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Setting the Stage for the Discussion and Analysis

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Understanding Regions and the Institutionalization of Universities

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Introduction

In this volume, we are concerned with the ways in which universities and university systems have responded to a rising set of societal pressures around regional engagement. Some universities have responded in ways that have produced a new portfolio of activities around the idea of the regional mission. But at the same time, our contention in this volume is that, contrary to what is advocated in the existing literature, this has been a rather complex process and, by implication, the regional mission is a complex mission. Failing to acknowledge and account for that complexity has led to simplistic accounts and normative prescriptions (by policy makers and scholars alike) of the role of universities in regional development.

There has been a readiness within analyses to assume 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: in fact the very idea of a university rests on its capacity to balance competing tensions and hold together diverse constituencies in ways that help to address multiple goals.

The tensions associated with higher education date back to the earliest institutions which might reasonably bear the name of university. As Rüegg (1992) reminds us, the earliest universities were solely concerned with educating people who acquired a qualification that bestowed in turn the right to educate others, but that qualification made its holder useful not only as a professor but for all kinds of professional occupations in medieval city-states. As universities have become increasingly important or embedded in society, through waves of massification (Trow, 2007), so the societal tasks they are expected to deliver have become increasingly complicated. Baumann (1997) argues that the reason why the university has been so successful as an institution is that it has been uniquely capable of finessing tensions through a set of constructive ambiguities in a variety of different ways, particular to the times and the tensions. Understanding the regional mission for universities and, in particular, getting under the surface of the tensions of the institution or idea of the

university, requires understanding the various kinds of ambiguities which characterize universities.

Our objective in this chapter is to provide an overarching conceptual framework for the empirical chapters in this book by reflecting on the ways in which regional pressures have affected institutionalization processes within universities, whilst acknowledging the reality of the institution of the university as a mish-mash in practice of organizational forms. We therefore begin the chapter by presenting five kinds of ambiguity which allow universities and systems to diffuse the tensions which universities face. What we see is that strategically playing upon these ambiguities can lead to unexpected consequences and outcomes in supposedly simple and straightforward processes of change, thereby also creating unexpected institutionalization processes and altering both the university as an organizational form/institution and the kinds of missions performed by the university.

The chapter then considers why the regional scale has become important, and situates the regional mission within a more general set of discourses and demands about universities' societal compact, public engagement, public value and knowledge exchange. It then looks at how these new pressures have influenced institutionalization in the context of a government-led reform process emphasizing strategic autonomy for universities and university systems increasingly governed by market norms and quasi-market mechanisms. The chapter concludes with a characterization of modes of regionalization of higher education institutions and systems, distinguishing three very different responses to "regionalization." This characterization makes the more general point identified in the Introduction as common to many contributions in this volume, namely that there is not a single university regional mission but many, reflecting starting conditions, actors' intentionality and the interplay between these factors.

The "Ambiguous" University Balancing Competing Tensions

There is a tension that lies at the heart of the university, which some have ascribed to the longevity and success of the university as an institutional form (Olsen, 2007), and which others see as creating problems for understanding and researching universities both as contemporary organizations and as social institutions. Conceiving of the university as an institution implies seeing it as:

> a relatively enduring *collection of rules and organized practices*, embedded in *structures of meaning and resources* that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances.
>
> Olsen, 2007, p. 27, emphasis added

This tension manifests itself in a variety of ways, but can be distilled into a distinction around the nature of knowledge (Allen, 1988). Immediate, practical, useful knowledge is improved through its augmentation with abstract, general conceptual knowledge. If you know why bridges work, then you can design a bridge for any river crossing you encounter; if you only know one bridge design, then there may be situations where the bridge does not work. Anyone paying for knowledge as the solution to a problem tends only to be interested in the immediate, practical and useful knowledge. But abstract, general conceptual knowledge contributes to better solutions to problems, and so knowledge customers benefit from accommodations that indirectly fund abstract, general conceptual knowledge.

That accommodation is what we understand as the institution of the university. Students originally studied to acquire a qualification that licensed them to become professors, but they simultaneously acquired skills valued by other employments. Teaching and supervision in turn created and sustained a professoriate with abstract, technical knowledge. In the Introduction, we noted that there has been at least one change in the institutional nature of universities, with knowledge creation supplementing knowledge preservation/dissemination as university tasks. This change brought with it a novel tension, in that the entire economy would benefit from graduates with the latest innovative knowledge, but there was no way for firms to easily capture all the benefits of investing in that knowledge. The university became a site of knowledge creation, allowing firms to gain private benefits of new knowledge, to the wider benefit of the national economy as a whole.

Moving through history rapidly towards the present day, the increasing addition of new, societally mandated tasks for the rapidly expanding higher education sector has brought new tensions. These include competing globally whilst remaining locally rooted, matching excellence and relevance, lifelong learning with professional competence forming, and disciplinary as against institutional loyalties. Pinheiro (2011) has classified these diverse ambiguities into five complementary areas, which provide a useful means for understanding how supposedly straightforward regional interests and direct pressures could influence universities' institutional evolution, an institutional form becoming increasingly important in the contemporary knowledge society. Pinheiro highlights five ambiguities, namely ambiguity in intention, understanding, history, structure and meaning: we now to provide an overview of each in turn.

The Ambiguity of Intention

Universities have traditionally been conceived on the basis of inconsistent, ill-defined objectives and diverging internal preferences. Internally and externally driven efforts to generate normative statements on the university "tend

to produce goals that are meaningless or dubious" (Clark, 1983, p. 19). Any shared purpose at universities, Clark argues, emerges from the forming of academic groups around bodies of knowledge (disciplines), with objectives emerging through the interplay between "the organization of people" and "the organization of knowledge" (p. 23). Universities can be conceptualized as coalitions of vested interests, with internal goals and strategic agendas emerging through functional compromise between various stakeholder group members (de Boer and Stensaker, 2007). The extent to which external constituencies gain privileged access to the decision-making structures of universities is here relevant. Trow's (1970) analysis of the transition from elite to mass systems of higher education distinguishes activities and purposes that are internally defined ("autonomous functions") from those that are taken on in response to external needs and demands ("popular functions"). Conflicts between popular and autonomous functions are traditionally mediated through the division of labor within a given university (Kerr, 2001) and amongst different types of higher education providers (van Vught, 2009).

> [Universities'] popular and autonomous functions are insulated from one another in various ways that serve to protect the highly vulnerable autonomous functions […] from the direct impact of the larger society whose demands for vocational training, certification, service, and the like are reflected and met in the popular functions of universities.
>
> Trow, 1970, p. 5

Castells argues that

> 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.
>
> Castells, 2001, p. 211

Empirical evidence has shown that even in highly regulated binary higher education systems, where particular missions are allocated to specific types of providers, the general tendency is for all higher education institutions to take on multiple functions or missions (Kyvik, 2009).

The Ambiguity of Understanding

Scholars have long noted that organizational technologies[1] are frequently unclear and environmental dynamics are difficult to interpret (March and Olsen, 1994), a situation that makes it difficult to establish clear patterns of

causality between organizational actions and intended outcomes. Within universities, research and teaching are the tools or technologies used to manipulate the basic material, knowledge (Clark, 1983). A distinctive feature of universities, as organizational entities, is that their basic technologies are rather unclear. This is primarily due to two factors. The first is the capacity of academics to resist efforts aimed at rationalizing university activities (Krücken and Meier, 2006) and the second is the intrinsically complex and unpredictable nature of academic tasks, particularly when it comes to research outcomes. While citing Cameron (1986), Birnbaum (1988) contends that means–ends rationality within a university setting is problematic, given internal participants' different conceptions of both the goals or ends to be achieved, and the various means to achieve them.

> So while people at Huxley College may agree that institutional effectiveness should be increased, "indicators of effectiveness are not obvious, principles of improving and maintaining effectiveness have not been developed, no standards exist against which to judge effectiveness, and ambiguity persists regarding the meaning of the word and its relationship to other similar concepts" (Cameron, 1985, p.1).
>
> Birnbaum, 1988, p. 63

In short, within the context of their inner dynamics universities are characterized by a system resembling an organized anarchy, since it "is hard to see the connections between organizational actions and their consequences" (March and Olsen, 1994, p. 12).

The Ambiguity of History

A key element of what is retained within organizations' collective memories is intrinsically related to the preferences (values, tastes, goals) and identities (roles, allegiances) of internal participants. March and Simon (1993, p. 198) claim that shared memory and problem solving are intertwined; the former is composed of repertoires of possible solutions to various problems previously successfully addressed. It can consequently be argued that organizational action occurs in a "routine-like manner," applying organization-specific solutions to newly emerging problems (March and Olsen, 2006). Universities are deeply embedded in distinct national systems which emerged over long time periods and which demonstrate remarkable stability (Rothblatt and Wittrock, 1993). Krücken (2003) found that, despite drastic changes in (German) higher education policy discourse, there was little "real change" within universities, the result of path-dependence within universities' structures, practices and identities. Marton (2005) likewise demonstrates that although the normative boundaries of (Swedish) universities appear to be in tremendous flux

around the dominant knowledge-economy discourse, there is no real evidence suggesting a domination of academic norms by market-determined success criteria. Obviously, this does not mean that change is alien to universities, but it does suggest that historical change within university systems is best characterized as "incremental, disjointed, contradictory, and opaque" (Clark, 1983, pp. 8–9).

The Ambiguity of Structure

Universities have long been conceived as "loosely coupled" entities, in that the structural connections between internal subsystems are infrequent, circumscribed, weak in mutual effects, unimportant, and/or slow to respond (Orton and Weick, 1990). When compared to other organizational types, universities possess relatively weak interdependent units related to disciplinary structures (Birnbaum, 1988). "Law does not need archaeology; English literature does not need physics" (Clark, 1983, p. 41). Loose coupling is advantageous for organizations in complex and turbulent environments, since semi-autonomous units are more capable of responding to emerging external demands, as compared to more centralized or tightly coupled systems. It is particularly valuable during processes of disruptive change because the lack of formal linkages amongst internal units is likely to prevent unintended (spillover) effects across units. Clark (1983, p. 235) suggests that the basic change or adaptation mechanism within "bottom-heavy" organizations like universities is grassroots innovation, with little interference or steering from managerial structures located at the top. This is not to say that leadership structures are irrelevant, but applying traditional "top-down" orientations to the daily management of academic affairs is, at best, problematic and, at worst, counterproductive.

The Ambiguity of Meaning

The cultural-cognitive features or symbolic dimensions must be considered in any attempt to understand an organization (Scott, 2008). Culture has been defined as the "social or normative glue that holds an organization together" (Smircich, 1983, p. 344). Universities can be understood as value-rational organizations grounded in strong cultures in the form of ideologies and belief systems (Dill, 1982, p. 303). Clark (1983) argues that universities' heterogeneity and structural complexity derives from a variety of sub-cultures, suggesting five deterministic factors accounting for universities' symbolic strength and character, namely: (a) size, with smaller universities/units more likely to forge unifying ideologies; (b) level of integration, with interdependent subunits more likely to share a self-definition or common identity; (c) age, with older universities/units possessing a wider repertoire of meaningful historical events or sagas;[2] (d) internal struggle, including reference to dramatic events

such as the emergence of heroic symbols; and (e) the competitiveness of the domestic higher education system (pp. 81–91).

Strong symbolic beliefs have the potential to act as "bridges to the outside world" (Clark, 1983, p. 84), manifested around a positive self-image and a beneficial public (market) reputation. Clark notes that, within a given national or university setting, cultural beliefs act as buffers, mediating between internal and external forces (1983, pp. 72–106). By strongly shaping the institutional contexts in which universities and academic professionals operate, belief systems play a key role in the local interpretation or translation (Czarniawska-Joerges and Sevón, 2005) of externally driven events to which organizational participants react.

> Steered by their own ideas, those within the [higher education/university] system interpret the meaning of societal trends and decide what responses are appropriate […] To grasp the relation of external events to internal [university] operations involves comprehending the way that [academic] beliefs intervene to give the external a particular form and relevance.
>
> Clark, 1983, pp. 99–100.

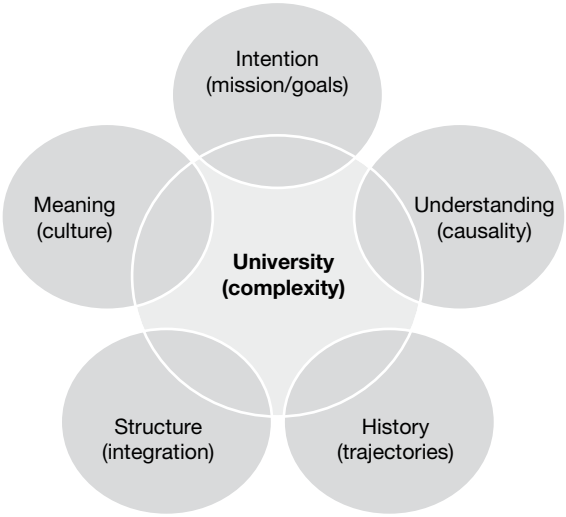
Interpreting Universities in an Ambiguous Context

The five ambiguities described above are represented in Figure 1.1, and offer a useful conceptual frame for assessing and interpreting university dynamics, especially processes of adaptation and change. These ambiguities also highlight the university's tremendous complexity as an organization, something that has received surprisingly little attention in the literature of university–regional relationships.

The Black Box of Complex Regional Processes

The idea that universities are involved in their region is not novel. Universities emerged as urban institutions involved in educating the administrative and, later, technical elite necessary for mercantile societies' smooth functioning (Bender, 1991). The Morrill Acts in the United States provided federal government resources to endow state universities to stimulate the USA's settlement and development in the late nineteenth century (Williams, 1991). Fawcett (1924) included possessing a university as a defining feature of his twelve-region classification of England. Dobrée (1943) went as far as to plead for universities' central roles in "their" regions.

> In my ideal society, the university will be the focal centre of the imaginative life of the region; it will profoundly "influence the way thinking and living move" (Flexner, 1930), not only by a perpetual process of irrigation



Source: Pinheiro (2011, p. 91)

Figure 1.1 The university: the five ambiguities

> through its graduates, but also as a centre of lively public interest. It will provide largely, but not one may hope wholly, the thinkers of the region, the inspirers in committee and council, as well as in farm, factory and shipyard, the liberal-minded administrators.
>
> Dobrée, 1943, p. 6

However, it is undeniable that there has been an increasing interest in understanding universities' regional roles, with some even arguing that universities might have a regional duty or mission (Charles and Benneworth, 2001). A strong policy push has underscored this growth in interest, which has emphasized the manageability of the idea of a regional mission (Rutten *et al*., 2003). The argument is made that managing a strategic interface between universities and their regions can benefit universities, their host regions and other key stakeholders (OECD, 2007). Besides these direct outputs, universities can have developmental impacts on their regions, improving the quality of economic development in those places (Gunasekara, 2006). The increasing interest in this new role may also be related to the shifts which have taken place within universities in terms of increasing their strategic management capacity as part of a wider process of reform and expansion in recent decades.

At the same time, critical voices are raising important questions about the emerging tensions associated with university–regional engagement. Fontes and Coombs (2001) highlight problems due to university–industry mismatch in their host regions. Boucher, Conway, and Van der Meer (2003) extend this point by noting the qualitatively different kinds of interactions between universities and their regions. This calls into question whether regional engagement forms a coherent university "mission," given difficulties in identifying suitable performance measures (CHERPA, 2010). In short, there remains great confusion and disagreement over university–regional engagement and, indeed, the validity of the idea of a regional mission (Christopherson and Clark, 2010).

This volume seeks to clarify this confusion by highlighting the conceptual and practical barriers and obstacles to constructive engagement that exist despite the manifold reasons for universities to engage with their regions. To understand these tensions more clearly in a conceptual sense, it is necessary to understand in more detail the confluence of mutual interest between those concerned with regional development and those concerned with higher education management.

The "rise of the region" is shorthand for the increasing focus on the region as a scale of economic activity associated with the increasing importance of knowledge capital (Hardill *et al*., 2006). Knowledge capital is increasingly important to economic growth (Temple, 1999). Creating knowledge capital depends on interpersonal exchange processes because tacit knowledge (Nonaka and Takeuchi, 1995) is not easily transmitted over distance. Transferring and exchanging tacit knowledge requires interpersonal contacts and trust (Gertler, 2003). The region is the natural scale for the kinds of regular, repeated contact which creates commercially useful knowledge capital (Storper, 1995). Thus, despite early prognostications that information and communications technology revolutions would be the death of distance (Cairncross, 1997), the reverse has been true; new technologies enable much finer-grained, uneven access to localized knowledge resources, driving in turn uneven territorial competitiveness and regional development (Scott, 1996).

Contemporary economic theory acknowledges the importance of places to support innovative businesses with pools of tacit knowledge and exchange networks (Longhi, 1999). Moulaert and Sekia (2003) argue that this orthodoxy is spread across many kinds of territorial innovation models (TIMs), rooted in a range of disciplinary backgrounds, but all embodying a belief that there is a profound relationship between regional characteristics and innovation potential. And it is the rise of the collective consensus of TIMs which provides an insight into why university–region interaction has increasingly become framed as a positive-sum strategic management question.

The uneven nature of the knowledge economy has increased the university's symbolic importance as a regional actor, pushing universities to the fore as strategic regional actors (Benneworth, Charles, and Madanipour, 2010).

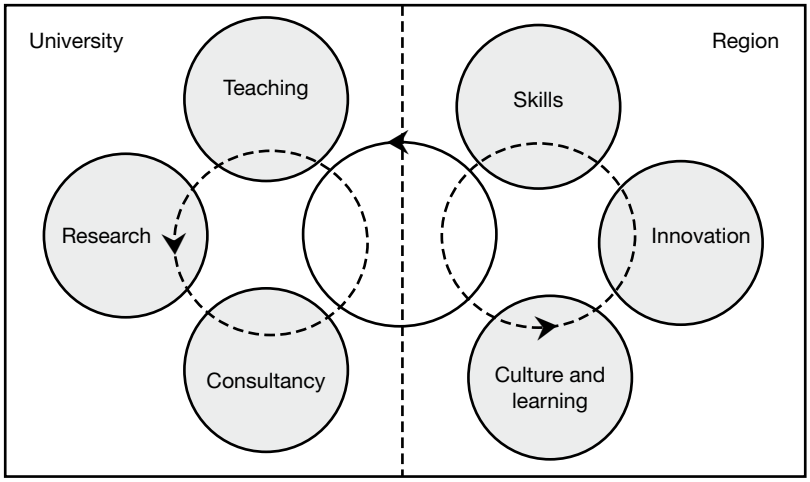
The "rise of the regions" has not treated all regions equally – some thrived through possessing the potent blend of regional knowledge assets making them a "place to be" in a particular industry (Gertler, 2003), such as Silicon Valley, Cambridge in the UK, Paris in France or the Øresund in Scandinavia. Universities feature centrally in the stories that are told about the rise and economic dominance of these places (Huffman and Quigley, 2002).

But policy makers in regions outside what Armstrong (2001) calls the "totemic sites of the knowledge economy" face the challenge of trying to place themselves on the map of globally successful regions. "Knowledge capital" does not suffer from congestion, and has increasing returns to scale (Romer, 1994). It concentrates in the most creative and productive centers, leading to disinvestment and decline in places outside these most successful centers. Policy makers therefore face the challenge of fighting against this vicious cycle of disinvestment, and need to make the case that their region is home to endogenous knowledge assets, which can support innovative networks and clusters. It is this which has created a strong demand for universities as strategic actors to contribute their knowledge assets where that does not already happen. But at the same time, the reality is that not all of universities' significant relationships are "regional." Understanding places and universities' trajectories involves understanding the way corporations and universities influence external relationships in their local activities and interactions.

The contemporary knowledge economy is split between public and private research and development (R&D) resources. Private R&D resources are concentrated in a handful of the most successful and competitive regions, while public R&D resources in universities and public research centers are distributed far more evenly. While not all regions have competitive knowledge-intensive networks and clusters, the majority of regions have some kind of higher education presence able to anchor knowledge-based development. As innovation becomes a growing theme in regional economic strategies (Kresl, 2005), the "university" becomes increasingly viewed as an important and legitimate strategic economic actor (OECD, 2011).

This policy imperative has shaped how universities' regional interactions have been understood, while tending to downplay the tensions which regional engagement can bring for universities and regions. Goddard and Chatterton (2003) offered a normative model for effective university–regional engagement: the strategic management interface (Figure 1.2). Noting that universities and regions had activities of potential mutual benefit, they argued that the construction of a strategic management interface between university managers and regional policy makers was necessary to maximize mutual benefits.

However, something has been lost in translation in the way this model subsequently informed policy debate. The model hides tensions and problems both within universities and between universities and their regions, the mismatches and quirks of history highlighted above by, *inter alia*, Castells



Source: Based on Goddard and Chatterton (2003)

Figure 1.2 The normative notion of university–region strategic management interface

(2001), Boucher *et al.* (2003) and Fontes and Coombs (2001). The five constructive ambiguities discussed above may provide a conceptual tool for illuminating and exploring some of the complexities and challenges associated with the university side of the diagram. Likewise, regions have to be understood in terms of complex evolutionary trajectories in their economic capacities.

In university–regional engagement there has been a conceptual side-lining by each approach of the "dynamics of the other side of the diagram." Regional scholars have focused on universities as simple organizations easily able to agree and deliver upon collective strategic priorities. Higher education institutional management scholars focused on the region as a space with potential to benefit from the resources, spillovers and knowledge flows which are created in universities' regular activity. This has left two very interesting sets of questions unanswered.

The first set of unanswered questions are those for regional scholars in understanding how universities function as complex communities with many interests, intentions, desires and dynamics. How do these complex and often unsteerable communities contribute to their regions, and how can regional policy makers effectively relate to apparently unstable institutions? Mirroring this are a set of unanswered questions for higher education management scholars concerning how universities, as complex strategic organizations (Krücken and Meier, 2006), relate to a fuzzy external environment composed of many actors active in their own wider international and global networks.

At the same time, both groups have trouble coming to grips with the fact that universities may have relationships and interests with actors who are not always located or interested in their region.

It is this second set of unanswered questions to which this volume is devoted, namely understanding the implications of the concept of regional engagement and a regional mission for universities which are understood as complex, systemic organizations. We consider the tensions which regions and regional engagement impose upon universities as organizations. We critically unpack the idea of the shared strategic interface, bringing to bear insights on university institutionalization, whilst retaining the sense of the complexity of regions and university–region interaction. Rather, regions offer potentially supportive resources for universities, but also defy an easy characterization or analysis. We address this issue through a series of detailed empirical analyses of the tensions emerging in particular cases of university–regional engagement, through the lens of institutionalization, i.e. the way these regional pressures influence (directly or indirectly) the internal dynamics of universities.

The Institutionalization of the "Third Mission" of Regional Development

Clark (1983) shed light on how universities, as distinct organizational entities, operate in a highly institutionalized environment composed of governmental regulations, professional norms, and cultural-cognitive dimensions such as values, belief systems, local traditions, etc. Some of these institutionalized features emanate from the external environment (macro level), whereas others originate from within the university (meso and micro levels). Taken together, these features both constrain and enable local-individual behavior, thus significantly affecting change and adaptation dynamics, and the outcome of institutionalization processes set in motion both within and beyond a given local or university setting.

There are several ways to conceptualize processes by which macro-level features such as dominant stylized university models present at the level of the organizational field[3] of higher education become integrated into universities' primary activities. One way is to focus on the organization's institutional fabric, the formal and informal rules that constrain the behavior of social actors (DiMaggio and Powell, 1983). A key assumption in the literature is that most organizational forms, universities included (Clark, 1983; Olsen, 2007), are based upon an institutional foundation (Greenwood *et al.*, 2008; Scott, 2008). In this context, shedding light on the processes by which macro-level features are adopted and/or adapted to local circumstances (Beerkens, 2010) becomes a major priority in order to access the complexity and uniqueness associated with the university as a distinct organization (Musselin, 2007) and relatively autonomous social institution (Olsen, 2007).

An institutional perspective on the university views it as a relatively autonomous fiduciary system with its core social participants (academics) acting as guardians of its constitutive purposes, principles, rules and processes, "whether the threat comes from outside or inside." (Olsen, 2007, p. 27).[4] Critics of environmental deterministic approaches argue that, as "open systems" (Scott, 2003, 2008), universities have historically been influenced by dynamics in their surrounding environments, but that their essence or *raison d'être* has not been determined or shaped by external imperatives (Olsen, 2007, p. 5). Kerr (2001, p. 15) sheds light on the resilience characterizing academic systems, rooted in the ideal type of the North American research university, noting: "everything else changes, but the university mostly endures." Comparative historical analysis in the last two centuries has concluded that the modern university has successfully coped with, and adapted to, increasing environmental complexity while simultaneously maintaining its basic essence or "idea" (Frank and Gabler, 2006; Rothblatt and Wittrock, 1993).

Resilience to external pressures is often a consequence of the degree to which a given university has successfully internalized or institutionalized key features likely to guarantee its external (societal) and internal (field) legitimacies (Deephouse and Suchman, 2008) as well as future growth or survival (Clark, 1998). Institutional sociologists like Philip Selznick argue that to institutionalize is "to infuse with value beyond the technical requirements of the task at hand" (Selznick, 1984, p. 17). This perspective is closely associated with the view that the formal structure of organizations, universities included (Clark, 1983), evolves naturally, over time, through an adaptive and unplanned, historical process (Scott, 2003). "Old" institutional perspectives stress the importance attributed to values, norms and attitudes, and the critical role of socialization processes, whereas proponents of "new" institutionalism highlight the cognitive nature of institutionalization and the role played by scripts, rules, and classifications (Greenwood *et al.*, 2008).[5] Institutionalization occurs when "social processes, obligations, or actualities come to take on a rule-like status in social thought and action" (Meyer and Rowan, 1977, p. 341), hence making alternative behavioral patterns "literally unthinkable" (March and Olsen, 2006; Zucker, 1991).

For Olsen (2010), institutionalization is both a process and a property of organizational arrangements, and encompasses the ways by which rules and repertoires of standard operating procedures are established, supported by organizational capabilities and resources. This conceptualization implies that, at the meso level, "an organizational identity is developed and legitimacy in a [given] culture is built" (p. 158). There is increasing clarity, agreement and formalization amongst organizational participants with respect to: (a) behavioral rules, including the allocation of formal authority; (b) how those rules are to be described, explained and justified; and (c) the routinization

of resource allocations (Olsen, 2007, 2010). Standard operational procedures become regarded as appropriate and legitimate both within and outside organizational boundaries (March and Olsen, 2006). The literature identifies the primary carriers of institutionalization as being composed of three distinct domains: formal organization or structural arrangements; regimes, such as explicitly codified rules and sanctions exercised by authoritative entities such as states or professions; and culture, concerning expectations about individuals' properties, orientations and behavior (Jepperson, 1991; Zucker, 1991).

March and Olsen (2006, p. 7) argue that institutions, the independent variable, should not be conceived as static entities, and institutionalization processes, the outcome, should not be seen as inevitable. Zucker (1991, p. 105) contends that although institutionalization processes often occur unexpectedly, as a by-product of the creation of other structures, "deinstitutionalization is seldom accidental."[6] Consolidating this perspective, March and Olsen (2006, p. 7) highlight that since institutions are defended by insiders and validated by outsiders, with histories encoded into rules and routines, "their internal structures and rules cannot be changed arbitrarily." In the institutionalization of universities' third mission, outcomes result from a complex interplay between internal (university) and external (society/region) preferences (Pinheiro, 2011). Particular formal structures and informal postures are adopted and consequently adapted (Beerkens, 2010), depending on how far external imperatives are aligned or do not clash with local (past) traditions and (future) aspirations (Zucker, 1991).

Hence, following this line of thought, and bearing in mind both Olsen's definitions, the institutionalization of universities' third mission encompasses the processes by which regional dimensions become an integral component of universities' primary activities at the level of the academic core and the extended periphery,[7] supported by structures of meaning and resources. Moreover, given an organization's natural tendency to protect or buffer core activities from external influences (Thompson, 2008) and the university's inherent structural complexity (Pinheiro, 2011), it is particularly important to investigate the degree to which regional dimensions: (a) have become institutionalized in/around core teaching and research activities; and (b) the level of coupling (tight vs. loose) between core and peripheral tasks/structures. In this respect, the current volume addresses recent calls for a better conceptual understanding of the "black-box" characterizing university dynamics (Maassen and Stensaker, 2005), the importance of institutionalized dimensions such as academic/institutional autonomy (Arbo and Benneworth, 2007), and the dynamic interplay between external drivers and engagements and internal transformations (Perry and Harloe, 2007), in the context of universities' regional development missions (Charles and Benneworth, 2001).

Stylized University Models

Universities do not operate in isolation but are active social actors at the collective or aggregate level of the organizational field of higher education, both domestically and internationally. At the field level, there are a number of widely available (macro-level) models or templates providing a generic blueprint on how: (a) to go about their daily activities; (b) to operate within the (organizational) field; and (c) to relate to the outside world. Across the gamut of different types of higher education institutions across various national systems, from comprehensive universities to liberal arts colleges to technical colleges, etc., there are two basic, generic models or templates acting as legitimating scripts (Greenwood *et al*., 2008) for the modern university. These are the globally oriented, research-intensive university; and the locally embedded regional university.

The origins of the first stylized model lie in the early nineteenth century and the University of Berlin (Nybom, 2003), although its contemporary form is the (North American) research-intensive university that became prominent during the second half of the twentieth century (Geiger, 2009). As a global script (Beerkens, 2010; Mohrman, Ma, and Baker, 2008) the research-intensive university is characterized by seven key features: (a) the comprehensive nature of its academic core, spanning a variety of disciplinary fields; (b) the importance attributed to the teaching–research nexus; (c) the attention paid to scientific inquiries of the highest levels; (d) autonomy and excellence as cherished norms; (e) a multiplicity of roles or functions; (f) its public, non-profit character; and (g) a universalistic or global orientation.

The second stylized model, the "regional university," can be traced back to the mid-nineteenth century with the emergence of specialized training (Europe) and land-grant (North America) institutions, many of which later converted into fully fledged universities and/or became the basic template for the establishment of universities in relatively remote regions (Arbo and Benneworth, 2007; Charles and Benneworth, 2001).[8] Its distinctive features include: (a) a strong professional or vocational orientation, along a selected number of disciplinary fields; (b) the importance attributed to teaching and learning dimensions, and the needs of student audiences; (c) a high level of local embeddedness; labor markets linkages, service orientation, civic engagement, etc.; (d) the demographic profile of its student population, with the bulk originating from within the locality/region; and (e) knowledge production in the context of application, often in close partnership with regional actors like industry.

In recent years, a new (third) stylized model has emerged in the form of the "*entrepreneurial university*" (Clark, 1998). The rise of this new global script is intrinsically linked with the "second academic revolution" (Etzkowitz, 2001). Clark (1998) highlights five elements characterizing entrepreneurial

universities, namely: (a) a strengthened steering core; (b) an expanded developmental periphery; (c) a diversified funding base; (d) a stimulated academic heartland; and (e) an integrated entrepreneurial culture. Recent comparative inquiries (Pinheiro, 2011) suggest some convergence between the two previous models and that of the entrepreneurial university, in two ways: (a) as a natural evolution (Scott, 2003) of the stylized models of the research-intensive and/or regional universities, as a result of major changes in the external or operational environment; and (b) as a strategic alternative (Oliver, 1991) away from the classic model of the research-intensive university, seen as lacking adequate external support or public legitimacy (Deephouse and Suchman, 2008). Table 1.1 provides an overview of the key features associated with each of these three stylized models.

Given this volume's objectives, it is important to note each model's very different assumptions underscoring the relationship between the university and the region in which it is located. The research university is global and universalistic in orientation. The regional university is locally embedded and aims at local service and relevance. The entrepreneurial university is globally engaged, but highly responsive to local needs and partnerships.

It might be tempting at this point to suggest a three-fold classification of the regional mission between these three models. However, we contend that the three models are "ideal" types and should not be seen as mutually exclusive. It is feasible that parts of the university (sub-units) will subscribe to, and adopt, specific features associated with each model. This is particularly the case, although not exclusively, with formal mergers between distinct higher education providers, but also exists in institutions with disciplinary and professional fields with very different orientations. In Scotland, for example, the University of Dundee was spun off from St Andrews University at the end of the nineteenth century as a home for technical and vocational university disciplines such as law, planning, accountancy and medicine. In the course of the twentieth century, there has been an academization (Kyvik, 2009, pp. 135–66) of those disciplines, and these faculties and departments find themselves pulled in the tension between local embeddedness in their practical-vocational sense and the need to be globally excellent in fundamental research.

Conclusion

Our objective in this chapter has been to provide a foundation for the volume by reviewing a series of concepts that illuminate the complexity of the relationships between universities and their regions. The five ambiguities of the university described above demonstrate the tremendous complexity of the internal dynamics of these organizations and provide a useful framework for analyzing internal processes, especially adaptation and change. We have also outlined three ideal types of the university, and each model positions

Table 1.1 Stylized university models

	Research-intensive	*Regional*	*Entrepreneurial*
Modelled after (origins)	Humboldt/Oxbridge (late 19th century)	Specialized institutions Land-Grant colleges (mid/late 19th century)	MIT (1970s/80s)
Structural features (scope)	Disciplinary demarcation (breadth) and specialization (depth)	Professional and vocational training (selected fields)	Interdisciplinary collaboration (science and technology)
Primary activities (internal linkages)	Teaching–research nexus (core vs periphery decoupled)	Teaching centred (no clear demarcation between core–periphery)	Teaching–research–service nexus (core–periphery coupled)
Primary activities (nature)	Strong academic core, weak periphery	Weak academic core, strong periphery	Strong academic core, strong periphery (key fields)
Internal orientation	Collegial (bottom-up)	Professional (top-down)	Executive (top-down and bottom-up)
Dominant ethos	Discipline-oriented	Society oriented	Partnership oriented
Normative preferences (academics)	Scientific autonomy/excellence (fundamental research)	Relevance and service (training and instruction)	User-oriented basic research (Pasteur's Quadrant)
Locus operandi (scope activities)	Internationally connected, nationally embedded (universalistic)	Nationally connected, locally embedded (regionally embedded)	Globally engaged, locally responsive (glo-cal)

Source: Pinheiro (2011, pp. 142–43)

the regional dimension of its activities in a quite different way. We have also discussed the double ignorance of the ways in which regional scholars have traditionally viewed higher education, and the ways in which scholars of higher education have traditionally viewed the region. If we are to truly understand the regional mission and dimension of the university, we need to move beyond simple assumptions about these complex relationships and explore them through detailed, empirical case studies. The objective of this volume is to address this gap. In Chapter 13, and on the basis of the empirical findings presented in this volume, a new model for assessing and interpreting such types of developments is advanced.

Notes

1 Organizational technology relates to the processes via which certain *inputs* or materials are transformed into specific *outputs* (Scott, 2003, p. 231–32).
2 "An organizational saga is a collective understanding of a unique accomplishment based on historical exploits of a formal organization, offering strong normative bonds within and outside the organization" (Clark, 1972, p. 3).
3 According to Bourdieu (1984), a *field* denotes a distinct social setting in which *agents* and their *positions* are located. DiMaggio and Powell (1983) define an *organizational field* as being composed of all those organizations that, in aggregate, constitute a recognized area of institutional life. These include suppliers, consumers, regulatory agencies, competitors, etc. Consult Kyvik (2009) for the (sociological) concept of "organizational field" as applied to higher education systems.
4 "In constitutional democracies the University is functionally dependent on, but partially autonomous from other institutions" (Olsen, 2007, p. 28).
5 "The new institutionalists [in organizational sociology] put less emphasis on the stabilization effects of norms and values, arguing that social order is primarily induced by practical experience and cognitive elements embedded in the structure of institutional life" (Trommel and Van der Veen, 1997, p. 60).
6 "De-institutionalization implies that existing rules and practices, descriptions, explanations, and justifications, and resources and powers are becoming contested and possibly discontinued" (Olsen, 2010, p. 158).
7 Following Pinheiro (2011), the academic core is composed of formal degree programs and fundamental (long-term) research, whereas the extended periphery encompasses all the teaching, research and service-related activities in the form of continuing education, technology transfers/innovation, consultancy, community service, etc.
8 It is worth pointing out that most of the land-grant universities quickly became rather comprehensive in orientation (with a strong academic core) and quite research focused (with a strong belief in a teaching/research/service nexus).

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