

## II.2

### Universities in the Knowledge Economy

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#### INTRODUCTION

The continuing tension between ideal and reality lies at the heart of the human condition. The struggle to embody a high ideal in the harsh reality of the actual world has provided some of humanity's greatest achievements, as well as some of its most depressing failures. Finding ways to realise an ideal in a changing world has been central to many great reform movements.

This tension between ideal and contemporary reality is acutely evident in the modern university. Heir to a great ideal of the disinterested community of scholars seeking truth for its own sake, the university has become a central institution of the modern era. Operating as they do in a world in which wealth and power have become increasingly tied to knowledge, universities are now massive, prestigious and powerful. They are also the focus of the ambitions of individuals, companies and governments.

In the communities of scholars that did so much to shape the modern world, knowledge may have been pursued for its own sake. But the knowledge acquired proved to have enormous social and economic implications. Possessing and controlling existing knowledge and being in position to generate valuable new knowledge, confers power and economic advantage, and attracts the attention of those whose interests are far from scholarly. In some ways the success of communities based on the ideal created conditions that make it harder to pursue the ideal.

The issues which emerge from this tension – the position of the university as an independent, scholarly institution, the ways in which relevant economic and social knowledge can be generated and disseminated, and the maintenance of an independent critique of strategies and values – have been central to William Melody's life and work. In this contribution, I discuss some elements of this tension as they appear at the beginning of the 21<sup>st</sup> century in the light of what we have learned from him on these matters. My empirical focus is implicitly on universities in Australia; readers may recognise similarities in many other countries.

### THE TIMELESS IDEAL AND THE CONTEMPORARY REALITY

Many cultures possess the ideal of the committed community of scholars seeking truth in a disinterested way, and sharing both the way of life and the results of the search with young members being initiated into the community. While having substantial resonance in many other cultures, this ideal has been particularly influential in the West. After the rediscovery of the civilisation of the ancient Greeks in the 10<sup>th</sup> and 11<sup>th</sup> centuries, this ideal became embodied in the new universities of Europe, which grew to maturity by the 13<sup>th</sup> century.

The role that these universities, and many others established subsequently, played in the intellectual, cultural and economic history of the world need not be recited here. Suffice to say that they have, for several centuries, played a pivotal role in shaping economic and social trends. Thus, they have contributed greatly to the emergence of a knowledge-based society. That is, to a society in which knowledge is central to both economic and social developments, and in which access to knowledge is rightly seen as critical to employment, income and power.

The following are some of the key features of the situation in which universities now find themselves, partly as a result of their own success. In terms of the role of knowledge, and of the nature of knowledge generation and of education, four features stand out.

#### **The Economic Importance of Knowledge**

In the community of scholars, knowledge was to be sought for its own sake. This did not mean that knowledge had no value – indeed, knowledge was seen as supremely valuable, and ‘the truth shall make you free’ – but that it was not sought for such extrinsic benefits as it might provide. Thus knowledge was a public good, both in a value sense and in the more technical sense of being non-rival and non-excludable. It should be both generated and distributed in a free and open environment.

But when knowledge is recognised as a primary economic good, the dynamics change a good deal. What knowledge is generated, who controls it and who is trained to use it, become matters of central importance throughout the broader community.

#### **Technical Specialisation**

In recent decades, the academic enterprise has become much more specialised, with these specialisations often being linked to the application of particular techniques or bodies of theory. Particular narrow areas generate their own

intellectual communities, journals, career paths and so on, and the number of specialised areas of study seems to have proliferated greatly. This also seems to have led to a high proportion of academic work being driven by the technical demands of various disciplines, rather than by the requirements of real world problems. In economics, for example, the bulk of published work still relates to theory development or testing using econometric techniques, rather than to problem-driven empirical studies.

### **The Globalisation of Research and of Knowledge Flows**

Modern information and communications technologies have led to greatly increased globalisation of research and of knowledge flows over the past decade or so. This is evident not only in the 24-hour corporate R&D effort, operating sequentially in eight hour shifts in various parts of the world, but in many more mundane effects. These include the instantaneous flow of articles and working papers across the Internet, so that researchers, students and clients can all share the latest information.

### **Knowledge and Education as Corporate Goals**

Reflecting the economic importance of knowledge, R&D and education have become central corporate goals. This is true in two senses: large firms have established major R&D and education facilities to achieve their own corporate objectives, and many smaller firms have been set up to undertake R&D or to provide education on a commercial, profit maximising basis.

In terms of the operation of the universities themselves, and of their place in the broader community, four further features stand out.

### **Mass Participation in Higher Education**

Given both the high prestige of university life and the economic rewards associated with knowledge, it was inevitable that there would be a demand for mass participation in higher education. Thus, most industrialised countries, at least, have seen massive expansion in higher education in recent decades. In Australia, for example, the number of persons enrolled in higher education increased twenty-fold over the four decades to 1995, rising from 30,800 in 1955 to 604,200 in 1995. For the OECD as a whole, by 1999 four in every ten school-leavers attended a tertiary institution to study for a bachelor or higher tertiary degree (OECD 2001a).

### **Diverse Education and Training Functions**

If four in every ten school leavers attends a higher education institution, then the educational and training functions of these institutions must be enlarged and

greatly diversified. While the dispute about the inclusion of professional faculties in universities was settled in the first half of the 20<sup>th</sup> century, the last two decades of that century saw a massive expansion of these functions.

### **Corporatisation, Self-funding and Competition**

In many countries, governments funded this massive expansion of university education, initially. But by the 1980s there were widespread attempts to shift the costs of continued growth, both by direct and indirect fees for students and by forcing the universities into a corporatist, self-funding model. In many cases, this has led to universities being driven by the values of the marketplace – managers and marketers are in the ascendancy, there are heavy pressures of a non-academic kind on staff, competition is rife between universities for funding and students, teaching and admission standards are in decline, there is increased use of sessional and casual staff, and so on. Thus, a significant part of the costs of expansion have been borne by the universities themselves, in terms of increased pressures, declining conditions and standards, and fundamental value shifts (for the case of Australia, see Coady 2000).

### **Policy Research and Social Critique**

Finally, one effect of these various changes and pressures has been a drying up of independent, long-term policy research, and the social critique to which it can give rise. When it is publish or perish, limited technical publications are the way to go. If research is funded externally, the agenda of the funding body determines the research undertaken. Even if funds are available through the competitive processes of government funding bodies, these very processes often impose their own constraints, requirements and fashions. The end result of these and other factors has been less fundamental policy research and social critique. To take economics again, the major shifts in policy which have swept the world in the past 10 to 15 years have been driven mainly from the market and market-related institutions, and have still not been the subject of much sustained academic research.

### **REALISING THE IDEAL**

We have barely begun to address the place of the university in the knowledge-based society, where knowledge is at the heart of economic and social affairs and, hence, also the focus of the ambitions of individuals, companies and governments. While trading on the cherished ideal, most universities have developed into quite different institutions, where the pressures of teaching, fundraising, administration, publication and competition make a mockery of the disinterested search for truth.

To a distant observer, the most obvious exceptions to this generalisation seem to be many of the great universities of the United States. Backed by history and prestige, by massive endowments, by high levels of government funding, by links to successful knowledge-based businesses and by inflows of many of the best staff and student talent from around the world, many of these universities still seem to be able to create a viable university experience. But, even if this is so, it simply highlights the situation of those who are not so fortunate.

As I have said, these issues have been, in one way or another, at the heart of Melody's life and work. Not only has he written about them on many occasions (Melody 1997c) but he has tried to do something about them. This is true both of his long involvement in many universities, but also of his work in setting up several research institutions at the interface between universities and public policy. In these activities, he has experienced many of the tensions, conflicts and contradictions inherent in seeking to realise the ideal within the contemporary reality.

### **The Experience of CIRCIT**

The Centre for International Research on Communication and Information Technologies (CIRCIT) is a case in point. This centre was set up in 1988 by the Victoria Government, to be an independent centre for high quality research on the economic and social implications of the emerging information technologies. It was relatively well-funded, at least by Australian standards, and was encouraged to build a respected international position in the area. It was expected to cooperate with, but not to fund, activities in the universities, on the basis that a new organisation with critical mass needed to be created. Melody, fresh from his experiences with the British Programme on Information and Communication Technologies (PICT) endeavour, was involved in its initial specification and was engaged as founding director in 1988.

The early years of the new centre were exciting. A strong team was quickly assembled, some very good work was done and CIRCIT soon became well-known in the international community. The centre was achieving much of what its founders had intended. But within Australia, the position was rather different. Many research groups in the universities and elsewhere saw the centre as a competitor, rather than as a source of funds, and were at best reluctant to cooperate, and at worst hostile. Many bureaucrats within the Australian Government saw the centre as a threat to their power, and to their control over the policy-making process. In many companies, CIRCIT was seen as too independent and uncertain, and as not necessarily generating results consistent with company interests. Thus, in a period

in which Australia was blundering through the early stages of telecom reform, the centre was seen more as a threat to vested interests than as an opportunity to throw new light on issues of great national importance.

Such signs of rejection of a new irritant into the body corporate are not uncommon, and can often be temporary. But in different circumstances they can be fatal. By the early 1990s, the Government of Victoria had changed, and those who had promoted CIRCIT were no longer in a position of influence. The Government was short of money, and the voices of vested interests could still be heard. In 1993 the Government ceased funding the centre and Melody resigned as Director. Reflecting the heroic efforts of a number of individuals, the centre has continued, and has done some important work since then. But this has involved the hand-to-mouth existence of much Australian research, and incorporation within a university. The opportunity to create a major new star on the international firmament, with a strong funding base and critical mass, had been lost.

#### CONCLUSION

Many of us, at least outside the United States, are struggling within university institutions that have lost their way in the welter of conflicting demands, expectations and vested interests. To sort through these problems, and to preserve some space for the historic ideal, will require both clear thinking and committed action. Melody has given plenty of both in a long career, and will surely give much more in a vigorous retirement.