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## **The economization of education: knowledge transformations in higher education institutions**

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*“Rethinking the purpose of education and the organization of learning has never been more urgent.”*  
(UNESCO, 2015)

## Introduction

The concept of knowledge is a highly complex and constructed fictitious commodity. It highlights a process going on since the 1980s characterized by the capitalistic tenet of economization as a rationalization principle (Becker, 1992). The process has been progressing in the work and production sectors and transferred to non-economic spheres such as education (Höhne, 2015). It has been reflected by the emerging power of global financial markets as well. Polanyi already noted this process for nineteenth century liberalism (Polanyi 1957: 33-34) and the same tendency can be seen in neo-liberalism, where educational, scientific, and other decision-makers are pressured to assess based on the criteria of economic rationality. They have to assess how their activities have a financial impact on the individual, organizational, and institutional levels and/or the (perceived or socially constructed) imperatives of a strong, internationally competitive economy (Jessop, 2012; Ward, 2012; Olssen and Peters, 2005). The key argument on which the article is based highlights a new process of disembedding revived under the label of neo-liberalism prompting the *“(re-) commodification of political, educational, health, welfare, scientific and other activities organized by businesses oriented to exploiting opportunities for profit without regard to possible extra-economic costs and benefits”* (Jessop, 1996). This process of transformation towards entrepreneurial universities is pushed on national as well as international scales by state, political and transnational actors, who try to integrate efficiency measures such as evaluation and indicator controlling systems into educational systems.

These commodification processes are manifested in various European policies such as the Guiding Framework for Entrepreneurial Universities epitomising higher education (HE) innovation throughout its research, knowledge exchange, teaching and learning, governance and external relations (OECD 2012). These policies suggest how universities should function, be organized and of particular importance is that universities have to seek income themselves via behaving as entrepreneurs selling their services. Nurturing a new generation of entrepreneurs, in terms of helping graduates to give them the right skills and mind-sets for the job market, education for vocational purpose only, is framed as a key action to support growth and business creation (EC 2013). In fact the commodification of knowledge is manifest in a variety of these policies and in the effects of marketization of scientific (and other HE research) as well as innovation policies. In this context, the European Commission (EC) puts emphasis on linking HE and actors of practice, in particular enterprises. As such the EC aims for a closer university-business cooperation, which shall

help universities to develop curricula that are relevant and meet the needs of students and society (EC 2016).

Furthermore, the forces and tensions understood by the umbrella concept of globalization constitute a dramatically different environment for higher education institutions (HEI) and policy makers to operate in (Van Damme, 2001, 1). The impact of the various trends and challenges related to globalization (...) is profound, but also diverse, depending on the specific location in the global arena (Van Damme, 2001, 2). Systematically established development instruments based on competitiveness (Höhne, 2015; Münch, 2010; Disterheft, 2013) and market-oriented structures – quasi markets – are generated, aiming at the economization of education and a constant increase in productivity of education towards entire societies. Consequently, HE has become one of the key arenas where neoliberalism transforms the concept of knowledge.

The aim of the article is to show how the neoliberal utilization/exploitation logic and capitalistic market dynamics manifest itself in particular policies in Europe concerning entrepreneurial universities. The implications of these policies on HE in the context of competitive market economies, and the marketization of knowledge and science are therefore of particular interest. As such, the article aims to better understand and meet social, political and economic challenges connected to the process of (re)-commodification of educational activities. As Polanyi already understood the key challenges of these processes, his perspective will be used to analyse the commodification process and the dominant paradigm in knowledge production, neoliberalism, supporting these transformation processes in HE. Reflecting the global scope of the challenges accompanying knowledge capitalism, the article provides a contemporary analysis of consequences provoked by capitalistic market dynamics and utilization/exploitation processes in the sphere of education on macro, meso and micro level. As a response to the ongoing transformations, the article highlights possibilities of de-commodification strategies in the context of a democratic and transdisciplinary governance of knowledge (Foss and Michailova, 2009). Finally the potentials and challenges of institutionalized science-society interfaces, aiming to work with a contextualized knowledge approach at the regional level, are briefly outlined. As such the article illustrates the necessity and possibility to re-embed economic practices in social, ecological and cultural contexts, especially regarding actual knowledge transformation processes.

## Global higher education neoliberalism

General trends in global HE and academia in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries such as the challenge of 'massification' are more extensive due to their global nature and the number of institutions and people they affect (Altbach et al., 2009). Indeed HE drives, and is driven by, globalization, a phenomenon of increasing worldwide interconnectedness that combines economic, cultural and social changes (OECD, 2009). Current global transformation processes are further manifested in ecological, social, political and financial crises (WBGU, 2011). To understand the interlinkages of these multiple crises and their effects further redefines different kinds of educational settings, which are open to creating and adapting to change on regional, national and global levels. Unfortunately HEI are still educating such that crises do not exist (Mitchell et al., 2011; Orr and Ehrenfeld, 1995). In fact, HEI at a global level are in a crisis. In order to characterize the features of global HE neoliberalism - the dominant paradigm in knowledge production - it helps to understand transformations of the nation state in the context of a capitalistic globalization and its crises (Brand, 2014). The internationalization of the state and the dominance of the neoliberal globalization strategy imply structural competitive relationships and conditions in which cooperation breaks down again and again (Brand, 2003). These transformations redesigned the nature of universities worldwide and are compared to the 19<sup>th</sup> century when the research university evolved (Olssen and Peters, 2005).

Neoliberalism in HE introduced a new mode of regulation or form of governmentality<sup>1</sup> (Olssen and Peters, 2005, 314ff). Even though there are clear similarities with 19<sup>th</sup> century liberalism, neoliberalism shows some new features different to classical liberalism. Neoliberalism has come to represent a positive conception of the state's role in creating the appropriate market by providing the conditions, laws and institutions necessary for its operation. Central characteristics of HE neoliberalism include:

*The neoliberal self:* The individual no longer has to be freed from interventions of the state, as neoliberalism seeks to create an individual that is an enterprising and competitive entrepreneur (Olssen and Peters, 2005, 315). In the neoliberal sense, the individual is self-interested and a rational utility maximizing agent. The expectation is that human beings behave in such a way to achieve maximum money gains (Polanyi, 2001 [1944], 71). The end goals of freedom, choice, etc. must be

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<sup>1</sup> The term governmentality refers to Foucault who addresses the overarching 'problem of government' – that is, 'how to govern oneself, how to be governed, by whom should we accept to be governed, how to be the best possible governor?' He is thus interested in both how governing happens and how it is thought (Sokhi-Bulley, 2014).

constructions of the state acting now in its positive role through the development of the techniques of auditing, accounting and management (Olssen and Peters, 2005, 315). McGuigan (2014) proposes an ideal type of the neoliberal self as the preferred form of life in the economic, political and cultural circumstances of present-day developed and developing capitalism. As such, the neoliberal self combines the idealised subject(s) of classical and neoclassical economics – featuring entrepreneurship and consumer sovereignty – with the contemporary discourse of ‘the taxpayer’, who is sceptical of redistributive justice, and a ‘cool’ posture that derives symbolically – and ironically – from cultures of disaffection and, indeed, opposition (ibid.). In effect, the transition from organised capitalism to neoliberal hegemony over the recent period has brought about a corresponding transformation in subjectivity (ibid.).

*Marketization of public sectors/higher education:* Marketization has become a new universal theme manifested in the trends towards the commodification of teaching and research and the various ways universities meet the new performative criteria, both locally and globally in the emphasis upon measureable outputs (Olssen and Peters, 2005, 316). The prioritization of measured outputs is recognized such as strategic planning, performance indicators, quality assurance measures and academic audits (ibid.). Marketization is defined as the attempt to put the provision of HE on a market basis, where the demand and supply of student education, academic research and other university activities are balanced through the price mechanism (Brown, 2015). Brown (2015) states three components of the rationale for reforms in the UK, abolition of subsidies for student fees, separation of funding for teaching and research, and the introduction of selective research funding, or tuition fees<sup>2</sup>. First, it is believed that the best use of resources is obtained where universities interact directly with students as customers, rather than with the government or a government agency acting on the students’ behalf. The argument here is that ‘students know best’ and if they are empowered to act as consumers, institutions will either have to respond to their needs and preferences or lose custom. Also, Molesworth (2011, 2) agrees that there is the attempt to recast the relationship between academics and students along the model of a service provider and customer. Second, as the system expands, its costs increase, especially as HE has relatively limited scope to increase its efficiency. Because of real or perceived limits on the ability and willingness of taxpayers to fund a greatly enlarged system, a private contribution is necessary if quality is to be maintained. Third, many of the benefits of HE – such as higher wages, more satisfying jobs, better health and longevity – accrue to students/graduates as individuals. It is therefore only fair that they should contribute a reasonable share of the costs.

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<sup>2</sup> Similar reforms took place in various European Countries such as Austria, France, Italy or the Netherlands.

*A commitment to laissez-faire and free trade:* Self-regulating markets through market prices (general equilibrium) is a key assumption of standard neoclassical economic theory. It is accepted that a market economy is an economic system controlled, regulated, and directed by markets prices; order in the production and distribution of goods is entrusted to this self-regulating mechanism (Polanyi 2001 [1944], 71). For HEI, this implies, a preferred self-regulating order such as the free market regulates itself better than the government or any other outside force. As such “Nothing must be allowed to inhibit the formations of markets, nor must incomes be permitted to be formed by other means than through sales...Neither price, nor supply, nor demand must be fixed or regulated... (Polanyi 2001 [1944], 72).

## Knowledge capitalism

The restructuring of the economic world system, with the transformation to a post-industrial knowledge economy in the core, is stressed as one of the key tendencies within the overall force of globalization (Van Damme, 2001). Although the concept of a knowledge economy is fuzzy, it seems to clearly capture important phenomena and tendencies of our society. In general, the relationship between HE and the economy is seen as a key determinant of the university’s future development (Scott, 1997). Scott (1997) argues that not only cultural capital but also economic wealth is expected to be created as a measure of national success and HE has become a key arena for creating this advantage. Therefore, HEI are at the core of the knowledge economy, whereby knowledge is emphasized as the most important form of global capital in key public policy documents (OECD, 1996a, 1996b, 1996c, 1997; World Bank, 1998). In this context Foss and Michailova (2009) argue that *“These tendencies are the growing value of human capital inputs, the greater than ever importance of immaterial assets and scientific knowledge in production...and to tap an increasing number of knowledge nodes, not only internally but also through alliances and networks with other firms and institutions. These tendencies profoundly impact economic organization and competitive advantages and highlight the role of organization as the context of the creation of knowledge-based competitive advantages.”*

Similarly, Olssen and Peters (2005) emphasize that HEI are the new star ship in the policy fleet for governments around the world and universities are the key drivers in the knowledge economy. They argue that the transition towards knowledge economy, called knowledge capitalism is characterized in terms of the economics of abundance, the annihilation of distance, the de-territorialization of the state, and, investment in human capital (Olssen and Peters, 331). Figure 1 summarizes the characteristics of the knowledge economy and how it differs from the traditional economy.

The knowledge economy differs from the traditional economy in several respects:

1. The economics is not of scarcity, but rather of abundance. Unlike most resources that deplete when used, information and knowledge can be shared, and actually grow through application.
2. The effect of location is diminished. Using appropriate technology and methods, virtual marketplaces and virtual organizations can be created that offer benefits of speed and agility, of round the clock operation and of global reach.
3. Laws, barriers and taxes are difficult to apply on solely a national basis. Knowledge and information 'leak' to where demand is highest and the barriers are lowest.
4. Knowledge enhanced products or services can command price premiums over comparable products with low embedded knowledge or knowledge intensity.
5. Pricing and value depends heavily on context. Thus, the same information or knowledge can have vastly different value to different people at different times.
6. Knowledge when locked into systems or processes has higher inherent value than when it can 'walk out of the door' in people's heads.
7. Human capital - competencies - are a key component of value in a knowledge-based company, yet few companies report competency levels in annual reports. In contrast, downsizing is often seen as a positive 'cost cutting' measure.

Figure 1: Characteristic of the knowledge economy (Olssen and Peters 2005, 332)

Policy concepts for HE, based on the characteristics of the knowledge economy, are problematic in the context of their capitalistic principles. The incremental rationalization of non-economical spheres like education has multiple effects such as the value appreciation of human capital ("Bildungskapital") or the convertibility of various kinds of capital (Höhne, 2015). Others claim that education as a cultural capital is primarily transformed into a medium of exchange (Münch, 2010) dealt as a new form of capital under neoliberalism (Olssen and Peters, 2005, 330ff). However, it is not clear that knowledge can be said to be produced in any way similar to a commodity as knowledge has not such a clear production function (Institute for New Economic Thinking, 2015).

*"Knowledge is different from other goods in that it shares many of the properties of a global public good which implies a key role for governments in protecting intellectual property rights in a global economy marked by greater potential monopolies than those of the industrial age"* (Stiglitz, 1999 In Olssen and Peters, 2005, p.331).

Molesworth et al. (2011) analyse the so called managerial revolution in universities and state that it is not so clear of what is being bought and sold.

*"So is the student purchasing instruction in an academic discipline or buying a credential necessary for the pursuit of a profession? Or is he doing both? It appears that what we have is a highly controlled quasi-market that forces institutions to compete against one another for resources and funding"* (Molesworth et al. 2011, 1)

From a Polanyian perspective the commodity description of knowledge is entirely fictitious. The postulate that anything that is bought and sold must have been produced for sale is emphatically untrue in regard to them (labor, land and money) (Polanyi 2001 [1944], 75). Michael Polanyi, the brother of Karl Polanyi, emphasizes that especially tacit knowledge, i.e. tradition, inherited practices,

implied values, and prejudgments, is a crucial part of scientific knowledge but difficult to codify and measure (Polanyi, 1966). He emphasized the idea that science, far from being a purely rational enterprise of cognition and calculation, involves of necessity a non-formalisable, on-mechanisable, characteristically human phenomenon which one might call 'judgment', 'intuition', or, with Polanyi himself, 'tacit' or 'personal knowledge' (Smith, 1988, 7). Polanyi, in fact, sees the scientific enterprise itself as resting on a deep-rooted and fundamentally non-utilitarian fascination with order or pattern (ibid.).

Nevertheless the self-regulating market relies on the commodity fiction of tacit knowledge, in the form of skills needed to handle codified knowledge, servicing as a vital organizing principle. However, Stiglitz (1999) argues that

*“We now see economic development as less like the construction business and more like education in the broad and comprehensive sense that covers knowledge, institutions and culture. (...) The movement to the knowledge economy necessitates a rethinking of economic fundamentals.”* (Olssen and Peters, 2005, 335)

## **Commodification of education and multi-level effects**

Education is reconfigured as a massively undervalued form of knowledge capital that will determine the future of work, the organization of knowledge institutions and the shape of society in the year to come (Olssen and Peters, 2005, 331). However, neoliberal governmentality reduces education to an economic production function (ibid., 324). Its core dimensions are flexibility, clearly defined objectives and a results orientation. The effects of the current paradigm (knowledge capitalism and HE neoliberalism) impact individuals, organizations/institutions, and (global) society.

*Marco level effects:* From a macro level perspective it is argued that

*“Universities orient their activities to more economic-driven directions, with a strong belief in the power of market mechanisms and competition, based on a business-as-usual approach instead of sustainability principles. A new model of entrepreneurial university can be identified that utilizes relations with industry and government in order to contribute to an innovation-driven regional or national economic growth strategy.”* Disterheft (2013, 17-18)

Privatization of public education and increase of private universities are responses to the “knowledge economy”. One major effect of these knowledge transformations has been to install relations of competition as a way of increasing productivity, accountability and control (Olssen and Peters, 2005, 326). In applying quasi-markets to the management of public sector organizations, new public management has replaced the “public service ethic” whereby organisations were governed according to norms and values derived from the assumptions about the “common good” or “public interest” with a new set of contractualist norms and rules (Olssen and Peters, 2005, 324). In his analysis Polanyi criticises the relation between economic and social behaviour and argues that in modern

market-oriented societies, economic action is not embedded but dis-embedded from the social context and non-economic institutions (Polanyi, 1979). Today universities priority target is to produce state of the art knowledge and prepare students for the economy. The purpose of education is a vocational one (preparing for professional careers/economic life). Such a reductionist view on education neglects other possible purposes such as socialization (reproduction of culture and promotion of citizenship), a liberal purpose (to develop individual's potential) and a transformative one (where education for change, for a better world is at the core). The dominant idea of an educational purpose focusing on competition establishes policies framing education as a product (in terms of courses and qualifications). Curricula are top-down products, knowledge is abstract and fixed, and practices of teachers, who shall teach state of the art knowledge which is abstract and fixed, are based on instructions and a transmissive model of pedagogy. The related model of reductive science is based on precise numbers and solutions, linear cause-effect relationships, calculated risk, predictability and control.

*Meso and micro level effects:* For academic staff this new kind of governmentality carries the effect of *de-professionalization* as the essence of contractual models involves a *specification*, which is fundamentally at odds with the notion of *professionalism* (Olssen and Peters, 2005, 325). Further, the nature of knowledge is changed and the emergence of new modes of science (see Mode 2 science, Nowotny *et al.*, 2003) is directly linked to the world of work. Knowledge capitalism involves transformations towards knowledge creation, acquisition, transmission and organization. As an example academic staff is expected to transfer knowledge, which is perceived as an input factor creating efficiency gains, as experts. Knowledge as an input factor shall help to produce more efficient, more cost-effective and as such improves our growth-oriented economy. The paradigm behind this perception of knowledge as an input factor is a mechanistic one, characterized by a reductionist view of knowledge, and a deficit view of learner (testing and competition). Above, current mechanistic mental models with strong disciplinary structures hinder inter- and transdisciplinary approaches, which would be essential in order to create e.g. solutions for sustainability challenges (Disterheft 2013, 18).

Learning processes focus on few learning styles and passive learning as current structures of HEI are characterized by external assessment. Teaching systems and not learning systems are developed in formal educational territories. And if actors dare to break down the corridors of formal education they are confronted with resistance in terms of study plans, time pressure of students having to finish their studies in time etc. In sum, the role of education is often based on an instrumental understanding, in terms of a soft-controlling instrument where pedagogical dishonesty is at stake and individual reflection, autonomy and freedom of design are missed out. Facing the conditions of

postmodern society such as unsustainability, uncertainty, complexity, interdependence and globalization it is even more contradicting that the content of curriculum and the processes of education, with a few notable exceptions, have not changed (Orr, 1992; UNESCO, 2015).

## **Democratic and transdisciplinary governance of knowledge**

Polanyi's prediction was that in modern societies neither the political function nor the social mechanism behind the economic order was understood and an embeddedness of economic elements in the social and ecological contexts cannot be found anymore. For HEI, as the article shows, that means their political function is not understood, as they are perceived as purely economic institutions and not as a social mechanism. The social and political embeddedness of HEI is pushed in the background and the impact of their institutional transformation towards the economization of education is underestimated. For HEI the idea of a self-regulating system of markets, directed by market prices and without interference from the outside has a major impact on the actual possibility to fulfil its societal mission. The principle of organizing knowledge and education and thereby human beings along the lines of the market mechanism is highly contradictory in terms of the characteristics they are based on as argued above. Similarly, the principle to subordinate the substance of society itself to the laws of the market and respecting the economic order not as function of the social order, and therefore not embedded it in the social sphere.

Hence and in order to avoid subordination and demolition of society, particularly relevant are new forms of governance focusing on processes and forms of organization that enhance mutual learning and knowledge exchange between HE and diverse other stakeholder groups (Biberhofer and Rammel, forthcoming 2017). Novy et al. (2013) asks to shape these changes in an inclusive and sustainable way, requesting new ways of learning to deal with unexpected situations and upcoming problems. In this context, meta-platforms (Steiner and Posch, 2006), knowledge alliances (Novy, 2013) or the Regional Centres of Expertise on Education for Sustainable Development community (Fadeeva and Mochizuki, 2010) are examples of new collaborations and a critical dialogue between different actors. Biberhofer and Rammel (forthcoming 2017) argue that science-society interfaces are shifting the focus from traditional expert-driven knowledge transfer to an open dialogue and the co-creation of knowledge via investing in strategies for collaboration formats. There seems to be a need to investigate in innovative forms of a democratic and transdisciplinary governance of knowledge as sustainability issues such as climate change or erosion of biodiversity demand new mindsets and competencies for academics, entrepreneurs and society in general. For HE, this means that the focus on universities as actors of change in terms of knowledge creation as well as communicators to various groups in society is key. In the course of this new accentuation universities role is discussed in

terms of a stronger and methodological sound integration of actors of practice such as NGOs/GOs, business partners etc. in order deal with key challenges society is facing. Still challenges and difficulties, but also potentialities of approaches fostering inter- and transdisciplinary project implementation need to be better understood (Weiss et al., 2011) in order to learn more about institutional frameworks supporting such collaboration settings. Most importantly, the political and social function as well as embeddedness of HEI must be emphasized and their potential to act as a social mechanism put in the foreground of their duties.

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