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(Re)Conceptualising the Academy: Institutional Development of and beyond the Third Mission

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Framed in terms of the Third Mission, the "enterprise" or "entrepreneurial" university has increasingly become normalised in public policy; however there remains much contention about the implication of third stream activities. There is little rigorous evidence as to whether the Third Mission adversely affects teaching and/or (basic) research. Martin and Etzkowitz (2000) note there is some anecdotal evidence that the Third Mission has had a positive impact. Indeed, it is to this debate that this paper seeks to contribute. It considers how the Third Mission can positively reinforce teaching and research activities and how this is arguably more significant than the Third Mission itself. Indeed, it proposes that triangulating teaching, research and third stream activities should reinforce the respective dynamics of each through their recursive and reciprocal development. Conceptualising institutional engagement with the third stream holistically in terms of entrepreneurial architectures may enable universities to stimulate institutional development beyond the Third Mission. The paper concludes by reflecting upon and looking towards the future of higher education policy and the management of higher education institutions.

Introduction

"[T]he research university powers the knowledge economy in the same way that electricity powered the industrial economy." (Mote, 2000)

The social contract between universities and society has been amended, if not rewritten, over the past 30 years. Universities are no longer simply dedicated teaching and research institutions; they are now regarded as the engines of the knowledge economy. Mote (2000) sees the research university as powering the knowledge economy in the same way that electricity powered the industrial economy. However while not contesting the importance of universities to the knowledge economy, there is a need to reflect more critically upon their role. While electricity did power the industrial economy, it is an output of numerous processes and uses raw materials. In a similar vein, while the importance of the contemporary university for the knowledge economy has been recognised, there is a need to refocus on the functions of teaching and research, the ultimate generators of innovation within universities and the source of knowledge transfer.

Framed as the Third Mission, the "enterprise" or "entrepreneurial" university has increasingly become central to public policy. The Third Mission is a phenomenon, articulated in policy, in which higher education institutions are encouraged to realise their broader socio-economic potential through knowledge exchange and partnerships. However its broader impact remains contested and the subject of normative debate. There is little evidence as to whether the Third Mission, as a set of "new" roles, adversely affects teaching and/or (basic) research (see Ziman, 1991; Geuna, 1999; Behrens and Gray, 2001). Martin and Etzkowitz (2000) note there is some anecdotal evidence that the Third Mission has had a positive impact. It is to this debate that this paper seeks to contribute. It considers how the Third Mission can positively reinforce teaching and research activities and how this is arguably more significant than the Third Mission itself. It proposes that triangulating teaching, research and third stream activities should reinforce the respective dynamics of each through their recursive and reciprocal development. The concept of entrepreneurial architecture is introduced as a theoretical framework within which the third stream can be embedded within core institutional missions. This provides a pragmatic approach for policy makers and managers confronting the challenges of the Third Mission.

The paper begins by identifying and situating the so-called Third Mission and university entrepreneurship, identifying its emergence as an integral facet of the contemporary university. Exploring the political dynamics of the Third Mission, the paper considers how this can serve as a mechanism of institutional development beyond the Third Mission itself (*i.e.* for teaching and research). The second section picks up the theme of institutional development and how it can be affected by the Third Mission, but needs to be deliberate – embedding the Third Mission within the strategy and ideology of universities through institutional entrepreneurial architectures. It concludes by reflecting upon and looking towards the future of higher education policy and the management of higher education institutions.

Evolving missions, fuzzy roles

Universities are evolving institutions. Everywhere higher education institutions have endured revolutions in the ways in which their roles and functions are conceived. This paper provides an overview of general trends in the development of the moder university and the emergence of a new paradigm embodied in the Third Mission. The earliest medieval universities, primarily within Europe, were established through religion as teaching institutions, and subsequently expanded by sovereigns, monarchs and the state. Despite the association of universities with religion, functioning as they were as training centres for the clergy (Jewell, 1998), they were also more than this. Newman (1852) observed how it was necessary for universities to reinforce credibility through teaching universal knowledge, with the focus on intellectual as opposed to moral teachings. As such the primary role of the medieval university was the diffusion and extension of the frontiers of knowledge rather than the advancement of knowledge *per se*.

Universities existed as teaching institutions until the mid 19th century when an alternative model emerged. This paradigmatic shift, which Etzkowitz *et al.* (2000) refer to as the first academic revolution, saw research introduced as a core function of the university alongside teaching, and is commonly attributed to Wilhelm von Humboldt. In contrast to Newman's vision of the university, the Humboldtian university saw academics both as teachers and scholars. Indeed Martin and Etzkowitz (2000) observe how it has become "conventional wisdom" that universities are teaching and research institutions, with bewildering results in the development and extension of disciplinary fields. In contrast Johnston *et al.* (1993) note there is no empirical evidence that teaching has any influence on research performance, while Nybom (2003) observes that in fact the unity of teaching and research is being superseded by two distinct cultures.

Whether unified or distinct, as core missions of the contemporary university, teaching and research are increasingly subject to a new dynamic. The prevailing growth of the knowledge economy sees universities as engines of economic growth (King and Nash, 2001; Yusuf, 2007), constituting a shift which Etzkowitz *et al*. (2000) frame in terms of a second academic revolution. Essentially the revolution refers to the transformation of universities from ivory towers to more socio-economically engaged institutions. The notion of universities engaging with industry and society, however, is not a new one (Jacobsson, 2002). Relationships between universities and industry are almost as old as universities themselves (Jencks and Riesman, 1968) – yet the second revolution marks a new era in this engagement. Kerr's (1963) proposition that the diversifying remit of universities should more accurately see them called *multi*versities appears to have become ever more of a truism. However, on account of the predominantly economic focus of activities associated with the new mission they have been referred to as "entrepreneurial" universities (Clark, 1998a, 1998b; Etzkowitz *et al*., 2000).

It is not the intention here to intimate that a homogenisation between national systems of higher education has occurred, or is occurring. Indeed there remain strong distinctions between countries. However, the transition from "ivory tower" to "entrepreneurial university" can broadly be seen as universal in light of the global nature of the knowledge economy, despite occurring at differing rates. The United States has been at the forefront of pioneering university-industry links and commercialising academic research. Universities such as the Massachusetts Institute of Technology and Stanford, which were once perceived as atypical, are becoming the standard, prompting other institutions and governments seeking to emulate their successes. This trend has been replicated in the United Kingdom, and subsequently across Europe and Asia, albeit in different guises (see Etzkowitz *et al*., 2000).

Public policy framed as the Third Mission emphasises the positive impacts of deeper socio-economic engagement from publicly funded higher education institutions. While, in principle, this definition provides equal scope for social and political engagement, in practice the Third Mission exhibits a strong bias towards economic interactions based on knowledge transfer (OECD, 2007). This bias is reinforced by government funding the exploitation of academic, or more accurately, scientific research (Geuna, 2001; Goddard and Puukka, 2008) and by the proliferation and significance of leagues tables in measuring competitive performance (Salmi and Saroyan, 2007).

As the Third Mission has become more established it has diversified to a point. Tuunainen (2005) finds it encompasses a wide range of activities involving the generation, use, application, and exploitation of knowledge and other university capabilities outside academic environments. Still it is significant

that much of the work on university entrepreneurship and engagement is couched in strictly economic terms with a primary focus on industrial linkages. Göktepe (2002), for instance, distinguishes between specific and generic mechanisms of "university industry technology transfer" (UITT). This typology differentiates between Set-1, those forms of UITT which endeavour to commercialise university knowledge directly, and more generic and indirect mechanisms of UITT identified as Set-2. These include consultancy, joint workshops, co-funded research and personnel exchange, among others. This highlights the paradigmatic shift that has occurred and which has resulted in the rise of the (market focused) entrepreneurial university. Geuna and Nesta (2003) argue that this shift has seen the dominant norm become managing industrial research agreements, assessing and protecting intellectual property, and the commercial translation of science rather than blue-sky research or other forms of knowledge exchange.

The entrepreneurial turn within academia can most clearly be seen as based in the sciences, most notably with biotechnology and information technology at its core. The scientific foundation of the Third Mission, especially in relation to the mechanisms of technology transfer and commercialisation, meant that such activities were almost exclusively the domain of research-intensive universities. While this met the objectives of governments and research-intensive industries in extracting the value of the academic research base, it did not contribute significantly to the realisation of institutional economic or societal potential.

Historically, there has always been a binary divide between "tiers" of academic institutions, whether new *versus* old universities; teaching *versus* research led; basic *versus* applied research (for example see Williams, 1992). The Third Mission is not entirely different in this respect, with different forms of UITT associated with different degrees of prestige, though it presents a more equal basis for engagement. Furthermore the somewhat premature split between Set-1 and Set-2 forms of UITT arguably only serves to distort the Third Mission, effectively creating an artificial divide, as some institutions adopt this mission to pursue prestige rather than effectively engaging in alternative (less prestigious) third stream activities. The increasing number of UITT mechanisms recognised as Set-2 shows how the evolution of third stream activities is seeing the Third Mission become more inclusive, even within the sphere of interaction with industry. Consequently a wider spectrum of less research-intensive universities is able to engage in third stream activities, so realising their competitive advantage(s). While more generic forms of UITT do not demand research intensity *per se*, they often capitalise on the specialisms of individual academics and/or specific research groups within universities.

This evolution has also seen the Third Mission extend beyond the science base. In addition to the sciences, the knowledge base of universities transcends

the arts and social sciences, yet in terms of the Third Mission, non-scientific knowledge has been largely overlooked in the literature and in practice (Mould *et al*., 2008). Whether at the apex of the knowledge economy (Knell and Oakley, 2007), or as a distinct economic sector, Mould *et al*. identify how universities are also beginning to engage in more non-scientific, creative and cultural third stream activities. Again with the inclusion of non-scientific and more creative/culturally orientated forms of third stream activities, the Third Mission becomes more accessible to a wider range of institutions.

While the Third Mission is often considered in relation to universities, the three missions of universities are invariably conducted in relation and response to society. This sentiment is aptly articulated by Foucault (1971) who identified the importance of universities as a form of least-cost state apparatus, capable of engineering social, economic and political objectives. Sutherland (1994) observes the dialogue between governments and universities as demonstrating how universities respond to the demands of the state, and in so doing highlighting the power dynamic between the two (for a more comprehensive discussion see Vorley, 2008). It is increasingly evident that through the Third Mission more universities are assuming roles as engines of the knowledge-based economy, at different geographical scales and through different forms of engagement.

Universities are being required to fulfil a greater and greater socio-economic role in the context of shifting policies, incentives and priorities; however, as a result there is a need to reflect on the implications of the entrepreneurial university. Such a shift has implications for the legacy of the Humboldtian research university, although this need not be detrimental. The following section outlines key strands of debate and develops how the Third Mission has the capacity to reinforce the teaching and research missions, and so facilitate institutional development beyond the third stream activities.

Expanding the academy: institutional development beyond the third stream

The ideology of the Third Mission – even if not acknowledged everywhere in these terms – has infiltrated the consciousness of higher education policy makers and university management and has begun to gain purchase in academic cultures. While this shift has been pervasive, as outlined above it has not proceeded without controversy or critique. The degree to which institutional change is required to adapt to the necessary conditions of the third stream has raised questions that strike at the very heart of university functions and their roles in social, economic, cultural and knowledge (re)production (Deem, 2007). The dominant streams of this debate focus generally on two related dilemmas. First, what functions are universities best suited to

fulfil (or take on) in their roles as engines of economic development? That these institutions are the best and most appropriate conduits and producers of knowledge, providers of training, etc. is often assumed but is not always justified (see Fuller, 2007; Garnsey, 2007). Second, what implications do the (new) economic and social roles demanded by the third stream have for the traditional and arguably core missions of teaching and research?

This section focuses on this second question of the impact of the Third Mission on trajectories of institutional development. Arguments regarding the inevitability of trade-offs between missions, or the potential for their co-option by purely industrial imperatives have been well documented and debated. While counterarguments that point to the potential for positive interaction between the three missions exist, they are typically vaguely elaborated (Etzkowitz *et al.*, 2000). By presenting the case for the Third Mission to initiate institutional development beyond the third stream through the framework of entrepreneurial architecture, the paper seeks to contribute to the growing body of literature on the contemporary university, and specifically the Third Mission.

Far from standing alone, the Third Mission is inextricably linked to the core functions of the university. It is therefore puzzling that the third stream is often perceived, discussed and even implemented as a separate agenda. The Third Mission is more accurately conceptualised as a thread that has the capacity to weave together teaching and research, while assuming a more economic and societal focus. Despite the extending frontiers of the contemporary university, it need not be a zero-sum game involving necessary trade-offs between streams (see Behrens and Gray, 2001; Nieminen and Kaukonen, 2004). The Third Mission has the capacity to reinforce existing institutional strengths but also stimulate development in these areas beyond third stream activities. This process is both recursive, as positive feedback can be magnified beyond the third stream, and responsive to the degree that it is adaptable to institutional strengths and developmental requirements.

The relevance of research to the third stream, and *vice versa* , is the most obvious recursive dimension. As noted above, the Third Mission is most commonly (and narrowly) conceptualised in terms of technology and knowledge transfer activities – both of which are typically dependent on a research base. The focus of public policy on third stream activities, most commonly in terms of funding streams/mechanisms, has seen an increase in the resources available for knowledge exchange to universities (Guena, 2001). Moreover, public policy has begun to encourage research between university and industrial partners, for which governments often provide additional support to university researchers. While often dismissed as detracting from curiosity-driven research, the search for practical solutions has played an important role in extending the boundaries of academic inquiry and opening up new areas of research

(such as biotechnology and computer science) (Thorn and Soo, 2006). Indeed, far from being detrimental to academic aspirations Nieminen and Kaukonen (2004) find collaborative research with industry often produces a "win-win" situation, whereby there is more funding for research as well as opportunities for creative networking outside the academy.

While the Third Mission is often thought to privilege research-intensive universities, it has the capacity to develop the research base of all institutions. With public funds increasingly distributed on the basis of institutional performance on measures of research excellence (Benner and Sandström, 2000; Molas-Gallart and Castro-Martinez, 2007), this provides a powerful incentive for all institutions to strengthen their research base. One implication of this is that teaching-led universities face pressure to adapt in order to retain competitive access to public funding. It is this dynamic that is most frequently cited as contributing to a zero-sum (or near to) situation in which institutional strategies are shifting towards more "profitable" streams. This is an issue which demands further consideration. Etzkowitz *et al.* (2001) observe the phenomenon of "status emulation" in higher education systems in the process of transition, resulting from the adoption of the strategies of research leaders irrespective of institutional "fit". However, it is interesting to note that the strategy of emulating leaders also permeated preceding academic revolutions and reorganisations (Williams, 1992). The widespread restructuring of higher education institutions on the model of Huboldt's Prussian academic reforms are the original case in point. While there is no question that the research agenda has become more prominent in the modern university – both as a means to access funds and as a strategy of institutional development – there is little evidence to support the notion that educational roles have been proportionally reduced (Behrens and Gray, 2001; Stephan, 2001). A more powerful critique of the increased emphasis on research is the degree to which universities are encouraged to pursue projects with potential economic returns.

The most resilient counterargument to the claim that the third stream may strengthen research capabilities is that the emphasis on commercial applicability has privileged applied over basic research (Nedeva, 2007). Recent scholarship that has addressed this question argues that this concern is largely unfounded. In their analysis of the academic publishing content of collaborative research groups, Ranga *et al.* (2003) find no evidence that university-industry relations have affected the proportion of basic research publications. Similarly, Poyago-Theotoky *et al.* (2002) conclude that engagement with industry shows no deleterious effects on either the quantity or quality of basic research. Jensen and Thursby (2004) further echo this finding in terms of the time researchers allocate between basic and applied streams of inquiry. This conclusion is reinforced by the proliferation of studies that outline the difficulties

industry and technology transfer offices have in extracting intellectual property from within universities (see Baldini *et al.*, 2005; OECD, 2003; Markman *et al.*, 2004). These demonstrate that, in many cases, far from being co-opted by industry for commercial output, or shifting research objectives wholesale to produce ideas for market, academics are often cautious and reluctant to pursue potential avenues of commercialisation. This is in part due to persistent academic cultures that privilege basic research leading to publication over "local" activities such as commercialisation (Markman *et al.*, 2005). Finally, it is a fallacy that industrial actors are only concerned with supporting research with direct or immediate potential impact on their primary economic interests. While the demise of basic research is clearly overstated, there are certainly legitimate concerns regarding the effect of third stream engagement on academic life, freedom and behaviour. What is critical here is that the institutional adoption of the Third Mission does not necessarily result in trade-offs between basic and applied, teaching or research missions, and often reinforces these core functions – that is to say it is not necessarily a zero-sum game. The degree to which these positive returns can be effectively harnessed is less a function of the characteristics of the third stream in the abstract (as it is often discussed), but of institutional strategies in adapting to Third Mission goals.

The Third Mission also has a potentially positive recursive impact on teaching and training missions. In many respects the logic that supports this contention should be intuitive and echoes many of the arguments tabled following the first academic revolution. Just as the involvement of faculty in their own research agendas enhances the value of teaching (Etzkowitz *et al.*, 2001), enterprising academics with links to industry, collaborative research experience and/or commercial experience, can also deepen the scope of the learning experience. This type of engagement can lead to the initiation of new programmes and the potential for valuable curriculum updates (Stephan, 2001). Furthermore engagement outside the university is not restricted to faculty, indeed students are increasingly interfacing with industry and the regional economy through their involvement in research projects and co-operative education placements. Etzkowitz *et al.* (2001) argue that teaching is expanded as students test the practical applicability of their knowledge in the "real world", acting as intermediaries between the university and other spheres. Industrial engagement and the Third Mission provides a mechanism through which students can be linked to the economy more efficiently through pre-employment interaction (Stephan, 2001). Behrens and Gray (2001) similarly find the potential for external, often industrial, sponsorship benefits students. Such student involvement can also contribute to institutional cultural shifts and further reinforce the importance of the third stream to faculty (see Nelles and Vorley, 2008b). The potential for recursive and responsive interaction between the Third Mission and teaching within higher education institutions is clear.

However, participating in third stream activities does not guarantee positive feedback to research and teaching missions. This highlights the importance of tailoring institutional approaches to the Third Mission to maximise positive recursive effects and minimise the potential for negative feedback.

Having demonstrated how the third stream can buttress "traditional" university functions we come full circle – back to the question of how policy has been perceived and implemented both at the government and institutional level. The Third Mission, where it is adopted, is not necessarily a self-reinforcing or mutually reinforcing phenomenon (Hatakenaka, 2005; Nedeva, 2007). In order to realise positive effects beyond the third stream, the entrepreneurial mission needs to be embedded in the broader institutional strategy of the university. As such, it is argued that the potential for positive returns and negative externalities from the third stream is less a function of the paradigm of external engagement in the abstract than of specific contexts and modes of institutional adaptation.

The third stream has typically been adopted as a bolt-on mission, with a technology transfer and/or industrial liaison office established that, at least initially, embodies the Third Mission. However, real success in the third stream depends largely on the degree to which the Third Mission is consolidated and embedded within the university as part as a broader entrepreneurial architecture – a concept introduced by Burns (2005) and elaborated by Nelles and Vorley (2008a). An entrepreneurial architecture consists of the institutional, communicative, co-ordinating and cultural elements of an organisation oriented towards innovation. An entrepreneurial architecture comprises five elements: structures, systems, strategies, leadership and culture (Burns, 2005). These are interrelated and overlapping, however the presence and co-ordination of all five is required in order to secure successful adaptation to the Third Mission. This theoretical approach is developed in detail elsewhere, however, it provides a useful lens through which to conceptualise institutional engagement with, and embeddedness of, the third stream. Two core arguments related to entrepreneurial architectures are significant in this context. First, an entrepreneurial architecture approach requires a holistic strategy that unites visions, leadership, structures, networks and cultural consideration. The adoption of a strategy that incorporates these elements increases the potential for teaching and research considerations to shape third stream engagement and establishes internal linkages to integrate and mediate these goals. Secondly, entrepreneurial architectures emphasise third stream engagement along institutional strengths, rather than the straight emulation of the strategies of high performing universities. Embedding the third stream within existing institutional strengths is a fundamental component of entrepreneurial architecture. Therefore, it provides both a theoretical and pragmatic approach to

policy makers and managers seeking to adapt the Third Mission and stimulate institutional evolution.

This is particularly salient as it is clear that third stream engagement does not necessarily imply institutional *embeddedness* (Hatakenaka, 2005). From this perspective third stream engagement can vary in terms of the intensity of institutional integration. Intensity can be gauged both in terms of the levels of knowledge exchanged (versus transferred) and of the degree to which external engagement is linked into teaching curricula and research culture. A minimum level of institutional engagement could consist of limiting the third stream to contract research with industry. Here the interface between the third stream, teaching and research is minimal and interaction between industry and the university remains strictly prescribed by the boundaries of contract deliverables. Ideally, industrial engagement is seen as a valued mission in which engagement is integrated into long-term institutional planning both as an end in itself (*i.e.* as another potential revenue stream) and as a tool to stimulate institutional development.

This embeddedness requires that the third stream activities are recognised explicitly by university management and faculty as an opportunity for institutional development – and as a mission to be moulded to university strengths rather than copied from more prominent entrepreneurial universities. As a result, the importance of third stream leadership, *i.e.* the entrepreneurial *architects,* should not be underestimated. Alhough leadership is only one dimension of an institution's entrepreneurial architecture, it is a critical piece of the puzzle in the integration of third stream activities. Indeed, this observation has been recognised in literature on higher education management, which finds that where the third stream is championed by a dedicated university officer (typically a vice-president/pro-vice chancellor/rector) the more likely it is that administration and faculty will adopt it as a priority (Council on Competitiveness, 2008).

On this basis the Third Mission has the potential to stimulate institutional growth and development well beyond the direct benefits of knowledge exchange. Rather than being perceived as a separate mission distinct from the traditionally conceived Humboltdian ideology of higher education, the Third Mission is more usefully conceptualised as a tool to reinforce teaching and research if properly integrated through entrepreneurial architectures. In addition, this section illustrates that it is difficult (and possibly unproductive) to predict the impacts of the third stream on teaching and research missions without reference to specific institutional contexts. So much depends on how universities choose to adapt these activities and the relative development of their entrepreneurial architectures. The task of leveraging and consolidating the Third Mission as an institutional strategy therefore falls crucially to university management as

the entrepreneurial architects. These architects are key agents of institutional evolution but also the socio-economic role of universities.

Making the connection: reconceptualising the three missions

"An institution remains functional only as long as it vitally embodies its inherent idea ... The functions the university fulfils for society must preserve an inner connection with the goals, motives, and actions of its members." (Habermas, 1987)

The ideology of the Third Mission, and its various guises, has been widely adopted by both governments and the universities that are their instruments. As lynchpins, or the engines of the knowledge-based economy, higher education institutions are increasingly under pressure to contribute to the economy and wider society. However, this has not come without costs. The emphasis on economic engagement presents a challenge to the core missions of the university, and arguably the *idea* of what a university is and the functions it should fulfil. While the Third Mission has evolved over a relatively long period of time, its inclusion in public policy has been comparatively recent. As such, universities are in the process of adapting to new imperatives and adjusting their goals and motives to integrate the Third Mission with teaching and research.

This adjustment has been, and continues to be, characterised by a degree of ambiguity as institutional identities and functions are reimagined and realigned. What is clear in an analysis of patterns of policy adoption is that the Third Mission has typically been conceived as a set of functions that are held to be distinct from the teaching and research roles of higher education. Perceived in this way the Third Mission lacks the "inner connection" Habermas sees as critical to the preservation of the social functionality of the university. This paper contests this atomistic view of the third stream. It argues that the precepts of the Third Mission provide an opportunity for institutional development beyond the third stream: in essence, linking teaching, research and third stream activities reinforces the respective dynamics of each through their recursive and reciprocal development.

Adoption of the Third Mission does not, however, necessarily guarantee holistic institutional development – rather it represents the potential for recursive evolution. Positive feedback beyond the third stream is only effective where the Third Mission is integrated into broader institutional strategy – where inner connections link functions and goals through consolidated entrepreneurial architectures. Where the third stream remains isolated it is more likely that tensions will develop between missions and there will be less scope for mutual reinforcement. This brings to the fore the critical role of university leadership and management in the pursuit of third stream activities. These actors are the key architects of institutional evolution and, while they are

not the only determinants of third stream success, are nevertheless critical agents of its integration and design.

While institutional agency is key, it is important to acknowledge that universities do not exist in a vacuum. As instruments of the state they are inevitably the subjects of government policy. In most cases the Third Mission has been adopted as a discrete public policy goal. It is therefore important to consider the impact that policy design and implementation have on the incentive structures faced by target universities. If third stream embeddedness is a determinant of potential for broader institutional evolution, then the degree to which public policies encourage an integrated as opposed to a grafted-on approach may be decisive. Higher education funding structures can have a significant effect on institutional strategies (Benner and Sandström, 2000). To date, while the effect of funding on academic norms has been explored, its impact on the structure and development of entrepreneurial architectures remains underdeveloped. Differences in policy design may account *ceteris paribus* for cross-national variance in third stream adoption. One of the issues related to the design of third stream funding mechanisms is that they are largely performance-based. However, serious questions have been raised about the adequacy of the third stream indicators that underpin funding formulae (Molas-Gallart and Castro-Martinez, 2007; Sörlin, 2007). Of particular concern is the tendency to privilege the most visible dimensions of the third stream – namely patenting, licensing and contract research. This bias may contribute to incentivising university strategies that concentrate on forging external links rather than building the internal connections necessary for entrepreneurial embeddedness.

It has been the intention of this paper to reflect on the second academic revolution: the dynamic between the Third Mission and the former core missions of teaching and research. Whether a university or multiversity, the role of contemporary higher education institutions has been and continues to be in transition, and in some respects this poses a dilemma whereby the "inner connection with the goals, motives, and actions of its members" (Habermas, 1987) are lost. The core proposition of this paper is that while in some instances this "loss" is an outcome of the Third Mission, the Third Mission also has the capacity to be that inner connection. Rather than simply *a* third mission, *the*"Third Mission" presents an opportunity for institutional development beyond third stream activities, allowing universities to (re)define themselves as well as consolidate the (core) missions of teaching and research. Indeed, engineering a recursive and reciprocal dynamic between the three missions poses a greater challenge to the contemporary university than privileging or excelling in any one mission.

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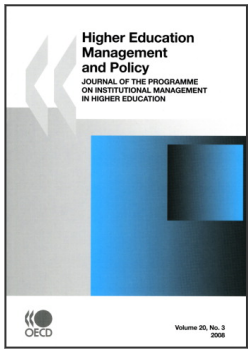

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