

# One size does not fit all! New perspectives on the university in the social knowledge economy

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## Abstract

Universities face a tension from two urgent pressures they face, firstly to demonstrate that they deliver value for society in return for public investments, and secondly to demonstrate their responsibility by introducing strategic management to demonstrate to their funders that they meet their goals. In this special issue, we explore the ways in which these tensions play out in practice, as universities facing ‘mission overload’ in turn try to develop additional regional development missions, highlighting three findings. Firstly, there can be no one-size-fits all idea of a ‘third university mission’ alongside teaching and research because engagement is so context-dependent. Secondly, universities and regions need much better understand their own contexts to improve their performance rather than seeking simplistic best-practice third mission instruments elsewhere. Finally, higher education ministries should recognise that diversity in higher education is critical to delivering societal benefits, and uncritically believing in the power of world class universities.

**Key words:** university third mission; regional engagement; public value failures; innovation policy; entrepreneurial university.

## 1. The constrained vision of the complex role of universities in the knowledge economy

A number of important questions remain unanswered with regard to the role of higher education institutions (HEIs) and their contribution to society, and providing answers to these remains central in current policy and academic debates. Certainly, it is clear that there have been profound structural and functional transformations of HEIs over the last three decades, with a new model of the ‘modern’ university becoming prevalent in recent years (Commission of the European Communities 2006). Central to the notion of the modern university is the importance of strategic management to HEIs. Historically, the roles of rectors and deans may have been reserved to elected academics who sought to balance between competing interests to maintain and sustain their institutions. These positions are increasingly becoming the province of professional managers who seek to identify institutional shortcomings and opportunities, and to remake the HEIs to better respond to market forces (Middleton 2000). These changes have been coupled with the importance of ‘strategic’ management, setting institutional-level priorities and goals, and directing HEI efforts towards achieving those goals, more than balancing the needs of different individuals, research groups and disciplinary fields (De Boer et al. 2007).

With the emergence of ‘strategic modernisation’ as a leitmotif in contemporary higher education, universities have likewise developed their traditional roles of teaching and research as elements by which they fulfil the demands from key stakeholders, customers, clients and users (Jongbloed et al. 2007). In particular, teaching and research are now seen as part of a broader and more complex nexus of (not strictly) market-oriented and knowledge transfer activities. Stoked by a mixture of urgent pressures (e.g. austerity), long-term secular shifts (globalisation, digitalisation, post-industrialisation) and also driven by universities’ own claims, there is now a widespread acceptance by policy-makers, senior university managers and also researchers that the future of HEIs lies in serving as strategic knowledge hubs to stimulate innovation systems at various scales. The extent to which the position set out in policy rhetoric is a reality can be debated, but that there has been a shift in the roles of universities is indisputable.

But we are struck that there has not been more critical reflection on the ways in which universities have adopted and incorporated these new missions into their existing core activities. Policy and academic narratives concerning universities’ roles in national and regional economies are often based on simplistic, naïve assumptions that a natural strategic alignment between universities and external actors is easily achievable (cf. OECD 2007). Yet, in reality and as

demonstrated recently, this is far from axiomatic (cf. De Boer et al. 2007; Pinheiro et al. 2012). Certainly the diagnosis that a benevolent platform linking universities and their local partners can identify areas of strategic mutual interest, which they then jointly pursue, seems a little idealistic. At its most basic, we are struck by the fact that there is no automatic necessity for there to be areas of common interest between universities and other parties in their localities. But reflecting a little further leads us to note that there are many tensions inherent in the ways in which universities interact with regional partners given the multiplicity of actors involved, with very different expectations, values, interests, aspirations, and even historical trajectories.

A second area of concern is the assumption in much 'modern university' rhetoric that universities are simple, strategic actors able to respond to a well-articulated set of regional needs. The reality is that universities are enormously complex entities that perhaps can better be understood as a range of knowledge-producing communities that are held together within a single institutional framework, but are never more than loosely coupled. The idea of a university rests on its capacity to balance competing tensions and hold together in a synergetic manner, diverse constituencies in ways that help to address multiple goals (Benneworth 2014). According to Manuel Castells (2001: 211):

... the critical element in the structure and dynamics of university systems is their ability to combine and make compatible seemingly contradictory functions which have all constituted the system historically and are all probably being required at any given moment by the social interests underlying higher education policies.

The process of modernisation has attempted to make universities more centrally directed. The needs of various knowledge-producing communities for autonomy (consider for example the simple fact that students are never strategically directable under the control of a managing authority) means that universities retain this property, which has been described as a form of 'loose coupling' (Reponen 1999). Our access point into these discussions is to note that many academic conversations regarding universities' wider roles in the 'social knowledge economy' have tended to overlook this complex property of HEIs (Olsen 2007). The various social learning communities within universities are themselves embedded in many kinds of wider (non-local) networks that play a critical role in regulating knowledge flows into regions. In turn, these networks have very different logics and territorialities, and impose a rather unpredictable set of constraints on those actors within universities seeking to engage with regional constituencies across the public and private sectors. Academics organise their own knowledge production, diffusion and transfer activities in ways that best suit their own disciplinary cultures, norms and judgements (Becher and Trowler 2001). External engagement fits in very different ways into external engagement (Callon 1999), and in particular that with local and regional partners.

Senior managers can therefore find themselves pulled between different poles when trying to articulate what the university can do, or what the university as an organisation finds beneficial in regional engagement. The university will have its own strategic interests (e.g. in large infrastructure developments), individual academic knowledge-producing communities may have their own quite distinct interests. The various stakeholders with which universities work will have their own interests. At the same time, universities themselves must be careful to take account of the problems that engagement

can bring to universities, what Bozeman et al. (2013) term the 'dark side' of engagement. If real estate companies become strategic partners for universities in developing new campuses where engagement can be better promoted, then suddenly the researchers critical of these developments can become seen as 'enemies' of the institution rather than legitimately exercising academic freedom. Therefore, there is a need for a more systematic account for the various ways in which particular kinds of regional engagement may facilitate or hinder the multiplicity of universities' missions or functions (Krücken et al. 2007).

It is therefore intriguing that universalistic models and organisational archetypes have come to play such a prominent role in both policy and practice in recent years (cf. Harding et al. 2007; Temple 2011). By this we refer to policy concepts such as 'mode-2 knowledge production' (Gibbons et al. 1994), 'triple helix' (Etzkowitz and Leydesdorff 2000), 'entrepreneurial university' (Clark 2001) that carry a highly reductionist connotation of the practice of involving universities in engagement activities which downplaying these tensions. We use the term policy concepts here to refer specifically to terms that achieve salience in policy discourses because they are able to carry very different meanings in different communities that nevertheless wish to talk about a common issue (Böhme and Gloersen 2011). It is important not to imbue policy concepts with analytic capacity, because they are no better than commonsense understandings. We therefore see danger in treating the notion of university-regional engagement in policy discourses as a rigorous analytic capacity. The idea of the triple helix has very quickly lost its notion as a way in which to understand the interplay of tensions between actors in different spheres that achieve systematic outcomes, whether entrepreneurial, statist or free market. It is often simply used to refer to universities, businesses and government working together in whatever way.

There is a broad recognition that such stylised perspectives on universities' roles within society/economy are unsuitable for addressing the nested challenges posed by the new knowledge economy, or indeed the complex nature of universities. Nevertheless, academics, policy-makers and institutional leaders have iterated these new concepts as a new policy paradigm whether constructed as regional advantage or smart specialisation (cf. Asheim et al. 2011; McCann and Ortega-Argiles 2015). These new concepts claim to be able to offer better insights into what needs to be done to allow knowledge-producing institutions, including universities, to realise their full potential in contributing to solving the 'grand challenges' facing humanity. But at the same time they speed too quickly over the tensions and problems.

Despite enthusiasm among some policy-makers and university leaders for these ideal-type models, they systematically overlook or downplay the tensions that arise in the course of engagement (cf. Bozeman et al. 2013), and therefore fail to offer any practical insights for those either studying or encountering the tensions. The effect of 'black-boxing' the university as a complex institution is to create a very simplistic view of the way in which universities create knowledge, assuming that societal demands unproblematically carry sufficient legitimacy and urgency to justify universities responding to those demands (Jongbloed et al. 2007). Our argument is that this conflation of a range of divergent processes by which universities and regions can sometimes mutually and beneficially engage has led to the formulation of a new policy concept of the 'engaged university' an overarching holistic ideal-type ('one-size-fits-all') model of how universities should always undertake regional engagement. The concept of the engaged university might

be useful as a policy concept, to enable a heterogeneous group of political elites to be able to discuss how universities can make more important contributions to society. But it is important not to confuse this elite policy consensus with a rigorous analytic framework that captures the diversity of HEI communities engaging with society in various ways. Our concern in this special section of *Science and Public Policy* is to take a first step in this academic conversation, and to say ‘one size does not fit all’ in the regional engagement of universities.

## 2. Introduction to the special section

To take this first step, in this special section we focus on two specific shortcomings of the ‘one-size-fits-all’ perspective. First, it dilutes the reality of the variety of capabilities that universities have to answer the ever-changing societal needs at national, regional and local levels. Secondly it does not take into account universities local specificities which affect both their performance and future expectations and aspirations (including historical trajectories and local embeddedness). In particular, there is a consensus regarding the transferability of policy lessons around supposed best-practice examples (Geuna 1999; Commission of the European Communities 2005; Rodríguez-Pose 2013; Sánchez-Barrioluengo 2014) and policy (European Commission 2005). These shortcomings are intimately linked with the lack of contextualisation of universities’ circumstances. Pinheiro et al. (2012) argue for a need to understand ‘what is’ and ‘how to change’ the scale and scope of universities’ capabilities to sustainably contribute to society across the contextual characteristics in which they are evolving. Our heuristic is to argue for a better understanding of the issue of scale. For example, a raindrop falling on a mountain top or a densely braided tidal delta creating fertile breeding areas for fish are both examples of water interacting with rock. But each is best understood through very different kinds of concepts and models reflecting the particular interplay of local circumstances, external factors and underlying engagement processes.

These different dimensions combine in particular places to create a distinctive environment characterised by new strategic possibilities but, in turn, also a new set of constraints whether structural, normative, or cognitive. There is therefore a need to distinguish both the underlying processes, but also the most common scalar contexts operating, to come up with a much more systematic understanding of university–regional engagement in very different kinds of places. To that end we have assembled a range of papers that shed light on the way in which global processes play out in these very different contexts. They also demonstrate the wide range of policy outcomes and impacts that can arise by considering a broader perspective on the roles played by universities and HEIs in regional development.

The first of our papers looks at the interplay between very strong homologising institutional forces across HEIs located in very divergent regional environments. Kitagawa et al. (2016) addresses the tensions that arose in England with the introduction and standardisation of knowledge-exchange activities in English universities located in very different kinds of regions. Using a mix of quantitative analysis as well as more detailed case study analysis, they explain the heterogeneous pathways that organisations take in response to external environments and their own strategic choices. The authors conclude that each university generates unique internal capabilities by targeting different areas of activities, partners and geographical areas, and by combining different set of missions,

capabilities and resources. More consideration should therefore be given to systematically considering how these internal capabilities arise, their internal dynamics/relationships with core teaching and research activities, and, ultimately, their susceptibility to purposive intervention.

The second paper is concerned with the emergence of a heuristic ideal-type of the kinds of academics that are active in engagement. Olmos-Peñuela et al. (2016) are particularly concerned with the simplification involved in making engagement synonymous with very specific kinds of commercial entrepreneurship activities. They begin from an alternative perspective on how universities make knowledge available, drawing on the idea of the contributions to a ‘usable knowledge pool’ which fit with user interests. Drawing on a Spanish survey of 1,500 researchers in the national research organisation (CSIC), they analyse the personal and professional characteristics of those scientists whose research practices correspond most strongly to contributing to this knowledge pool. Their findings highlight that, in contrast to simplistic narratives of heroic entrepreneurial scientists, there is far more heterogeneity among those scientists creating publically usable knowledge, and indeed that the PhD formation process is a key determining factor on whether scientists seek to create this publically usable knowledge.

In the third paper, Charles (2016) considers an atypical campus location, that of rural universities where there may not necessarily be a very strong set of local demands for their activities, meaning that they are dependent on their position in extra-local networks for their success. Charles examines this in the case of six rural university campus developments in the UK by looking at both the strategies of the campuses and the expectations of local partners. Differences among universities appear within this particular context: for those where disciplinary specialisation has been pursued, potential for engagement exists with niche clusters. In those other campuses that have focused on broad educational equity issues, engagement with business has been difficult to achieve. Charles concludes that overall policies to enhance rural innovation through new university campuses must be seen to be very long-term strategies and not necessarily congruent with strategies to increase participation and equity of opportunity in higher education.

Although to some extent all the papers deal with the diversity of external engagement forms (cf. Olmos-Peñuela et al. 2016), this issue is the central concern of the fourth paper. Thune et al. (2016) consider how five different forms of external engagement (dissemination, training, consultancy, research collaboration and commercialisation) are influenced by a range of factors. Drawing on a comprehensive survey of 4,400 Norwegian academics working at 31 HEIs, they find a complex picture of influences on forms of external engagement among academics. The major influences are individual and disciplinary, rather than being related to the institutions within which individuals are employed. In particular, they seek to question the commonsense idea that the presence of a strategic infrastructure for promoting technology transfer is associated with a greater propensity for engagement, particularly with regard to dissemination and collaboration.

In the fifth paper Pinheiro et al. (2016) show how patterns of external engagement across disciplinary domains and knowledge types vary within a single, regionally embedded institution, itself a relatively ‘new’ university. The authors contend that the variations that are observed can be interpreted as a result of the unique contextual circumstances of the case university, most notably its historical evolution (from vocational college to fully fledged university) but also the dynamics within its immediate regional surroundings. In

addition, and given the important role attributed to individual academics, the authors suggest that variations across units may reflect the presence/absence of particular ‘academic intrapreneurs’. Behavioural patterns within and across departments seem to emulate the more established (‘older’ and more prestigious) universities. This, the authors contend, is a reflection of both the transition towards a more universalistic model of the university and the result of isomorphic pressures at the level of the organisational field of higher education, both domestically and internationally.

Finally, the paper from [Sánchez-Barrionuengo and Consoli \(2016\)](#) deals with the processes of knowledge creation and mobilisation by which HEIs contribute to regional human capital. Rather than simplifying the situation by considering exclusively regional contexts, their paper seeks to reflect the reality that human capital formation and uptake processes are determined by networks functioning at a range of scales (local, regional, national and also international). They focus on occupations as a proxy for the skill content of jobs and explore those factors influencing the Spanish employment structure over the period 2003–10. They conclude that, while universities teaching activities are a robust predictor of high-skill employment, the impact of engagement (research and knowledge transfer) activities is more sensitive to the structural characteristics of the regional socio-economic context.

### 3. Towards a better fitting set of models and concepts

The empirical evidence provided in these six contributions makes the point that it is certainly true for university–regional relationships that ‘context matters’. But at the same time, it is possible to begin to perceive some regularities in how context affects the ways in which universities undertake regional engagement activities, and how different constellations of universities and regions can find mutually beneficial ways of engaging. From this basis, we can see both implications for further research on universities and regional engagement reflecting this diversity, as well as recommendations for policy-makers and university managers.

Our first observation is that there is a difficulty in studying diversity in that there is a tendency to simplify part of the diversity in order to study it, rather than to acknowledge that there is diversity across the spectrum: there are diverse kinds of institutions, carrying out diverse kinds of engagements, in diverse kinds of contexts. In higher education policy studies, there can be a drive to create a singular definition of an external phenomenon (such as the ‘third mission’ concept) and then conceptualise that simple definition as one element of a much more complex institutional picture of how universities function to deliver particular outcomes. We therefore urge that the issue of diversity in engagement activities by universities is dealt with much more explicitly in the future by higher education scholars, no longer considering simple policy concepts such as the ‘third mission’, or ‘the engaged university’ or the reductionist reading of the triple helix. Instead, it would be preferable to consider how universities’ institutional and organisational arrangements interact with societal partners in ways that are mutually beneficial, interact and/or interfere. Likewise science policy scholars need to be aware how universities function. In particular, that engagement is not a core concern of most HEIs. Instead, engagement is shaped through outcomes which reflect diverse pressures across the university. As an example, saying that universities should use tenure and promotion policies to stimulate engagement overlooks the fact that, if engagement is the criterion with the

lowest weighting (whether explicitly or implicitly), then simply creating the policy will have no effect.

Turning to policy-makers and institutional leaders, we see that there is also a need to acknowledge the importance of diversity—not merely as a by-product of engagement but as actually central to delivering the desirable elements of the university–society compact. We therefore are confident in recommending on this basis that as much as there is a need to stimulate policy-learning and transfer from elsewhere, there is also a need for places and place-specific partnerships to better understand their own contexts, and to import ideas and models that are relevant to the situations within which they find themselves. This has resonances with the [OECD Regional Innovation Strategies \(2011\)](#) which stresses a dual approach, seeking to replicate comparable best practices, along with serious benchmarking and contextualisation within regional partnerships to clearly understand which regions represent fair comparisons for them.

This lesson is of critical importance as we detect a decline in institutional diversity across the world through the strong forces driving homologisation between different types of HEI, driven by the great emphasis placed by various kinds of policy elites on stimulating their institutions to become ‘world class’ ([Salmi 2009](#); [Hazelkorn 2011](#)). Through this underlying process, a particular version or stylised model of the university has come to the fore as being qualitatively desirable or better than other models. This sees particular kinds of engagement (often related to generating substantial research incomes and supporting extensive facilities to attract students and faculty) as a normative ideal for all universities to follow. It is not clear that a few excellent engagers are sufficient to raise performance across the system as a whole. It is not sufficient to target commercial engagement alone and hope that it stimulates much wider regional engagement. Universities need to find ways to deal with diversities of activities within institutions, and avoid defaulting to prioritising visible, profitable activities if the true goal to justify their societal privileges. And if understanding this is difficult, then putting it into practice is much harder because the kinds of metrics and indicators that might support a range of engagement activities are not readily available, even if the papers in this special section indicate the range of areas in which universities may create an impact.

This raises a series of parallel dilemmas for policy-makers, not least when it comes to equity dimensions and the future development of higher education systems. As with natural systems, different types of HEIs provide higher education systems with the diversity to respond heterogeneously to the various demands (including those from students) being posed by an increasingly volatile external environment. Contrary to common belief, this external environment is less homogeneous than meets the eye, even where substantial efforts have been invested into creating markets to capture and channel these demands. The synergic effects of specific local circumstances—from history to policy to national and regional identities, etc.—make the adoption of universal and standardised solutions (e.g. particular type of university or mode of knowledge production and/or transmission) problematic. Thus, both policy-makers and institutional managers should take time to critically analyse the key factors—external and internal—which shape the dynamics surrounding specific national systems and HEIs, in an attempt to devise non-standardised solutions (including societal engagement) to a multiplicity of ‘wicked problems’ that are increasingly interconnected.

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