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Cette publication n'aurait pu être réalisée sans l'aide précieuse et les compétences des auteurs, de Mme Britta Schlüter, responsable du Service de communication de l'UL et soutien de tout moment, ainsi que, à titres divers, de Mmes et MM. John Allard, Emmanuelle Ambrosien, Daniel Clarens, Monique Gaasch, Jeanne Glesener, Ane Kleine-Engel, Anja Lenninger, Massimo Malvetti, Pit Peporté, Anne Marie Vesdrevanis et Sara Volterrani.

Que tous en soient vivement remerciés.

En 2013, l'Université du Luxembourg fête ses dix ans.

Elle est certes jeune, mais elle a déjà une histoire à relater :
celle d'un contexte de fondation international et national mouvementé,
celle d'un développement impressionnant,
celle d'une recherche constante de la qualité.

Ce livre veut retracer cette histoire,
à travers des regards internes et externes :
un regard sur le paysage universitaire international,
sur la fondation de l'Université au Luxembourg,
sur ses réalisations et ses spécificités,
sur ses perspectives d'avenir enfin.

Il est dédié à toutes celles et à tous ceux,
membres, étudiants et partenaires de l'Université,
qui ont contribué au succès de celle-ci

– en guise de remerciements.

Rolf Tarrach, recteur
Michel Margue, chargé de mission

Octobre 2013

Martine Hansen
Ministre de
l'Enseignement supérieur
et de la Recherche

UNE CULTURE ACADÉMIQUE DE QUALITÉ

Joyeux anniversaire, chère Université du Luxembourg ! 10 ans d'existence déjà avec une longue histoire derrière vous en un si bref laps de temps.

L'Université du Luxembourg est dorénavant ancrée dans le tissu social et économique du Grand-Duché. Elle est bien implantée sur la carte internationale de l'enseignement supérieur et elle est reconnue par ses pairs. Elle a su développer une recherche de très bonne qualité et comme démontré par les demandes d'inscription, ses enseignements sont convoités par les étudiants.

Je me félicite de ce développement. En effet, nombreux étaient ceux qui, lorsque l'idée de l'Université du Luxembourg prenait forme, ne cessaient d'émettre des doutes quant à la nécessité d'une université au Grand-Duché et qui pensaient que cette université allait s'engouffrer dans la médiocrité.

Tel n'a pas été le cas. Je salue donc la persévérance des quelques femmes et hommes qui ont eu le courage de leurs convictions et qui ont rendu cette aventure possible. Je salue également le dévouement de celles et de ceux qui, la loi sur l'Université une fois votée, ont été appelés à mettre en œuvre l'acte créateur. Ils n'ont à aucun moment de leur démarche renié leur engagement pour la quête de la qualité – aucun faux compromis n'a été accepté. Voilà pourquoi l'Université est bien positionnée.

En dix ans beaucoup a été accompli. Lorsque l'Université fêtera son 25e anniversaire, d'autres progrès auront été réalisés, mais la recherche de la qualité devra avoir été l'élément fédérateur entre ces deux périodes du développement de l'Université. C'est précisément cette insistance sans cesse renouvelée sur une culture académique de qualité que ce soit au niveau des recrutements, ou celui des enseignements ou encore celui de la recherche scientifique qui devra continuer à guider l'Université dans ses choix et ses démarches.

Pour l'heure réjouissons-nous de ce qui a été accompli et souhaitons à l'Université tout le bien pour son devenir.

Marc Jaeger
Président du Conseil
de gouvernance de l'Université
du Luxembourg

DIX ANS

En 2013, l'Université du Luxembourg a franchi une nouvelle étape importante – dix ans de projets et d'objectifs atteints qui continuent à rendre service aux étudiants, à la recherche et à transformer la société luxembourgeoise.

Dix ans de recul permettent de jeter un premier regard rétrospectif sur l'importance de la tâche accomplie pour donner vie à l'Université du Luxembourg, première institution universitaire du pays au large rayonnement international. Tout au long de sa construction, elle a toujours visé l'excellence en recherche et en formation. Elle réalise peu à peu son ambition de se rapprocher des plus grandes universités européennes et internationales en défendant des valeurs communes et d'autres qui lui sont propres. A travers son enseignement et sa recherche, l'innovation et son esprit d'entreprise, l'Université donne vie au potentiel créatif et sert l'épanouissement de nos étudiants, de notre communauté scientifique, de notre société et de notre économie.

La création de l'Université s'est faite dans un contexte peu favorable, empreint d'un certain scepticisme ambiant. Il fallait mettre en place un nouveau système capable d'absorber les anciennes structures académiques. Le défi du Conseil de gouvernance, structure nouvellement créée dans l'organigramme de l'université naissante, était d'en élaborer la stratégie et d'en faire un atout pour le développement de l'institution. Le principe d'un Conseil de gouvernance composé de membres externes à l'Université, avec une symbiose des membres actifs dans le contexte national et experts de la tradition académique de divers pays, a aidé l'Université à poser ses premiers fondements. Le Conseil de gouvernance, sous la première présidence appliquée et rigoureuse de Raymond Kirsch, a veillé au bon déroulement des activités de l'institution, a déterminé les futures directions et a créé un environnement favorable à la mission de l'institution.

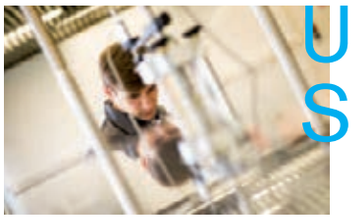
Les acteurs de l'Université sont parvenus à questionner intelligemment, à débattre d'une manière constructive, à prendre des décisions en toute sérénité, tout en développant une écoute sensible de chacun. Les membres de l'Université ont fait preuve de désintéressement, d'intégrité, d'objectivité, de transparence, de responsabilité et d'ouverture d'esprit.

Comme toute université nouvellement créée, l'Université du Luxembourg a dû trouver l'équilibre délicat entre les attentes sociétales, ses aspirations propres et l'idéal d'une université, promouvant la recherche qui apporterait un développement économique et culturel significatif au pays et qui ouvrirait de nouveaux horizons.

L'Université et son environnement étant en perpétuelle évolution, il est nécessaire d'acquérir sans cesse de nouvelles compétences pour faire face aux changements actuels ou prévisibles. Dans cette optique, il apparaît intéressant de se tourner vers l'innovation, sans perdre de vue les objectifs de développement de l'Université.

L'Université peut donc être fière du travail accompli ces dix dernières années mais elle reste consciente qu'elle devra relever le défi de poursuivre son développement dans le contexte compétitif global de l'enseignement supérieur. Les défis ne manqueront pas d'abonder à mesure que nous avancerons dans le futur.

J'exprime mes remerciements à notre personnel et à nos étudiants pour leur engagement, leur enthousiasme et leur soutien dans notre recherche permanente de l'excellence dans tout ce que nous entreprenons. Je suis confiant que nous arriverons ensemble à consolider les acquis obtenus en cette brève période et à transformer les défis à venir en véritables perspectives d'avenir.



UNIVER-SITÉS

FONDA-TION

TRANSI-TIONS

RÉALISA-TIONS

SPÉCIFI-CITÉS

P.168

OPI-NIONS

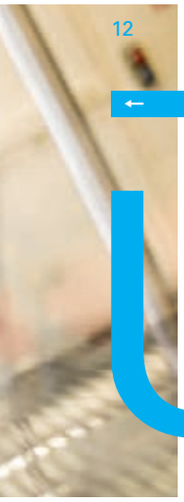
P.192

PER-SPEC-TIVES

P.212

EXCEL-LENCE

P.228



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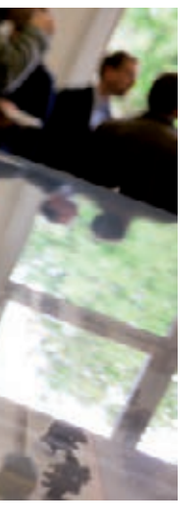

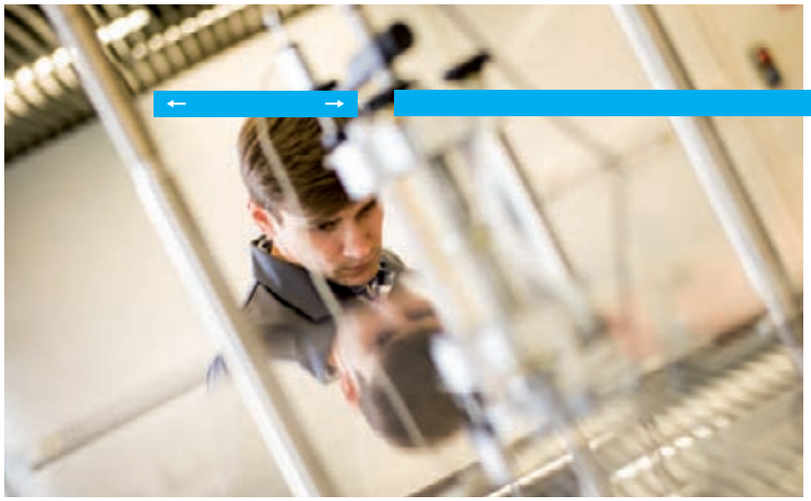

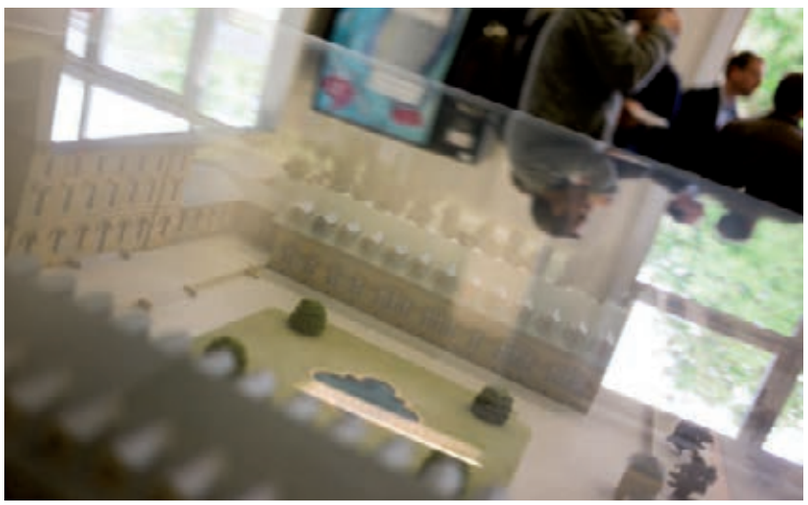


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Robert Harmsen

THE CHALLENGES OF THE CONTEMPORARY UNIVERSITY

Universities as institutions have, since their inception, always had something of a dual character. Their raison d'être *is clearly that of being autonomous seats of learning, animated by a spirit of critical inquiry and concerned solely with the development and dissemination of knowledge.*

As such, they are answerable only to the dictates of science or scholarship themselves[1]. Yet, though often cast as "ivory towers", universities have also always been "of the world" – institutions integrally bound up with the polities, societies and economies of their day. Much of the justification for such institutions has, indeed, long been associated with their crucial role in the reproduction of elites – educating generations of servants of church and state, as well as populating the professions and the commanding heights of the economy and society. In this regard, it is as well to remember that Humboldt's often invoked (if rather less read) justification for the research university was written as a ministerial memorandum, ultimately grounding the case for the support of such institutions in the enlightened self-interest of the state.[2]

Nevertheless, though inescapably bound up with their surrounding environments, the position of universities relative to these environments has been fundamentally reshaped in the contemporary era. In the post-World War II period, universities have become objects and instruments of public policy to a previously unimaginable extent. The massive expansion of higher education across the post-industrial economies during the immediate post-war boom (the *"trente glorieuses"*) saw the implication of the state in the sector on an unprecedented scale. More recently, as the Keynesian consensus has shifted to a neo-liberal paradigm, universities have increasingly been seen as the necessary engines of economic and societal innovation. Across these two periods, highly complex patterns of interdependence have correspondingly emerged, linking the academy to government, industry and civil society through a multiplicity of channels. As such, our traditional models of the university no longer entirely hold. While elements of both Humboldt's research university and (modernised and secularised) versions of Newman's "idea of the university"[3] retain an influence, they no longer capture the full range of missions which confront contemporary higher education.

It is thus relative to this fundamentally changed reality that the present brief contribution surveys three contemporary understandings of the university, providing a context within which the more specific experience of the University of Luxembourg might be understood. To this end, the "multiversity", the "global university", and the "entrepreneurial university" are discussed in turn. In each case, the basic tenets of the model are drawn out with a particular eye to understanding its implications for both institutional governance and the wider development of public policy in the sector. Across the three models, a portrait emerges of an institution pushed and pulled by diverse forces, but one also still recognisably defined by a traditional core and capable of creatively capitalising on the challenges which confront it.

THE MULTIVERSITY

The idea of the "multiversity" first appeared in relation to the larger American research universities in the 1960s. The term itself evokes the sprawling institutional complexes which had emerged, encompassing a far wider (and often disparate) range of functions than those associated with their traditional forbearers. Such institutions are connected to their wider social and economic environments through multifarious channels, allowing them to assume comparatively central roles in national life. Yet, at the same time, the multiversity is also faced with commensurately complex governance issues, having to respond to the progressively growing range of demands placed upon it by a multiplicity of internal and external constituencies.

The multiversity has perhaps been nowhere better described than in the writings of onetime University of California chancellor Clark Kerr. First in his 1963 Godkin Lectures delivered at Harvard University and latterly in the multiple editions of his ensuing book, *The Uses of the University*, Kerr drew a portrait of the "multiversity" which continues to resonate through to the present for both his insider's insight and his wry humour[4]. The book title is telling. Kerr's vision of the university was not that of Humboldt or Newman. There is no unifying idea of the university to be found here, nor the expression of an ideal as to what the institution *ought* to be. Rather Kerr's university – the contemporary university – is shaped by constraining realities; it has multiple "uses" (functions), but no singular overarching purpose. As Kerr describes this modern form of the university:

"The Idea of the Multiversity" *has no bard to sing its praises; no prophet to proclaim its vision; no guardian to protect its sanctity. It has its critics, its detractors, its*

transgressors. It also has its barkers willing to sell its wares to all who will listen – and many do. But it also has its reality rooted in the logic of history. It is an imperative rather than a reasoned choice among elegant alternatives.[5]

For Kerr, the multiversity is a place where a broad range of activities – undergraduate teaching, graduate training, pure and applied research, professional education, community service, alumni engagement, etc. – take place and co-exist, but find no cohesive, shared sense of purpose. As Kerr quipped, no doubt reflecting the frustrations of many a university president, his institution often appeared reducible *to a series of individual faculty entrepreneurs held together by a common grievance over parking.*[6] More seriously, following from this argument, the idea of the university as a distinctive type of scientific or scholarly community gives way to a rather soulless and protean entity, which may be reshaped as necessary to meet shifting external and internal demands. As Kerr puts it, contrasting his view with that of an earlier, more "organic" conception of the university:

In an organism the parts and the whole are inextricably bound together. Not so the multiversity – many parts can be added and subtracted with little effect on the whole or even little notice taken or any blood spilled. It is more a mechanism – a series of processes producing a series of results – a mechanism held together by administrative rules and powered by money.[7]

Although capturing much of the essence of the contemporary university, Kerr undoubtedly overstates its "decentred" character. The multiversity, though assuming a wide range of tasks, nonetheless remains centrally defined by its academic missions as regards teaching and research broadly conceived. Those missions, in turn, continue to sustain distinctive senses of academic community, even if their specific institutional expressions may in some cases be attenuated. A discernible institutional cohesion remains, notwithstanding an often unwieldy reality in practice.

This institutional cohesion was interestingly captured in Parsons and Platt's seminal sociological study of *The American University*, published in 1975.[8] Looking at much the same institution as Kerr during much the same period, Parsons and Platt essentially invert the logic of his analysis. Whereas Kerr stressed the functional disaggregation of the institution, the two sociologists were conversely intrigued by the macro-sociological puzzle of why the university as an institution continued – against expectations – to "hang together". At least following a rationalist model of institutional development, one might have expected a degree of institutional differentiation to have taken place – separating out distinct teaching, research and service functions into more "efficient", specialised institutions. Yet, this clearly had not taken place. Not only had long established universities continued to maintain and expand their range of activities, but new universities were continuing to be established on the same, all-encompassing model. For Parsons and Platt, the explanation for this pattern of development could be found in the nature – and utility – of the "bundle" of functions performed by the university. In effect, though superficially distinct, the university's various domains of activity profited from multiple and mutually enriching interconnections. Teaching and research could be seen to cross-fertilise one another intellectually. At the same time, the university's breadth of external contacts provided both an intellectual openness to wider society and ensured a continued level of support for the institution itself. The "bundle", in other words, served a clear institutional purpose, even if coming at the cost of a certain apparent lack of coherence. "Unbundling", conversely, would risk uprooting this historically forged complex of interconnected activities, potentially at the far greater cost of forfeiting much of the institution's distinctive advantage.

More recently, the Canadian academic and university administrator George Fallis has returned to the theme of the multiversity, putting forward a rather more strongly normative view than that of Kerr.[9] Fallis' descriptive account of the multiversity largely corresponds to that already seen. It is portrayed as a *large conglomerate combining multiple tasks and conflicting ideas.*[10] As in earlier accounts, Fallis also underlines the close connection of the institution's development with the evolving demands of the wider society and economy to which it is inescapably linked. Fallis, however, is further centrally concerned with the relationship between the multiversity and contemporary liberal democracy – arguing that a form of "social contract" must be seen to exist whereby, beyond tech-

nological advancement, the university is also recognised to have a distinctive role as regards the fostering of critical social awareness. In keeping with this, Fallis is much more concerned with the university's teaching function than most other commentators on the multiversity, seeing the institution (and in particular the humanities) as having a crucial role to play in the cultivation of the critical intellect necessary for the flourishing of democratic citizenship. It is, indeed, in this respect that Fallis sees the principal threat to his version of the multiversity – arguing that the rebalancing of the relationship between the citizen, the state and the market in favour of the latter in the period since the 1980s has systematically tended to erode the democratic dimension of the institution's mission.

Fallis' concerns raise the wider question of the continued contemporary applicability of the multiversity model. On the one hand, much in the model – with its emphasis on the management of disparate interests – continues to resonate with contemporary institutional realities. It does so, moreover, well beyond its American origins, as research universities, at least across the OECD countries, have come increasingly to fit this mould. Yet, on the other hand, the model now also appears at least partially rooted in an earlier era, reflecting the democratic inclusiveness of the Keynesian consensus more than the market responsiveness of latter day neo-liberalism. It further retrospectively appears to be strikingly insular – concerned essentially with the university as a national, rather than as a global institution. It is thus to these two dimensions that we turn in the following two sections, looking first at the global, and then at the entrepreneurial university.

THE GLOBAL UNIVERSITY

If the idea of the multiversity served to anchor an earlier generation of discussions surrounding the contemporary evolution of the university, that pride of place has now no doubt been assumed by differing versions of the "global university". To speak of the "global university" is obviously to engage with wider debates about the concept of globalisation itself – and this, as one would expect, has generated a vast literature within the higher education policy community.[11] Broadly, this literature has followed wider sociological literatures on globalisation in drawing a distinction between "globalisation" on the one hand and "internationalisation" on the other.[12] "Internationalisation", in this view, refers simply to the multiplication of cross-border contacts. This phenomenon in itself offers nothing qualitatively new for universities. While the intensity or frequency of such contacts has undoubtedly multiplied (exponentially), the scholarly community has always in a sense been defined by the existence of such contacts "beyond borders". "Globalisation", conversely, is taken to refer to a deeper logic which "disembeds" institutions from their national contexts. This "disembedding" implies the emergence of new logics at the global level which redefine institutional structures or operating procedures such that in significant respects these no longer correspond to traditional national frameworks or respond to traditional national mechanisms of control. Following this logic, the global university thus no longer operates across borders, but rather increasingly finds itself in a world where those borders no longer meaningfully exist.

In his evocatively titled book The *Great Brain Race*, US journalist and policy analyst Ben Wildavsky draws an extensive portrait of these new model global institutions.[13] For Wildavsky, this new type of institution is defined by five broadly intersecting trends: the rapid growth in student and staff mobility; the growing number of "branch campuses" (universities creating "satellites" in other countries); the increasing recourse to/influence of international rankings and benchmarking exercises; the increasing pressure/incentives to create "world class universities" exercised essentially within domestic arenas; and the growing importance of private/"for profit" providers, notably as regards the on-line delivery of courses and qualifications. The underlying logic(s) of Wildavsky's descriptive survey are thus clearly "global" in the sense of pointing towards the emergence of a global marketplace for higher education in which institutions are in direct and increasingly fierce competition with one another for prestige, personnel, students and resources. Yet, at the same time, the continued existence of significant national moorings should not be neglected, even though Wildavsky himself tends to downplay them. Specifically, as Wildavsky notes, the pressure to create "world class universities" may significantly come from the national policy arena itself – as decision-makers increasingly see such institutions as a necessary factor in sustaining or enhancing *national* economic competitiveness.

The Australian academic Simon Marginson identifies many of the same features as Wildavsky in his model of the "Global Research University" (GRU), though Marginson is ultimately more concerned with the underlying logics driving and defining the institution.[14] More specifically, Marginson takes as his point of departure Kerr's multiversity, seeking to define the ways in which the GRU departs from this earlier model. To this end, Marginson identifies both the general impact of globalisation and the more specific operation of the "global knowledge economy" as having reshaped the multiversity. Globalisation, in general terms, is seen to have produced an intensification of communication and an acceleration of mobility, coupled with the emergence of progressively convergent international standards of institutional evaluation and influential international rankings. These trends have, cumulatively, lifted the university – at least partially – outside of its historically national confines. To this has further been added the working of the "global knowledge economy", in which knowledge production and its practical applications have come to be the principal determinants of national economic well-being. This has placed universities in something of a privileged position, but has also reshaped the institution – tipping the balance decisively towards their (applied) research functions. While research had already assumed a dominant position in the multiversity (the "federal grant university" in Kerr's terminology), this has become even more pronounced in the global university. As Marginson argues, the GRU is part of a one-world knowledge system in which *research is central to the economic fortunes of leading institutions through its direct effects on revenues and its indirect effects via status*.[15] Nonetheless, though highlighting this deep globalising logic, Marginson is also careful to stress that universities, beyond the research dimension, continue to be primarily connected to their local and national environments – producing institutions which are, in the round, best understood as "glo-na-cal", combining elements of the global, the national, and the local.[16]

In the final analysis, it is perhaps this multiplicity of attachments – rather than a distinctively globalising logic alone – which should be highlighted as regards the "global university". Although at least the top tier of research universities are increasingly playing in a global arena defined by global rules, it is easy to overestimate the extent to which they may have "slipped the leash" as regards traditional national forms of control. In the overwhelming majority of cases, both regulatory frameworks and core resource allocations remain essentially determined at the national (or regional) level. Moreover, as highlighted above, much of the support required for universities to emerge as "global actors" derives from national agendas concerned to ensure a place in the global knowledge economy. Paradoxically, it is in a sense because universities are seen as "national champions" (to use the dated vocabulary of earlier industrial policy) that they may lay claim to enhanced resources so as to maintain or assume a global role. Corresponding complications arise as regards the framing and implementation of public policy. Governments are, in effect, called upon to back universities competing in global arenas defined by global logics on the premise that it is only by succeeding at this level that the university may properly fulfill its national/regional/local role. This is not, as one would expect, without creating mismatches between institutional strategies and policy-makers' expectations. The potential imbalances in such relationships, involving the triangle of government, business and the university, are nonetheless best explicated in relation to the final model of the university to be presently discussed, that of the entrepreneurial university.

THE ENTREPRENEURIAL UNIVERSITY

The term "entrepreneurial university" is a politically charged one. To evoke the concept in certain milieux is immediately to risk the expression of strong oppositions to the "marketisation" of the university or to a "neo-liberal" turn in higher education policy. Clearly, in the past two decades, such economic pressures have mounted - to the point, in some instances, where the core missions of the university appear compromised.[17] Nevertheless, one must be careful to distinguish between the different models of the "entrepreneurial university" and their underlying objectives. In some cases, the entrepreneurship envisaged centrally concerns not the institution's relationship to the market, but rather the development of a culture of internal innovation allowing traditional universities to confront potentially "disruptive" developments such as the growth of open-source courses.[18] Equally, in

other cases, it is a form of "social entrepreneurship" which is envisaged, in which research universities are identified as key engines of innovation in dealing with "wicked" policy problems (such as climate change or poverty) that demand the creative engagement of specialists from across an array of different disciplines.[19] Moreover, even those models of the entrepreneurial university which are principally concerned with universities as drivers of economic innovation do not necessarily focus only on this economic dimension, recognising the complex interlinkages between the successful development of applied research and the institution's wider intellectual missions. As detailed below, such a concern with balance animates both Burton Clark's version of the "entrepreneurial university" and Harry Etzkowitz's "triple helix", arguably the two most influential models in contemporary debates.

The starting point for Burton Clark's widely cited 2007 study *Creating Entrepreneurial Universities* is that which he terms a "demand-response imbalance".[20] For Clark, contemporary universities are faced with a spiralling series of demands – from their students, from governments, from societal and economic actors – which even the most well-endowed institutions do not have the capacity to meet. The challenge of the contemporary university thus becomes one of positioning itself strategically relative to these environmental demands. This requires that the institution have the means (and the wherewithal) selectively to pursue those opportunities which best correspond to its objectives and capacities. It also requires, more generally, the emergence of a culture of innovation within the institution, open to both organisational change and external engagement.

More specifically, on the basis of a detailed empirical study of five "successful" cases of entrepreneurial universities drawn from across Europe, Clark outlines five key factors which may be seen to have allowed for this "success" and which broadly should be reproducible elsewhere. Briefly, these are: "the strengthened steering core" (strong central management careful to work *with* traditional academic values and line departments); "the enhanced development periphery" (the development of new interdisciplinary institutes and technology transfer units); "the discretionary funding base" (the diversification of funding sources, including "third stream" funding); "the stimulated heartland" (the engagement of traditional departments and disciplines in the university's new missions); and "the entrepreneurial belief" (the emergence of a new institutional culture more attuned to innovation). The overall portrait drawn is thus one of a substantially transformed institution, but one in which its traditional core – "the heartland" – is directly engaged in that transformation, rather than being displaced by it.

Henry Etzkowitz's "triple helix" is, in a somewhat different vein, concerned with the effect on innovation of different patterns of university-industry-government relations.[21] For Etzkowtiz, the key to establishing a high-performing innovation system lies in the intensification of this trilateral pattern of relationships, such that each of the institutional poles comes to "take the role of the other" to some extent while also maintaining its own distinctive institutional characteristics. To "take the role of the other" implies that actors in each of the university, government and industry will become systemically more aware of the concerns and approaches of actors in the other two sectors as roles overlap, personnel circulates and ideas disseminate. This will afford new individual insight ("thinking outside of the box"), while also more generally creating a "meta-innovation system" – the intertwined "triple helix" – across the field of inter-institutional relationships.

At the same time, however, Etzkowitz stresses that each of the institutional partners must continue to maintain *their primary role and distinct identity.*[22] Thus, *the fundamental role of the university as an institution for the preservation and transmission of knowledge remains its core mission,* much as government remains *the ultimate guarantor of societal rules of the game* and industry continues to be *the primary source of productive activities.*[23] If each pole continues to be defined by its traditional core functions, it is nonetheless the university that has pride of place in this system. As the only institution dedicated to knowledge production, it is the university, for Etzkowitz, which is the pivotal actor and necessary driver of the system of the system as a whole. For the university as an institution, a singularly virtuous circle consequently appears, in which *the transition to the entrepreneurial university enhances traditional academic missions just as new missions are enhanced by their association with old ones.*[24]

Both Clark's and Etzkowitz's models of the entrepreneurial university should, in themselves, allay much of the apprehension that the concept often evokes in academic circles. Both clearly see the traditional core of the university as the indispensable foundation for its expanding societal and economic engagements. Yet, looking further afield, it is also readily apparent that the policy translations of these models do not always retain the nuance and balance of the originals. Policymakers will often have incentives to stress – and to support – only the more "applied" or "value added" components of the innovation system, while (comparatively) neglecting its necessary, but less immediately visible foundations. Universities, though they may be the intellectual drivers of the innovation system, are also arguably in the weakest strategic position of the three main actors – ultimately being dependent for resources on government and industry. The key question is thus finally one of how this and other models of the university may offer "lessons" or "prescriptions" that are concretely applicable at the level of institutional strategy or wider public policy. Attention is turned to this question in the conclusion.

CONCLUSION

The portrait of the contemporary university which emerges across the different models discussed above is unmistakably that of an institution "under pressure". Burgeoning internal and external demands confront the institution, potentially creating manifold tensions. Yet, despite the intensification of such pressures, the vast majority of commentators – Kerr's initial rendering of the multiversity notwithstanding – continue to see the university as maintaining a basic institutional cohesion. Indeed, even more than simply "surviving against the odds", it is these very tensions that emerge as the creative core of the contemporary university. As perhaps most comprehensively captured in Parsons and Platt's analysis of the "bundle", the university is centrally defined – and draws its distinctive advantages – from being at the crossroads of such a wide array of functions and interests. The interplay of its teaching, research, and expansively defined "service" roles creates the opportunities for innovative synergies to develop, at the same time that the need practically to manage such a diverse range of interests keeps the institution systemically connected to a broad range of constituencies. It is thus ultimately this diversity which sustains the university, both intellectually and organisationally. Correspondingly, the challenge of university governance may be understood as one of managing such diversity, ensuring that an apposite balance is maintained between the institution's different constituencies and functions.

As systematically evidenced across the models discussed, this balance requires, in the first instance, that the traditional core of the university be sustained. This corresponds to a strong normative argument. As Fallis in particular underlines, it is through maintaining its traditional functions centred on critical inquiry that the university may best contribute to forging wider practices of democratic citizenship. To this may further be added a related cultural dimension, in which the university is seen to play a distinctive role as a repository of knowledge and societal memory.[25] Yet, the argument for the preservation of the traditional core of the university extends beyond this, incorporating a strong functional dimension as well. As highlighted in the models of the entrepreneurial university discussed above, it is also only through sustaining its traditional,

critical functions as regards the development and dissemination of knowledge that the university may play its intended role in the knowledge economy. The normative and the functional rationales are consequently intertwined, in a manner which again points to the ultimately integrated character of the institution as a whole – and the need for the academic "core" to be sustained if the interface with applied technological and societal innovation is to flourish. This point has been eloquently made by the British social commentator Will Hutton, now confronting such dilemmas in his current position as principal of Hertford College Oxford:

A university is not a scientific hothouse with some frills around the edges – such as the humanities – generating off-the-peg ideas for business to patent and commercialise. It is an independent, autonomous institution housing multiple academic disciplines whose cross-fertilisations and serendipities lie at the heart of the capacity to enlarge the knowledge base.[26]

This in turn leads to a consideration of the obverse question, concerned with the university's place in wider innovation systems. Here again, the lesson to be drawn across the different models is one of the need to maintain balance, recognising both the roles which the university may assume and those for which it is comparatively ill-equipped. Etzkowitz's "triple helix" model provides the most readily applicable guide here – pointing to the creative intersections between government, industry and the university where each to some extent "assumes the place of the other", but at the same time stressing the need for each to preserve its core mission. Richard Florida, writing in much the same vein, describes the role of the university as that of a "creative hub" within wider social structures, distinctively contributing to the provision of "technology, talent and tolerance".[27] The first two of Florida's terms – "technology" and "talent" – return us to both the university's newer engagements with more applied research and its traditional educational mission. "Tolerance", on the other hand, points to the more intangible societal contributions of universities, suggesting the complex ecologies which link them to their surrounding environments and the delicate balances which must be maintained.

The maintenance of such balances is, of course, by no means a straightforward task in practice. It requires the careful management of diversity at the institutional level, ensuring that effective decision-making is combined with open channels of dialogue. Equally, at the level of higher education policy, it requires the development of frameworks which allow universities to pursue their diverse missions relative to structures of accountability which themselves account for this diversity. Striking such balances poses central policy challenges in all post-industrial societies. Nonetheless, it arguably poses even more pronounced challenges – and presents even more novel opportunities – in the present context. The situation of the University of Luxembourg is undoubtedly a unique one – that of a newly founded institution operating within a wider policy environment that has never before had to deal with the demands made by and on a full-fledged university. The models outlined above may, it is hoped, provide useful reference points for reflecting on this unique experience as it moves forward into its second, inescapably challenging decade.

NOTES

P.14

Robert Harmsen
The Challenges of the Contemporary University

1 The present chapter derives from Professor Harmsen's inaugural lecture, 'Globalisation, Europeanisation and the Governance of Higher Education', delivered on 23 January 2013.

2 See further Mitchell G. Ash (ed.), *Mythos Humboldt: Vergangenheit und Zukunft der deutschen Universitäten* (Vienna: Böhlau, 1999).

3 See further Sheldon Rothblatt, *The Modern University and its Discontents: The Fate of Newman's Legacies in Britain and America* (Cambridge: Cambridge University Press, 1997).

4 Clark Kerr, *The Uses of the University* (Cambridge, MA: Harvard University Press, 1963). Citations here refer to the fifth and final edition of the work, published in 2001.

5 Ibid, p. 5.

6 Ibid, p. 15.

7 Ibid.

8 Talcott Parsons and Gerald M. Platt, *The American University* (Cambridge, MA: Harvard University Press, 1975).

9 George Fallis, *Multiversities, Ideas and Democracy* (Toronto: University of Toronto Press, 2007).

10 Ibid, pp. 17 and 48.

11 For a recent survey, see Roger King, Simon Marginson and Rajani Naidoo (eds.), *Handbook on Globalization and Higher Education* (Cheltenham: Edward Elgar, 2011).

12 See, for example, Ulrich Teichler, 'The Changing Debate on Internationalisation of Higher Education', *Higher Education* vol. 48, no. 1 (2004), pp. 5-26.

13 Ben Wildavsky, *The Great Brain Race: How Global Universities are Reshaping the World* (Princeton, NJ: Princeton University Press, 2010).

14 Simon Marginson, '"Ideas of a University" in a Global Era', paper delivered at the conference 'Positioning [the] University in the Globalized World: Changing Governance and Coping Strategies in Asia', University of Hong Kong, 10-11 December 2008. Available for download from: http://www.cshe.unimelb.edu.au/people/marginson.html

15 Ibid, p. 12.

16 Ibid, p. 10.

17 One of the more influential (and severe) critiques in this regard is that of the former long-serving Harvard University president Derek Bok. See Derek Bok, *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton, NJ: Princeton University Press, 2003).

18 Clayton M. Christensen and Henry J. Eyring, *The Innovative University: Changing the DNA of Higher Education from the Inside Out* (San Francisco: Jossey-Bass, 2011).

19 Holden Thorp and Buck Goldstein, *Engines of Innovation: The Entrepreneurial University in the Twenty-First Century* (Chapel Hill, NC: University of North Carolina Press, 2010).

20 Burton R. Clark, *Creating Entrepreneurial Universities: Organizational Pathways of Transformation* (Bingley: Emerald, 2007).

21 Henry Etzkowitz, *The Triple Helix: University-Industry-Government Innovation in Action* (Abingdon: Routledge, 2008).

22 Ibid, p. 9.

23 Ibid.

24 Ibid, p. 30.

25 See further Stefan Collini, *What are Universities for?* (London: Penguin, 2012).

26 *The Observer,* 5 January 2013.

27 Richard Florida, *The Rise of the Creative Class* (New York: Basic Books, 2012/revised tenth anniversary edition), pp. 309-312.

P.22

Justin J.W. Powell
Founding the Inter/National University of Luxembourg in the Bologna Era

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