

CHAPTER

War and peace: how did we get here in HE-business relations?

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INTRODUCTION

Wars have had a major impact on research in the 20th century: the century of technological discovery as a motor for economic development. The First World War produced a major impetus for the investment by governments of developed countries into science, and also produced significant spin-offs in terms of domestic use (for example, mauvene in WW1 uniforms as founding for modern chemistry, similarly, from WW2, new developments in electronics, aviation, atomic energy etc). And, following WW2, governments invested into higher education as a source of transformation of modern industry and economy. To quote from the Universities Grants Committee of the UK in 1948 (Quoted in Becher & Kogan, 1992): “There has emerged from the war a new and sustained public interest in the universities and a strong realization of the unique contribution they had to offer to the national well being, whether in peace or war... A heightened sense of social justice generated by the war has opened the door more widely than before”.

The relationship between defence science and technology and fundamental research is an interesting case of the inter-play between use and discovery. The need to solve real world problems provided an impetus to discovery, and new discoveries provided opportunities for new solutions to real world problems. And governments have sought to use that relationship to deliver public goods, such as defence, but also increasingly to pursue economic goals. (And that inter-play is reflected in policy thrusts such as seeking secondary domestic and economic uses out of new defence technologies.)

THE 'THIRD STREAM'

In the U.K., there has been increasing interest in recent years in “third stream” as a mission direction in HE, additional to those of teaching and research (as the first and second streams). This links with academic debate on the forms and nature of scholarship, including scholarships of discovery, integration, teaching — and *application*. And the last, scholarship of application, is described, for example, in the following extract from Ernest Boyer’s *Scholarship Reconsidered* (Boyer, 1990): “The scholarship of application, as we define it here, is not a one-way street. Indeed, the term itself may be misleading if it suggests that knowledge is first “discovered” and then “applied”. The process we have in mind is far more dynamic. New intellectual understandings can arise out of the very act of application — whether in medical diagnosis, serving clients in psychotherapy, shaping public policy, creating an architectural design, or working with the public schools.”

So the third stream agenda focuses specifically on how higher education impacts on the economy and society and vice versa. Much of the underlying activity to the third stream is specifically either “pieces” of research or of teaching. But there is nevertheless an important added value in looking at these through the prism of their interplay or engagement with the world. And that creates a specific policy and strategic focus which is distinct from those largely of research and teaching, in considering how we can make the third stream work most effectively to the benefit of both HE and the world of its use.

Much of the early policy interest in the U.K. in third stream, following U.S. examples in the 1960s and 1970s, addressed “technology transfer”, with the focus on science and engineering, on transmission from HE research into exploitation and on achieving economic and commercial goals. So the policy debate was couched in fairly technocratic and mechanical concepts — legal regulations such as Intellectual Property regimes, commercial regulations such as spin-off companies and “hard-edged” and use-focussed disciplinary references such as “new technologies”. But even in the early days, there were always some broader, more organic strands within the development of policy in the U.K., linking it to interactive, communicative and flow models, greater disciplinary ranges and to more wide-ranging conceptions of public benefit than wealth creation.

Just as third stream has become a more powerful policy and strategic emphasis in the U.K., so too has the question of mission specialisation or differentiation. The experience of higher education in the U.K., as in the developed world more generally, is of increasing success as a major societal function, which accelerates its pace rapidly in the 20th century. From origins in scholarship, higher education begins to play a dominant role in the basic research enterprise, in the early development of the professions, in initial

vocational education — and then in continuing professional and skill development, in social and economic regeneration, in the development and production of culture and the arts, and so on.

Just as the functions of higher education have expanded, so the scale of delivery has also accelerated. Over the 20th century, the contribution of higher education, and the university sector more specifically, has changed from a relatively small and specialist system, producing the elite cadre needed to support the “professions”, to a mass system widening its doors to an increasing diversity of entrants and serving much broader education and training needs. The transition from elite to mass higher education (from 8% participation of the population in HE in the first half of the 20th century to 42% today) has probably been the major challenge to the HE sector and to national governments in the latter part of the last century.

While the third stream, as conceptualised as knowledge **transfer**, has largely been about the relationship between research and use, in a broader modern notion of third stream as knowledge **exchange**, we can also look at the relationship between teaching and use. Obviously, a lot of this can be subsumed within the issue of engagement between higher education teaching and the employers of graduates and postgraduates. The job of higher education has historically largely been about the production of graduates prepared for entry into the professions, which included the profession of scholar. But the teaching contribution of higher education has broadened considerably in the context of lifelong learning as a component of a knowledge-based economy. The exchange between users and HE teaching may then include a great diversity of components — the initial preparation of highly qualified people and entry into professions, meeting the needs of professional updating (CPD), the development and exchange of skills, the exchange of people-embodied tacit knowledge, and the definition of professional competence and knowledge domains as part of workforce development and definition of professional standards. And as part of this trend toward lifelong learning, higher education qualifications, skills, knowledge, etc, are likely to become important to an increasing range of sectors of the economy.

In the U.K., possibly uniquely, the reaction to the expanding potential of the HE sector in the latter part of the 20th century has been successively to break down different legislative or statutory frameworks which compartmentalise or channel different parts of the sector to play specific roles. This has been combined with an increase in the use of market or quasi-market forces as a means to drive quality, efficiency — and diversity. And this in turn has led to greater attention to the issue of institutional management and leadership, since public funds are now riding on the performance of institutional managers in the context of a more private-sector type market environment in which there may be winners and losers.

This trend toward the unleashing of market forces in HE will become stronger in the U.K. in the next year with the introduction of variable fees for undergraduate provision in England, and hence this will prompt even greater market attention from institutional leaders. Of course, university leaders in the U.K., as in U.S. or Australia, have been engaged for some time in concern over their performance in the expanding, but competitive global market for HE itself, with attention, in teaching, to their international brands and overseas student recruitment, and, in research, to their access to global knowledge networks and performance in the global knowledge-based economy. But, at the same time, there has also been increasing attention to the local and regional aspects of third stream and knowledge exchange, with a greater trend (but from a low base) in the U.K. toward regionalisation and devolution as a component of economic and social development. This provides a very challenging environment for institutional leaders to define their sources of comparative advantage when they may participate in local, regional, national and global markets. And far from being isolated in “ivory towers”, universities find themselves at the vanguard of economic and social development, but also operating themselves increasingly as a marketized commodity in a cut-throat global market.

There are very present today concerns that HE leaders may converge in their strategies, particularly when there are both prestige and funding influences that make some strategic choices much more attractive than others. This particularly applies to the research mission, with the access it provides to international prestige, brand and peer networks, as well as to highly competitive and substantial funding. If institutional strategies converge, then nations as a whole may lose out on a sufficiently diverse range of HE offerings to meet public interest needs. (And, from an efficiency point of view, given the complexity of functions and potential local, regional, national and global markets, it seems unlikely that many institutions could operate successfully in all.) The national system needs then to ensure that there is a sufficiently diverse and nuanced range of influences and funds that can help institutional leaders play to particular strengths, but which is flexible to evolving HE roles and to the need to unite activities and disciplines in unpredictable combinations. And probably the greatest challenge to the future is achieving, in any national system, the right balance between differentiation to achieve diversity, and connection and collaboration to achieve innovation in “novel” (interdisciplinary) ways. The U.S. super-universities of scale are a means to achieve both, but it is less clear how the European systems with a greater range of smaller institutions can achieve both. This points toward the need for more sophisticated future debate on the scale of institutions, but also on the different purposes and advantages of collaborations, strategic alliances, etc.

The Higher Education Funding Council for England (HEFCE) has taken a leading role in the development of third-stream policy, working with other national partners. In particular, HEFCE has taken forward the creation of a specific fund to support engagement between HE and “users” (the Higher Education Innovation Fund — HEIF) working with government departments, regional bodies etc. While once we talked of technology transfer, the new language of HEIF expresses itself largely in terms of knowledge exchange. So it embraces an interactive relationship between HE and users, a broader conception of those users (businesses, to public services, to social enterprises or not-for-profits), a greater subject range transitioning from “technology” to “knowledge” and a breadth of engagement across teaching and research.

NEW STRATEGIC DIRECTIONS

At this time, the HEFCE is developing its next Strategic Plan for 2006-11 (November 2005 <http://www.hefce.ac.uk/aboutus/straplan.asp>). In our draft plan we propose new developments to open up of our conception of the potential points of contact between HE and the world, of the possible benefits to HE and users from knowledge exchange and the sophistication of our models for achieving deep engagement. In particular we are beginning to focus on:

- **The new context for engagement between HE and users in this century.** We can anticipate increased global economic competition as some of the differences between developed and developing nations break down in terms of their sources of comparative advantage. And as part of this, global firms or organisations may become increasingly promiscuous in where they base themselves, to migrate to the most flexible regulatory regimes, best labour markets, best sources of capital, and indeed highest quality HE knowledge base. And a source of competitiveness for any country may be to attract these global players to their shores. These global players may be drawn into countries by factors that go beyond the economic, to the quality and life, cultural stimulation, lack of threat etc provided by any country, which can provide an attractive environment for the highest quality people. But, at the same time, in a post-modern dynamic, we may expect more attention by domestic governments to the economic and social disparities within their territories, with a view to ensuring productive and vital communities that deliver quality of life to their electorates, provide a basis for economic competitiveness and reduce the need for public expenditure on health, crime etc. Beyond the global economic dynamic, we may also anticipate that there will be a need for more

intensive promotion of civic and community engagement, at global, national, regional and local levels, to achieve a fairer, sustainable and more peaceful world. At the heart of both agendas could be a critical role for HE, in third stream mode, as a source and inspiration for rational and innovative problem-solving.

- **Expanding opportunities in third stream.** In the context of this much larger agenda for third stream, we can envisage that the contribution from HE will continue to move rapidly beyond the historic focus on business and wealth creation, on the science and engineering disciplines, and on research and development as the privileged conduit for engagement. This will then provide greater opportunities for a wider range of HE disciplines to play a part in third stream, and in inter-, intra- and multi- disciplinary modes.
- **Change in HE teaching and third stream.** Specifically, in terms of HE teaching, we will also continue to move rapidly beyond traditional conceptions of “professional” education (medicine, law etc) as the dominant mode in which HE teaching connects with engagement with employers. The dynamic will continue toward new roles in skill development, CPD, workforce development and vocational progression routes appropriate to new business sectors that historically have not engaged with HE.

As a result of these forces, HEFCE is proposing in its draft strategic plan that the broadening conception of third stream, together with the increasing emphasis and requirement for mission specialisation, may open up possibilities for a new mission descriptor or brand for a “**third stream intensive institution**”. Such an institution will put engagement at its heart. It will embrace strong business, public service or social enterprise representation in its governing arrangements, and its top management will make a priority of their interactions with critical business and community organisations. The senior management of the organisation will provide a strong focus and deep expertise in the third stream mission, and will have in place structures below to ensure that third stream work is strategically and effectively promoted and managed. The impact of institutional activity on the performance of “client” businesses, public services and charities will be a key measurable in driving strategy and investment decision-making within the institution. User impact will provide the same kind of driver for staff in this kind of institution that publication in a peer-reviewed journal might in an institution with a research mission focus.

We will have to present any such mission opportunity as a positive addition to the choices open to universities in England. The dynamic in the U.K. has been to break down compartmentalisation or stratifications of the HE sector,

and we cannot swim against the tide. We will need to be sensitive to the natural dynamic within the U.K. HE system, and to provide an opportunity that is forward- not backward-looking. As part of this, we will need to make it clear that the potential for knowledge exchange from research remains very important and such research is highly user-relevant.

CONCLUSION

If the third stream is to fulfil its potential we will need some vision at the national level to enable such new types of mission to flourish, and to keep the HE system evolving to a new place in its engagement with the 21st-century world. A lot of the national debate will inevitably continue to be around wealth creation and the economic competitiveness of our nation, since wealth provides a foundation for other things. But we have stressed — and indeed in our title — that we also need to highlight the potential of HE to contribute toward realisation of the values of peace, civilisation and civic and community spirit in our country and globally (not least as a way of inspiring the more idealistic young people of the present day as budding social entrepreneurs). So HEFCE has also proposed in its plan that we should embark upon the development and implementation of an explicit “civic, cultural and community engagement strategy”.

Who knows whether any government will ever put the same investment it has into war and wealth into peace and a sense of love and vitality in our society? Probably not, but this kind of investment is nevertheless something that becomes even more relevant year to year. We face greater challenges — and opportunities — to live in a peaceful, and intellectually and culturally stimulating world. We live in a globally connected world, but we often still struggle to understand and enjoy the diversity of people, as well as the multiculturalism in our own nation. HE campuses themselves, staff and students, are mini-microcosms of this diversity of backgrounds and nations. So we believe we do not celebrate enough the civilising contribution that HE can make to a more complex, social environment. And we do not trumpet enough to governments and to the public that HE prepares people for participation in civic life, and provides the expertise to support innovative rational problem-solving. And we do not shout enough about how HE provides resources for intellectual and cultural enrichment that make this a more exciting and vital world in which to live. But we should.

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