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The 21st Century Idea of a University

You may not believe it (though I could of course be deluding myself) but I'll soon turn 70, the allotted span. My lifetime has taken in many striking social developments, and my career's chance vicissitudes have underlined the extent of some of them. I'll explain. I was the first of my family to go to university. In the 1960s I was one of the six per cent or so of my age group in Britain to do so. We know how that figure has ballooned exponentially in Britain and in every other European country. But, partly because I spent five years as a colonial governor in Asia, I have also been Chancellor of more universities (I would reckon) than almost anyone else anywhere. In the 1990s, I held this post at every Hong Kong university – most of them newly established products of a social revolution in the last years of the twentieth century, in the largely immigrant community of an Asian city. When I returned to Britain, I was selected as Chancellor of a good public research university in the north-east of England, Newcastle, and eleven years ago, on the death of Roy Jenkins, I was elected by its graduate body as the Chancellor of Oxford University. All this has given me an enthusiasm about higher education, some knowledge of its role in the promotion of welfare, progress and civic humanism, and a growing frustration both at the disinterest of much of Europe's political class in what has been happening to our universities, and also at their occasional complicity in the degradation of the idea of the university itself.

For some, the traditional idea of the university is so much old hat; universities are apparently being "MOOCed" out of any 21st century relevance. Now for a start we should beware prediction. This is true in politics, as we recall this year the centenary of the outbreak of the First World War which many experts thought (just before it happened) was an inconceivable consequence of the Balkans crisis. It's true in economics where "black swans" add randomness to the hazards of prediction. And it is true about social and educational developments, like the future of books. Yes, we have moved on from the Gutenberg bible; and yes, e-books have taken a toll on traditional hard and paperbacks. But there are unlikely to be fewer books in future; we will just find them differently. Reading is not passé; it is part of our DNA. Res ipsa loquitur.

So the way in which technology has democratised access to knowledge does not amount to a death sentence for the universities of Heidelberg or Leiden or Louvain or Cambridge. Universities need to adjust the way they operate, making these choices autonomously. What they should not do is to choose, or be pushed into choosing, to change their basic purpose, their core values and attributes in free, plural societies. What exactly are these purposes and values?

The work of Europe's comprehensive research universities (and I will come back later to the issue of who should do research) is still based on the insights of Wilhelm von Humboldt and Cardinal Newman. For Humboldt, a university's objectives and structures should be based on three principles: unity of research and teaching, freedom of teaching, and academic self-governance. The products of research should be shared with and tested by the young minds of those being taught. Teaching and

university governance should not be controlled or overly influenced by governments, outside agencies and pressures. For Newman, a university was – in his lyrical phrase – a place where "inquiry is pushed forward … discoveries verified and perfected and …. error exposed, by the collision of mind with mind, and knowledge with knowledge". For both these sages, universities served the present by helping us to understand the past and preserve the best of it; they served the future by shaping the citizens, who could help create it, by passing on a legacy both of knowledge and of civic commitment and attainment. Economic usefulness might be a by-product of these purposes. But universities are different from factories or vocational institutions; they have laboratories but are more than laboratories. They are a pillar of liberal civilisation and order, not primarily agents of GDP growth, and it is my contention that they are usually more likely to contribute to that utilitarian goal when their liberal purposes are understood.

I do not for one moment seek to argue that universities, and indeed the education system as a whole, play little or no role in economic development. When political leaders strut their stuff about the importance of creating a knowledge-based economy, how can one do other than concur? Who, after all, advocates working for the establishment of an ignorance-based economy, though I suppose that one can inadvertently stumble into one? On the other hand, I accept what Alison Wolf argued more than a decade ago that it is naïve to contend that there is "a simple, direct relationship between the amount of education in a society and its future growth rate". She went on to refute the proposition that "governments can fine-tune education expenditure to maximise that self-same rate of growth".

Here I come to a paradox. It is a common-place of political debate in Europe that spending on education – especially universities – can be justified principally because of its economic benefits. And many universities, and many of those who administer them, have embraced that argument themselves. In arguing for more public investment these days, no university advocate quotes Newman. We are swept along by often risible arguments about GDP effects, and submit to a utilitarian audit culture that devours learning and makes accountants kings. My main points are simply these. We manage at one and the same time both to spend less than we should on European universities, and to justify what we do spend with arguments that damage the ability of our universities – often the serendipitous ability – to contribute to the very things that utilitarians value most, namely economic performance.

This is not only a European problem. I read last month, for example, of the debate in Canada about the government's efforts to transform basic research. Curiosity driven blue-sky research should apparently be put to one side in favour of work that is directly relevant to industry's present needs. University – or other - research should be "useful", and usefulness can presumably be determined by governments or their agencies. So what is useful? The Commission set up by President Roosevelt to advise on likely innovation in the thirty years after 1937 missed nuclear energy, computers, lasers, jet engines, xerox, radar, antibiotics, sonar, the genetic code, many pharmaceuticals and so on. To take a more recent example of usefulness, when do you suppose we began to recognise that climate scientists belong in the "useful" category? Whatever the climate predictions, I prefer blue skies to government committees!

Let me go back to money. It is surely fair to argue that the proportion of your wealth as a nation that you spend on the gamut of your various interests and endeavours – money that you spend as taxpayers and as private individuals – reflects to a considerable extent the priority that you attach to each of them. Well, by that measure universities, which contribute up to four-fifths of our basic research in Europe and employ one-third of all those involved in it, do not seem to count for much. The OECD comparisons tell a pretty miserable story.

As a percentage of GDP, all European countries spend far less on universities than the US. Those who respond by pointing to the contribution of private spending to the American figures, should note that the US taxpayer contributes a higher proportion of GDP to universities than taxpayers in some EU countries. Overall, the US spends almost 2.8 per cent of GDP as against an OECD average of 1.65 per cent. In the EU only Denmark, Finland, the Netherlands and Sweden spend a little more than this average. The figures across the board are awful. The expansion of university education has been funded over the years by a reduction in the amount spent on each student. This is regarded as increases in university productivity. What it has amounted to very often is under-resourced teaching, under-funded research, and under-performance in dilapidated buildings. This contrasts bleakly with the language of European communiques, which might lead you to suppose that we were living in a golden age for our universities. Look back with much embarrassment to the commitments made in Lisbon in 2000, and to similar subsequent assurances of our leaders' understanding of the vital role of universities in the improvement of Europe's fortunes.

The wonder is that so much good work and good teaching is still done; some of the credit for this should go to the Bologna process which has helped to raise standards and the quality of qualifications in many institutions. But the story should be better, much better, especially if you set it against the competitive yardsticks which are apparently to be our judge and jury. How do we in future earn our crust with America and Asia challenging our share of global markets?

Some of the measures that are used to demonstrate the scale of our problems are deemed crude or misleading. But cumulatively who is misled except ourselves? Does a tally of the Nobel prizes won by Europe and by America in the past and today not count for something? And what of the league tables of universities, whose methodologies can admittedly be suspect (though the weight of criticism seems to owe something to the place you occupy in them). Again, those tables surely tell us something – that American campuses dominate, that Europeans by and large do not do well, and that Asians are starting to ascend the rankings. Add those scores to the PISA figures and we in Europe seem to have quite a lot to worry about. We are not as smart as we think we are.

The truth is that if you judge universities by research impact and the ability to attract the best and the brightest, America is top of the tree. Dig out country by country, two simple figures. First, what proportion of our ablest post-graduates go to America for their doctorates, and second, what proportion come back to Europe on completion of these degrees? Look at the figures today, and look at the figures ten and twenty years ago. I want to make a very simple point. If we want better universities making a bigger and better contribution to our national and European life, then we have to

spend more on them. Let me quote from a paper published in 2010 by the League of European Research Universities on “Universities, Research and the Innovation Union”: “It cannot be emphasised enough that Europe’s investment in higher education research and innovation is too low and as such constitutes a major contributing factor to the growing gap between Europe and its competitors.”

Having been involved in the setting up of the European Research Council, I am pleased that it channels today about 1.8 billion Euros a year to the highest quality peer-reviewed European research. That has been a good news story. But there aren’t enough such tales. And I wish that the ERC was getting a larger share of the EU cake. Spending for the future seems hugely preferable to trying to protect and bail out the past.

The ways in which our universities can make the most valuable contribution to European society, including innovation and our enhanced competitiveness, is by fulfilling their principal purposes. To do this, they will need to resist pressures to fit them into short-term plans that purport to impose a central view on what sort of workforce we need and what sort of economic agents we require. Universities should not be judged by what happens next term or by what a student is doing by the time she or he graduates. What students learn should, for example, shape them for life.

The British Surgeon-General during the Crimea campaign in the mid-19th century responded to criticism of the medical services at the time by remarking that they would have been perfectly adequate had it not been for the number of casualties. We should avoid a similar error, excluding those who are studying at our universities from

the debates on higher education. We pay too little attention to the learning experiences of students, and I fear that this problem may be exacerbated by a simplistic focus on the contribution that on-line resources can make to courses. After all, the aim of pedagogy should not be simply to transfer information. University teachers should get their students to think – to know how to frame the right questions (and the wrong ones), to search for the knowledge that will help them to produce answers, to embrace complexity, to argue rationally, to question and to dare to have their own opinions. Can we do that without close contact between students and their teachers? Can we do it in systems that fail to insist on good academic performance and that tolerate drift, dragged out courses and high drop-out rates? Can we achieve it without placing a high value on the pedagogic role and insisting on the highest teaching standards? Can we manage it when universities sometimes seem to be mainly in the business of providing the obligatory pre-workplace ticks in the box. School done; university done – now for the job market. Universities are for learning not "creditentialing"; students are not simply customers in an academic supermarket. We should expect more of the experience university provides for young people if we want not only a properly skilled graduate workforce but rounded citizens. We all know the Plutarch quote, "the mind is not a vessel to be filled, but a fire to be kindled". How often is that reflected in what we say and do about higher education?

The research done by our universities constitutes about 80 per cent of all basic research in Europe and is, as I have argued, underfunded. Lisbon proposed a goal of spending three per cent of GDP on R and D, but the overall figure achieved is less than two-thirds of that figure. Moreover, the money is spread over a much wider range of universities than is the case in the USA where less than 10 per cent of degree-giving

institutions are funded to do serious research with much of that research income coming from government. That comes as a shock to some Europeans. To give one comparison at Oxford, where we receive probably the largest research income of any European university, about 40 per cent comes from government. At Harvard, the figure is 80 per cent.

The concentration of research spending on far fewer institutions in the US is partly a result of the distinctions drawn, most notably in California thanks to Clark Kerr's reforms, between the roles of different tertiary institutions. In Europe we have tended to think that the only way in which we can demonstrate equality of esteem is by treating everyone as though they should be doing more or less the same thing. I do not regard a more hierarchical approach to the tertiary sector – from vocational training to basic degrees to high quality research – as elitist. It is only in danger of becoming elitist when you fail to respect the different and vital roles played by a variety of institutions.

The impact that research makes is not an unreasonable concern for those who fund it. But more important is the excellence of the work done, and I doubt the ability of funders to ascertain with much precision (if at all) the likely outcome of free-ranging academic inquiry. Good research in the sciences answers the "whys" and entrepreneurial innovation provides a bridge to the "hows" of developing technologies and business models. The basic contribution that universities make to innovation is that research; they are not in the first place entrepreneurial motors, though some may prove adept at such activity. But I doubt whether there is a simple model to take off the shelf of the ideal university contribution to discovery and innovation. What is

required is an environment which makes this creative process more not less likely. Features on this landscape will almost certainly include public investment, tax policies, workforce skills, physical infrastructure, land-use planning, and access to talent from other countries. It helps of course to add to that north California's climate! But I doubt the ability to re-create exact replicas of Silicon Valley, without begrudging those who think it worth making the occasional study visit there.

What will not work in my view is to try to constrain scholarly inquiry and to direct it to those areas which governments believe most likely to give swift economic results. But they should not be regarded as the micro agents of national economic policy. As Geoffrey Boulton and Colin Lucas argued in another LERU paper in 2008, "to confine universities to such a mechanical place in the progress of society is to diminish them; it invites doomed attempts to measure intangible effects by unyielding metrics; it offers only eventual disillusion".

This does not mean that universities can disregard efficient management of resources in the way they run their affairs. Academic freedom is not a synonym for incompetent governance. Universities have broader responsibilities to the communities which fund them, including sensible financial management, and their autonomy is not best defended by prioritising their own inward-looking, narrow self-interest. But academic autonomy is not simply a quaint relic of another age. It is part of the bedrock of a liberal society.

There is one other subject which I want to address briefly - the role of the humanities in our universities. It is not an economic irrelevance, a charming but outdated "jeu

d'esprit". I note, for example, that the Harvard Business review recently reported that while 750,000 jobs in the information sector of the American economy had been shed since 2000, employment had grown for library employees, actors, composers, writers and musicians. Anecdotally, I also note a prevalent complaint among employers about the inadequacy of communication skills on the part of graduates in more favoured "stem" subjects. So we cannot, in considering the future of healthy Europe universities, treat the humanities as an optional add-on indulgence.

Why bother to study and research the humanities? Why do I cherish, for instance, the fact that at Oxford (I choose one of many such examples) we have a small team of academics producing the only complete scholarly edition of the works of Voltaire? Will they add mightily to British capacity to innovate, to our national productivity or GDP?

We must support the humanities because we are human. Because the humanities help to answer the question why we need universities at all. Because they provide us with a fuller understanding of our world and of one another, just as the Erasmus programme has done for six million or so of our citizens. Because they enable us to think creatively and critically. Because they inform our moral sense. Because they teach us to love jazz and Beethoven, Raphael and Cézanne, a Shakespeare sonnet and a Flaubert novel. Because they teach us about life and beauty and love and death.

So to those who question a serious, generous and lasting commitment to teaching and researching in the humanities, I offer the story of Samuel Johnson's refutation of Bishop Berkeley. You may recall that his biographer, Boswell, suggested to Johnson that even if one did not accept the philosophical argument of Bishop Berkeley that

matter did not exist, that matter was only perception, it was impossible to refute it. Samuel Johnson reacted with alacrity. With “mighty force” he kicked against a large stone – “I refute it thus”. That is more or less how all of us who care about universities should respond to mindless and meretricious criticism of the humanities. We refute it, thus.

Universities are not a solely European contribution to humanity – from Nanjing in China to Al-Azhar in Cairo, universities contributed to the development of civilisations. But the European idea of the university has been a mainstay of our own western society and the principal influence everywhere on the development of modern education for young men and women and of academic research. It would be worse than a calamity, an act of cultural treason and economic self-harm, if we were to sell our universities short as we wrestle with the predicament of making our way in the 21st century.

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