Innovation in the Past and Future of Europe's Universities*

Europe's universities are the cultural and organizational legacies of an extended historical process of incremental evolutionary adaptation, punctuated by episodes of radical institutional innovation and epistemological re-orientation. Remarkably, they have managed to survive as the primary *locii* of their societies' appreciation of ancient learning, and to emerge also as acknowledged the font of new thinking about responses to a wide array of present and future societal challenges. It is incumbent upon the leaders of these institutions to contemplate and debate the possibilities of embracing far-reaching changes in their ways, in order to speed the advance of useful knowledge and human wellbeing. But, although we may agree that 'innovation' is a desireable process, it does not follow that all innovations are good.

This paper offers a considered response to an emblematic proposal for radical redirection of Europe's universities, which was set out in the Commission of the European Communities' (February 2003): "Communication on the role of the universities in the Europe of knowledge". In it the Commission assessed Europe's critical needs in the epoch of «knowledge-driven economic growth», identified the university as the institution uniquely suited to meeting those needs, and called for debate on the means by which the conditions of European universities can be changed to satisfy the requirements of the new societal role for which the Commission believes them to be destined. Reduced to its essence, the Communication's assessment sees Europe's universities, grandes écoles, polytechnics, and fachochschulen, collectively as possessing the potential to become more effective than European industry at the business of technologically driven innovation. The Commission therefore proposes a course of institutional reform that would permit the mobilization of that capability for the purpose of solving the dual problems of meeting the rising costs of public education and research, and raising the share of EU gross domestic product that is devoted to investment in R&D.

^{*} Precis presented to the Coimbra General Assembly of the Historical European Universities convened in Siena, 14-16 April 2004. This presentation is based upon a revised and expanded text of the *Lectio magistralis* delivered by the Author at the Università degli Studi di Torino, 12 May 2003 (N.d.R.).

In response, a certain lack of coherence must be noticed, first, between the Communication's diagnosis of the proximate causes of European underinvestment in R&D, and its focus upon altering the performance of public sector research organizations as means of addressing that macroeconomic problem. Second, it is apparent that many of the features of universities -particularly those that have rendered them particularly effective in fulfilling their historical role as 'open nodes' in international knowledge-disseminating networkswould be seriously jeopardized if not sacrificed in order to implement the EC's proposed institutional innovations. The latter program would aim at 'harnessing' the energies of university professors, students and administrators to a new and highly instrumental goal, namely, the advancement of knowledge for national and regional 'wealth creation'. Within the familiar context of academic 'open science' norms and governance structures, the comparative advantage of university-based researchers' lies in conducting inquiries that may provide the foundations for valuable commercial innovations; but, not in the tightly-coupled fashion that interests most political leaders and policy-advisors concerned with predictable and identifiable near-term payoffs.

Thirdly, there is a vital question that the EC's Communication fails to address: what is the evidentiary basis for supposing that the social benefits envisaged will be substantial enough to justify the costs of attempting to transform Europe's most prestigious academic institutions into knowledge-management enterprises whose intellectual property revenues would contribute significantly to meeting their own operating expenses. It is evident that the thrust of the Commission's proposals for institutional reform and regeneration, and similar policy-directions now popular among national government ministries in Europe, and elsewhere, has drawn inspiration from glowing accounts of U.S. experience following passage of the Bayh-Dole Act in 1980, a significant piece of liberalizing legislation that permitted American universities to obtain and commercially exploit patents for inventions resulting from their performance of research funded by the federal government. Would not a similar program of regulatory reform, reinforced by the application of suitable financial carrots and sticks, elicit in Europe a comparable blossoming of myriad university-industry research partnerships, a vigorously rising trend in academic patenting activity and licensing revenues, and the healthy awakening of the spirit of entrepreneurship among the professoriate? Perceptions of development in foreign lands are notoriously subject to distortions. Recent examinations of the available record by U.S. economists have exposed a more complex and problematic picture of the workings of 'the Bayh-Dole regime'. A sober review of the findings (and the ac-

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companying suggestions for 'regime changes') would seem to be an obvious precautionary measure for European policy-makers who presently view this American experiment in institutional innovation as an appropriate paradigm for the European Research Area. It would reveal that the sustainable economic benefits are likely to be far more limited than current proponents of such policies seem to envisage – whether for the region's higher education institutions, or for the larger communities they are meant to serve-; and a variety of unintended and pernicious effects that would entail some very appreciable costs.

Fortunately, it is still not too late for Europe to turn away from so illconceived a strategy; to eschew institutional experiments that are likely to create internally conflicted and dysfunctional hybrid organizations. There is an opportunity now to embark instead upon a truly more innovative approach: devising and supporting independent and complementary 'bridge institutions' that could better facilitate fruitful symbiotic interactions among the mix of public research organizations and profit-motivated firms throughout the European Research Area. (PAUL ALLAN DAVID)

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