

## **A NEW PLACE OF LEARNING**

**Speech to mark the inauguration of NMITE—**

**The New Model Institute of Technology and Engineering**

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Ladies and Gentlemen, it is an honour beyond measure to be asked to address you this evening. For once the cliché is both accurate and appropriate. This is an historic occasion: the eve of the inauguration of a new university in Herefordshire.

## **THE EMERGENCE OF UNIVERSITIES IN BRITAIN**

Let me start, if I may, by taking you to a specific place, and a specific time. The time is the 9<sup>th</sup> February 1825; the place, the letters page of *The Times* newspaper. For it was then and there that the poet Thomas Campbell wrote a remarkable open letter to the educational reformer Henry Brougham MP. In the letter Campbell drew attention to the fact that there was no higher education of any description in London, and he called for the creation of a London University. As he

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<sup>1</sup> Member of Parliament for Hereford and South Herefordshire (2010 - ). I am very grateful to Ian Bass and Sam Norman for their advice and help, and to the works cited in the Bibliography.

put it, “The people of London should settle what sort of university they wish for, and it will be their own fault alone if it does not exist.”

And the astonishing thing is that his diagnosis was correct. Oxford had originally come into being as a community of scholars in the late 11<sup>th</sup> or early 12<sup>th</sup> century, and Cambridge in the thirteenth, and for six hundred years thereafter that was it. England had just two universities, and they jealously fought to maintain their privilege of granting degrees; notably in 1333-4, when they managed to defeat a petition for Edward III to charter a new university in Lincolnshire.

Scotland, however, was a very different story. By 1600 Scotland had five universities, at St Andrews, Glasgow, Edinburgh, and two in Aberdeen. Thus the city of Aberdeen, a place with a population of 10,000 people or so—described by Pope Alexander VI at its founding as “separated from the rest of the kingdom by arms of the sea and very high mountains”—had as many universities as England. Campbell and Brougham were both Scotsmen, and they could see what a difference to educational opportunity, and to economic, social and cultural growth, the Scottish universities had made in their own country.

Nor was an Oxford or Cambridge education always up to much. By the 18<sup>th</sup> century the two English universities were very dull places indeed. Adam Smith diagnosed the general problem brilliantly in *The Wealth of Nations*, but perhaps his contemporary Edward Gibbon put it best, in Smithian spirit:

“The legal incorporation of these societies by the charters of popes and kings had given them a monopoly of the public instruction; and the spirit of monopolists is narrow, lazy, and oppressive; their work is more costly and less productive than that of independent artists; and the new improvements so eagerly grasped by the competition of freedom are admitted with slow and sullen reluctance in those proud corporations.”

Thus it took an insurgent institution, University College London—the university Campbell had called for in his letter to *The Times*—to break that monopoly, in the 1820s. And it did so in pioneering style: for it became the first university to admit Catholic, Jewish and nonconformist students; the first to admit women; and the first to offer external degrees via distance learning, among a host of other ground-breaking achievements.

These reforms had further institutional effects in turn: the creation of external degrees in particular gave a great boost to new colleges across England and Ireland, as they sought university status. But there were also important fraternal acts of university sponsorship: Balliol College and New College, Oxford played a key role in establishing Bristol University; the University of Newcastle was an offshoot of Durham. And so on.

Looking at the history as a whole, we can say this: every university treads its own distinctive path. Some were established by the papacy, some by royal charter, and Edinburgh University by its Town Council, which gave it a distinctively civic character from the outset.

But there are underlying patterns nonetheless. Universities take a long time to get going; money is always short; everyone must be involved; enlightened benefactors and supporters can be transformative; an unflagging persistence and shared focus on the prize are essential for success. But the results are miraculous: economic growth over decades; a vast infusion of social and cultural energy; new youth and life and confidence.

### **THE UNIVERSITY AS A SCHOLARLY COMMUNITY**

So much for the wider history. Let us now go back briefly to first principles. At root, the word “university” has two meanings. The first comes from Roman law, where *universitas* means a corporation. In this sense, a university is a legally recognised group of people committed to a common purpose, that of intellectual or practical inquiry.

There is a second and deeper meaning, however. This is that in pursuing this purpose such people are committed to a specific kind of inquiry: one that is open-ended, one that seeks to draw a universal understanding from a particular study, and one that treats others with dignity and respect, as befits fellow-inquirers. PhD degrees are doctorates in philosophy not because philosophy is the subject studied, but in recognition of the shared love of knowledge that is *philosophia*.

A university is, then, above all a community; and a community not merely in law but in mutual recognition, mutual obligation and mutual purpose. Properly understood, it embodies a commitment to take an interest in each other's work that is the very antithesis of the innumerable silos of modern university specialisms. It is the product of a shared conversation, and the means by which that conversation is sustained.

But as with all institutions, the university is a community that also shapes its members. At its best, it gives them the scope and opportunity not merely to interrogate the world, but to cultivate their own souls, and to submit their own ideas and actions to critical evaluation by others, and by themselves. The result is a spirit of self-confidence tempered with humility, an awareness of what Matthew Arnold called "the best which has been thought and said", and genuine independence of mind. A liberal education is based on freedom. It refuses to be dominated. It is the mind's attempt at liberation from its own self-slavery.

## **HEREFORD AS A CENTRE OF MEDIEVAL LEARNING**

As it happens, in twelfth and thirteenth centuries, just when Oxford and Cambridge were getting going, this city of Hereford was recognised as a community of philosophers. It is amazing that it was, because this was a time when the royal writ did not always extend to the Marches—when the Marcher Lords ruled, as it was said, *sicut regale*, like a king; when they could build their own castles and hold

their own courts for all crimes but that of high treason. England was regularly at war with Wales, and Herefordshire—lying as it did in a natural bowl between the Black Mountains to the West, the Cleve Hills to the North, the Malvern Hills to the East and the Forest of Dean to the South—was, in effect, a frontier province. Though, as the phrase *Hereford in Wallia* or similar from the time reminds us, whether of England or Wales is far from clear.<sup>2</sup>

In such circumstances, it must have taken remarkable energy to create a scholarly community of any kind. But energy there was, and it was focused on the Cathedral. The Cathedral had at last been rebuilt and reconsecrated by 1148 after its destruction almost a century earlier by a raiding party of the Welsh prince, Llewellyn ap Gruffudd. In 1179 a decree of the Third Lateran Council required every cathedral to establish a master to teach the clergy and the poor scholars of the church, and it may be no coincidence that at Hereford Cathedral the first mention of the office of Chancellor—in this case Master Nicholas, responsible for the Cathedral's teaching in divinity and grammar—occurs shortly thereafter, in 1190. And there was clearly civic energy then as well, for the town, as it then was, received a charter in 1189, of which a copy exists in the Town Hall.

This was a community of scholars that went well beyond the staples of divinity and grammar, however. A letter of that time in Latin verse from Master Simon de Fresne to his friend the noted scholar Gerald of Wales, also a Canon of the Cathedral, invites Gerald to come to

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<sup>2</sup> I owe this point to Ian Bass.

Hereford. Why? For two reasons: first because Gerald, who had recently been passed over for Church preferment, would be given the honour due him by fellow scholars; and second, because Hereford was a city of thinkers who specialised in all the seven liberal arts: not merely the medieval *trivium* of grammar, logic and rhetoric, but the *quadrivium* of arithmetic, geometry, astronomy and music. That is, not merely the three arts of thinking itself, but the four specific subjects to which that thinking was to be applied.

Hereford's particular expertise in applied mathematics was of long standing, and it reflected the discovery of mathematical ideas and methods which had been lost to the West after the fall of Rome but had been kept alive, and much improved, by Arab scholars. In 1079 Bishop Robert of Lorraine had arrived in Hereford, having studied in Liège at a cathedral school with a reputation for mathematics, and he is reputed to have introduced the abacus to England. His friend and fellow man of Lorraine, Walcher, Prior of Great Malvern, was an expert in the astrolabe and the use of Arab mathematics. A century later, the scholar known as Roger of Hereford, who had studied geometry and astronomy among the Arab masters in Toledo, composed a set of astronomical tables in 1178 around a meridian placed in Hereford. Who knows? If these had been widely taken up, then Hereford really would have been the centre of the world. Indeed—since every Christian then believed the universe rotated around the Earth—it would have been the centre of the cosmos.

Why does this matter? First, because it seems tolerably clear that by the end of the 12<sup>th</sup> century Hereford was a centre for the applied

sciences, with expertise not merely in the use of instruments such as the abacus and astrolabe, and in computational methods such as those used to determine astronomical tables, but in the deeper new mathematics of axiom and structure inspired by the translation of Euclid's *Elements*. If the great Mappa Mundi—dated to around 1300—was in fact produced in Hereford, perhaps that should not be a surprise given its historic expertise in projective geometry.

Secondly, the history matters because this fertile Anglo-French-Arab pure-and-applied multidisciplinary mix was the intellectual environment into which the most important British thinker of the early 13<sup>th</sup> century, Robert Grosseteste, moved when he joined the household of William de Vere, Bishop of Hereford, in around 1195; and all of those ideas and influences were to play a part in Grosseteste's pioneering formulation of scientific method, of which mathematics is a central part. And thirdly—though this is just a speculation—because if Grosseteste did in fact derive his ideas from the intellectual milieu of his formative years in Hereford, ideas then further refined in Paris and at Oxford, then this would place Hereford at the base of the modern Western scientific tradition. That's quite a thought.

And there is one final point. When Oxford was convulsed by a dispute between students and townsmen in 1209, a group of scholars left to settle in Cambridge, laying the foundations for the modern university of Cambridge. Yet as Chris Pullin, the Cathedral's present Chancellor, has pointed out, despite Hereford's recognised status as a centre of academic excellence, no scholars went west from Oxford to

Hereford. Why not? We cannot say for sure, but Herefordshire remained a place of periodic conflict; by the middle of the 13<sup>th</sup> century Wales had been conquered, reducing the city's wider strategic significance; and Oxford was rapidly growing with the early development of its first colleges. All three factors perhaps contributed to a loss of critical mass.

Ladies and Gentlemen, it is that gap, that missed possibility of eight centuries ago, that NMITE, our new university project, is designed, nay destined, to fill.

## **A SPECIALIST UNIVERSITY OF TECHNOLOGY AND ENGINEERING**

When I first launched a public campaign for a university in Herefordshire in July 2008 I had little understanding of this history, and no clear idea of what was needed. On the contrary: I thought it was essential to incorporate ideas from every quarter into a single countywide vision of a university, one which could command the widest possible local support, and complement and build upon the county's excellent College of Technology, Arts College and Sixth Form College.

But two other things were very clear. One was that the county, indeed the Marches as a whole, needed a dramatic boost to its economic base. It needed to move from annual growth rates of 2-3 per cent; low wages; underemployment; an elderly demographic and a "missing middle" of medium-sized businesses, to growth rates

three or four times that level; good jobs; higher wages paid for by more specialisation, greater added value and higher profits; a younger demographic and a robust base of new business formation and growth.

A second thing was also evident, however, especially to someone who had both studied and taught at universities: that British Higher Education in the early 21<sup>st</sup> century badly needed a dose of insurgency itself, that the wider context of technological change and funding could support it, and that a new government might be interested to promote innovative approaches to education.

All these factors pointed towards a new university, of a radically different kind to any already established. But it was only when I discussed the idea seriously with David Sheppard and Karen Usher, and then brought the two of them together in 2011, that the project really started to move. And when it did move, with the support of early expert advisers and local volunteers, it was in directions I had never originally imagined, and at ever-increasing speed: towards a specialist technology and engineering focus, towards adaptation of the best international educational models, towards a conception of the “liberal sciences” that self-consciously recognised the importance of focusing on the student as a whole person, at work and at leisure, in mind, body and spirit. We must recognise Karen and David for their astonishing leadership, commitment and hard work; and we must thank Fiona and Elena and the new NMITE executive team for carrying the baton forward now with similar energy and resolve.

I will spare you the travails of the last seven years; suffice it to say that they have fully conformed to the historical experience I outlined at the start. It has taken a long time to get going; money has always been short; we have had an amazing range of supporters and helpers, from chief executives to vice-chancellors to academic and professional advisers to civic and business leaders to council and regional officials to local people who just want to do their bit; the generosity, foresight and faith of local donors and supporters has been astonishing; there have been enlightened benefactors, notably in the superb academic sponsorship of the University of Warwick, and a foundational commitment by the Government, originally through the Treasury, then through the Local Growth Fund, then through the Department for Education; and the need for unflinching persistence and a shared focus on the prize remains as great as ever.

For let us be clear: this is still the beginning. It will be like this for many years yet. And there will be voices along the way that argue that it cannot be done; or worse, that it should not be done. That Hereford is too small to host a major national centre of academic excellence; that there is not enough capital locally to support it; that there are too many universities, and too many students, and it's all airy-fairy academic nonsense anyway.

To which I simply say this: the world is changing, and faster than you imagine. Young people have a passion to learn in new ways; the UK has a desperate need not merely for more engineers, but for a stronger culture of engineering; this project blends learning with business experience and hands-on training; good ideas will find an

audience, or a market; the most powerful capital of all is intellectual capital; and the greatest obstacles to success are low expectations, inertia and lack of imagination. Despite all the travails, if you had told me in 2011—let alone in 2008—that we would get this far, this fast, I would have been amazed.

And think of the possibility, the potential. Hereford: a medieval cathedral city with a university at its heart, its colleges spreading from Blackfriars to Eign Gate to Castle Green and beyond, its students filling the ancient alleyways and the modern centre, its facilities extending to the Enterprise Zone in Rotherwas and in due course perhaps to include the market towns around the county. And NMITE an institution unlike any other, driven and designed by students, with a 50-50 gender balance, the most modern learning methods—and glorious escapes to the River Wye, the Black Mountains and the rolling hills of Herefordshire. A compelling blend of old and new, of established local values and innovative skills, energies and technology.

Now we have a choice. To paraphrase Thomas Campbell in his letter to Henry Brougham, “The people of Herefordshire should settle what sort of university they wish for, and it will be their own fault alone if it does not exist.” We can let this moment slip through our fingers. Or we can come together, all of us together—the four Cs of Council, Companies, Cathedral and Community—and do for Hereford, for Herefordshire and for the nation what we should have done eight centuries ago: build a global centre of educational excellence, revolutionise specialist higher education across the UK, renew our

local and regional economy, give this city and this county the future they deserve, and endow our children and grandchildren with the intellectual and practical skills needed to be a citizen in the world of the future.

We will never have another opportunity like this. This is our destiny. This new university can be the most transformative institution for our county since the establishment of Hereford Cathedral itself. Let us all join together, link our arms each to each other, and make it happen. Thank you very much indeed.

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