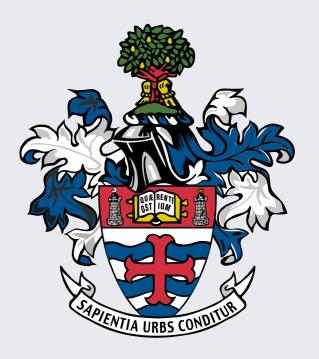




## Transcript of the Vice-Chancellor's Inaugural Lecture Professor Shearer West

Thursday 7 December 2017





## Vice-Chancellor's Inaugural Lecture Professor Shearer West

Thursday 7 December 2017

is a tremendous honour for me to be here today and to be able to address you as the seventh President and Vice-Chancellor of the University of Nottingham. I would like to give you my thoughts about the place of global higher education in 2017, to recognise the University of Nottingham's many successes, and to lay out my vision for where I think we will need to go over the coming decade in order to build on this rich heritage. But before I begin, I would like to pay tribute to two of my predecessors, Professor Sir Colin Campbell and Professor Sir David Greenaway. Between them, they led this University for nearly 30 years. Sir Colin was responsible for ensuring that Nottingham was a first mover in developing overseas campuses at a time when very few universities worldwide were contemplating this, and Sir David has overseen the growth of those campuses, the development of an outstanding educational offering and student experience, and a deep and sustained engagement with our alumni community. Building on their legacy and moving us forward through exciting but nevertheless troubling times is both a daunting task and a huge privilege. I look forward to working with all of you on that endeavour.

I want to begin with the origins of the University. As someone who has studied history, I recognise that every generation builds on the foundations of the previous ones, and the legacy of Jesse Boot is something that I see everywhere I go. As he stated when donating the land on which this University was built in 1928, "Thousands of students yet unborn will pass along the corridors and learn in the lecture rooms and wrest the secrets from nature in the laboratories. Their work will link still more closely industry with science, add to the honour of the city and help to increase the wellbeing of our nation." And we can go further back to the civic ambitions of the late nineteenth century that inspired Jesse Boot. University College Nottingham was a sort of Wunderkammer, or cabinet of curiosities, which embraced both academic and technical education, a natural history museum and a public library all in a single building. Such structures have played a strong role in our University's history. When the Trent Building was erected in 1928, the Architects'

Journal praised Morley Horder's design for "recognis[ing] from the outset that he was building a modern university, and not an imitation of a medieval university." Taking these various origin stories together, we can see that the University of Nottingham was founded on the values of comprehensive education and partnership with industry and the local community, as well as being forward looking and committed to new discovery as well as social engagement and impact. All of those things are part of our foundational values, and I feel that we need to remind ourselves of them regularly as we move forward in the choppy seas of 21st-century global higher education.

The higher education landscape that we are witnessing globally would have been completely unthinkable 20 years ago. The scale of universities worldwide, the multiplicity of their missions, the intensification of competition both from the Asia Pacific region and from private providers are some



of the changes that we have witnessed. And we have also seen a rapidly evolving employment market, with new skills required, universities playing a significant anchor role in their local communities (particularly as budgets are cut to public services) and students increasingly perceiving themselves as customers, challenging universities to provide value for money. The rise of mental health problems, pressure on free speech and scorn for expertise are only a few of the major cultural issues that are affecting universities throughout the world.

We need to use our imagination and energy to address all of these challenges, but in the UK we are also undergoing a barrage of media and public attacks. At the moment, it is not possible to open a newspaper without finding ourselves in the spotlight for all sorts of negative reasons: from allowing or not allowing certain speakers or sculptures on campus, to the pay that Vice-Chancellors receive to allegations of poor value for money or bad student behaviour. The individual complaints-whether justified or not-accumulate to make it appear that universities are failing in every way. To counter this, Universities UK (UUK) and the Russell Group have provided significant evidence of the contribution universities make to society and the economy. UUK has made strong arguments about the innovation of our research and the skills we provide to ensure we can address the national productivity challenges. A recent report by the London Economics consultancy group has demonstrated that Russell Group universities alone contribute £86.8 billion per annum to the UK economy and are responsible for 261,000 jobs. And that is only 24 universities, and there are 166 in the UK as a whole. However, facts and figures such as these appear to have little value in the emotional and posttruth environment in which we are currently operating.

So where do we, as the University of Nottingham, place ourselves in this complex and anxious world? I would like to spend the rest of my time today talking about a vision for Nottingham's future that builds on our distinguished heritage and yet also positions us for continued success. My vision is for Nottingham to be a university without borders, where disruption is seen as possibility and where ambitious people and a creative culture will enable us to thrive.

We represent ourselves as the UK's global university, and the values that we share recognise the importance of looking outwards in a world where a combination of social media, global industries and the ease of travel bring us all closer together. When the Malaysia Campus was founded nearly 20 years ago, universities generally were much more parochial places. Extending our reach overseas had elements of both welcome cosmopolitanism and perhaps rather more problematic imperialism. Today, however, we are in a very different situation. 'Global' in many parts of the world has accrued negative connotations, and we are witnessing greater levels of protectionism in many countries that in its most extreme manifestations can engender xenophobia and hate crime. It is more difficult to be global in the same way that we used to be, as our cosmopolitanism has become tarnished by anti-elitist rhetoric and the disenchantment of members of the public with the unintended negative consequences of globalisation.

How we evolve our global positioning requires us even more than in the past to break down the barriers with our local community, with our alumni, with our partners in industry, the public sector and charities, and challenges us to use our digital strategy to compensate for any obstacles to staff and student mobility. We need to be at the forefront of thinking about what global means in an anti-global world. To achieve this, we can draw on the lessons of history. We are living in what Klaus Schwab and others have called a 'Fourth Industrial Revolution' of ubiquitous computing, artificial intelligence, smart cities, wearable technology and advances in robotics. However, we can look back to the first Industrial Revolution of the eighteenth century which coincided with the Enlightenment

– a period of new thinking, changing political and religious belief and scientific revolution. The Lunar Society – a quintessential Enlightenment institution – was a Midlands phenomenon that drew together philosophers, scientists, engineers, inventors and makers to explore the changing world together. At that point, as today, boundaries between the academy and society were broken down for the sake of developing and delivering knowledge to a changing world. As David Hume wrote in his Essays: *Moral, Political and Literary*:

"The elegant Part of Mankind, who are not immers'd in the animal Life, but employ themselves in the Operations of the Mind, may be divided into the learned and conversible. The Learned are such as have chosen for their Portion the higher and more difficult Operations of the Mind, which require Leisure and Solitude, and cannot be brought to Perfection, without long Preparation and severe Labour.

The conversible World join to a sociable Disposition, and a Taste of Pleasure, an Inclination to the easier and more gentle Exercises of the Understanding, to obvious Reflections on human Affairs, and the Duties of common Life, and to the Observation of the Blemishes or Perfections of the particular Objects, that surround them."

To Hume, the worlds of the ivory tower and of society needed to come closer together, because, he felt, "Learning has been...a Loser by being shut up in Colleges and Cells."

A contemporary version of the Lunar Society is present in the significant partnerships we already have - that fuel research, that provide opportunities for our students and that catalyse innovation. As a top performing research university, we need to think carefully not just about how we continue to develop durable partnerships, but where we need to focus in future in order to ensure that we both enhance the quality of what we do and that we deliver for society in a variety of ways. Boundary breaching comes in the form of how we work across, as well as within, disciplines to face to the challenges that the world is throwing at us. It recognises an ecosystem that embraces the entire spectrum from fundamental research to innovation, from pure discovery and knowledge to training for professional practice. This ecosystem is what makes universities so valuable, but it is only by working with our students, our community and our partners that we can realise the full value of the work we do.

Strong relationships are best developed initially bottom up and by people being able to have face to face contact with each other. Brian Schmidt, Nobel Prize Winner and Vice-Chancellor of the Australian National University, in a speech at the Times Higher Education World Academic Summit of 2015, stressed the importance for early career researchers in particular to be able to work with the very best in their field wherever they are. This often involves spending time in a country not their own. In the more protectionist and closed environment that I referred to earlier, those opportunities for mobility may well be made more difficult than they have been in recent years. We need to work for ways to ensure that border controls and obstacles to the free movement of our staff and students are compensated for in whatever ways we can. This is going to require influencing public policy whenever we can, deploying a variety of opportunities for short duration 'in country' experience, and using the technology tools we have to support that.

When I talk about us being a university without borders, I am referring to the ways in which the many achievements the University of Nottingham has had, working in partnership with others, have already been instrumental in breaking down the barriers between our beautiful campuses and the society in which we live. Here, I can point to evidence from the UK, from China and from Malaysia of where we have been able to make a difference in terms of the health

## Vice-Chancellor's Inaugural Lecture

and wellbeing, economy, culture, sport and education not only for our own students, but for stakeholders outside our physical perimeters. We benefit from students, staff and alumni working together to make a difference. I know that we share many of these attributes with Nottingham Trent University and that our contributions are complementary and reinforce each other. I would like to spend a little time focusing on some of these border breaching achievements of the University of Nottingham that we rightly should be proud of.

Health and wellbeing represents an obvious example of porous boundaries between the University and our community. Nearly 50% of our medical students and over 70% of our nursing and midwifery students remain in Nottingham or the surrounding regions. The caring community that we foster throughout the world has engendered a volunteering culture that in China sends students and staff to work in impoverished rural areas and in Malaysia helps raise awareness of how we can support the UN's sustainable development goals. The Cripps Health Centre on our campus, which will include a new building thanks to the generosity of the Cripps Foundation, has a list of more than 41,000 patients and is the largest GP register in the UK. The new centre will continue to provide a service for staff, students and for the community, as well as fostering more clinical research collaborations leading to improvements in healthcare.

The economic significance of our university is also demonstrable, with 5% of the local economy and 14,000 jobs driven by us. I am sure that the work we have done with businesses and local government in the city and the county, and drawing on our close relationships with the Ningbo provincial government have contributed to the value of trade between China and the East Midlands increasing from £250,000 in 2006 to £1.3bn in 2016.

In terms of culture, we boast an outstanding cultural quarter in Lakeside Arts and the Djanogly Gallery, which have had over two million visitors since 2001. Our Nottingham New Theatre is the only entirely student run professional company in England. Our engagement with the UNESCO City of Literature initiative, and our staff and student community work around poetry and creative writing enrich our quality of life as does the Philharmonia Orchestra and other musical ensembles. It is deeply regrettable that events have taken such a negative turn against the UK's engagement with the European Capital of Culture bid. I have been truly impressed by how well the various cultural organisations, the universities and the city council have worked together to support this bid.

In addition to our cultural partnerships, we also have extensive interactions with our community in terms of both sport and education. The David Ross Sports Village, opened last year, has not only made it possible to offer more participative and elite sports to our students, but also to enable greater engagement with local school children. The Tri-Campus games have taken our strengths in sport around the world and have offered excellent opportunities for our students to engage around a common love of sport. We are pleased to be the sponsor or co-sponsor of three local schools in the UK, as well as working with a migrant school in China and building capacity of teachers throughout the Zhejiang province. In Malaysia we have provided an opportunity for the first two students ever from the Orang Asli indigenous community to receive a British education.

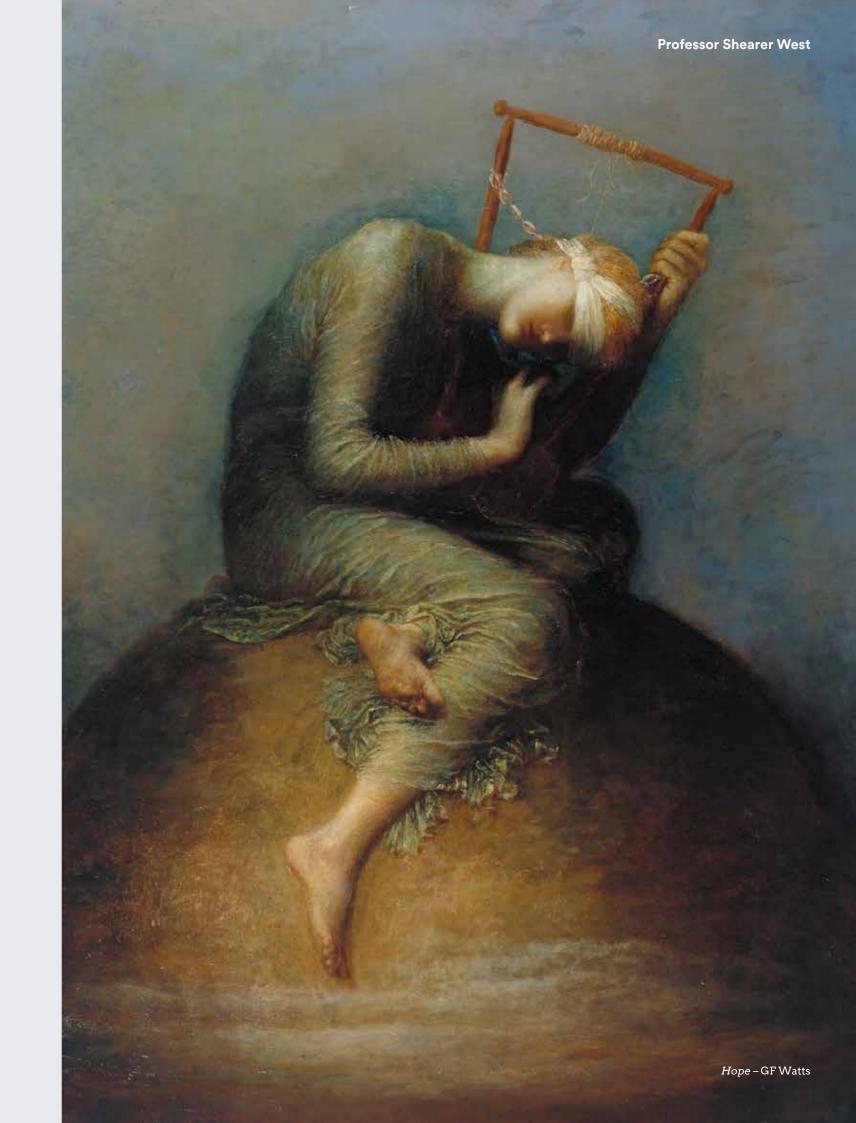
All of this boasting is to demonstrate that we are already, to an extent, operating as a university where our borders are porous, where disciplines work together, where staff work with students and where we collaborate with a range of partners both within our own communities and throughout the world to ensure that we are delivering to our charitable goals. However, there is always more we can do. Part of this is about our mindset and ensuring that we continue to challenge ourselves to "get out of our colleges and cells" as

Hume put it, and see that we have myriad roles to play locally, nationally and globally. This is not to deny our core business of research and education, but to see how that business sits in a bigger context. The history of universities shows us that this has been our purpose for centuries. The 'ivory tower' is a seductive concept, but even Cardinal Newman in his idealistic 'Idea of the University' recognised that the purpose of the university was not to serve itself. He wrote, "I say that a cultivated intellect, because it is a good in itself, brings with it a power and grace to every work and occupation which it undertakes, and enables us to be more useful and to a greater number... Training of the intellect, which is best for the individual himself, best enables him to discharge his duties to society." It is important that we work tirelessly to break these barriers down further, to transcend the challenges that antiglobalisation has thrown at us and to overcome the suspicion that our publics have developed about our purpose and aims.

Given that we operate in a globally connected world, it also is essential that we use the tools available to us to assist with that engagement, and this brings me to the second tier of my vision for the University of Nottingham, where I refer to 'disruption as possibility'. I use this statement deliberately as a positive, although this is not the way disruption is frequently portrayed. It is inarguable that in the last ten or even five years, our way of life has changed largely because of developments in smartphone technology, artificial intelligence and machine learning. It was within close living memory that we used landlines, typewriters and CD players and that we walked around the streets folding and unfolding a map, or sat on the train reading a newspaper. Now we just look at our phones. The rapidity of these changes has brought out futurologists to predict gleefully the end of the world as we know it. Only a month ago, I listened to a lecture by Glyn Davis, the outgoing Vice-Chancellor of Melbourne University, who posited that universities were heading for dissolution, not unlike the monasteries under Henry VIII. This narrative of the death of the university has been around since the mid-1990s, and I am going to go against the tide and challenge it.

I am going to indulge myself a bit here and refer to one of my research interests, that is the art of the late nineteenth century. In the last decades of the nineteenth century, the so-called second industrial revolution saw rapid advancements in manufacturing, infrastructure, telephones and electrical power, accompanied by a combination of dystopian angst, millenarian doom and a global mental health crisis, not unlike the one we are experiencing now. I have studied the art that emerged during this period and included such masterpieces as Munch's Scream, James Ensor's Entry of Christ into Brussels, Van Gogh's Starry Night and GF Watts' Hope - all of which speak to the end of the world futurology that dominated fin-de-siècle Europe. At that time, some things did indeed change forever, but others survived. I have every confidence that universities are going to survive the fourth industrial revolution as they did the first, second and third. However, universities have survived 1000 years by adapting, and we are now under pressure to adapt more rapidly than ever before.

Here are some facts that lead me to be confident. The Organisation for Economic Co-operation and Development (OECD) is showing that the number of people going to universities has been rapidly increasing, even while we have had constant predictions that MOOCs, Google and other technologies are going to drive us into obsolescence. It is worth noting that the recent arguments about value for money in universities have resulted in students demanding more face time with their lecturers and a better student experience – not more technology to replace the human contact that education provides. Although machines can learn by themselves if they are properly programmed, the majority of the population is not auto-didactic: the number of people who begin MOOCs and fail to complete them suggests that there is always going to be a need for human facilitation to help support students in how





they learn. Not least to navigate the infinite amount of data and information that we all now have at the touch of a button.

However, I accept that we now have tools that we did not have before, that we may be nearing saturation point with the 'campus university' as we know it, with greater limitations on the affordability or desirability of constant physical expansion. I also recognise that we are operating in a world where the workplace is changing due to the rapid technological breakthroughs of the last few years. On the latter point, it is worth looking at the World Economic Forum's (WEF) assessment of how skills needs are changing and what students entering employment will require in 2020, as opposed to 2015. We will definitely need more highly trained STEM graduates to provide the deep knowledge that is required to operate in a world of driverless cars, cyberterrorism, robot surgeons and genome sequencing. However, the WEF report tells us that we are also going to need more people who are creative, who have emotional intelligence, who can think critically and who are comfortable with complexity. Our new world of work is going to require everyone to use both their left and right brains in order to thrive. This means we must continue to examine critically both our curriculum and our pedagogical methods. In terms of curriculum, the new interdisciplinary Liberal Arts and Cancer Studies degree programmes that we have developed are just two examples of how we are already turning our attention to this changing world of work.

So how do we take this skills challenge into pedagogy? There are varying views of whether flipped classrooms actually lead to better educational outcomes, but there is little doubt that students benefit from a virtual learning environment as a supplement to lectures, seminars and tutorials; that more personalised learning is expected, and that this is only possible using sophisticated data analytics to ensure that support is tailored to the individual; and that we are only at the beginning of what virtual reality might do for us in terms of such subjects as architecture, medicine and engineering.

Here again, we can build on the University of Nottingham's notable success, which in educational quality and innovation was recognised by the recent award of a gold in the Teaching Excellence Framework - whatever you might think of that exercise. We have introduced the Nottingham Advantage Award to provide additional credits to students for everything from evening language learning to peer mentoring in maths. Our 'Students as Change Agents' project gives students the opportunity to co-produce educational and research outcomes with members of staff. Problem-based learning is widespread. and we have increased the numbers of internships and placements to enable students to experience the workplace as part of their degree programme. The work UNMC is doing in Bangladesh and the Association of Southeast Asian Nations (ASEAN) region is using a combination of short course delivery and Moodle content to upgrade the capability of English language teaching in a deprived part of the world.

When I talk about disruption as possibility, I am thinking about how we can make more use of a combination of digital and physical resources. How we can bring our alumni in to assist us further in providing both mentoring and work placements. How we can begin to diversify our educational offering and look more to the opportunities for lifelong learning, by providing higher apprenticeships on the one hand, and by developing and expanding our CPD and digital delivery on the other. I would like to see how we can explore new opportunities for both student and staff mobility beyond the whole semester or full year experience.

And how do we do all that? This comes down to the final component of my vision for the University of Nottingham and that is around people and culture. I cannot stress enough how people are our most significant resource. I remember

speaking to staff at the University of Christchurch in Canterbury New Zealand after the devastating earthquake in 2010 that saw loss of life and destroyed much of their university infrastructure. That is an extreme example, but it was the people who kept the university going, despite the devastation, who continued to teach the students and conduct their research in a post-traumatic environment and who worked together to rebuild what they had lost.

Let's look at the volume of human talent we have at the University of Nottingham. We have 45,000 students, 9000 staff and more than 250,000 alumni living in over 195 countries across the world. That is an astonishing figure. Added together, that is the population of Pittsburgh. And this is more than just a set of numbers. Our people do every job that exists. On our campuses we have cleaners, gardeners, doctors, data analysts, lecturers, technicians, counsellors, nursery nurses, poets, lawyers, accountants, farmers and athletes. Among our alumni, we have leaders in all the professions and who contribute to public life, industry, politics, culture and charities throughout the world. This is a diverse group – ambitious, committed and successful.

To ensure continuity of the success of the University of Nottingham and the delivery of our mission, it is essential that we cultivate a culture of equality, diversity and inclusion. Although strides have been made, there is still some way to go. A significant amount of recent research demonstrates that diverse teams lead to higher performing organisations, but I also passionately believe that the principles of diversity should be prioritised in an open, democratic society. Diversity does not just comprise gender, ethnicity and other protected characteristics (crucial though these are), but also belief, background, nationality and life experience. If we can celebrate and harness a culture of inclusion in our University, this will make us a more successful place. It is also particularly important to promote these values in a world where public life has become increasingly uncivilised, and divisions in society have been exacerbated.

This is about people, but I would like to draw to a conclusion by focusing on how we can develop our culture to ensure that we can deliver a university without borders, where we capitalise on the possibilities of a disrupted world and draw on the immense talent pool I have just described. I am going to categorise what I see as the prevailing culture not just of our university but of many other research-intensive universities throughout the world.

I am going to present this as a series of six 'couplets' that demonstrate both the positive and negative aspects of what I see as the academy's cultural norms. First, and as I have mentioned already, we are building on more than 1000 years of tradition. There were institutions of training in Asia and Africa as early as the 800s, and in Europe, the University of Bologna dates its foundation to 1088, when it became the first place in the world to use the term universitas for a community of students and teachers. The flourishing of universities over such an extended period of time is a testament to the institution's resilience, but the downside of tradition is a tendency to conservatism and risk aversion. It is interesting to me to note that when I visit our campuses in China and Malaysia, where universities have not been around as long, I see a different approach to both tradition and risk.

The second cultural quality I would like to posit is the power of an individualist ethos in universities. It is this that fuels curiosity, enquiry, debate and analysis. It is what leads us to produce ground-breaking monographs and creative outputs. It is responsible for Nobel prize winning revelations such as the late Sir Peter Mansfield's discovery of Magnetic Resonance Imaging. The negative side of this remarkable individuality is a tendency towards entitlement, where we pay more attention to what the University does for us inside it than what we are doing for the rest of the world.

## Vice-Chancellor's Inaugural Lecture

Related to that is the way in which a knowledge-based organisation, full of clever people, can ensure that when we have a problem, we can always find a local solution to it. However, this can lead to what I call, drawing on anthropological thinking, 'normalised weirdness'. This is the behaviour, attitudes, processes or actions that seems perfectly normal to anyone inside a community, but appear totally bizarre to someone from the 'outside', wherever that is. This exacerbates an 'us and them' approach in universities, where people embrace the familiarity of their local systems, processes and practices and scorn those of others.

To illustrate my next point, I will indulge my art historical bias again and refer to sculptures that were commissioned by guilds in Florence in the early fifteenth century to celebrate their patron saints. Nanni di Banco's Quattro Santi Coronati was commissioned by the wood and stone workers; Donatello's St Mark by the linen-weavers and peddlers; Brunelleschi's St Peter by the butchers; and Ghiberti's St. Matthew by the bankers. All of these sculptures were intended to be displayed in niches at Orsanmichele, a centrally located church in Florence that became the chapel of the trade guilds. To me, these guilds are the Renaissance version of our academic disciplines: full of pride, competitive, having their own standards, habits, practices and methods of training. Economists, engineers, vets and historians, rather than bankers, stone workers, butchers and peddlers. These strong disciplinary communities are hugely valuable to a comprehensive university like Nottingham, but guild pride becomes problematic when it leads to intolerance of other disciplines or unwillingness to cooperate. The niches of Orsanmichele symbolise for me the silos that we create for ourselves. The pronoun 'we' can too often be synonymous with 'people like us'. In the borderless university world I have described earlier, advancements in research and curriculum development require people willingly to step out of their guild silos from time to time and work with others.

While we are suffering from a period in which scorn for expertise permeates our populist world, I am convinced that the expertise is one of our greatest strengths. However, the downside of this level of expertise is the seriously high bars we set for ourselves and the fear of failure that goes along with that. We need to become less frightened of failure seeking to experiment more frequently, fail fast when we do fail, learn from that, pick ourselves up again and carry on.

My final couplet relates to the way we govern ourselves. While a university like Nottingham has grown way too large for all decisions to be made by the polis, or body of citizens, we still have an ethos that respects the role of Senate to set academic standards and agendas for research and education. This is a positive quality of universities that has been somewhat lost in recent years, but still exists more prominently in our institutions than in just about any other large organisation. However, the downside of this is that change can be sluggish; that decisions are not taken until they wend their way through too many layers of governance, and that we are therefore unable to be as nimble as we need to be to address the new challenges that face us on a daily basis.

I have just drawn you a picture of universities that should be read against the synthesis I gave you at the beginning of my talk about global higher education. We have a rapidly changing, demanding and highly competitive landscape, and we have a university culture that will either help us thrive or will bring us down. What we will need to do at the University of Nottingham is to accept that change is going to continue for the foreseeable future, and that it is going to happen more rapidly than before. One of my favourite books about universities is Microcosmographia Academica, a marvellous satire written by the Cambridge classicist, Francis Cornford, in 1909. It is amazing to me how many of Cornford's observations

still hold true. Cornford's quip that 'there is only one argument for doing something; the rest are arguments for doing nothing' is supported by his assertion that fear of the unknown and fear of change are endemic in a university environment.

I believe we should have a culture that enables us to be courageous, imaginative and agile in relation to change – that builds on all those positive things about university culture that I mentioned earlier and eschews the negatives. But if we look at our changing environment and our maturity as an organisation, we have the ambition to move in the direction of being a strategic enterprise, while the tendency to react badly to a pressured and changing environment is driving us back towards tribalism. We are not helped in this by the burden of compliance and accountability that is placed upon us by a myriad of external agencies and by the competing expectations of our funders, whether they are government, industry or students. If we are not careful, our 'Trojan Horse' is going to be an Office for Students that micromanages everything we do, rather than rightly ensures that we provide the best possible education to our students.

So what do we do about it? To my mind, we need to create an environment where we strip away as many bureaucratic burdens as we are allowed to, and where our decisionmaking respects the principles of subsidiarity, with all the implications of responsibility and accountability that go with that. It is difficult to make choices and hard decisions, but they need to be made at appropriate levels. If we look at our institutional organogram, it may appear hierarchical, but in truth we operate in a complex organisation where human relationships matter more than structural models. How we unlock the power of that complexity, without losing a sense of vision and purpose is what I feel we need to work together to achieve. It has been said that universities usually lag 15 years behind big private corporations in their ways of operating, so I think we are just about in the right place to develop the sort of creative culture that has been responsible for so many of our recent technological breakthroughs. While this is easier said than done, it seems to me that our future depends on it.

I started with Jesse Boot and I want to end by reprising his inspirational quotation. While I will never be able to be so eloquent, I decided to try to sum up my thinking about a university without borders, disruption as possibility and ambitious people, creative culture into a single quotation. I am very proud to be the leader of a comprehensive university with the history, research achievements and educational excellence that characterises the University of Nottingham. So I end with the thought that Nottingham, as a comprehensive university, does not need to do everything, but that we have the capability to do anything.



