HIGHER EDUCATION AND REGIONAL DEVELOPMENT

TALES FROM NORTHERN AND CENTRAL EUROPE

EDITED BY
**RÓMULO PINHEIRO, MITCHELL YOUNG
AND KAREL ŠIMA**

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Higher Education and Regional Development

Tales from Northern and Central Europe

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This book is dedicated to our dear colleague Olga Šmídová-Matoušová (27/06/1955–18/09/2017) who sadly passed away during 2017

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Contents

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List of Figures

List of Tables

1

University Complexity and Regional Development in the Periphery

Rómulo Pinheiro, Karel Šima, Mitchell Young, and Jan Kohoutek

Introduction

Universities and other types of higher education institutions (HEIs) have long been recognised as playing a key role, directly and indirectly, in socio-economic development, both at the local and national levels (Arbo & Benneworth, 2007; Pillay, 2011). They do so through the provision of skills

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and competencies (via graduates), knowledge and technology transfers, engagement and outreach, and so on. In recent years, and as a result of the rise of a post-industrial and globalised economy, HEIs the world over have also been mandated to help their regions and countries become globally competitive through fostering economic development and innovation, amongst other things (Harding, Scott, Laske, & Burtscher, 2007; OECD, 2007).

The rise of strategic science regimes within HEIs (Rip, 2004) has taken some of these external demands into account, and the increasing competitiveness for students, staff, and funding has led to a situation where external priorities and agendas play an increasingly important role (Benneworth & Jongbloed, 2010). This is particularly the case for HEIs located in peripheral regions, which often lack the adequate physical, technological, and knowledge infrastructures required to compete in the new knowledge economy. Not only are these regions highly dependent on a few knowledge-based institutions (HEIs, firms, and other knowledge producers and manipulators) to increase their absorptive capacity (Isaksen, 2014), but they are also at a disadvantage geographically, as they are located in less central (more remote) parts of their respective countries (Kohoutek, Pinheiro, Cabelkova, & Smidova, 2017). In addition, they tend to suffer from a multiplicity of socio-economic issues, such as deindustrialisation, unemployment, brain drain, and high levels of social exclusion and, thus, are often stigmatised as "places to avoid".

HEIs located in peripheral areas tend to struggle when it comes to attracting talented students, staff, and competitive funding, and in many cases, they lack in-house research capacity, which, in turn, limits the developmental roles they can play in their host regions. This, in turn, generates a set of internal and external tensions that universities need to address in their quests for legitimate places in the increasingly competitive domestic and international higher education (HE) field, as well as in their immediate geographic surroundings.

In order to understand how these internal tensions emerge and develop over time and how they affect the roles that HEIs play in their host regions, one needs to consider the organisational and institutional features of HEIs. Therefore, building on earlier work in the field combined with seminal insights from organisational studies, this chapter provides a broad conceptual framework against which the case studies that form the bulk of

this volume can be assessed and interpreted. In so doing, we address two interrelated questions: (1) what characterises HEIs as organisations? and (2) how does the complexity inherent to modern HEIs (in the form of in-built ambiguities) affect their interactions with their host regions?

The volume derives from a comparative research project (2015–2017) investigating the socio-economic role of HEIs located in peripheral regions in Norway and the Czech Republic.[1] Norway, one of the richest countries in the world, is located at the periphery of (Northern) Europe and has long identified HE as a key sector in the socio-economic development of the country. Regional considerations have, since the early 1950s, ranked high in the policy agenda, culminating in the geographic distribution of HEIs through the entire country (324,000 square kilometres). The Czech Republic emerged from communism in 1989 and its split with Slovakia in 1992 to become one of the strongest economies in Central Europe. It is oriented on the industrial sector and closely tied to its neighbour Germany. It is a landlocked country (of 79,000 square kilometres) situated in the centre of Europe. Higher education (HE) was profoundly reformed during the transition era in the 1990s, with partial changes after the 2000s. Regional development imperatives have largely been absent in HE policy until the recent adoption of EU regional agendas (structural funds, regional innovation policy, etc.).

We find comparisons—similarities and differences—regarding the role of HEIs in the development of peripheral regions in these two rather distinct national economies to be of interest to policymakers and scholars alike in shedding light on important contextual circumstances at the macro (policy and region), meso (HEIs) and micro (key actors within and outside HE) levels. Methodologically, the study adopted a mixed-methods research design with qualitative and quantitative data sets emanating from a variety of sources: policy and institutional documents; official statistical databases; national and international reports; published peer-reviewed studies; site visits; face-to-face interviews with selected internal and regional stakeholders; and seminars and workshops involving researchers, university managers, and regional actors across the public and private sectors and society at large.

The chapter is organised as follows. In the next section, we describe the features of universities as organisations by shedding light on five key ambiguities. Then we provide critical empirical insights on the contextual

circumstances underpinning the case studies by shedding light on national policy dynamics and the chosen regional contexts, respectively. Finally, we provide a brief overview of the aim and focus of the volume's individual chapters.

Universities as Complex Organisations Nested in Dynamic Policy and Regional Environments

It has long been acknowledged that HEIs are rather unique and complex organisational forms (Birnbaum, 1988; Clark, 1983). Even though many HEIs are rather recent in their histories and local traditions, as an organisational template or archetype, universities and other types of HEIs have, in some shape and form, been around for the best part of eight centuries (Ridder-Symoens, 2003). This implies that, as an organisational form, and when compared to other types of organisations, such as firms, HEIs are thought to be rather resilient when confronted with shifting external circumstances (Olsen, 2007). This resilience is due to the fact that, over the years, HEIs have adapted to new external contexts without losing a sense of identity regarding their core functions and purposes (Frank & Meyer, 2007; Wittrock, 1985; for a recent analysis see Pinheiro & Young, 2017).

Following seminal works in the area, Pinheiro (2012a, 2012b) characterises modern HEIs as organisations along five key structural features, each of them representing a certain type of ambiguity which distinguishes them from other organisational forms. Taken together, the complex interplay between these five ambiguities helps explain their internal dynamics, as well as the ways in which HEIs respond (or not) to environmental factors.

The Ambiguity of Intention

In spite of the fact that most people, internal stakeholders included, recognise what an HEI is, defining what its core purposes are is a more daunting task. For some, the purpose of HE is to socialise and train youth to become productive workers and/or engaged citizens. For others, HEIs are unique social arenas for critical and disinterested inquiry about topics

of shared interest to scholarly communities and society alike. Yet, for many, HEIs are the bastions of freedom and democracy, substantiated on core values such as equality and autonomy. Staff based at teaching-only institutions would contend that instruction and supervision are their core functions, whereas those at research-intensive HEIs would argue that the pursuance of knowledge for its own sake ranks high amongst their core priorities. "Classic" universities, such as the flagship institutions of many national systems, often located in the capital city/large urban areas, praise their societal independence. This contrasts with the normative postures of smaller and less resourceful institutions located outside major urban areas or core regions, where the dominant ethos is that of addressing societal needs by responding to the emerging requests of multiple stakeholder groups. Throughout history, different types of HEIs catered to different, sometimes contradictory, demands in society (Castells, 2001). On paper, providing education to the masses and elite training are contradictory functions, yet many HEIs the world over have been successful at simultaneously accomplishing both. Likewise, teaching and research are rather distinct activities, but many HEIs have devised mechanisms for accomplishing both tasks, albeit with different degrees of success. In short, the ambiguity of intention pertains to the different internal conceptions of the functions and roles played by HEIs.

Tensions emerge when internal actors, more often than not managers, who possess different normative views on the role of HEIs in society attempt to suggest that one view should be predominant over the other competing ones. At the heart of the problem lie conceptions of HEIs along two relatively distinct paradigms or visions (Olsen, 2007). There are those pushing for a more instrumentalist view, suggesting a vision of HEIs as tools for reaching certain predetermined political or managerial agendas. In contrast, some argue that internal rather than external imperatives should be at the forefront, with autonomy and respect for diversity ranking high on the strategic agenda (Olsen, 2007).

The Ambiguity of Causality[2]

The second ambiguity characterising the university as an organisation pertains to the complexity inherent to universities' core technologies, namely,

teaching and research (Clark, 1983). More specifically, and in the context of the third mission of regional development (Pinheiro, Karlsen, Kohoutek, & Young, 2017), it is rather difficult to ascertain the causal relationships between inputs (funding, students and staff, projects, etc.) and outputs (innovation, economic growth, etc.). It is a common argument that the outcome of many research projects is the need for additional projects/ funding in order to address new insights and try to answer the new questions posed. Similarly, it is impossible to predict the impact that both graduates and the knowledge produced by academics will have on society.

The simple presence of an HEI is not a sufficient condition for local development to take place, as other factors play critical roles as well, as demonstrated by earlier studies from both Europe and North America (Feldman & Desrochers, 2003; Florax, 1992). These include, but are not limited to, the ability of regional institutions (public and private sectors alike) to absorb both skills (employability) and academically generated knowledge, what is commonly known in the regional science literature as local "absorptive capacity" (Vang & Asheim, 2006). It is widely acknowledged that universities stimulate the formation of social capital or networks at multiple levels—local, regional, national, and global (Benneworth & Hospers, 2007; Zyzak, Pinheiro, & Hauge, 2017). Yet, it is far from clear how these networks contribute, directly or indirectly, to regional development. Hence, tensions emerge as institutional managers and regional actors attempt to predict and quantitatively assess the impacts or effects that regionally related activities by various academic groups have in the region. More often than not, such activities contribute to regional externalities, for example, in the form of a growing awareness of the importance of knowledge and innovation, but are not easily captured in a formula (gross domestic product, innovation per graduate, patents resulting from local activities, etc.), per se.

The Ambiguity of History

The third ambiguity relates to the fact that, like all organisations, universities have histories of their own, which, in part, help shape local values and beliefs, mind-sets and behaviours, and strategic ambitions. The concept of *organisational saga* (Clark, 1972) is a useful one in this

respect, as it relates to the importance attributed to past achievements and a sense of unique identity. This feature is most visible in old, renowned universities such as Oxford and Cambridge (Tapper & Palfreyman, 2011), but it permeates the internal life of every institution, irrespective of size, age, and location. Following the tenants of historical institutionalism within the social sciences (Pierson & Skocpol, 2002), the "ambiguity of history" is associated with the fact that past events help determine current behaviours and future trajectories, yet not necessarily in a linear or predictable fashion, as argued by proponents of systems theory and the study of complexity (Room, 2011).

In the realm of HE, Krücken and colleagues have empirically demonstrated how contemporary responses to emerging demands, like globalisation and increasing competition, are, to a large extent, shaped by historical or deeply institutionalised features such as values and identities (Krücken, 2003; Krücken, Kosmützky, & Torka, 2007). For example, the negative or positive experience of past engagement activities with regional actors will, to a large degree, determine the willingness of particular academic communities to be actively involved with partnership efforts that address the needs of regional stakeholders (Pinheiro, 2012a). Organisational archetypes or blueprints are also relevant in this respect (Greenwood & Hinings, 1993). Classic, older research-intensive universities have traditionally been more inward oriented, focusing on knowledge and science as an institution. This contrasts with younger and/or more vocational institutions, often located in peripheral regions, which have tended to take into consideration external dynamics and the needs of stakeholder groups (Pinheiro, Benneworth, & Jones, 2012). Hence, tensions emerge from the clash between logics and normative postures that have grown organically over time and those (more recent ones) that result from external drivers and strategic postures by formal leaders and other key actors.

The Ambiguity of Structure

The fourth ambiguity relates to the ways in which universities as organisations organise or structure their core activities. As knowledge organisations, universities are organised around bodies of people working within

the context of a specific knowledge or disciplinary domain (Clark, 1983). In this respect, there is a considerable degree of loose coupling between the activities undertaken by various sub-units (Birnbaum, 1988). Decoupling also occurs within the sub-units themselves, for example, between teaching and research activities. What is more—and, given the fact that (European) universities were traditionally characterised as "bottom-heavy" organisations (Clark, 1983), that is, with power and authority located at the lower levels (e.g. department or institute)—there has been a considerable amount of decoupling between leadership structures and activities (e.g. strategies) at the central (university/faculty) levels and the inner dynamics of the individual academic sub-units (Birnbaum, 1992; Hölttä & Nuotio, 1995). Earlier studies also revealed significant structural decoupling between core, teaching and research activities, and academic efforts aimed at promoting regional development (Arbo & Eskelinen, 2003; Benneworth, 2013).

Structural decoupling can be problematic in those situations where central leadership structures are attempting to steer academic units in a particular direction, such as increasing emphasis on excellence/world class or tighter societal engagement (Pinheiro & Stensaker, 2014a, 2014b). In the last few decades, under the banner of "modernisation", efforts have been underway to centralise leadership structures within HEIs along the lines advocated by new managerialism (Deem, Hillyard, & Reed, 2007). Such efforts, initiated externally by government but eagerly implemented by management (Berg & Pinheiro, 2016), are integral to a much broader process of transforming/rationalising HEIs into more coherent, predictable, and accountable strategic actors that are thought to be better able to respond to external events and the pressing needs of multiple stakeholders (Ramirez & Christensen, 2013). Hence, tensions arise from the different sub-units reacting differently to external events, as well as to the strategic postures by formal leaders at the central level.

The Ambiguity of Meaning

Finally, HEIs are value-laden organisations composed of a multiplicity of internal norms, values, identities, and traditions (Dill, 1982). Each