

# The Role of the University in the Development of its City and Region

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## INTRODUCTION:

I very much welcome this opportunity to share with you a journey that I have been on as an academic who has sought to build bridges from the world of thought into the world of practice. It has been a shared journey, and I am delighted to see many of my fellow travellers from both the academic and practitioner sides here tonight. What I have learned on this journey is that academic work, in my case in the social sciences, can be shaped by and shape the wider society within which universities are embedded. It is not a one way street, but a recursive and cumulative process involving mutual learning. One of the advantages for me personally of undertaking a succession of jobs in one institution and one region, has been the benefits of accumulating knowledge, understanding and learning from others.

I would particularly like to acknowledge the part played by past and present members of the Centre for Urban and Regional Development Studies (CURDS) who have created a reservoir of knowledge which has informed what I have tried to achieve as a practitioner, both inside and outside of the University. As they strive to be learning organisations as well as institutions of learning, it is vital that universities support and draw on their own local expertise, as well as the global pool of knowledge, to inform their policy and practice. With regard to global knowledge, I should emphasise the fact that I have learned a great deal from acting in an advisory capacity to universities and regions in many other countries in the OECD and have attempted to bring this back home.

So what I want to do tonight is tell the story of a journey in which universities and their regions AND cities have rediscovered each other. I would like to emphasise regions AND cities and give this phrase an autobiographical signature.

I came to Newcastle in 1975 to a newly created Chair of Regional Development Studies. My research at LSE had focussed on cities. It had two strands: first, the contact networks that underpinned

the agglomeration of businesses in the City of London and second, what in those days was referred to as the National Settlement System – that is the hierarchy of cities and their surrounding city regions which form the backbone of national space economies. So it was appropriate that my inaugural lecture was entitled “Regional Development in Britain: An Urban Perspective”. One of the key themes in this exaugural lecture will be the re-birth of the great civic university, not only as part of a national system of city regions but also playing a key role linking the global and the local.

And so to the story told from both sides – the city region and the university. I will tell it from a public policy perspective – namely the drivers from both sides behind closer engagement, starting with regional policy.

The regional development drivers behind engagement

Post-World War II regional policy in many developed countries emphasised the need for intervention by the nation state to reduce disparities between central and peripheral regions. Public intervention took the form of financial support for established industries and the attraction of mobile investment in order to absorb surplus labour. There were also measures to equalise living standards between regions, including standards of primary and secondary education.

Significantly, higher education did not enter into the panoply of regional policy interventions. Many European universities which had developed to serve local industries during the later part of the 19<sup>th</sup> and first half of the 20<sup>th</sup> century were subsequently incorporated into national systems of higher education. In this process their local ties were weakened. However, in the United States, individual states did support public universities in serving the needs of their territories, building on the land grant tradition established in the 19<sup>th</sup> century. Indeed, state investment in higher education to tackle industrial decline in New England in the 1930s and to attract new Federal investment to areas facing structural adjustment in agriculture in California laid the foundation for subsequent high technology corridors such as Route 128 and Silicon Valley. In Canada and Australia, where a federal structure of government was established, higher education played a key role in the development of the cities that were the gateways to the individual states, for example laying the foundations for the so-called “sandstone” universities in each of the state capitals of Australia. Outside of the so-called “developed world” the priority of nation building around national capitals contributed to rising regional disparities, with national universities being one of the magnets for internal migration.

The European post-war consensus around the need for state intervention to reduce disparities between core and peripheral regions broke down during the 1970s. This was associated with the onset of structural adjustment problems and the rejection of the post-war Keynesian model

of economic regulation. These problems had particularly severe impacts on cities, including those in some core regions. The emergence of so-called "rust belts" linked to traditional industries such as coal and steel, heavy engineering and textiles which were now facing competition from newly industrialised countries and the related decline of mobile investment seeking lower cost sites within industrialised countries, undermined the basis of redistributive regional policy.

In response to the crisis, the emphasis in territorial and industrial policy switched towards indigenous development focussed on small and medium-sized enterprises (SMEs) with a particular emphasis on the role of innovation in raising their competitiveness.

This shift of emphasis opened the way for links into the research base in local universities. It also coincided in the US with the passing of the Bayh-Dole Act in 1980 which empowered universities to commercialise their own intellectual property. During the 1980s a growing body of academic literature underpinned the case for local or "bottom up" public intervention in the supply side of the local environment which either supported or inhibited innovation. Studies of the so-called "third Italy" indicated that networks of traded and untraded interdependencies between SMEs could provide a fertile environment for innovation in traditional industries outside established urban agglomerations. Whereas in Italy these networks did not involve Universities, the experience of Silicon Valley in California and Route 128 in New England assumed totemic significance in relation to the possibility of creating new industrial districts or regenerating older districts through strong links with research-intensive universities.

Moving into the 1990s, the range of supply-side factors that regional policy makers deemed to be influencing economic performance widened. Most significantly education and skills and the tacit knowledge gained through work-based learning became embodied in the concept of the "learning region". This had resonances with the growing appreciation that innovation is not necessarily a linear process and could involve close interaction between producers and users, interactions which were best conducted face to face. Moreover, the role of students and graduates in "knowledge transfer on legs" and establishing the social relations between researchers and the business in which their former students were employed became increasingly apparent.

During the 1990s these perspectives began to be formally adopted in public policies to foster the development of "industrial clusters" rooted in particular places. The concept of the industrial cluster recognised that innovation is seldom isolated but systemic with the industrial cluster acting as a reduced scale innovation system. Clusters, in this instance, could encompass strategic alliances of Universities, research institutes, knowledge-intensive business services, bridging institutions and customers. Cluster success required and encouraged flows of talented individuals, including students and graduates, and the creation of vibrant and exciting places.

My colleague David Charles has suggested that within the cluster a university can assume an entrepreneurial role while firms develop an academic dimension. He emphasised a spiral model of interaction where a number of channels feed into the process. These include research links - the creation of new knowledge; information transfer -selling existing knowledge; and people-based transfer of students and staff, as well as the spin-off of new businesses. In this model specialised centres and cluster discourse could provide a focus for both universities and the business community. It could involve embedding co-working in the core business processes of both universities and industry.

Throughout the OECD there is now a convergence of innovation and territorial development policy. This is placing new demands on universities as innovation policy becomes more comprehensive. There is increased emphasis on education and training, employability, the quality and skills of the workforce and lifelong learning. People and human resources are being brought into focus. There is recognition that initiatives to foster innovation and competitiveness need to take account of the challenge of urban and regional variations in unemployment, poverty and exclusion and of a multi-cultural society.

There are also aspirations to establish and foster creative and enterprising places where people and companies want to locate. Thus many towns and cities have been inspired by Richard Florida's reflections on the new "creative class" and the global competition for talent which has led to increasing investment on place marketing and the branding of cities as "a nice place to live". This emphasis on place making has been linked to programmes of publically sponsored physical regeneration of the type witnessed on the Newcastle Quayside and Business Park. In some instances, as in Stockton and Sunderland, this physical regeneration has involved the building of new university campuses.

In summary, regional policy which was redefined and narrowed down to a technological focus is now in the process of being ever broadened as other fields of policy are given an innovation signature. More agents and levels of government (city, regional, national, international) are now being drawn into the process of building innovative places. From a rather narrow focus on high technology and manufacturing industry and the private sector, attention has been widened to include social and organisational innovations and business, consumer and public services.

This broadening of regional policy has wide-ranging implications for the expectations placed on universities by cities and regions. They are now expected to participate in public and private partnerships and contribute to balanced region building. Whereas previously attention was focussed on sources of high technology innovations and new knowledge-based industries, universities are now being seen in a broader perspective, encompassing the whole social fabric of which they are part. For example, the new emphasis on social innovation, tourism, the creative industries and welfare in territorial development has widened the academic domain from science and technology and medical faculties to the arts, humanities and social sciences.

In summary, and for those agencies charged with city and regional development, universities are: major businesses generating tax and other revenues; global gateways in terms of marketing and attracting inward investment in the private sector; generators of new businesses and sources of advice to existing businesses; enhancers of local human capital through graduate retention and professional updating of the existing workforce; and providers of content and audience for local cultural programmes. Universities, particularly in highly centralised states, can also be key local agencies able to bring together within the territory different national interests in science and technology, industrial performance, education and skills, health, social inclusion and culture.

### The Higher Education drivers behind engagement

What are the drivers for engagement from within higher education? The longevity of universities as key institutions in the evolution of civil society is linked to their adaptability to changing circumstances, whilst maintaining key elements of continuity, such as the global connections which characterised the medieval foundations. The emergence of the Humboldtian university in 19<sup>th</sup> century Prussia was linked to the professionalisation of science, the requirements for specialised infrastructure to support it and to underpin “at a distance” the development of the state.

The principle of “at a distance” is important because in many respects the research university that evolved in continental Europe during the 19<sup>th</sup> century can be described as a “denial of place”. This is because the ideal of scientific enquiry that was embodied in the modern university is to strive for universalism. Scientific claims to truth were deemed to be irrespective of time and place and the university had to have a mission that transcended its actual location. Indeed the notion of the university as a detached site for critical enquiry, exchange of ideas and advancement of knowledge for its own sake has been of vital importance to the creditability and legitimacy of the institution.

The nationalisation of science and education during the 20<sup>th</sup> century further enhanced the detachment of universities from places. Because of their importance to nation building, universities were no longer expected to rely on the patronage of churches, town councils and local elites. The UK’s great civic universities which were linked to major industrial benefactors like Boots in Nottingham and William Armstrong in Newcastle turned their backs on their cities, both functionally and in term of their campus development. They now received their core funding from national governments and in return trained the cadres for the civil service and national corporations and the professions such as law, medicine, engineering and architecture. They were to contribute to national identity and the cultural spirit which underpinned the nation-building process. All of this was based on a compact whereby the university rendered services to the state in return for a degree of institutional autonomy in terms of internal governance.

Part of the American higher education system, however, developed in a different direction. Land Grant universities, which in the first instance promoted agricultural development, were regionally embedded “people’s universities” based upon widening access to education and service to the community linked to a strong research base.

The second part of the 20<sup>th</sup> century witnessed a massive expansion of public investment both in research and development and higher education. This had a profound impact on the universities that emerged in the previous century and their engagement with city regions. The expansion of higher education typically took place outside the established universities which were regarded as too inflexible to meet the demands for new skills emerging in the workplace and from communities where they were not present. Thus we now speak of higher education institutions not just universities. The higher education map of most countries has been coloured in incrementally with a diverse set of institutions. Many of the new institutions built on previous foundations, typically with a limited tradition of research (such as teaching and nurse education colleges). And many of them had a specifically regional mission. In the UK, University expansion in the 1960s in the form of new universities eschewed the big cities of the industrial revolution and focussed on medieval towns like Lancaster, York, Norwich and Warwick (even though in the last case, the University was in Coventry!).

In some countries this geographical dispersal of higher education has formed part of a conscious policy seeking to preserve the spatial distribution of the population and to achieve balanced regional development by addressing regional disparities. It has included also the objective of improving regional access to higher education. This has translated into policies to establish new Universities in less developed regions as in the Nordic countries. However, in many countries dispersal of higher education has followed a simple logic of higher education expansion modified by political lobbying. This was not just a top-down phenomenon. Towns and cities lobbied for “their” university. In the UK the establishment of the Universities of Lincoln and Chester are recent examples. The creation of universities based on a network of further education colleges in Suffolk, Cornwall and Cumbria are also examples of filling in the map of higher education.

The consequence of this expansion is that many countries now have a highly diversified system of higher education with complex mixes of universities, polytechnics, regional colleges and vocational training institutions. The regional role has sometimes served to differentiate among the various types of institutions. In Finland and Portugal, for example, universities are considered to have a stronger national and international role while polytechnics as required to focus on their regional role.

However, I would argue that the resultant distribution of institutions may not necessarily be best structured to meet the challenge of balanced territorial development in a highly competitive global economy. So while disadvantaged regions may possess locally orientated Universities such as

polytechnics in Finland, community colleges in Canada or universities for applied sciences in the Netherlands, these are often more geared towards upgrading existing industries and less equipped to build a new knowledge-based economy.

The expansion of public investment in research in science and technology has likewise had a spatial impact. This expansion has largely been driven by ministries of science and technology and in many cases has taken place in public research laboratories outside of higher education, characteristically in the hinterlands of capital cities. At the same time Universities were able to compete for research funding from research councils operating at arm's length from government. In these councils the academic community has had a major influence via peer review in ways that preserved the autonomy of their institutions and their distance from the state. This peer review process has tended to reinforce the position of the longest established institutions, typically in national capitals, thereby reinforcing regional disparities.

During the 1990s this model for the organisation of public research began to break down as governments started to demand a more immediate economic return for investment in the science base. A key challenge has been to remove barriers and bottlenecks between scientific research and industrial innovation. The institutional division of labour which implied that research was carried out in isolation from the context of application was perceived as a problem when science policy was morphing into innovation policy. In this process universities as institutions, as well as the individual academics who work within them, have been expected to become more active players in what my colleague Henry Etzkowitz has called the "triple helix" of government, business and university relations.

Industrial policy and science and technology policy have thus been converging towards a common innovation policy which in some countries explicitly or more likely implicitly embodies a strong territorial dimension. Research-intensive universities have been surrounded by science parks and a host of special purpose organisations established to support close co-operation with industry. In some instances these have served to buffer the institution from external pressures and instead of facilitating links these have operated as filters or merely served as display windows towards the universities' political environment. But increasingly these universities are being expected to take the lead and to rearrange structures so that entrepreneurship and technology transfer activities form part of the academic heartland of research and teaching.

This science-driven model nevertheless overlooks many features of city region development to which Universities directly and indirectly contribute. It neglects the contribution of teaching and learning to the enhancement of regional human capital. Service industries provide most city region jobs and the majority of graduates take up employment in financial, legal and other professional services. Some locally based services will be traded nationally and internationally and use the skills of graduates to develop new "products", some of which will also be provided to regional high-technology-based firms. These businesses also require

non-scientific graduates, for example with a business school background to assist in activities such as marketing. Other important non-manufacturing sectors recruiting graduates are the cultural industries and tourism which can attract and retain creative people within the city region, including those working in high technology firms and universities themselves. Moreover universities are creators of, and venues for, cultural and social activity.

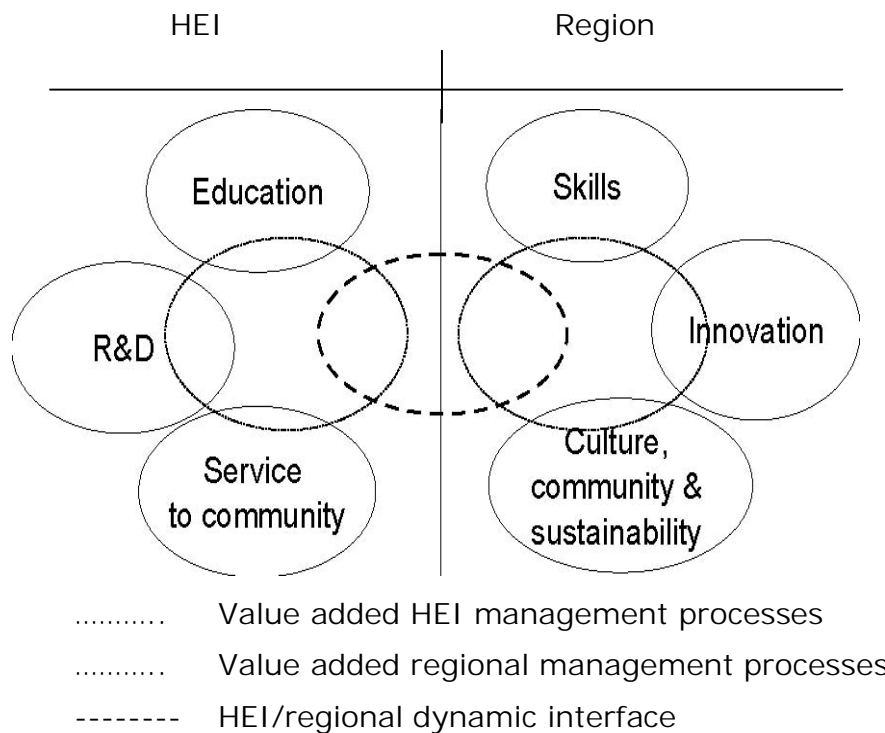
Universities also make a considerable contribution to public services, particularly health and education; these services play a role in economic development not least as city regions with wide internal social disparities are less likely to be attractive to leading-edge investors in the global knowledge economy. Finally, as environmental sustainability moves up the political agenda it is becoming increasingly apparent that universities could have a key role to play through research, teaching and public education in building sustainable communities. All of these latter roles highlight the public service responsibility of Universities as distinct from the more private focus of the science driven model.

In summary, and in terms of their economic drivers universities are seeking: local support for their global aspirations in research and student recruitment; increased student enrolments from the local population; additional income from services provided to local businesses through consultancy and professional training; and last but not least the indirect benefits of a local environment attractive to students and staff. At a higher level, city region engagement is an outward and visible sign of the third or public service role of higher education and through which the institution can demonstrate its contribution to civil society. Through such endeavours Universities are able to provide concrete evidence of the value that higher education and research adds to public investment in it.

Synthesis: Higher Education Institutions tying down the global in the local

I will now try to bring both sides together in a synthesis which highlights the mutual interests of universities and their city regions (Figure 1).

Figure 1



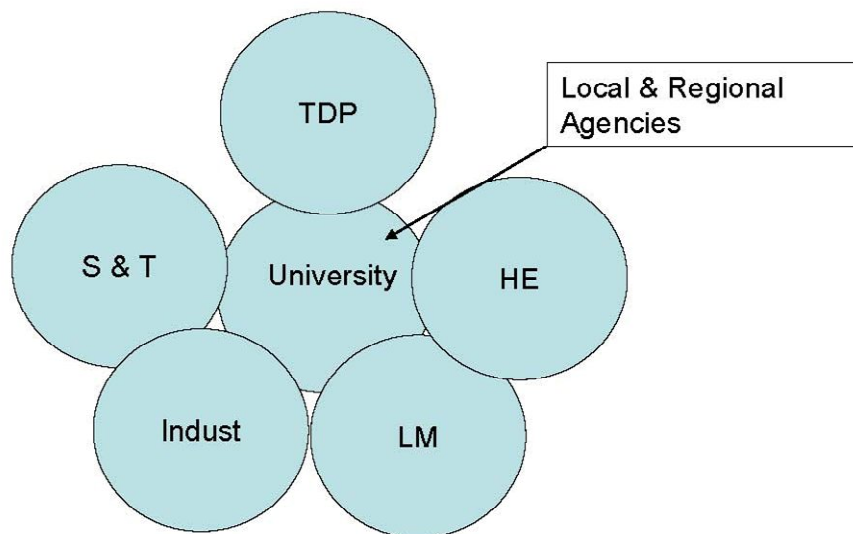
Source: adapted from Goddard and Chatterton, 2003

The left hand side of Figure 1 refers to the three conventionally identified roles of universities (teaching, research and service to the community). The right hand side summarises the three key dimensions to territorial development, namely innovation, skills and cultural and community cohesion, including environmental sustainability. Just as successful development requires drawing together these strands too a university's effective engagement with its city region must involve joining up teaching, research and service in a coherent manner and establishing effective mechanisms for bridging the boundary between the institution and the locality.

If the lens is widened to the national level as in Figure 2, it becomes apparent that many of the drivers from within higher education arise from

different priorities from within various parts of national governments. In many countries ministries of education remain as custodians of the traditional logic of higher education. Ministries of science and technology espouse the logic of knowledge exploitation for business benefit. And labour market ministries focus on the role of higher education in skills enhancement. Additional national drivers come from health and cultural ministries and those parts of central government with oversight of local government and territorial development. In the UK the new Department of Innovation, University and Skills now combines three of these domains, and is seeking closer links with the “Department for Place”, that is Communities and Local Government. Significantly, the Minister for State for Science and Innovation has recently asked the Russell Group of research intensive universities for their view on the role of universities in creating innovative places.

Figure 2 National policies impacting on HEI /regional relations



National policies impacting on university / regional relations

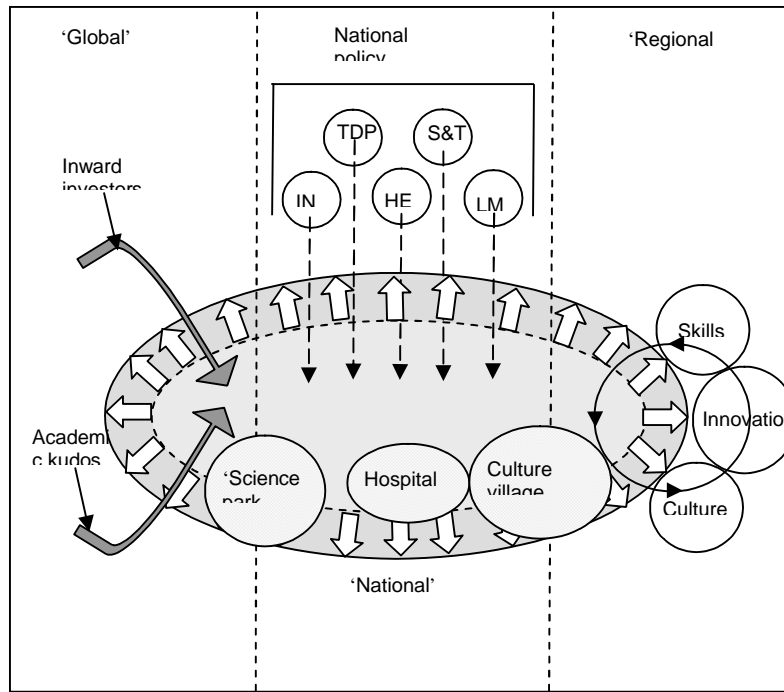
Key:	S & T	Science and Technology
	TDP	Territorial Development
	HE	Higher Education
	LM	Labour Market
	Indust	Industry policy

Source: Goddard, 2005

A final influence on relationships between a university and its city region is the presence of global competition. The forces of globalisation and information and communications technologies are contributing to "the death of distance". In principle, any place with an internet connection can participate in a knowledge-based global economy. However, innovation continues to cluster in specific cities and the tendency for innovations to coalesce is becoming more pronounced. Increasingly, universities not only need to market their education and research services across the globe but also provide the supporting infrastructure that will attract and retain the best researchers, teachers and academic leaders. At the same time, city regions also need to attract knowledge-based inward investment, support local companies seeking to operate on the global stage and retain within, and attract to the community, the most creative people.

Figure 3 A regionally engaged multi-modal and multi-scalar HEI

Source: Arbo and Benneworth, 2006



In Figure 3, my colleague Paul Benneworth has drawn this analysis together to describe a regionally engaged multi-modal and multi-scalar university. It illustrates the regional, national and global dimensions to external engagement by universities. It also highlights the spill over effects (represented by open arrows) from the presence of a university in a country and region. For example, applying an economic multiplier model to data from Newcastle University suggests that we generate over 9,000 direct and indirect jobs in the UK with 6,500 accruing to the North East. The diagram also refers to the physical places where interaction takes place, such as a science park, university hospital or cultural quarter. It is a complex diagram because the drivers for regional engagement require universities to undertake a wide range of functions (modes) and act on a large number of stages (scales) and engage with a vast array of stakeholders. The diagram would be further complicated if account were taken of the presence of a range of institutions in a region, often as a result of historical accident, which creates a further challenge of working out the appropriate division of labour between them.

In this regard Marilyn Wedgewood from Manchester Metropolitan University has captured this differentiation of universities in Figure 4 by highlighting the spectrum between academic engagement and societal

engagement and between teaching and research. The so called research intensive university which undertakes leading edge research would have limited involvement in the upper quadrants of her model, while a new university with a more limited research base would focus on the upper quadrants. This idea has been taken forward by Lord Sainsbury in terms of his reference to "Business Facing Universities". However, I and many of my colleagues in Newcastle would highlight the importance of the mixed economy university which seeks to perform well in each quadrant AND make strong connections between all four. Nevertheless, and given that no single university can excel at everything, it is important from a city region development perspective to have a mix of institutions active in each of these spaces and collaborating effectively with one another. Indeed, all of the UK great cities have the advantage of strong research intensive universities with medical schools and flourishing post 1992 universities with strong city roots.

And this brings me nicely back home to the north east and Newcastle in particular. In the remainder of my lecture, I will attempt to put flesh of the bones of my rather abstract account by describing the journey this University and City have been on, highlighting some of the barriers we have had to overcome in building stronger partnerships between different universities and between these universities and the city and region.

These barriers relate firstly to university funding for city and regional engagement. Second, the roles and responsibilities of local bodies can create barriers because these agencies characteristically operate in closed territories whereas university interactions know no boundaries. Third, the leadership and internal management challenge within universities to ensure the linkage of the traditionally separate domains of teaching and research and of developing capacity to engage with those outside of the academy. Finally, the story will highlight the role of key leaders in building bridges between the university and local civil society and Newcastle as a place with a history of innovative public policy making.

### The Newcastle University Journey

Newcastle is a quintessential civic university borne out of the need to support the newly emerging industries of the 19<sup>th</sup> Century and to sustain a healthy population to work in those industries. What was to become King's College, Durham was based around departments focussing on various areas of engineering – marine, electrical, civil and chemical, together with agriculture and medicine. The more academic parts of the University remained on the Durham campus. The 19<sup>th</sup> Century city had a flourishing intellectual life that embraced science, engineering and the arts, with places like the Lit and Phil and the Mining Institute providing locations where the world of thought and action came together.

The establishment of the University of Newcastle upon Tyne in 1963 was followed by a significant expansion of higher education in the UK. This expansion coincided with a major programme of urban redevelopment in Newcastle which in turn was part of a national attempt to revive the flagging economy of the north east. An alliance between the then Deputy

Vice Chancellor, Henry Daysh, Viscount Ridley and the charismatic civic leader, T Dan Smith, resulted in the consolidation of the present campus as part of Dan Smith's vision of "Education upon Tyne", a vision which anticipated later notions of the knowledge or service based city. In physical terms, this embraced the polytechnic, Civic Centre, University and RVI sites. As a result, unlike many other civic universities, Newcastle was able to expand in situ and develop a single site city centre campus.

With the fall of Dan Smith and the growing influence of the University Grants Committee in London, the University turned its back on the city during most of the 1970s and 1980s and developed a traditional academic heartland in the arts and sciences. Equally the region ignored its universities and polytechnics. Quite simply, the universities followed the money. Local and regional agencies had no remit or funding to engage with or support higher education. Higher education funding was (and still is) related to student numbers and research outputs with no explicit concern with where those students are taught or the graduates employed, where the research is undertaken or the economic impacts occur, be this international, national or regional. In short, higher education funding remains geographically neutral, with for example one third of funding for research going to four institutions in London and the south east.

It was therefore not surprising that new sources of funding from the European structural funds in the 1990s brought about some change. Influenced by the growing body of evidence, some of it produced by CURDS, European regional development programmes were increasingly being given an innovation signature, particularly focussing on SMEs. Most importantly universities were made eligible beneficiaries. In addition a group of three regional civil servants, Reay Atkinson at DTI, Peter Carr from the Department for Employment and Alistair Balls from the Department of the Environment worked together across the Whitehall silos and played key roles in changing UK Government thinking in relation to support for business innovation. Partly to exploit these opportunities, Newcastle University Pro Vice Chancellor Andrew Hamnet led the establishment of a network of north east universities (Higher Education Support for Industry in the North East) (HESIN) and its gateway for SMEs, Knowledge House. HESIN developed into the current association of Universities for the North East as the widening role of higher education in regional development became apparent. Capacity for engagement was built up in the universities and the association through a series of short term projects funded via a variety of European and national time limited programmes. However, this endeavour was never embedded into the main stream funding of higher education.

Two national developments in the 1990s moved regional engagement on. First the establishment of a small higher education funding stream to support engagement with business and the community (but which did not have a regional dimension) and the creation of the Regional Development Agencies with a single pot of funding determined on the bases of regional need. The establishment of ONE North East fundamentally changed the points in terms of engagement by the region's universities. Its first Regional Economic Strategy recognised the need to rebuild the economy

around knowledge based industries, and consequently “placed universities at the heart of the regional economy”. This exhortation was translated into a “Strategy for Success” hubbed around 5 “centres of excellence” designated to operate between business and the research base in the universities. These were spread around the region. The RES also recognised the advantage that the region had in terms of a diverse set of universities, some with strong local roots and others with global reach.

Further point changing developments for Newcastle University and the City were the creation of the Millennium funded International Centre for Life, the Newcastle Gateshead bid to be recognised as a Capital of Culture and the designation of Newcastle as a Science City. These developments were paralleled by a restructuring of the University initiated by a new Vice Chancellor, Professor Christopher Edwards appointed in 2001. This made it possible for the institution to adopt a more corporate response to opportunities in its external environment. Through restructuring the University rediscovered its roots of “excellence with a purpose”. All three developments illustrate the importance of leadership inside and outside of the university. I would now like to consider each of these developments in turn.

Starting with the International Centre for Life, this development led by Alistair Balls and Professor John Burn enabled the University to bring together on a single site its dispersed strengths in the rapidly emerging scientific field of human genetics and create space for collaboration with the NHS in tackling problems of infertility; space was also set aside for the incubation of new business and for a visitor attraction to enhance public understanding of the science and an institute to engage with ethical issues. The Centre for Life is a place where all of these activities come together. ONE North East has played a key role in the development of the Centre as one of the key planks in its “Strategy for Success” programme.

A similar place based strategy emerged in connection with the Capital of Culture bid. The University created a new post of Dean of Cultural Affairs filled by Dr Eric Cross. We then decided to contribute to the bid by the development of a Cultural Quarter, re-evaluating the use of our theatre, museums and art gallery, working in partnership with the City Council and various Arts organisations. The outcome has taken the form of the remodelled Northern Stage, the relocation of the creative writing support agency New Writing North onto the campus, the £26M Great North Museum and the redevelopment of the Old Assembly Rooms as a digital media laboratory. What were once estates liabilities are now university and community assets that contribute to the creative buzz of the city and which symbolise both the intrinsic value of the arts and heritage to our academic heartland, but also their instrumental role in civil society. For example, under the leadership of Linda Anderson, we have built a School of English Literature and Language where academic excellence and community engagement through creative writing and theatre are mutually re-enforcing.

Both of these programmes of activity provided the experience and confidence in the University and its partners to respond positively to the designation in 2004 of Newcastle as a Science City. Each of the three partners – Newcastle City Council, ONE NorthEast and the University have distinct but nevertheless overlapping objectives as described in Figure 5, such as urban renewal, attracting inward investment and international recognition. For the University the latter has involved the identification of scientific areas where we have research strength and visionary leaders with a strong commitment to the community and where there are prospects of transforming the economy of the city and region by mobilising our intellectual capital. The areas are: Stem Cells and Regenerative Medicine led by John Burn and Michael Whitaker and based on the human genetics area at ICfL; Ageing and Vitality led by Jim Edwardson and Tom Kirkwood and based at the General Hospital site; Energy and Environment led by Paul Younger and Molecular Engineering led by Nick Wright, both on the main campus.

I have referred to the locations because underpinning the Science City strategy has been the principle of bringing science, business and the community together to facilitate the exchange of knowledge through personal interaction. And because the main campus was in effect full, the partnership made the bold decision to purchase the former Newcastle Brewery site in the city centre when this came onto the market. The University subsequently decided to provide a new home for the University Business School on the site with the express intention of building a bridge between its expertise and that of our leading edge scientists.

A further key dimension to the Science City vision is the ambition to ensure that the University's intellectual capital is mobilised to the benefit of the people of the city and region, not just in terms of more employment opportunities, but also contributing to health and well being and to an environmentally sustainable city. A key part of the programme led by Ella Ritchie our Pro Vice Chancellor for Teaching and Learning involves education – encouraging young people to engage with science and pursue it as a career. We are also seeking to mobilise business and community knowledge to inform science itself as we believe that knowledge creation is a two-way street. We are therefore delighted that under the leadership of our PVC for Research and External Engagement, Trevor Page, we have been recognised as a national Beacon of Excellence in public engagement in science, working in partnership with ICfL and Durham University. The Beacon builds on the excellent work of the Politics, Ethics and Life Sciences Institute linked to ICfL and led by Erica Haines, Tom Shakespeare and Tom Wakeford.

The Science City themes focus on the University's science research base. Equally important to our civic engagement has been our ambition to widen participation in higher education. Through its Partners programme with local schools, the University has increased the proportion of its Undergraduates recruited locally by 87% between 1999 and 2006. Nearly a quarter are recruited from neighbourhoods with a record of low participation in higher education. More and more of our students are taking modules in business enterprise or community volunteering activity.

On graduation, many wish to remain in the city by establishing their own businesses or working with local employers. For example, the number of our locally recruited graduates taking up employment in the region increased by nearly 200 between 2004 and 2006 bringing the total to 800. Equally significant, 470 graduates from homes outside the region took up employment here in 2006, representing 37% of our non local recruits.

While I have stressed the city and regional links of our research and teaching, it goes without saying that this has a strong international dimension. 1 in 8 of our students come from outside the European Union and 580 or 27% of our academic staff are from outside the UK. We attract many overseas academic and business visitors and participate in international inward investment missions with ONE North East. Conferences our academics attract fill many hotel beds in the city, helped by the Newcastle Gateshead Initiative Ambassadors Programme. Our graduation ceremonies encourage many parents to visit the region as tourists and, in some instances, as business investors. Through a national programme on routes into modern languages our School of Modern Languages is working with local schools to turn around the declining interest of young people in languages. We are also working with the Chinese Government, the City Council, Northumbria University and the local Chinese community to establish a Confucius Institute to strengthen our links with China. We are also in dialogue with various faith groups through the Council of Faiths led by Harry Schukla to support overseas students and harmonious living in the city. In short, the University plays a key role in the city's international, multicultural and multi-faith life through its staff, students and alumni.

From these examples it should have become apparent that the University's engagement with the city and region embraces virtually all aspects of our core business of teaching and research. Many of the big challenges facing the city, such as ageing and health, environmental sustainability and social and community cohesion do not fit into the traditional disciplinary boxes. Equally important, engagement with civil society is not simply a "third task" but requires mobilising both teaching and research. For example, the city and region need graduates who can transfer research based knowledge into practice in the workplace and the community, and with the necessary skills to utilise ever advancing technologies or work with disadvantaged groups.

I would now like to refer to the challenge of institutional leadership and management. As I have already mentioned, restructuring of Newcastle University led by Professor Edwards was necessary in order to create an institution more able to respond to external opportunities in terms of teaching, research and external engagement.

The 2001 Mission Statement, which remains unchanged, says that the University aspires to be a "world class research intensive University (and) deliver teaching of the highest quality". This could apply to any good university anywhere. However the last phrase "to play a leading role in the economic, social and cultural development of the North East of England" sets Newcastle apart.

The strengthening of the academic based management hierarchy by the formation of three large faculties and 27 schools largely followed disciplinary lines and focused on the first two tasks. It has laid the foundation for a future emphasis, highlighted by our new Vice Chancellor Professor Chris Brink, of integration across the hierarchy, not least through the pending appointment of Pro-Vice Chancellors for Research AND Innovation and for Engagement, both with cross-cutting roles and responsibilities. These responsibilities also extend into the academic services which support these areas. For example the University estate must accommodate outside parties from both the public and private sectors and play a role in the city place making. And the Communications and Marketing function must contribute to positioning both the University and the City.

Realising the full mutual benefit of the University's engagement with the city and the region not only requires building on our own capacity to act in new ways, it also requires a similar capacity building on the part of our external stakeholders. Underpinning Science City and the wide ranging relationships between the University, ONE North East and the City Council are a series of Memoranda of Understanding. The partners recognise that delivering on the obligations set out in the MoUs require conjoint planning and the development of people who have boundary spanning roles and who understand the drivers on each side. Building these bridges between the university and the locality undoubtedly needs strong pillars on both sides.

#### CONCLUSION:

I would like to conclude by saying that this common understanding between a university and its wider society can most readily come about if it is strongly rooted in a particular place. Within England there is not a strong sense of regional identity. While this may not be the case in the North East, it certainly does apply elsewhere in England. On the other hand, cities do have an identity. Newcastle, Leeds, Manchester, Liverpool, Sheffield, Birmingham, Nottingham and Bristol are really strong brands nationally and even internationally. University staff and students work, shop, engage in sport, culture and community activity in the place. Each has a strong university hospital. The success of the city, its universities, business, hospitals and public services are inextricably linked. This goes way beyond the simple economic impact of the University as a major employer. These cities are all partners nationally in what is called the Core Cities Network, lobbying Government to pay greater regard to the role of the major cities in national development. However there is not a network of Core City universities. My retirement project is to continue bridging the gap between theory and practice by working on an academic book on the University and the City, which will bring together literatures on universities and on city development. At the same time, I will seek to share learning about the practice of building city and university partnerships across the UK and worldwide. In a recent speech the Secretary of State for Innovation, University and Skills has set out a list of five objectives for the British higher education system for the next

15 years, and this has given a new impetus to this task. One of these objectives is quote "maximising the regional and cultural role of universities". John Denham goes on to say and I quote again "I wish universities to play to their strengths because I believe all organisations do best when they focus on what they are good at and the (higher education) system overall strength will increase if we get to a stage where every institution values the work of its peers". Contributing to build a network of great civic universities, striving to learn from each other is a challenge I look forward to.

Thank you for your attention.

Professor John Goddard  
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