 milliards Euros will be allocated.

17. In her recent PhD, C. Champenois (2006) showed that Bioregio did not only favour the three rewarded territories but also those who apply for the prize. The dynamic launched by the preparation of the application among the concerned private and public local actors continued after the results. Consequently, the two territories she compared (one rewarded and the other not) experienced a comparable development of their biotechnology industry by the late nineties.

by public authorities. They can either be understood as a tribute to the NPM, the network governance or the neo-Weberian narrative, according to the rationales and the concrete implementation they lead to in each national context The development of national research councils in many countries (ANR in France or NWO in the Netherlands) but also at the EU level with the recent implementation of the ERC (European Research Council) is typical of this move. The creation of accreditation agencies (often linked to the Bologna process) is also a good example with national effects (see for instance the different professional, disciplines-based or *Land*-based accreditation agencies in Germany, assessing the new bachelor-master curricula) or European and international scope (see for instance, the rising influence of EQUIS, the AACSB or the AMBA on management schools).

By looking more carefully at instruments two different research perspectives may be opened.

First, following the paths opened by P. Lascoumes and P. Le Galès (2004), this multiplication of instruments could lead to the following questionings (replicated from the introduction of their book):
– Instrumentation and the re-composition of the state, i.e. what can be learned about the redefinition of the state, public action and public management in higher education through these instruments?
– Change in public policies: how far do discussions and agreements about instruments de-politicise the debates on higher education in making the construction of consensus on formal apparently neutral equipments easier?
– Instrumentation as implicit incorporated theory: what are the political stakes hidden behind new instruments listed above? What can we say about the relationships between instruments and narratives? What do they tell us about the exercise and transformation of political power on higher education institutions?
– Instrumentation and its specific effects (i.e. unexpected effects: inertia, production of a specific representation and problematisation of the issues at stake): how do the new instruments produce new conceptions/representations about higher education, what are their unexpected effects, how do they empower some actors weaken others etc.

Secondly, these instruments are not higher education institutions's specific but may well reflect wider patterns and allow for fruitful inter-sectoral comparison. Similar NPM style instruments for instance also exist in other UK public services such as in health care and secondary education. In the NHS, the late 1980s and 1990s saw the elaboration of sets of performance indicators which formed the basis for publicly available rankings such as 'star systems'. In the UK NHS, for example, health care organisations ranked highly (3 star) were accorded more operational autonomy; whereas poorly ranked organisations (0 or 1 star) faced increased intervention and 'support' from above, mergers, new executive teams brought in from outside or in the last resort closure and the bringing in of external providers.

4.1.3 Narratives and new levels of governance

Most of the time the analysis of public governance modes in terms of narratives focuses on public policies, reforms, decisions made at the national level. Yet, as described in section 2. of this paper, higher education as a public sector has experienced the development both of regional and European forms of governance along side the nation state.

This raises new issues. Some analyses of higher education developments have been restricted to questions which have been addressed to other public services which experienced the same process, in terms of Europeanisation on the one hand and multi-level governance on the other. We consider the debate on Europeanisation as a promising route because it seems to summarise most of the debates touched upon above. To begin with, the very notion of (multi-level) governance has been devised to make sense of this 'strange' entity called EU: one should mention the pioneering studies on cohesion policy by Rod Rhodes and associates (see Rhodes 1997) and on decision-making more generally by Gary Marks et al. (see Marks and Hooghe 2004 for example for the latest and very influential statement on the two different types of multi-level governance). Empirically it is our aim to see how the *impact* of Europeanisation on higher education institutions will be played out. It is difficult to underplay the importance of this process in view of the key significance of higher education institutions for national systems of innovation and the wider European political economy.

But such a perspective should also deal with other issues. First the analysis of European governance on higher education within the framework of the three narratives developed above has not yet been conducted. At first glance, and at first approximation, one could suggest that, in this sector, intergovernmental processes (such as the Bologna process, Ravinet 2005), the recourse of methods of coordination (Gornitzka 2005) and soft law (Abbott and Snidal 2000)) illustrate forms of network governance, while some of the policies led by the Commission would be closer to NPM or neo-Weberian narratives.

Qualifying and analysing the narratives of higher education governance emerging at the European level raises two further issues:

– the combination of these different narratives pushed by (at least partly different) actors should also be studied (for instance: how does the construction of the European Higher education area and the construction of the European Research Area articulate?)

– the interplay and combination between the narratives of the European level and those characterising higher education governance in each EU country, and their impact on Europeanisation processes (for instance: are "neo-Weberian" countries more influenced by/ open to/responsive to "neo Weberian European forms of intervention?).

4.2 The Higher Education Governance Reforms and a Research Base

The research agenda developed above relies on the assumption that public governance on higher education, even if transformed, will persist and thus is relevant to study. This first hypothesis must be associated with a further research issue dealing with the effects of this public governance on higher education systems.

The Public management 'reforms' often associated with normative assumptions from their political sponsors and interested sponsoring reformers (e.g. NPM is more efficient than the traditional bureaucracy, a strong university government is better than a weak one, governance is better than exclusive relationships between the state and universities…). They are calls to political and collective action as well as evidence based 'solutions,' and have to be to survive in the political arena. Many critics of NPM similarly engage in normative rather than empirical argument: NPM will destroy participation and collegiality and emphasizes quantity rather than quality.

There is an international industry in public management reform which brings together buyers and sellers of reforms. Why do some reforms diffuse internationally while others remain of local significance? Within general public management reform, Mathiassen (2005) points out some of the key international diffusion agents such as the OECD and World Bank (the EU may also play an important role). For developing countries, for example, World Bank loans may be conditional on the adoption of an approved public management reform strategy. Management consultancy firms (Saint Martin, 2005) also diffuse favoured reform strategies across public sector organisations. There may be think tanks or high profile politicians, civil servants or indeed academics who act as diffusion agents internationally. This would be an interesting theme to look at within the higher education context. So the adoption of higher education reforms is not just a rational process but also contains elements of managerial 'fads and fashions.

Nevertheless, one important question which can legitimately be raised from the point of view of evidence based policy is: do these higher education reforms 'work'? This is a vast question which raises theoretical, methodological and empirical issues. What are the criteria and theoretical framework for deciding whether a reform 'works' or not? How can the impact of a reform be isolated from many other confounding variables? How can we gather appropriate evidence? What do high quality research designs look like in this field? How do we compare before and after? How can we measure the effects of reform, not only quantitatively but also in terms of quality?

Such evidence as we have is of a very provisional nature. In terms of the UK NPM, for example, Reed (2002) concluded that there is significant NPM led change in terms of some intermediate organisational process indicators (role redefinition at the managerial level). Whether this is good or bad, and what are the implications of this for the delivery of teaching and research, is difficult to say.

The development of a high quality research base in higher education reforming is then an important long term objective which needs further thought, coordination and investment. The higher education research base appears to be less well developed than the research base in health care management where we see the development of initiatives such as the Campbell Collaboration to codify high quality knowledge. In the absence of a strong primary research base, policy level reflection would be a shorter term way forward, drawing on a search of the literature which has been published and interpreting it in terms of its relevance for policy.

4.3 Towards the Dismissal of Public Governance in Higher Education?

A last research perspective to be developed relies on an hypothesis which is the opposite of the assumption on which the two preceding points were based. It questions the capacity of public governance to maintain its influence and role over all or parts of higher education systems. It therefore focuses on facts, areas, events ,which could potentially escape (are already escaping) local, national as well as supra-national governance.

Such research should focus on internationalised higher education institutions. This is not a completely new phenomenon. The internationalisation of higher education and science is not recent and it was possible, centuries ago already, to identify institutions whose influence, reputation or sphere of recruitment, were larger than their own countries.

But new elements have to be taken into account. The first one concerns the type of relationships such institutions are developing among themselves. It is based

on "coopetition" as some form small clusters of highly reputable institutions which cooperate and at the same time compete on the same markets for top students, top academics and resources. As a result, selective networks of elite institutions (such as the Russell group in the United Kingdom for instance) are no longer national, they tend to develop within a regional area (the League of European Research Universities, LERU, for instance) or at the international level (for instance Universitas 21 or the Worldwide Universities Network).

The second element to mention is that most of these international networks are rather recent and based on self-selection. They are also multimodal. Along the multi-continental clusters, there also exist some inter-regional networks developed by regional public authorities (for instance "The four motors for Europe" launched by Bade-Wurttemberg, Lombardy, Catalonia and Rhône-Alpes) or more focused agreements among two or three institutions on joint-programmes or degrees.

All these initiatives cannot be compared and further studies would be needed to see whether they are pure windows or active supra-national structures. How far are they used by some of the concerned institutions to develop curricula or degrees which then escape the national regulations? How far do they contribute to the production of highly qualified international manpower trained for international or supra-national organisations rather than for national purposes? How far can national public authorities or supra-national bodies (the EU for instance, or the GATTS) exercise control over these networks and the institutions belonging to them? Are multinational higher education institutions, comparable with multinational corporations (BP or EDF for instance) emerging? Looking at this process from the other way round, how far do these clusters of institutions, or universities playing on a global rather than on the national market, have an impact on national governance[18]. These are further issues to study in order not only to focus on governance but also on potential ungoverned policy and organisational 'territories'.

5. Concluding Discussion

We hope to have connected the study of changing patterns of higher education institutions organisation and management with wider concepts drawn from political science, organisation theory and an emergent body of work in public management. We have argued:

– that many of the organisational and managerial reforms apparent in higher education cannot be studied in isolation but have to be considered as part of a broader pattern of public sector reforming; the state seeks to steer higher education subsystems as it does other publicly funded service delivery subsystems;
– that individual reforms should not be considered in isolation or as 'one off' tactical responses but instead relate to narratives of reforming. We have highlighted the NPM and network governance as alternative narratives of public sector reforming and drawn out some researchable indicators;
– that alternative long term tracks of change can be distinguished;
– that national conditions of path dependency continue to have impact and that 'convergence' onto one track is unlikely.

We have also drawn attention to the lack of a well developed research base in this field – a first step would be to codify what has already been published by academic teams across the EU but high quality longitudinal and perhaps comparative (both cross national and cross sectoral) studies are also needed to generate primary data.

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The Changing Patterns of the Higher Education Systems in Europe and the Future Tasks of Higher Education Research

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1. Introduction

Analyses of higher education can be divided in various respects (see the analyses of different concepts in Tight 2003). The relevance of the theme addressed here is underscored in a classification of higher education research into four major areas (Teichler 1996).

- First, attention is often paid to the substance addressed, i.e. to *"knowledge"*; we must register, though, that this substantive core of higher education is addressed by specialists of the various disciplines as well as possibly by science researchers, but hardly by higher education researchers. Quite exceptionally, the Encyclopedia of Higher Education published by Clark and Neave (1992) reserved almost one fifth of its space for "academic disciplines". As a rule, however, higher education research pays attention to the conditions under which academic substance is treated.
- Second, the *processes* are addressed according to which higher education is generated, preserved and disseminated – teaching, learning and research – as well as the *persons* directly involved in these processes – scholars in charge of teaching and research as well as students.
- Third, *organisational matters* of higher education are a key area of analysis: both the higher education system, i.e. the macro level – the "steering", "supervision", "control" and funding by and the "accountability" to society or government, and the higher education institutions, i.e. the meso level – institutional power relations, decision-making, management and administration, funding and resource allocation etc.
- Fourth, many analyses focus on *quantitative-structural issues* of higher education, i.e. the "shape and size" of the size of the system. As will be discussed below, most of these analyses have paid attention more strongly to the teaching and learning function than to the research function of higher education. Key themes are the delineation of the system ("universities", "higher education" or "tertiary education"?), the size and its determinants ("enrolment", "access" and "admission") and to the shape of the system (the "institutional fabrique", "the structure or the "patterns" of the system").

Quantitative-structural aspects of higher education are a widely discussed theme because they reflect the prevailing compromises between the various educational education objectives (academic quality, professional relevance, meritocratic selection, equality of opportunity, etc.), and they are in many countries a key arena of interaction between public expectations on education and academic self-regulation, and student-related quantitative-structural aspects have often been more central for the resource allocation in higher education than research issues.

Within this area, the public discourse began to focus on the "shape", i.e. "patterns" of the higher education system since the view prevails that a "modern" society with an advanced economy should accept a substantial growth of enrolment or a high enrolment rate and then the term "mass higher education" spread. Irrespective of prior patterns: when high enrolment rates were viewed as acceptable or desirable, the question was no longer "whether" persons could study but "where" in the *fabrique* of higher education they should be allocated or could allocate themselves. This was true in many European countries in the 1960s and 1970s. "Diversity" became the key term, when the question was raised as to how homogeneous or how varied institutional elements and programmes are, or to what extent they have much in common or are they quite diverse.

This analysis addresses both patterns of the higher education system, as far as we can see on the basis of available systematic knowledge, and the approaches of research aiming at analysing the patterns. Attention will be paid to the major lines of actual developments as well as analyses since the 1960s, and this notably within European countries; because, as will be discussed, the views, policies and actual developments in this domain developed differently, for example, from those in the United States of America, Japan and from most other areas of the world.

The analysis does not intend to give a more or less comprehensive account how the actual systems and the respective conceptual frameworks have changed over four or more decades. Rather, efforts will be made to identify dynamics of the systems which might be helpful to project future developments and to "map" the dynamics of research on patterns of the higher education system over the years which might help to "look forward" to what the future tasks of higher education research should be – in possibly understanding the gaps in the current knowledge and in naming new research tasks suggested by most likely future developments of higher education systems.

Public debates and expert discourse on patterns of the higher education system are strongly shaped by a priori value judgements. Values vary strikingly with respect to the acceptability and desirability of a substantial of expansion higher education, the appropriate balance of underlying objectives, e.g. "quality", "equity", etc., and last but not least with regards to the extent and modes of diversity. The argument will be put forward here that the discourse and many analyses are unbalanced by a widespread believe that a high degree

of vertical diversity is desirable; as a consequence, the mainstream discourse does not raise the question whether this judgement is supported by evidence. The author of this analysis has to admit, though, that he being active in analyses and public discourses in this area (see various essays in Teichler 2007), frequently has advocated to examine the possible competing hypothesis that a relatively low extent of vertical diversity and a broad range of horizontal diversity could serve more easily a socially acceptable balance of objectives. The thematic area certainly is too much shaped by value judgements and the available knowledge is too limited for anybody to claim that a real Archimedical point of analysis has been found.

This analysis will initially address some definitions and choices made for determining the focus of analysis: the emphasis on the specifically European approaches, the delineation of system and the key terms employed as well as the "diversity" issue. Subsequently, the developments and conceptual frameworks will be addressed which prevailed from 1960s until the present. Third, the implications of these analyses will be discussed for a "forward look", for the anticipation of developments in the near future and for setting a future agenda of higher education research.

2. The Scopes of Analysis

2.1 Emphasis, but not Exclusive View on Europe

The aim of this study is primarily to discuss future challenges for higher education research in Europe. This does not mean, however, that attention can be paid exclusively to Europe.

First, the conceptual framework for this study is not confined to European scholars or public debates. Rather, the two scholars shaping the international theoretical debate most strongly over the years were US higher education researchers strongly involved in comparative analysis. Martin Trow (1970, 1974) argued that higher education will serve its function best if it diversifies in the process of higher education. When enrolment surpasses in a country about 15 %, the emergence of a sector of "mass higher education" will serve the additional number of students well whereas the diversification helps to protect "elite higher education" to serve similar functions as traditionally the university systems served. When enrolment surpasses about 50 %, "universal higher education" was likely to emerge in addition. Burton Clark (1983) did not only offer additional interesting classifications of national

systems of higher education, but strongly underscored the virtue of diversification growing out of loose systems of quantitative-structural control, but he also depicted US higher education as superior in providing room for diversification, for example with the title "The Benefits of disorder" (1976).

Second, the rising interest in the issue of "diversity" in Europe certainly was not only due to the conceptual framework put forward by a few key higher education researchers, but certainly also due to the growing popularity of this idea in public debates. In these debates, in which scholars' conceptual frameworks and actors' views are closely intertwined, we also note a strong influence on Europe from sources outside Europe. I argued recently: "Europe has provided the world with a model (or a range of models) of the 'university'… But the world (or more precisely: other areas of the world) provided Europe with a model or at least a set of hypotheses about the proper configuration of the higher education system:

- Expansion of student enrolment is desirable and expansion is intertwined with diversification of higher education establishments.
- There is a trend towards a higher extent of diversity within the national higher education systems.
- Increasing diversity of higher education establishments is beneficial in terms of quantity, quality, relevance and efficiency of higher education.
- Diversification is multi-dimensional, but the single most important dimension of diversity of higher education is 'research quality'.
- The vertical dimension of diversification is more relevant than the horizontal dimensions, and within vertical diversity, the apex of the system is crucial.

Europe was taught the 'lesson' that 'steep diversification is beautiful' in two waves:

- The 'expansion and diversification of national higher education systems story' from the 1960s to the 1990s mainly triggered from the United States of America.
- The competition for individual world class universities in a global setting since the 1990s was a lesson jointly conveyed by, first, the coalition of the success story of US elite universities, second, traditionally highly stratified higher education and social systems in some Asian societies, and, third, by need in developing countries to concentrate scarce resources.

Third, the actual developments of higher education systems in Europe will be addressed from a comparative perspective which takes into account differences between Europe and other parts of the world. For high-

er education systems in Europe developed differently from the conceptual models and the realities in the US In some respects, they certainly were influenced by these 'roots'. Trow wrote in 1999 (p. 311): "…the flow of influence about forms and structures of higher education is today, as it has been since the Second World War, very much from the United States to Europe". We can assume, in addition, that these ideas of desirable diversity found a substantial degree of acceptance, because similar autochthonous views and developments surfaced within Europe, varying by country but certainly most readily accepted in the United Kingdom, but certainly not dominant all over Europe. But obviously, the 'lessons' were not accepted unfiltered. As Trow (1999, p. 312 puts it: "While many European innovations are adaptations of American models, they operate under circumstance in which these elements come to serve quite different functions, or function quite differently."

Without presenting any details about the developments in other parts of the world, we have to point out here at the beginning that more attention was paid in analysis and public debates in Europe on the pattern of the system of higher education than in other parts of the world. Moreover, options actually chosen in Europe differed strikingly from those in other parts of the world in two respects. In many European countries, differences between types of higher education – also called "sectoral" diversity, as will be discussed below - were at the core of diversification. Moreover, vertical diversification was less steep in many European countries. We refer to past tense here because some experts claim that the differences are evaporating in recent years.

Fourth, the analysis notably of recent developments has to look beyond Europe because the recently increasing interest in ranking list of top universities of the world is based on the assumption that top universities cannot be viewed anymore as the reputational apex of national systems of higher system. Rather, top university seem not to play anymore – to use the terms of the internationally most popular branch of sports – in national leagues, but in a worldwide "champions league". Therefore, the question has to be raised how the positions of universities of various countries in those lists is linked to the national patterns of diversity. Moreover, the implicit claim of these lists has to be addressed that the roles and functions of the top universities are primarily shaped by the global scene.

2.2 Focus on Institutional Configuration

In addressing the patterns of higher education systems, this analysis puts emphasis on the institutional configuration. This choice seems to be appropriate, because both, the conceptual frameworks as well as policies

and public debates on "diversity" in higher education do not address primarily the "diversity" within institutional configurations – not, as could be as well, for example, the diversity of students, academics or disciplines as key entities. Rather, one of major themes of higher education policy as well as of higher education research has been since about the 1960s and is likely to be in the future as well: To what extent and according to which dimensions is the overall pattern of institutional elements of higher education – sectors of higher education institutions, individual higher education institutions, their organisational sub-units, such as departments or research units, and their functional sub-units, such a study programmes, within the (national) system of higher education – homogenous or diverse? How does this configuration change over time? What are the causes for the degree of homogeneity or diversity at any point in time as well as for changes in this respect? What are the functional results of any given configuration, e.g. for the overall quality, relevance and efficiency of the results of teaching and research?

This does not mean that terms such as "diversity", "diversification", "differentiation", "homogeneity" etc. are employed in public debates and in research on higher education solely with regard to the institutional patterns of the higher education system. We note at least *six other directions* of references to the same family of terms:

1. Some authors refer to the diversity of administrative or organisational elements of the higher education institutions as well (see Birnbaum 1983; Huisman 1995);

2. Various analyses have put emphasis on the degree of homogeneity or diversity within higher education institutions and smaller units – a phenomenon called internal diversity by Huisman (1998) and *intra-institutional diversity* by Teichler (2006).

3. A major theme of debate and research always has been the *composition of the student body*, according to socio-biographic characteristics as well as to prior educational career and achievements, in institutional elements of the higher education system (types of higher education, individual institutions, fields of study etc.) (cf. the distinctions made by Ayalon and Yogev 2006). Studies in this domain are important as well for defining common elements or distinctions between diverse institutional units of higher education. The fact that socio-biographically advantaged students tend to be more strongly represented in the most prestigious sectors of the higher education system had led to perennial debate whether – in the process of diversification accompanying the expansion of higher education

- the less prestigious sectors of higher education could be viewed as serving primarily the opening or rather the closing of access for the less privileged parts of the population (see the study by Brennan and Naidoo in this project).

4. The dynamics of the *knowledge system* can be described as well in terms of diversity and homogeneity, new divisions and new integration. For example, Clark (1996) pointed at a continuous trend of diversification of disciplines.

5. In recent years, various analyses on diversity of higher education put emphasis on distinctions according to *ownership and control*. Notably, analyses of systems of higher education in Central and Eastern European countries (Tomusk 2003) as well as in Latin America, Africa and Asia underscore the role of private higher education as a clearly distinct sector from public education.

6. The US higher education researcher David Dill pointed out in various analyses the distinction between institutional diversity and *programme* diversity (e.g. Dill and Teixeira 2000). This distinction certainly is useful in predominantly unitary systems, e.g. the United Kingdom, or in countries where borderlines between institutional types are fuzzy, e.g. the United States, where distinct types of study programmes can be found in the same type of higher education institutions. In the majority of European countries, however, certain types of programmes were typical for certain types of institutions. Therefore, programme diversity is treated in this analysis as an integral part or at most a marginal supplement to institutional diversity.

Institutional patterns of the higher education system not only play an important role in analyses addressing primarily quantitative-structural aspects of higher education. Also analysis focusing on knowledge, processes of teaching, learning and research, students and staff as well as on organisational matters tend to include issues of institutional patterns .For example: Do we need varied modes of organisation and management in higher education in an expanded system of higher education characterised by institutional and functional diversity (see for example Hiroshima University 1997; Arimoto 1997; Bauer et al. 2000)? Is a system of substantial intra-institutional diversity combined with a low degree of inter-institutional diversity more, equally or less successful in terms of student achievements than a higher education system characterised by substantial inter-institutional diversity and a low degree of diversity within higher education institutions (cf. Hermanns, Teichler and Wasser 1983)? Is the diversification trend of the knowledge system the driv-

ing force for institutional diversity (cf. Clark 1996)? This study, however, focuses on diversity etc. in terms of institutional patterns and refers to the other discourses of diversity in higher education only as context factors of institutional patterns.

This choice to put emphasis on institutional aggregates in the analysis of diversity of higher education reflects the prevailing understanding. What is often overlooked, though, is the fact that the prevailing understanding is based on hidden assumptions which could be called into question. Notably, there is the hidden assumption that the quality and direction of what is learned and inquired is strongly influenced by institutional types and by local conditions of individual institutions or their sub-units. One could challenge this assumption by asking, for example, with respect to the vertical dimension of diversity: Does the quality of research of a scholar really depend to a considerable degree on the aggregate of her or his local colleagues? Do I have to choose a "good" university in order to improve the quality of my work? Similarly, does the academic progress of a student depend strongly on the choice of certain institutions or departments? These institutional claims notably might be viewed as inappropriate when students are mobile in their course of study or scholars in the course of their academic career: Does a German graduate writing in his CV "I studied in Göttingen, Tübingen, Wien, Zürich and Heidelberg" really hide very much, because he or she does not even mention the university he or she graduated from? What does the claim of a university means, that they have a nobel prize laureate, if this scholar moved through half a dozen or more universities and research institutes during his or her life course?

2.3 Classifications

Efforts to develop suitable categories for classifying the configuration of the higher education systems played a prominent role in the discourse on the diversity of higher education systems. Actually, we notice a bewildering variety of classifications (cf. notably the discussion in Teichler 1988; Scott 1996; Meek and Wood 1998). Trow's (1974) functional classification, i.e. a classification not explicitly referring to any institutional elements, became the most popular one, both, in the public policy discourse and in the discourse among higher education researchers:

- "elite",
- "mass" and
- "universal" higher education.

The concept often was misunderstood as characterising the different historical stages of the overall higher education system; in reality however, it refers to

a growing number of sectors of the higher education system: "elite" higher education is supplemented in the process of expansion by "mass" higher education and later additionally by "universal" higher education. Thereby, the division between the sectors corresponds – as a rule, but not necessarily – to an institutional division within the higher education system.

Birnbaum's (1983) classification of seven forms of diversity gained substantial popularity among higher education researchers and is often referred to in this domain (e.g. Meek and Wood 1998):

- systemic diversity (e.g. institutional types),
- structural diversity (organisational dimensions),
- programmatic diversity (e.g. curricula),
- procedural diversity (e.g. modes of teaching),
- reputation diversity (perceived differences in status and prestige),
- constituential diversity (e.g. types of students served) and
- values and climate diversity (internal cultural and social environment).

Teichler (1988) provided an overview of a bewildering diversity of terms employed by scholars, in the public debate notably in Europe and by international organisations. Terms were employed to describe institutional types in a general way, e.g.

- "short-cycle higher education" or "non-university higher education",
- "academic" vs. "vocational" higher education, or the overall configuration, e.g.
- "unitary systems", "binary systems" and "hierarchical systems",
- "multipurpose models", or "specialised models",
- "vertical systems",
- "elitist models",
- "comprehensive higher education systems", etc.

He refers to early efforts of classifying types of institutions and programmes (e.g. Cerych, Furth and Papadopoulus 1974) as well as to classify the motives and attitudes underlying institutional options, such as (Trow 1984, p. 157)

- the "meritocrats" versus the "egalitarians", and
- the "unitarians" versus "pluralists".

In this overview on classifications, it is argued that higher educational policies in Europe from the 1960s to the 1980s were characterised by a controversy on the scale from "diversified higher education" to "integrated higher education", whereby the former was most popular, but not as an extreme option, but rather moderated by the logic of a "soft system of higher education".

In recent accounts of institutional patterns of the higher education system, Teichler (1998, 2007) points out that national higher education systems are described concretely in most cases according to

- different *types of higher education institutions*,
- different *types of programmes* (e.g. academic vs. professional),
- various *levels of programmes* (e.g. sub-degree programmes, bachelor, master and doctoral programmes),
- variations in *reputation and prestige* within formally equal institutions or programmes, and occasionally according to
- different *substantive profiles* of institutions and study programmes.

In characterising the differences named, most actors and observers, according to Teichler,

- sort differences between institutional units to a varying extent *vertically* and *horizontally* and
- refer to a varying extent to *formal elements* (e.g. institutional types, levels of programmes, official functions of study programmes) and *informal elements* (e.g. "profiles", "reputation").

It might be added here that institutions of higher education can be classified according to characteristics not named above. The size of the institutions could be grouped according to the number of students and staff or the range of disciplines. In many European countries, for example, mono-disciplinary institutions tended to be viewed as clearly distinct from multi-disciplinary universities. Often the name "university" was reserved for multi-disciplinary universities while institutions with a small range of fields were called "colleges", "institute", "Hochschule", "academy", "polytechnica", etc. These distinctions, however, hardly played any role in the public debates on diversity of higher education in Europe in the latter half of the 20th century.

2.4 Patterns of a "System"

The analysis of the shape and the size of a "system" is relevant only, if higher education is viewed as a macro-societal entity. The term "system" is employed with regard to higher education not specifically by scholars advocating "system theory" but became a widely employed popular term expressing that higher education institutions have certain elements in common and interact to a certain degree while being less intertwined with other institutions, e.g. schools. Moreover, the term usually is employed for higher education of a whole country. Again, this implies that institutions of higher education within a country have much in common while differing significantly from institutions of higher education in other countries. This seems to be evident for countries where the major regulatory power for

higher education is the national government or other regular bodies on national bodies. But descriptions of national systems tend to be provided as well for countries where the regulatory powers rest predominantly on a regional level (in Europe in Germany, Switzerland, the United Kingdom and in some areas in Spain).

The idea of a "higher education system" was not strongly developed in many European countries before the 1960s. In many countries, the view that individual universities are part of a national system of the institutions emerged only after World War II: an understanding according to which universities are embedded into a *system;* the view, that the various persons and institutions which are considered as belonging to a higher education system have much in common, are interrelated, are positioned within a larger orbit, and are possibly treated as an entity by actors and social entities outside this system. And this social construct became more than a new understanding. It became a social reality. We noted, as Bleiklie (2005, p. 32) points it out, a "development whereby higher education institutions become part of formally defined higher education systems". Previously, the persons active in higher education and the higher education institutions could consider themselves more or less as singular entities with various loose linkages (to knowledge, to academia, to the government, to the nation, to the world) without any single of these references viewed as clearly dominant.

The terms characterising the system changed over time thereby claiming an *extension* of the range of the system: from a *university* system to *higher* education system and eventually *tertiary* education system. In most publications of the OECD in the 1960s, for instance, "university" still was the prevalent term. At that time the notion was dominant in many European countries that there was a certain number of universities; hardly any attention was paid to other institutions not equal to universities, and there was hardly any claim that universities and these institutions have much in common. But when the term "system" spreads, it mostly was linked with "higher education", and it implied the claim that there are universities and "other" higher education institutions: The universities are at the apex of the system (except for France), but they have something in common, and they are somewhat interrelated to other institutions of higher education. In the 1980s, international organisations, notably the OECD and UNESCO began to advocate the term "tertiary education" (cf. the change of terms in OECD 1974, 1983, 1998). One might argue, though, that the majority of OECD member states continue to define their system as "higher education system" and never developed a concept of a "tertiary education system". It should be noted that the extension of the view from predominantly addressing institutions in charge of both teaching and research ("university system") towards the inclusion of institutions solely in charge of teaching ("higher education system" and "tertiary education system"), implied a focus on the teaching function – an option against a possible alternative view of a "research system" comprising universities, public research institutions, R&D in industry, etc.

2.5 Sources of Information and Methods of Analysis

Analyses of national systems of higher education often describe the system according to official national classifications. In most European countries, types of institutions, types of study programmes and levels of study programmes are legally determined or otherwise officially regulated. The official statistics group the data either according to these categories and provide information to individual fields of study and groups of fields of study and possibly according to individual institutions of higher education. Even in countries where institutions of higher education are free to chose different degree titles and determine the length and the disciplinary composition of the individual study programmes, e.g. in the United Kingdom, the official statistics group the institutions and programmes in a similar way. Reliance on these official categories on the part of those analysing the system is customary in order to describe the official system characteristics and because information on the system according to other criteria hardly was available in most European countries until recently.

The classifications according to institutional types, types of programmes and level of programmes varied substantially between the European countries between the 1960s and 1990s. Among supra-national organisations the OECD was most active in classifying systems of higher education comparatively. On the one hand, various studies were undertaken to sort the institutional types and possibly programme types of higher education, beginning from the study on "short-cycle higher education" in the early 1970s (OECD 1973) to recent studies on "alternatives to universities" (OECD 1991; Grubb 2005), emphasising institutional and programme types. On the other hand, the statistical overviews annually provided in "Education at a Glance" and predecessor OECD publication provide information on the levels of study programmes and the length of required study. Scholars using the OECD material often take over these classifications. But the OECD often revised their schemes of classification, and some scholars using these materials try to regroup them or point out the limitations of the classifications provided.

Most official presentations within individual countries and supra-national governmental agencies point

out "formal" elements of diversity. Most of them do not provide information about the extent to which higher education systems are vertically diverse according the academic reputation, attractiveness for employers etc. or horizontally diverse according to "informal" profiles. In recent years, however, some national governments also moved towards indicator-based descriptions of higher education institutions, thereby sorting their higher education institutions vertically according to varied dimensions of "performance". In addition, various media and consulting firms published ranking list of universities. Altogether, the majority of academic analyses of the existing diversity of higher education relied on information organised by perspectives of actors and practitioners; they had few opportunities to collect information themselves not substantially shaped from the outset by formal relations, availability of information for administrative purposes and interests in "sexy" stories. Therefore, it cannot come as a surprise to note that scholars who have undertaken analyses in this area often point out the limitations of the available information, but have few opportunities themselves to overcome these limitations empirically.

However, conceptual frameworks have emerged over the years which provide certain general elements of a repertoire of analysing national systems of higher education. As a rule, scholars undertaking analyses in these areas make the following types of options and do the following steps:

- harbour a concept of a "higher education *system*", as a rule a national system of higher education;
- consider *institutional aggregates* as elements of the system, notably sectors of the higher education system (institutional ones such as types of higher education institutions or functional ones such as disciplines), higher education institutions, departments, basis units of research or study programmes;
- intend to establish a *"map" of the configuration of the system*, thereby naming, first, categories suitable to identify the *coordinates* of the system (e.g. "vertical" versus "horizontal" diversity, "institutional" versus "programme" diversity), second, establishing *the position of the* institutional *elements* and the extent they differ on the "map", and, third, analysing the institutional elements directly *with respect to the core functions* of higher education, notably teaching and research;
- aim to identify suitable *categories* to classify the institutional configuration of the system (e.g. "unitary systems", "integrated systems", "bifurcated systems");
- intend to establish the extent to which the overall system of higher education (or systems in comparative analyse) is characterised by a low and high *degree of (inter-institutional) diversity* (e.g. "stratified systems");
- aim to establish the appropriate and feasible functional *descriptors* for analysing the institutional elements (as a rule input, process and output elements of the teaching and research functions of higher education, e.g. socio-biographic background and educational attainment of entrant students, socio-biographic background and career of academic staff, curricular characteristics, "modes of delivery", careers of graduates, publications and other research outputs, research funds, etc.);
- examine the strengths and weaknesses of the *methods* of information collection and the actual data collected;
- try to identify in which way and to what extent *the appearance and the perception* of the system (e.g. "transparency", selective perceptions by the various actors, etc.) by the various actors have their own dynamics;
- intend to identify the *trends of system change*, e.g. "diversification"(!?);
- aim to explain the *causes* for the configuration of the system and causes for its changes (for instance according to the needs of society, characteristics of the knowledge system, the attitudes of the actors , politics, etc.), and
- deliberate the overall *functionality or dys-functionality* of the given configuration of the system.

In this framework, internationally comparative analysis and internationally comparative arguments, naturally, play a prominent role, because a higher education system is a macro-social entity and comparison, the key method employed to characterise any social phenomenon in order to understand this entity has to be internationally comparative.

3. Analyses of Institutional Patterns of Higher Education in Europe

3.1 Stages of Analyses and Debates

As already pointed out, the higher education system in Europe was challenged over the last few decades by concepts of a modern system of higher education which did not match the realities in most European countries. The question was on the agenda more or less constantly, whether the "modernisation" of higher education required a substantial change of the established patterns. Would European countries be most

successful in enhancing the quality, relevance and efficiency or successfully compete on a global scale if they opted for similar configurations of national higher education systems as the "mainstream," as the current arguments suggest, or would they be successful if they strengthened their characteristics, for example less stratified systems, as – according to currently fashionable business study jargons - "unique selling points"?

No matter how much these debates and developments actually were triggered externally or internally, we can argue on the basis on studies observing the European scene (Teichler 1988, 2004; Huisman 1998; Neave 2006) that the *debates and developments in Europe* regarding the institutional pattern of higher education underwent *three stages*, as will be specified below:

- a first stage from the 1960s to the mid or late 1970s, where virtues and problems of diversification according to sectors of the higher education system, notably types of higher education institutions and programmes, were the key issue;
- a second stage from the mid or late 1970s to about the mid-1990s, where more attention was paid to differences – notably "vertical differences" – among individual institutions or their institutional or functional sub-units (within the same sector of the higher education system);
- a third stage since about the mid-1990s, where institutional diversity is perceived as being embedded supra-nationally – globally and European – and where changes of the regulatory system are attributed a prominent influence.

The third stage, as will be pointed out, is characterised by a strong tension between advocacy of a steep hierarchy of higher education institutions in order to enable the top sectors of universities to compete globally for visibility, influence and quality, on the one hand and the call for a Europe convergence of national systems of higher education on the other hand, where stages of degrees play a major role and where opportunities for temporary student mobility among many partner institutions with a similar level of academic quality can be realised best if vertical diversity is kept in bounds.

3.2 Sectoral Diversity: The First Generation of European Approaches

Europe did not merely absorb "higher education", "system" and "diversity" perspectives in the 1960s and 1970s, but actors in Europe rather transformed the notions of a varied higher education system in various respects. First, *emphasis was placed*, in contrast to higher education debates on most other parts of the world, on:

- *formal elements* of diversity;
- *sectors of the higher education system* (e.g universities vs. polytechnics, IUTs, Fachhochschulen, HBO, AMK, etc., or "academic" versus "applied" programmes or teacher training vs. "regular" university programmes);
- a *clear mapping* of the system (which institutional aggregate belongs to what sector, what is "equal" or "equivalent" and what is "different" and "not equivalent");
- "*gold standards*" of quality;
- an acceptance of (only) a *moderate degree of vertical diversity*;
- *regulation* of variety in higher education through visible hands (legislation, approval, rights of access and transfer, international conventions, etc.) (cf. for instance van Vught 1996).

To be sure: There are also elements of formality, mapping, standards in regulations in other systems outside Europe: for example in the US institutional and professional accreditation, standardised levels of study programmes and degrees, the Carnegie Classification of higher education institutions since 1970. But these elements were never conceived in most countries outside Europe to be as strong as in Europe.

The limited role types of institutions and programmes played in concepts on institutional patterns presented by higher education researchers from outside Europe can be demonstrated with three prominent cases. Martin Trow (1970, 1974) interpreted diversity in functional sectors, not institutional sectors: elite higher education, mass higher education, universal higher education. In looking at the European scene, Trow (1979) later pointed out that politics in Europe did not accept the logic of expansion and diversification, but counteracted deliberately and in a targeted manner that – according to his view – was functionally detrimental. Burton Clark (1976) characterised the strength of the US higher education as compared to other countries as "benefits of disorder" and repeated in the early 1990s that "we should grant greater legitimacy to disorder. … Even our basic imagery of 'organisation' and 'system' lead us to expect simplicity – simplicity that must be there and can be found and expressed in a formula or two if we are only intelligent enough. Meanwhile, academic reality increasingly exhibits inordinate and uncommon complexity …" (Clark 1996, p. 21). Finally, Philip G. Altbach (1998, 1999), in his efforts to explain major dynamics of higher education in the world and the "logic of mass higher education" underscores "diversification", does not mention at all types of higher education institution as a major dimension of diversification. In later publications (for example Altbach 2002), he points out that the Carnegie classification from the 1970s to the 1990s clearly differed in its

function from types of higher education institutions on the one hand and from ranking of individual institutions on the other hand.

This does not mean, however, that a perfectly "mapped" system of higher education was viewed in Europe as an ideal. The OECD, in playing a major role of stimulating and moderating the international expert and policy debate on changing systems of higher education in the process of expansion, advocated a "soft" system of higher education without too clear borderlines and with permeability for the students (according to Teichler 1988). Ironically, though, the maps of the higher education systems seem to have changed more quickly in Europe than in the US and in Japan. Because the maps in Europe always put the universities as the top standard and mark the others according their degree of similarity or difference to the universities, this triggered constant collective efforts by non-university higher education to be redefined in respect to the universities and thus often triggered collective mobility of sectors. In the US and Japan, in contrast, the maps of institutions, sectors, levels of programmes etc. remained more stable, while dynamics were visible in terms of individual mobility of individual institutions, departments, programmes etc. from one sector or one stratum to another, as a rule a higher one.

It should be pointed out as well that the absorption of the notions of "system", "higher education" and "diversity" in the 1960s and 1970s in Europe was *not* accompanied by *a generally positive attitude towards a substantial expansion of higher education*. Expansion of higher education remained a controversial issue in Europe, and critiques tended to point out that it leads to a general dilution of quality in higher education as well as to increasing mismatches on the labour market. Only in the course of higher education expansion in many countries since about 1985, the mood seemed to have changed generally during the 1990s in favour of highly expanded tertiary systems (see OECD 1998).

Actually, the patterns of the higher education system and the "diversity" issue were *debated in Europe more vividly and controversially than in other parts of the world*. And stronger efforts were made again and again to revamp the patterns of the higher education systems and thereby also the logic of the system. The "modernisation" claim inherent in the "expansion and diversification" argument was not univocally accepted. Rather, one could notice, as Teichler (1988) argued, concurrently "modernisation" arguments, "idiosyncratic arguments" (this is the strength of our national tradition, this fits to our culture and society, etc.) and "political arguments" (e.g. do we want strengthen a segmentation between "elites" and "masses", or do we want higher education help reducing social inequities?) played a role.

Most attention was paid in Europe certainly in the 1960s and 1970s, both in discourse and political action, on a single dimension of diversification which might be called "institutional", "inter-institutional" or, as termed by Neave (2006, p. 245), "sectoral segmentation". In this framework, the establishment of different types of higher education institutions was viewed the single most important dimension and was valued as the single most desirable dimension of diversification. The establishment of the Polytechnics in Britain in the early 1960s, the Instituts universitaires de technologie in France in the mid-sixties and the German Fachhochschulen around 1970 are often referred to as the most visible reforms towards a "binary", "bifurcated" or "two-type" higher education system. But there are other countries as well, for example Norway, in overviews of reforms trends of that time (cf. Furth 1973; de Moor 1979; Cerych and Sabatier 1986; Teichler 1988, Jallade 1989).

The popularity of this two-type model was primarily clearly based on the assumption that expansion of higher education could be accommodated with moderate changes for the universities through the establishment of another sector with different curricular thrusts, an intake of new student groups and lower unit costs per student and graduate. This might be viewed as the European interpretation of Trow's distinction between "elite" and "mass" higher education. It implied that the key carrier of a "mission" – in order to employ the currently popular religious jargon – of higher education is the institutional type and not, as in the US, the individual higher education institution.

This does not mean, however, that a two-type system met everywhere in Europe with enthusiasm. Some European countries preferred to keep their "unitary system" or their diversification by levels of programmes. Most universities considered the establishment of a second type as a threat to reduce the provision of public funds to universities. A major debate emerged whether this new type of higher education serves a lower level of students' competences, intellectual rigor of study programmes and credentials, or whether these institutions are "different, but equal" (see Ahola 2006) in emphasising professional preparation more strongly than universities. Moreover, "integrated" and "comprehensive university" concepts became popular in some countries, notably Germany and Sweden, aiming at increasing the intra-institutional diversity, i.e. to serve a broad range of students through a range of curricular philosophies under a single institutional roof instead of separating the diversifying students and the curricular approaches according to institutional types (Hermanns, Teichler and Wasser, 1983). Yet, diversification of higher education according to institutional sectors became the most widely accepted diversifica-

tion strategy in higher education in Europe from the 1960s until at least the early 1980s.

Discourse and actions as regards the diversity issue differed in Europe from those the US in one other respect very clearly for many years. Whereas, from the European point of view, an extreme degree of vertical institutional variety was accepted in the US, only a moderate vertical diversity was desired in Europe. Countries such as Germany and Netherlands ensured in various ways a similar level of quality across the universities. And countries accepting a certain degree of vertical diversity such as Britain and France still had strong mechanisms to keep quality differences in limits: for example through the national selection of candidates suitable for a university professorship in France.

While in the US institutional accreditation is expected to provide a minimum standard in a highly stratified system, we could identify notions of a *"gold standard"* of higher education in the various European countries. This neither means a common quality across the system nor the minimum in a steep hierarchy, but a normal standard one can trust as widely applicable. For example, governments in various countries trust that a university degree indicates, as a rule, the entry qualification for the highest level of civil service careers; and in many European countries, a university degree implies an "effectus civilis": The right to embark on a career and practice in related professional areas (see Jablonska-Skinder and Teichler 1992).

3.3 Moderate Stratification: The Second Generation of European Approaches

Over the years, as will be discussed below, diversification by institutional type lost its prominent status in debates and actions with regard to the diversity issue all over Europe. First, increasing attention was paid to differences among universities and among institutions of other types in the late 1970s and in the 1980s. When the British polytechnics were upgraded to universities in 1992, some experts expected a rapid end of the other two-type models. But various Western European countries newly established two-type systems in the 1990s (e.g. Austria, Finland and Switzerland, and the Central and Eastern European countries opted for various models (Hennessey et al. 1998). When European governments agreed in the late 1990s to establish a staged system of study programmes and degrees all over Europe, types of higher education definitely became a subordinate dimension of diversification. This notwithstanding, different types of higher education institutions continued to play a more important role in Europe than in other parts of the world (cf. Huisman and Kaiser 2001; Kyvik 2004; EURYDICE 2005). Institutional sectors of higher education did not become marginal,

but rather one dimension of diversity in an increasingly complex setting.

In Europe, the shift of the prime focus from diversification of higher education systems through institutional types towards vertical diversification through reputation hierarchies of individual universities and their sub-units began already in the mid-1970s and was clearly visible in the 1980s (see Teichler 1988; Neave 2006). There was a clear normative trend, even though fundamental controversies never ceased around the desirable extent and modes of diversity.

We can explain this shift of emphasis, first, as a normal process in the wake of expansion of higher education, as the "expansion and diversification argument" discussed below. When the quota of students and graduates from higher education among the corresponding age group grows, but the hierarchy of professional ranks does not flatten correspondingly, small differences of educational attainment and credentials, such as small reputation differences between universities, are likely to have more substantial social implications than before (see Teichler, Hartung and Nuthmann 1980; cf. also Fulton, Gordon and Williams 1982) under normal conditions of an educational meritocracy and even more under conditions of a society exaggerating the value of credentials (Dore 1976; Collins 1979). From this analytical insight, it is only one step towards action in terms of increasing the status differences between institutes (of the same institutional type) through respective information and funding policies. The introduction of a Research Assessment Exercise and the highly differential distribution of research funds to universities introduced in Britain in the mid-1980s was the most visible step in this direction in Europe during that era.

But one could notice, second, a change of the socio-political climate surrounding higher education during that period as well. The widespread hopes faded that a social opening and expansion the advanced levels of education would reduce inequities of educational achievement (cf. Husén 1987). The "oil shock" of 1973 contributed to spreading pessimism as regards the economic and social value of higher education expansion and underscored that some of the growing number of graduates will be the winners and other the losers with respect to subsequent career).

Third, sectoral diversification did not turn out to be such a successful strategy that it was hailed in Europe as convincing model. It did not become a well established ideology in an similar way as the majority of American experts and actors tend to believe in the appropriateness of the virtue of the US model of diversity.

- Cerych and Sabatier (1986) pointed out that key higher education reforms in Europe, among them

prominently those affecting the patterns of the higher education systems, changed the higher education system less than expected. It was not possible to establish the extent to which the "mixed performance" of reform efforts was due to wrong "theories of the actors" about the consequences of such reforms, to problems typical for implementation processes or to changes in the socio-political context.

• In addition, the policy of establishing a second higher education was "woefully unsubstantiated" (Neave 2006, p. 246) as far as the underlying assumptions of youth educational choices, competences and job prospects were concerned. The second type of higher education neither 'served to deflect the bulk of rising student demand away from the universities' nor was a consistent alternative to the universities in terms of a clearly distinct level or student profile of those opting for the institution, clearly distinct curricular profile and a clearly distinct labour segment it served. Rather there was so much overlap of the educational functions of the two types that a clear superiority of other patterns of higher education systems did not become visible.

• Moreover, the second sector of the higher education system did not turn out to be a stable institutional unit. Though officially often defined as "different, but equal", the sector tended to be viewed as the "less noble" one, and the managers and academics of the sector favoured strategies to become more similar to the universities. Such a phenomenon of "academic drift" (Burgess 1972, Neave 1989) was already analyzed a long time ago in more steeply stratified systems than the European ones, for example in the US (Riesman 1958), but in the case of the two-types systems, we constantly noted efforts of "collective mobility" of the second type of higher education and thus an endemic instability of the whole pattern of the higher education system.

Fourth, we noted already a gradual change of the regulatory philosophies in various European countries. In countries, where government had played a strong coordination and supervisory role, it moved towards stronger target-setting, less detailed supervision and evaluation both as an instrument of improvement and feedback for political priority decisions. And in Britain, where government had pursued a less interventionist policy in the past than in most other European countries, a similar policy of evaluation-informed priority setting emerged. Thus, individual institutions were led by the changing socio-political environment to compete for research funds and students and thereby to

underscore their distinctiveness or to imitate the more successful ones.

"Vertical" differences between individual universities, mostly subdivided according to disciplines, became the focus of attention. This was most obvious in Britain. The decision in the mid-1980s to introduce Research Assessment Exercises and to fund research at universities more specifically than before according their research performance created ample opportunities to establish or reinforce "league tables" of universities. Also, the presentation of results of regular graduate surveys in the form of "league tables" attracted public attention.

But also in a country, where "vertical differences" between universities tended to be substantially smaller than in the UK, i.e. Germany, heated debates emerged in the late 1970s and persist up to the present about the extent to which the higher education system is vertically stratified. Available information shows that a certain degree of vertical differences already existed for a long time, but the differences remained small in international comparison, as far as graduate careers' and acquisition of research grants are concerned (see Neusel and Teichler 1986; Teichler 2005). But the public debate hardly was influenced by evidence. Rather, a public myth emerged that the quality differences between universities had dramatically increased since the 1970s; and biased presentations of data often put forward in order to support the argument of a highly stratified system. Last but not least, the public debate did not show any sympathy for vertical diversity as a means to serve different tasks with different profiles and levels, but rather to blame the less successful universities.

In analysing the debates about the extent to which universities in the various European countries were differed vertically and what degree of vertical differences was desirable, we certainly noticed that the public discourse in the 1980s and 1990s predominantly perceived an increase of vertical diversity and considered such an increase as desirable. Only by comparing realities and debates in Europe with realities and debates in countries with more steeply "hierarchical" or "stratified" systems, such the US and Japan, we notice that clearly less steep vertical differences were observed and viewed as desirable.

3.4 Global Competition for Work Class Status or an Open European Higher Education Area: The Third Generation of European Approaches

In the 1990s, a third generation of approaches in Europe to the issue of institutional variety among higher education institutions began to emerge. Interestingly

enough, the descriptions of higher education in this new area are more homogeneous as regards the factors relevant for the institutional development of higher education systems than the actual institutional patterns themselves. Altogether, there seems to be consensus among experts that a broader range of underlying forces has to be taken into consideration in order to explain changes of the institutional patterns. Second, many of the relevant factors might be called external factors to the higher education system.

We notice a further growth of student enrolment. Entry rates in tertiary education increased on average among European member states of the OECD for which data for a time series are available, from about 40 % in the early 1990s to more than 60 % in 2003 (see OECD 1993, 2005). This certainly again, as in the previous decades, reinforced the issue of how much the expansion as such calls for increased diversity given the talents, aspirations and job prospects of graduates, and how compatible needs are for teaching and for research under conditions of increasing pressures for financial efficiency.

Actually, however, as it was pointed out by experts analyzing this theme at a European workshop in the framework of the Unesco Forum on Higher Education, Research and Knowledge, five factors were paid more attention than the expansion both in discourses among higher education researchers and in public debates about pressures for a restructuring of the institutional patterns of the higher education system (see Bleiklie 2005; Guri-Rosenblit and Sebkova 2006; Teichler 2006):
- growing international cooperation and mobility;
- globalisation;
- new steering and management systems;
- moves towards a knowledge society and
- new media.

International cooperation and mobility: Student mobility, staff mobility and cooperation among scholars and institutions as well as knowledge transfer across borders increased in Europe gradually over the years. But in the 1990s, we noted more than a gradual change.
- Promotion schemes for intra-European mobility and cooperation, among them most visibly the ERASMUS programme for temporary student mobility were so successful that study abroad was not viewed anymore as an exotic choice, but as one of the normal options. Moreover, institutions of higher education began to consider their international activities as a key issue of their institutional strategies. International activities were reflected as regards their consequences for the institution as a whole, and overall institutional

policies now were always assessed and formed with respect to their implication for the international role of the institution (see Huisman and van der Wende 2005).
- Ministers in charge of higher education from most European countries agreed to establish a convergent system of study programmes and degrees in Europe. The establishment of a staged system of study programmes and degrees in the framework of the so-called Bologna Process has far-reaching implications for the institutional patterns of the higher education system. First, a system of stages of study programmes rather than one major type of programme within each institution is bound to increase intra-institutional diversity and to create an increasing overlap between the functions of the different types of higher education institutions existing in a substantial number of European countries. Second, the new structure was advocated in order to enhance the attractiveness of higher education in (continental) European countries for students from other parts of the world and to facilitate the mobility of students within Europe. Whereas the former aim might only call for improved transparency but seems to be neutral as far as the extent of diversity is concerned, the latter aim implies that quality differences between higher education systems have to be kept within bounds (see for example Amaral 2001; Bleiklie 2001; Rakic 2001; Neave 2002; van der Wende 2001; Fejes 2006). This is obvious, because mobility within European countries can be facilitated through convergent structures only if trust is justified that the quality of teaching and learning and the quality of the substance of curricula are similar at the same stage of study programmes among most institutions of higher education in Europe.

Globalisation: In recent years, the term "globalisation" surpassed the term "internationalisation" in the frequency employed in economically advanced countries to characterise cross-national changes of both contexts of higher education and higher education systems themselves (see Enders and Fulton 2002; Huisman and van der Wende 2004). The term globalisation suggests that increasing border-crossing activities in higher education are linked to a blurring of borders, while internationalisation might be based on the assumption that national systems continue to play a prominent role in the process of increasing border-crossing activities. Moreover, the term globalisation is used in this context to underscore that higher education is increasingly affected by worldwide economic developments which weaken national regulation, put a stronger emphasis on market mechanisms in most

spheres of life and challenges the strongest institutional units in many spheres of life to strengthen their position as "global players" (see Teichler 2006).

Globalisation concepts of this type suggest that relatively steep vertical diversification of the institutional pattern of higher education systems is desirable. No clear position is taken in most arguments whether such a trend towards steeper stratification is accompanied by increasing horizontal variety, because attention is paid mostly to the vertical dimension. Often, a pre-stabilised harmony seems to be taken for granted between quality and relevance in the elite sector of higher education in the 21st century.

New steering and management system: A substantial change of the steering and management modes in higher education are underway in Europe, starting in some European countries already in the 1980s and affecting others as well in the 1990s. Governments in most European countries reduced detailed bureaucratic controls, in some respects towards deregulation and in other respects towards stronger target setting, but at any event towards stronger output assessment, among others as feedback for target setting and resource allocation. Within institutions of higher education, the executive power of presidents, deans etc. is strengthened vis-à-vis academic self-administration or participatory models of decision making, and individual institutions of higher education have more leeway for strategic options. In this framework, mechanisms of incentives and sanctions are strengthened, in some respects also market mechanisms, and various modes of performance assessment (evaluation systems, indicator-based funding, accreditation etc.) are strengthened as a mix of feedback for improvement and control.

It is generally assumed that the new mechanisms of steering and management might have a substantial impact on the institutional patterns of the higher education system (e.g. Bleiklie 2005). Some experts and actors claim that the change of the regulatory systems contributes both to increasing vertical and horizontal diversity. Others expect primarily increasing vertical changes: a further hierarchisation or stratification. Others point at other possible impacts the consequences of which for the institutional patterns of the higher education system are less clear.

Moves toward a knowledge society: Most experts agree that the concept of a "knowledge society" is one of the most appropriate future scenarios of society when considering the challenges of higher education and the opportunities ahead. Consensus prevails that knowledge will determine economic growth and societal well-being to an increasing extent.

A close look at the public debates and expert literature suggests that knowledge society is a concept obviously relevant for institutional patterns of the higher education system but not really suitable for predicting certain directions of change of the institutional patterns. On the one hand, we notice elitist notions of knowledge society: the intellectual elite will determine the development of the knowledge society, and those who succeed in breeding and attracting elite will be the rulers of the knowledge society. On the other hand, we notice egalitarian notions of the knowledge society: the economic success and societal well-being will depend on large numbers of individuals with in-depth knowledge and understanding and with ability to take reasonable decisions in decentralised settings. It is generally assumed that pressures for visible societal relevance of research in higher education and graduates' competences will be increasing on the way to the knowledge society. This might increase institutional hierarchies but it might also shake the established hierarchies and the vertical stratification if competing paradigms to the classical academic paradigms (see Gibbons et al. 1994) get more important and if immediate useful knowledge, traditionally advocated by higher education institutions not in high esteem as far as academic reputation is concerned, gets momentum.

New media: Experts point out that the new information and communication technology has an enormous potential for changing academic concepts and research methods, modes of teaching and programme delivery, trans-national education, international cooperation of researchers, and ways of dissemination of knowledge. Obviously, again, these changes are highly relevant for the institutional patterns of the higher education system.

Again, our knowledge base is shaky as far as the impact of new information and communication technology on the institutional pattern is concerned. One may point at successful ways of disseminating knowledge generated at elite institutions of higher education to students at other institutions, but actually academically less reputed establishments are more active in disseminating teaching through new media. ICT also facilitates communication between individual scholars across the globe and thus makes them less dependent than in the past on local facilities and peers, thus possibly weakening the influence of the individual institution in determining the research and educational success of individual scholars and students.

Altogether, the third generation of debates and reform efforts in Europe as regards the institutional patterns of the higher education system is most strongly shaped by the interest of having "world-class universities" (cf. various contributions in Sadlak and Cai 2007). This implies three imperatives:

- The national higher education systems in Europe should be more strongly vertically stratified than in the past.
- Success at the apex of the system is more important than ever before.
- At the apex of the system, the institutions do not play anymore in "national leagues", but rather – to continue the vocabulary of sports – in a "champions' league".

In addition, the third generation of debates and reforms is strongly characterised by the claim that each institution consider itself to be in fierce competition with other institutions and opts for institutional strategies of positioning itself in a more targeted manner on the map of institutional diversity within the (national and possibly) global higher education system. Thereby, obviously, a strong emphasis is placed on the vertical dimension of diversity. And it is widely assumed that the overall effect of these activities is an increase of diversity, notably vertical diversity, and that this would be beneficial for the overall quality, relevance and efficiency of higher education.

But, we concurrently notice a multitude of observations which challenges the view both of a trend towards steeper stratification and of beneficial impact of further stratification. Moreover, doubt is often raised that the increased efforts of restructuring higher education by fuelling fierce competition between the individual institutions of higher education lead to the desired results. Some of these counter-observations and counter-arguments to the prevailing "Zeitgeist" of "competition and stratification" might be enumerated:

- In contrast to the assumption that the top has to be the global player league, while middle-ranking institutions should have a national focus and lower-ranking institutions a regional focus, the globally, nationally and regionally directed activities become more closely intertwined.
- The competitive behaviour of the institutions of higher education does not lead to steeper vertical diversity, but rather to a - more or less - continuation of old patterns or to a second "league" getting closer to the first one.
- The competitive behaviour of the institutions leads to a distortion of quality.
- There are increasing calls for new supra-institutional steering devices to counteract the dysfunctions of a system steered by the sum of individual institutional strategies, for example regional networks in order to agree on regional division of labour, state interventions to protect tasks overlooked by the individual institutions, etc.
- A race for quality differences affects only the apex of the system where other parts of the system are not affected or might be even characterised by a lowering vertical diversity.
- The maps of diversity as regards the research function and the teaching function of higher education become increasingly dissociated.
- The Bologna Process leads to an increasing overlap of the functions of universities and other institutions of higher education and thus to de-diversification of the higher education systems.
- The spread of the Bachelor-Master-structure predominantly increases intra-institutional diversity.
- Efforts to create convergent patterns of study-programmes in Europe in order to facilitate intra-European mobility are aimed at keeping vertical differences in bounds.
- The students' educational profiles and the scholars' research opportunities, as a consequence of increasing mobility, cooperation and rapid knowledge transfer are less and less determined by the position of their home institution on the map.
- Information systems claiming to contribute to increasing "transparency" of the institutional patterns of the higher education systems and to have the long-term effect of contributing an increased quality, relevance and efficiency of higher education through a steeper vertical division of tasks between the individual higher education system do not serve their presumed purposes. Rather, they unintentionally or intentionally put a biased pressure on the system to gear itself to certain ideologies, they operate with poor and biased data, and as far as they are successful, create overall more harm to the quality, relevance and efficiency of the system. Altogether, wrong advertisement and intransparency grows.

The so-called *Bologna-Process* deserves special attention in this context because it is certainly the politically most powerful campaign ever experienced in Europe to develop the patterns of the higher education system similarly across European countries. In May 1988, the ministers in charge of higher education in France, Germany, Italy and the United Kingdom signed jointly the so-called Sorbonne Declaration calling for the "harmonisation of the architecture of the European system of higher education". It stated that "a system, in which two main cycles, undergraduate and graduate, should be recognised for international comparison and equivalence, seem to emerge". In 1999, ministers from about 30 European countries signed the Bologna Declaration. "Greater compatibility and comparability of the systems of higher education" should be reached through the "adoption of a system essentially based on two main cycles, undergraduate and graduate.

Access to the second cycle shall require successful completion of first-cycle studies, lasting a minimum of three years. The degree awarded after the first cycle shall also be relevant to the European labour market as an appropriate level of qualification." The Bologna Declaration and subsequent official and semi-official conferences point out that the introduction of such a convergent stage model of study programmes and degrees across Europe should contribute primarily to make European higher education more attractive for students from other parts of the world and to facilitate intra-European student mobility. The latter aim obviously could be realised in the best possible way, if vertical stratification within Europe was kept in bound thereby offering students the options of choosing among a high number of institutions without endangering the recognition of achievements during a temporary study period abroad upon return (see Teichler 2007; the actual development of the Bologna Process is analysed in Haug and Tauch 2001; Alesi et al. 2005; Reichert and Tauch 2003, 2005).

The so-called *Lisbon Process* seems to lend more support to vertical diversification of higher education. The European heads of governments had called in for an increase of public research expenditure in the European Union to a level of three percent of the GDP in order to make Europe "the most competitive economy of the world". The subsequent documents clearly underscore the belief that success in cutting-edge science and technology would be instrumental for the future of the economy, thus turning attention to top universities and other research or R&D institutions as crucial for the "knowledge economy" (cf. for example European Commission 2003, 2005a, 2005b). Some experts consider the basic philosophy of the Bologna process and the Lisbon Process to be clearly contradictory as regards vertical diversity (e.g. van Vught, van der Wende and Westerheijden 2002). But the subsequent communiqués by the European Commission do not recommend clear stratification strategies, but rather efforts to strive for improvement of quality across the higher education systems.

Altogether, in spite of the dominant political tone of praising increasing "vertical diversity" in this third stage of development of higher education systems in Europe, we have reasons to believe that the actual effects of mechanisms aimed at restructuring the institutional patterns of the higher education systems seem to be less consistent than it advocates want to achieve and believe they have reached. Altogether, we know less than ever before how the actual patterns develop, because of an increasing range of relevant factors and, together with an increase of relevant information, a less consistent picture of any pattern is emerging.

4. Analysing Institutional Patterns: Between Theory and Deliberate Distortions

4.1 The Biased Discourse

One could argue, however, that the "diversity" debate in Europe triggered by the US had a strong analytical and normative bias from the outset in favour of "a high extent of diversity is beautiful". There was a widely held view among academics and other actors that a high-quality sector of universities should be protected from all other possible developments, even if the US notion of the virtues of a highly diversified system were not really shared. Hierarchical or stratified models just happened to get more popular over the years, because opposing models were advocated forcefully as time went by. I dare to describe the increasingly dominating views of the 1980s and 1990s as biased, because they were often characterised by conscious or unconscious preferences which were not open to evidence-based discourse at all.

First, the analyses and debates in this domain were and continue to be *terminologically biased*. As a rule, one talks about "diversity" as the end of a scale without any or at most with a fuzzy concept of how to name the opposite end of the scale (e.g. "homogeneity", "intra-institutional diversity" etc.); the terminology seems to preclude any alternatives. In addition, one uses the term "diversification" to claim a clear trend towards examining whether moves into other directions could take place as well. Further, one clearly opts for a certain term as the end of the scale without any discourse whether a different term could be appropriate such as the widely used term "differentiation" in discourses about school education.

Second, the debates and analyses in this domain are *biased dimensionally*. Emphasis is based, in Europe more than in the US, on the vertical dimension; the horizontal dimension often is overlooked or considered marginal. While horizontal diversity (for example curricular thrusts and varied research paradigms) tends to be viewed as fuzzy, vertical diversity is "sexy". It arouses all sorts of emotions as regards "elite", "excellence" and quality" versus failure, thus not only legitimising the winners, but also stigmatising those not on the top and even calling into question the appropriateness of a vertically diversified system: Cut the lower half.

Third, as already implied in the descriptions above, the debates and analyses are *biased normatively*. The arguments tend to present as increasing institutional diversity as the only reasonable way to cope with the increasingly complex tasks of the overall higher edu-

cation system and that any other option is an enemy of proper functioning of higher education.

Fourth, debates in this domain are *biased by a polarised perspective* (like peace and war, pregnant or not pregnant): Since you cannot realize homogeneity, diversity is appropriate, and this is claimed to be a clear hierarchical or stratified system.

Fifth, there is, as already pointed out, the *institutional aggregate bias*: The quality of teaching, learning and research of individual scholars and students is strongly dependent on the average quality of other persons around and the local institutional environment.

4.2 Key Arguments Regarding the Strengths and Weaknesses of Variety

The mainstream of arguments in favour of a *considerably high degree of vertical inter-institutional diversity in higher education* are the following six ones:

- *Institutional diversity as mirror of diversity of the students:* An inter-institutionally higher diversified system mirrors the diversity of the students' higher abilities, competences and job prospects.
- *Better learning in homogeneous environment:* Higher education serves all its functions better within a relatively homogeneous intra-institutional setting, i.e. relatively high homogeneity of the student body and of the academic staff within departments.
- *Holistic and cross-departmentally fertilising institution:* A similar quality and profiles within an institution of higher education across departments is beneficial. The quality, relevance and efficiency of teaching/learning, research and other functions is strongly influenced by cross-departmental fertilisation as well as by the joint management and the joint institutional "helo".
- *Quality on top requires austerity at the bottom:* The top segment of higher education, which often is claimed to be more valuable than any other segment, does not only need protection from other environments, as pointed out above, but also a privilege of resources. This can be secured under given constraints only if the system is highly stratified.
- *Less demand for research than teaching staff:* A differentiation between research and teaching universities reflects the fact that the knowledge system and society need more teaching personnel than research personnel in higher education. This differential need is served best through inter-institutional diversification, because otherwise we would face a "research drift".
- *Highly stratified research quality:* Quality differences in higher education as regards research

are often viewed to be more striking than quality differences regarding teaching.
- *Motivation through inequality:* Highest efforts and eventually highest achievements can be reached by substantially unequal rewards. Inter-institutional diversity is an efficient mechanism of ensuring unequal rewards.

The "diversification" argument often is presented in such a way that an *ever-increasing diversity is most beneficial* because the higher the extent of diversity the higher the typical benefits of diversity would be. This argument is questionable in two respects:

1. There is much evidence of a danger of "over-diversification"
2. There are also claims that higher education can offer more quality, relevance and efficiency through "moderate diversity" or through emphasis on "intra-institutional diversity" than through "inter-institutional diversity".

The *danger of "over-diversification"*:
- *Extreme competition* for admission to the most highly reputed universities is educationally and psychologically *destructive* in many respects.
- A modern knowledge society needs a relatively high level of "mass graduates"; i.e. independent and responsible persons taking over demanding work tasks across a broad spectrum of functions. This is endangered by an over-concentration on the educated elite.
- Extreme diversification contradicts efforts to offer opportunities for socio-biographically disadvantaged groups and for persons not following traditional education careers. Thus, it contributes to social exclusion.
- Extreme diversification discourages, undermines and endangers horizontal diversity both regarding teaching and research, because too many institutions and scholars aim to copy the elite.
- In total, extreme diversity produces more discouragement and demoralisation for large numbers of scholars and students than possible mobilisation for desirable results.

Advocates of increased diversification in relatively homogeneous systems of higher education in various European countries often argue, by pointing at existing phenomena of diversity of the system, that the homogeneity is a fake and therefore the system should move towards extreme diversity.

This is a misleading argument in various respects:
- Nobody from these countries has ever argued that there is no inter-institutional differentiation at all. For example, a considerable number of respec-

tive analysis have been undertaken in Germany for decades indicating a considerable horizontal and vertical diversity; this was notably relevant for academic careers but it did not call into question student mobility between universities during the course of study and did not call into question relatively open job opportunities for graduates from any university.

- It certainly makes a difference, whether scholars in one country at the reputational bottom quarter of universities have at hand about half of the resources for research and half of the research output of that of the top quarter or whether scholars in another country have less than 5 percent of the resources and less than 5 percent of the output. It also makes a difference whether a student from less highly reputed institution has a slightly lesser chance to be recruited to attractive starting position or whether many of them are more or less excluded from the beginning because they came from a wrong institution.

- A moderate degree of diversity can serve as a "creative myth": You can trust the competence of most graduates. You support those not successful to increase success, and this works better than under conditions where extreme diversity is on the agenda.

It is generally assumed that *a completely homogeneous higher education system* cannot work. But such a model *had never existed*. One can only ask whether those advocating an increasing stratification have such weak arguments that they have to invent such a non-existent alternative to justify their arguments.

If there was a real interest in examining strengths and weaknesses rather than claiming a single option, one would ask: What are the strength of moderate diversity? And: What are the strengths of a strong role of intra-institutional diversity instead of a strong role of inter-institutional diversity? Thereafter, one can compare the strengths and weaknesses of these models with models of substantial and extreme vertical inter-institutional diversity.

The most frequent *arguments in favour of moderate inter-institutional diversity and for a stronger role of intra-institutional diversity* than of inter-institutional diversity:

- Students are more strongly motivated and learn more successfully under conditions of a certain diversity of peers than within a relatively homogeneous pool of peers.
- Good advice to students, good encouragement and good supervision of their work does not depend on a good academic average of the teachers in the department, but on contact with

some teachers. Therefore, a less stratified system offers substantially more qualitatively demanding study opportunities than a system in which a high quality of academics is concentrated in a few universities.

- A moderately diversified system does not exclude large numbers of students from high quality programmes already prior to enrolment. It is open for students who get motivated and increase achievement while being enrolled.
- A moderately diversified system serves regional opportunities: Good study opportunities are better distributed across all regions, and good graduates are "delivered" to all regions.
- Students have broader opportunities to be mobile during the course of study to other institutions of higher education in the same country or other countries.
- A university degree can be viewed to a certain extent as a "gold standard", as traditions such as "effectus civilis" or recruitment by the public sector on the basis of "grades" rather than the university of origin have emphasized.
- Many individual universities can opt for ensuring a high quality of some departments while accepting an average quality in other departments without causing any disadvantage for the former departments. Also successful scholars active in a less highly reputed university are not discouraged and do not have to fear any disadvantage as a consequence of their institutional membership.

Available knowledge suggests that there is a scylla of "over-diversification" and a charybdis of "over-homogenisation". But within a broad zone between high and low vertical inter-institutional diversity and between the options of a high degree of inter-institutional diversity or of intra-intra-institutional diversity, we notice more claims, myths and strong beliefs than evidence of the superiority of certain models.

Altogether, we notice at first glance that the popular debate concentrates strongly on vertical inter-institutional diversity. A more in-depth study of the debates, however shows that views about the desirable diversity, differ substantially "in various respects: (a) what range of heterogeneity or homogeneity was preferable; (b) to what extent diversity should be arranged inter-institutionally or intra-institutionally; (c) how clearly differences should be demarcated or soft and blurred; to what extent diversity was best served by formal elements of diversification …; and (e) whether diversity prevails predominantly according to the vertical dimension … or whether horizontal differentiation … plays a role as well" (Teichler 2006).

4.3 Rankings and League Tables: A Politicised (In-)Transparency Game

In various countries, we note recent efforts of measuring the vertical diversity of higher education by means of producing ranking lists of institutions of higher education or their sub-units. Various available data are used as indicators or are gathered for this purpose in order to create rankings lists according to research "quality", educational "quality", academic reputation etc. In recent years, it became fashionable to produce worldwide lists of "world-class universities" (cf. the state of analysis and debate in Sadlak and Liu 2007). As a rule, these lists are produced by political journals, consulting agencies and by scholars not necessarily viewed as academically the most outstanding ones. But in some countries governments and various official agencies got involved in the ranking game as well. In some countries characterised by a steep vertically stratified higher education system, such as the United States and Japan, rankings lists have a much longer tradition; in these countries, we note a great diversity of respective analyses – among them some with considerable conceptual and methodological sophistication. Asahi Shimbun, one of the major Japanese newspapers publishes annually a book summarising the results of ranking studies. In the 2005 edition, it presented 717 studies (Asahi Shimbunsha 2005).

Obviously, ranking studies draw *substantial public attention*. They have a "sex appeal" of telling the real truth behind the scene. It seems to be exciting to praise the winners and to blame the others. The mix of somewhat valid measurement and somewhat arbitrary judgement seems to match the Zeitgeist of a competitive environment in higher education. Last but not least, amidst the fundamental difficulties existing in measuring academic quality, even dubious measurements can be taken seriously as a basis for allocating funds, for choosing institutions as a place of study, research cooperation etc.

Academic analyses and public debates on ranking studies pay attention primarily to two issues:
- the political intentions and functions, and
- methodological issues.

As regards *political intentions and functions*, advocates of ranking studies tend to underscore a public need of "transparency" as regards the quality of individual institutions of higher education and the achievement of ranking studies to provide *transparency*. Moreover, they believe that the publication of ranking lists reinforces a *healthy competitive environment* among institutions and scholars.

Critics of the political rationales and contexts (cf. the overview of arguments in Altbach 2004, 2006) often put forward the following arguments:
- Ranking lists do not provide neutral information for a variety of "customers", but rather deliver *data with a fixed ideological set* about the desired character of higher education systems: academic quality depends strongly on the individual institution of higher education; a steeply stratified higher education system is desirable; horizontal diversity is irrelevant, etc. According to this critique, league tables and rankings are produced by believers of the gospel that only the apex matters or that steep vertical stratification is beautiful. They are bound to create applause by fellow-disciples of the gospel and to be mistrusted by others.
- Ranking lists do not reinforce an open competition for quality improvement, but rather have an *anti-meritocratic impact* of stabilising the power of the traditional establishments in national higher education systems.
- Rankings lists elicit a *dysfunctional adaptive behaviour* of striving for improvement according to the measures employed while neglecting valuable activities not measured. Altogether, they reinforce an "academic drift" in terms of imitation of the activities of the institutions at the apex.

There is an abundance of *methodological critiques* (cf. the overview and analysis in Dill and Soo 2005). These critiques are not merely a repetition of the academic controversies of measuring research quality "objectively" with the help of numbers of publications, citations or "subsequently" with the help of ratings undertaken by academic peers, or of measuring educational quality by students' rating of the teachers' teaching quality. In addition, it was pointed out often that the majority of ranking studies rely mostly on "input" criteria and possibly "process criteria", but are weak with respect to "output" criteria; this critique seems to be most convincing with respect to international ranking studies.

In the framework of this study on trends of the structural configuration of the higher education systems and future research objectives in this domain, we can draw the conclusion that ranking studies are methodological relatively crude instruments which elicit enormous public attention. The available literature suggests that ranking studies have a strong impact on the norms and activities of the various actors in the higher education system. Altogether, they are not very helpful in providing a valid overview on the overall configuration of national higher education systems.

Therefore, the most interesting questions for future research will be, first, whether political messages implicitly or sometimes explicitly advocated by ranking studies, e.g. the praise of steeply stratified higher

education and the neglect of horizontal diversity, will persist or will change over time. Second, analyses would be valuable which explore the extent to which the higher education system actually is steered by such an information system and its underlying concepts and, in reverse, to what extent other forces play a role.

Last but not least, the rankings of "world-class universities" underscore that *the analysis of national systems of higher education might be outmoded eventually*. Future analyses should certainly pay more attention to the extent to which higher education is shaped locally, nationally, regionally (in terms of supra-national regions) and globally (cf. Marginson and Rhoades 2002).

4.4 Major Explanatory Concepts

The public discourse as well as literature aiming to analyse the institutional patterns of the higher education system, as a rule, do not merely address the facts, the configuration of the system and its change, but also try to explain the causes. Most of this discourse can be described as a straightforward pragmatic reasoning regarding the strengths and weaknesses of certain institutional configurations of the systems, such as: the more (inter-institutionally) diverse higher education institutions within a higher education system are, the better they serve the varied motives, talents and job prospects of students, or an alternative argument: the less diverse institutions within a higher education system are (and possibly diverse intra-institutionally), the more chances they offer for all students to opt during the course of study for different levels of ambition and for different profiles of expertise. We have provided the major arguments of that kind in the previous section.

But we note very sophisticated arguments as well, both, on the part of the actors and the scholars analysing higher education systems. Some secondary analyses have been made of the types of explanatory models.

The organisers of an expert conference on Diversity and Convergence in Higher Education held in 1993 in Turku (Finland) came to the conclusion that there are three major "theoretical perspectives on diversity" and that these three perspectives were represented by the three keynote speakers of the conference (see Meek et al. 1996):

- The *"internal perspective"*: According to B. Clark (1983, 1996), "it is the academic discipline engine that invariably drives higher education institutions and systems to differentiation". The "uncontrolled drive towards ever-increasing disciplinary specialisation is not always obvious; it often results in incremental or what Clark terms 'unannounced cumulative change'. But it is these changes … that

ultimately shapes higher education institutions and systems, making them evermore complex in an environment where operational diversification is far more important than nominal integration…" (Meek et al. 1996, p. 207). The authors argue that, according to Clark, "subject parturition, program affiliation, subject dignification and subject dis- person" all contribute to an increase of diversity (ibid., p 213).
- The *"systemic perspective"*: According to G. Neave (1996), the patterns of the higher education system are strongly affected by the actors, notably those on national and supranational levels. Neave names various "forces that work for and against homogenisation or integrity", and "no higher education institution or system moves inevitably towards either homogenisation or diversification" (Meek et al. 1996), p. 207). These authors point out that Neave does not name contradicting forces, but also ambivalent realities rather than a clear trend in one direction: "whether a particular system is 'diverging or converging is largely a function of where we focus our attention'" (ibid., p. 208). Neave argues that governments often aim to decrease diversity, while other actors might contribute to increased diversity or variable configurations.
- The *"environment perspective"*: According to F. van Vught (1996), higher education institutions are "located within a supra-system consisting of the social, political and economic environment" (Meek et al. 1996, pp. 209-210). Institutions of higher education "constantly survey the environment to identify opportunities and risks with respects to obtaining the resources … Those institutions that 'read' the environment correctly survive, those who do not perish" (ibid. 210). In principle, a varied environment, thus, leads to increased diversity, while an isomorphic and uniform environment encourages a decrease of diversity. Van Vught views national governments as very strong actors which in Europe mostly opt for homogeneous systems or types of higher education and thus contribute to a low degree of diversity.

The authors of the above named study point out that the various countries analysed – also the various European countries – "are themselves substantially divergent in terms of national approaches to diversity" (ibid., p. 234). The various theoretical efforts to explain the extent of diversity within the various national systems of higher education helped to "provide a better understanding of the complexity surrounding questions of diversity and convergence in higher education"

(ibid.), but there might be more questions raised than answered in such analyses of the various explanatory models and of the various national cases.

In a synthesis of the debates and analyses of the 1970s, 1980s and early 1990s, Teichler (1998, pp. 480-482) points out that various scholars have opted for "developmental theories" in their efforts "to explain the dynamics of structural change in higher education". "Four developmental theories are most frequently employed:

- The *'expansion and diversification'* theory … had the strongest impact on the public debate. Accordingly, the expansion of higher education creates a pressure for diversification because the needs of the learners and other potential users of the services of higher education become more varied and because, as many actors believe, these varied needs might be more readily met through a certain 'division of labour' among institutions…

- A second type of theory, *'drift' theories*, also became very popular. Types of higher education institutions are not necessarily very faithful in pursuing the goals they were expected to pursue when they were initially established. According to these theories, different types of higher education institutions are eager to pursue their initial mission at most for a short period after they had been newly founded or upgraded. After some period, they begin to consider themselves as competitors to other types of higher education institutions. …the almost universal 'academic drift' … Similar reasoning, although with different expectations, was frequently employed in the 1980s. Many experts suggest that the tight labour market for graduates from purely academic fields had triggered a trend of 'vocational drift', 'vocationalism' or 'professionalism'.

- A third type of approach might be called 'flexibilisation theories. … In contrast to the first theory, they point at weaknesses in segmented institutional types serving clearly distinct needs. Over time, soft models and broad ranges might be superior … Accordingly, late selection in pre-career education, permeability of educational careers, compensatory measures for the disadvantaged, soft diversified structures of higher education, and the establishment of a life-long education system contribute to a soft system in three respects: no decision in the educational career would be considered as definite, the model could satisfy both the advocates and critics of educational expansion, and it would finally facilitate rapid adaptations, if major problems occurred.

- Finally, we notice *'cyclical' theories* of the struc-

tural development of higher education. According to these theories, certain structural patterns and polices come and go in cycles. For example, opening up of educational avenues and a reduction of the differences between varied types of institutions and programmes might be on the agenda at times when a shortage of graduates is felt, whereas segmentation and hierarchisation of higher education is favoured or just taking place, when fears of over-supply or 'over-education' dominate the scene…".

Moreover, we notice explanatory efforts with regards to the *role and potentials of higher education policy* to shape the long-term movements of the higher education system. Teichler (1988) argued that most policies are a mixture of

- *'idiosyncratic' approaches*, where emphasis is placed on the persistence of characteristics of national systems of higher education system;

- *'functional' approaches*, according to which the higher education system in all modern societies is confronted with similar challenges and is on the lookout for the universally optimal response;

- *'political' approaches*, according to which actors have ample room to opt for elitist or egalitarian solutions, for extreme or moderate vertical diversity, for a strong role of academic or utilitarian norms, etc.

The various efforts to explain the dynamics of the institutional patterns of higher education have revealed from the 1970s to the mid-1990s a broad range of factors in play. In retrospect and with reference to most recent explanatory concepts, we might argue, however, that the explanatory models altogether were less complex than we would consider appropriate today.

5. Conclusion: Implications for Future Developments of Higher Education and for Higher Education Research Priorities

Any effort to consider future trends, challenges, potentially wise policies or, in our case, future needs for research for a better understanding of future developments and future options for improvement have to analyse currently visible dynamics and to infer on that basis about possible future developments. The common approach, under these conditions, obviously is to consider the current "Zeitgeist" as the "end of history", i.e. a signal for long-term developments in the

future. We might be aware of the dangers of such an approach. For example the German Federal Minister of Education and Research, Annette Schavan, argued on 13 August 2006 in the Frankfurter Allgemeine Sonntagszeitung "Those who marry the Zeitgeist soon become widows", but, in reality, extrapolation of the Zeitgeist, i.e. in this case the currently most popular intentions of shaping the institutional pattern of the higher education systems, is the prevailing intention in the most visible layers of the public debate.

One could argue that the notion of the virtue of a continuously increasing vertical diversification has stronger advocates outside Europe than inside Europe, but European higher education is increasingly exposed to external claims that steeper stratification of the system is the only possible way to increase overall quality, relevance and efficiency of the system. Accordingly, it seems to be only a matter of time until European higher education will have lost its divergent features of higher education systems and will be have conformist systems in line with presumed world-wide trends. On the other hand, we know as well that the arguments have some plausibility according to which globally prevailing notions can be viewed as possible options, but not as superior options for higher education all over the world, that there are signs of dysfunctions of the dominant trends and there are signs of feasible successful alternatives.

I suggest to draw three *conclusions for higher education research* in this area:

First, higher education research has to find ways *not to be subdued so much and not to act in such a timid manner* as regards the prevailing political debates at each stage of the development of the institutional pattern of the higher education system. Higher education research has to play the devil's advocate in order to design questions for debates and analysis which are really suitable to challenge and test the prevailing assumptions and options.

Second, *research on the "impact of college"* in Europe is relatively scarce up to now. We tend to be overwhelmed by claims that certain input and process factors are highly relevant for the output and outcome, and information on input and processes as well seems to have an increasing impact on the provision of sources without any solid information about their relevance for the output of the system.

Third, in-depth analysis of the current dynamics might help establish some *most likely future alternative scenarios* of the development of institutional patterns of the higher education system. This might help to design research approaches aiming to analyse major causes, major phenomena and major causes comparatively for various likely futures.

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