Sausages, evidence and policy making: The role for universities

Thank you for that generous introduction. It is a pleasure and honour to be invited to speak to you at your annual conference here in Wales.

The title of this conference is 'Exploring freedom and control in global higher education'.

What I would like to do over the next 30 mins is to explore this theme through two lenses:

- the first is the contribution that universities make to the formulation of public policy;
- and the second is how this perspective is changing in light of what people have called 'post-truth' politics – timely as some of you would have noted that the phrase 'post-truth' was named 'word of the year' by the Oxford English Dictionary last month.

And given some of my comments, I would like to caveat my remarks by saying that I am not a disinterested party – I passionately believe in 'pro-truth politics'.

I should acknowledge from the outset that whilst I am somewhat of an expert in the first theme, my thoughts and ideas in the second are developing and probably half-baked.

Nevertheless it seems to me that in the light of Brexit and the election of Trump last month, there is a threat to the role of universities in society and this is something we need to recognise, engage with and potentially adapt to.

I should stress this is not a political statement; it was formed by trying to analyse both the campaigns around these two votes and subsequent reactions to them.

So, let me begin with some data. For those of you who are not familiar with the UK system, we have a near quinquennial review of research excellence.

In 2014 the Research Excellence Framework, or REF for short, included for the first time an assessment of the impact of universities research on society.

As you can see here impact is defined as 'any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia'. The key being those final two words 'beyond academia'.

To assess this impact, universities had to submit nearly 7,000 impact case studies, each four pages in length. These case studies were then graded by peer review panels. The grades then contributed to the size of the block grant the UK universities receive over the next five years – with those demonstrating higher impact receiving more money.

Along with colleagues at King's and Digital Science we were lucky enough to win a contract to assess these 7,000 cases studies. To do this, we adopted various text mining technologies where we examined the words and word patterns in the case studies.

So, to illustrate that point, there were over 6 million words describing the nature of impact in the case studies; c4 million words remained after 'stop' words – eg 'and', 'but', etc – were removed. This resulted in c100,000 unique words and c20,000 words mentioned 10 or more times. This word cloud shows the most frequent 684 words. The bigger the word, the more frequently it was mentioned as is the case with 'policy'.

We however applied more sophisticated methods than just counting words. This is one of my favourite figures of all time and one I will at some point make into a tie!

Let me explain it to you. In the middle we organised the data by the so-called unit of assessment that was used in REF – the pink colour refers to the life sciences; the blue, the physical and engineering sciences; the purple, the social sciences; and the green, the humanities.

On the left we have a more detailed description of the field of research using nearly 150 categories. Here we tagged the research to a field using various automated algorithms.

On the right-hand side, we have 60 impact topics – these were identified using a method called topic modelling, where you are looking for clusters of word patterns in the text.

What we see here is that there are something like 13,000 lines in this graph and 4,000 unique lines – in other words the pathway to impact is often unique

Two of the largest topics were around 'informing public policy' and 'parliamentary scrutiny', accounting for nearly a third of all the case studies submitted

In this figure we are looking at similar data with the units of the assessment going around the circumference of these impact wheels (as we call them). What you can see here is that the majority of academic disciplines contributed to government policy and parliamentary scrutiny

Which brings me to my two first key messages:

- Universities make a significant contribution to public policy
- And that contribution is multi-disciplinary

And this 'supply' of evidence from universities is matched by the 'demand' for evidence by politicians.

The first quote here – 'What counts is what works' – as you can see, is from the 1997 Labour Party Manifesto, almost 20 years ago. Here Blair was referring to New Labour's commitment to ditch Clause Four in favour of privatisation, but that phrase, 'What works', has come to symbolise his early commitment to evidence-based policy making, as demonstrated in part by the What Works Network.

But this is an enduring desire that is picked up by both the right and the left: The second quote – 'health policy can become evidence-based' – comes from David Cameron in 2003, , and the third is from this year: 'We will put evidence at the heart of what we do'. This later quote I will come back to so keep it in the back of your mind.

But despite this political commitment, we know that policy making is an inherently messy process. Otto von Bismarck is alleged to have said that 'law and sausages are two things you do want to see being made' – allegedly as there is some dispute as to who actually said this. Nevertheless, it is the case that law, sausages and policy have many different ingredients. Here in our policy making machine you can see resources, habit, experience, judgement, values, as well as evidence.

And even with the ingredient 'evidence' we know that policy makers and research have different notions of what that actually is. This work by Jonathan Lomas draws out how policy makers see evidence as being colloquial, reasonable, timely and with a clear message, whilst researchers want evidence to be scientific, empirical, and appropriately caveated.

In addition to different notions, it is also the case that evidence is used in different ways. This review by Steve Hanney picks up on the work of Carol Weiss and identifies a number of different models. When we think about evidence based policy making we are often adopting the 'knowledge driven' model where research is produced by academics and this is 'handed' to policy makers to inform their decision making. In practice this is very rare – the use of research, of evidence in policy making, follows a multitude of different models

And even then, it is difficult for research and evidence to inform policy. An excellent literature review by Kathryn Oliver in 2014 identified the barriers and facilitators for the use of evidence in policy making. As you can see here, this comes down to three enduring themes:

The first is translation – the language of academic discourse is peculiar to say the least. The non-academic users of research don't speak that language and find it in accessible. Thus, one of the key tasks we as researchers needs to do is to translate and localise our knowledge for the use and context of the policy making machine

Umberto Eco inadvertently captured this very well in his book on translation – translation in a conventional sense, i.e. translating a novel from Spanish into English. As you can see: "*Translation is always a shift, not between two languages but between two cultures – or two encyclopaedias. A translator must take into account rules that are not strictly linguistic but, broadly speaking, cultural.*"

And that issue of culture is picked up in Kathryn's literature review – here with the label 'trust'. The relationship between the researchers and the policy maker is subtle and one where each are often working to different incentives, timelines and, as we have seen, notions of evidence. To overcome those challenges and to make that relationship symbiotic, both communities need to be able to trust one another. And, in short, there is no quick solution to this apart from getting to know one another, one's motivations and needs

The final 'T' in this literation is 'timing'. Policy makers often refer to the 'window of opportunity' – that moment when you can influence the policy process. A moment that is as unpredictable as it is short. The academic cycle is often slower and more linear – you put a grant proposal together, you get funded, you do the research, you write it up, you submit it to peer review, you revise it, it gets published. A process that typically takes years.

We have tried to address the three 'T's of translation, trust and timing head-on at the Policy Institute at King's, which I have the privilege of leading. I will avoid the temptation of doing an advertorial, but summarise by saying that our activities are organised around these Ts – we aim to delivery timely and relevant policy research and analysis; we build trusted

partnerships with policy makers through various activities including events, co-teaching and such like; we mobilise the impact of King's by providing a translation service and importantly training and coaching people in how they can improve the way that they communicate with policymakers.

And all of this leads me to my third take home message: The translation of research to policy is messy and complicated, requiring skills that are not valued or abundant in universities.

Now if all of that provides some coherence around the role of universities in supporting better policy making, it is also true to say that it is probably out of date. 2016 will go down as one of the most turbulent years in western democracies, with the Brexit and US Presidential votes resulting in a democratic revolution against the status quo.

A revolution that could be seen as a threat to the role of universities in supporting better policy making; indeed, a threat to the role of universities in society.

And this is probably best captured in this quote from Robert Daniels, the President of Johns Hopkins University:

> *I think a lot of us are simply dumfounded that we've seen the support that's been evidenced for Mr Trump ... On the core issue of the role of ideas, of facts, and whether they matter in contemporary political discourse, we are observing something that is deeply unsettling.*
>
> *Have universities in the United States and indeed internationally been successful in mustering up analysis [and] policy recommendations that are able to infiltrate the political process and bring our practical ideas to bear? ... Have we been effective as institutions ... in [producing a] comprehensive package that could respond to these issues?"*

And at face value this concern was highlighted by Michael Gove's comments in the EU referendum campaign that, 'People in this country have had enough of experts'.

But it is worth providing the full quote, as he went on to say '... from organisations with acronyms saying that they know what is best and getting it consistently wrong.'

It is also worth recalling the quote I put up earlier from the UK Ministry of Justice, when Gove was Secretary of State, which says: 'We will put evidence at the heart of what we do.'

So, whilst I and many others have been critical of Gove, I do think we need to be a bit more nuanced in our reaction, as he has been quoted out of context, has form for wanting to use evidence to support policy making, and was being politically opportunistic in a close-run and heated referendum debate

In short, I think it is now time for us to stop playing the blame game and return to what we are good at – looking at the evidence and reflecting on what it means for universities.

So, in that spirit, here are some data published by the Institute for Government.

In a representative survey of over 2,000 people in the UK, in August this year over 80% of respondents thought it was important that politicians consult experts when making difficult decisions, and that those decisions are based on objective evidence.

Interestingly, the proportion positively responding to these two questions increased marginally between 2014 and 2016.

Another interesting finding is that there was very little difference between those who said they voted to leave the EU versus those who said they wanted to remain

So, given that, my fourth take-home message is 'People have <u>not</u> had enough of experts.'

So, that gets me on to my final theme, which is to explore what all of this means to universities in the context of so called 'post-truth' politics, as captured so visually on this *Economist* cover.

And here I wanted to try and understand what is leading to the emergence of a 'pos- truth' world and how as universities we can react to that.

In reading around these issues since June, I think one of the really interesting phenomena of our time is the rise in social media. The Reuters Institute for the Study of Journalism undertakes an annual review, which is packed with interesting data and analysis.

This figure illustrates the main 'source' of news or evidence by age group. On the left-hand side, you see that two-thirds of all 18-24-year-olds get their news from social media, versus on the right-hand side just over half of people over the age of 55. And this trending is increasing in time meaning that it is increasingly likely that the dominant source of news will be social media in the near future.

In and of itself this is not a 'bad thing' – the fact that information is being sourced by individuals for their own needs and interest is inherently good and that should be celebrated

But one of the concerns about social media is that it is not regulated and doesn't have to adhere to professional journalistic standards. Again, this is broadly a good thing – we can all be citizen journalists. But there is also a dark side, and that is the deliberate dissemination of false or misleading information – lies, to you and me.

Buzzfeed is an online platform that delivers news and entertainment to hundreds of millions of people around the world. It recently undertook an analysis of nine Facebook pages – three from mainstream media, including CNN, and six from hyper-partisan pages – three from the left and three from the right.

They looked at nearly 3,000 posts from this sample in a week in September and showed that 38% of all posts from the right-wing Facebook pages were either a mixture of true and false, or mostly false, compared to 19% of all post from the three hyper-partisan left-wing pages. As you can see, the mainstream media only had a handful of 'mix of true and false' and these were classified as such as they included unverified claims.

And this information matters due to a phenomenon known as echo chambers, which was recently analysed in this fascinating study published in the Proceedings of the National Academies of Science.

Here the authors compared two type of Facebook pages – those that focused on conspiracy theories and those on scientific information. They then downloaded all the posts and interactions across a five-year time span and looked at the differences between how the pages are shared.

They showed that each set of narratives had very distinct communities that were homogenous and polarised – that is, they never interacted with each other. But despite that stark difference they also showed that the way the information was consumed over time was very similar.

So, with the fragmentation of media, the lack of editorial control to check the veracity of information, and the polarisation of online communities, it is perhaps not too surprising that pollsters and pundits have been unable to accurately capture the mood of the UK and the US electorates.

More fundamentally, it is worth reflecting on a shift from a patriarchal model of news and news giving, to one which is far more democratic. When I was a kid I would often watch the evening news with my parents. This was the dominant source of news and was taken as the 'truth' – we may have different interpretations of the rights or wrongs of what was being reported and its implications, but we trusted the 'facts'. But over the past 10 years or so the monopolistic supply of the facts has been fragmented into numerous sources – blogs, websites, Twitter, etc. There is no longer a single source of the truth.

And this creates an urgent need and opportunity for universities

Perhaps ironically, the phrase 'It's the economy, stupid' was coined in Bill Clinton's 1992 presidential campaign. As we seemingly shift epochs, perhaps this should now be 'It's education, stupid', as what is clear from the analysis of the changing nature of news is that the consumer must have the ability to think for themselves and differentiate between facts and fiction.

That may require a radical review of how we operate, but the core mission of education as central to universities is as important as it has ever thus been.

But when it comes to our second mission – that of research – I do wonder if we need a different and more nuanced approach.

It seems to me that we are in danger or both conflating the role of elites and experts.

Here I have crudely tried to capture this. In the top right-hand corner, we have our liberal elites – as the media now terms it – that is everyone in this room. We are, on the whole, merit-based experts. To their left in this figure we have what I have termed the 'unmeritocratic elite' – they are those who are using their position of power (however gained) to spread mistruths and lies. In the bottom right-hand corner, we have what I have termed the 'citizen expert', and on their left what I have uncomfortably called the 'civically disengaged'.

As you will see, I openly acknowledge that this is too simplistic and somewhat offensive, but please bear with me.

The first thing we need to do as a sector is to challenge the lies and untruths that we hear in public discourse. For whatever reasons, we are not doing that and we need to up our game and defend the fundamental values of what universities are and stand for. We must make

the case for being 'pro-truth' as indicated by the red arrow. At the end of the day *Truth Matters*, and we should unashamedly say that and say it very loudly

The second point is that we are doing a lot to engage with the citizen experts – we have increased participation in universities dramatically over the past generation, we have active programmes in place for widening participation and social mobility. These are more important than ever, and whilst we need to acknowledge our success in this area, there is still significantly more that needs to be done, and that should be an urgent priority for all education providers

And in pursuing such an agenda we can begin to blur these boundaries and actively engage with the communities that I have clustered as the 'disengaged', breaking down both barriers of elitism and expertise

The fact is we are all experts. If a pipe leaks in my house, I call in an expert to fix it; if my child is ill, I take her to an expert to make her better; if my car breaks down, I take it to an expert to be repaired. But this is not a new idea – the concept of co-production of policy has been in the literature for a long time; we need to revisit this agenda, using universities as brokers in creating new, engaged and <u>transparent</u> ways to formulate and deliver public policy.

And to illustrate this point, I want to cite a study that former colleagues at RAND Europe undertook a few years ago. There are 2 million new HIV infections every year globally. Science tells us that the most promising prevention strategies are based on anti-retroviral (ARV) drugs. However, just because we *can* use ARVs to prevent HIV infections, it does not mean that in practice we *will*. In this study, they showed that whilst the scientific evidence is compelling when it comes to the effectiveness or ARV drugs, that scientific data is interpreted, framed and perceived in different ways depending on the local context and perspectives. Just as the scientific evidence is a truth – so is that local evidence.

So, the post-truth politics is actually a multiple-truth politics. Those 'truths' may or may not be anchored in evidence or expertise but they are perceived by the recipients as the trusted facts. Facts that are reinforced through an 'echo chamber' of like-minded people in a self-selected virtual network. So, as experts we need to acknowledge and change our game accordingly. We need to improve the way that we engage in with the communities that support us, we need to use social media to our advantage, in a language that is accessible and understood. We need to make a difference and justify our existence.

So, my final key message is: 'Universities have a lot to offer in this "multiple-truth world", but need to adapt in vision, structure, process and incentives to a new challenging reality, otherwise risk becoming irrelevant.'

So, what does this mean for universities in the context of freedom and control.

- First we have to advocate – and I use that word deliberately – the contribution we are already making
- Second we should avoid 'blaming' others for the anti-intellectualism – reflect on what we do and how we do it
- Third we need to diversify our educational offerings
- Fourth we need to acknowledge that 'multi-truth politics' is about multiple disciplines bringing different perspectives to a 'problem'. It is about working together by co-producing solutions

- Finally, we need to understand and fulfil a new social contract

Thank you.