

We Meet Again!

What can we do to support the fight against global warming in the current climate?



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Programme

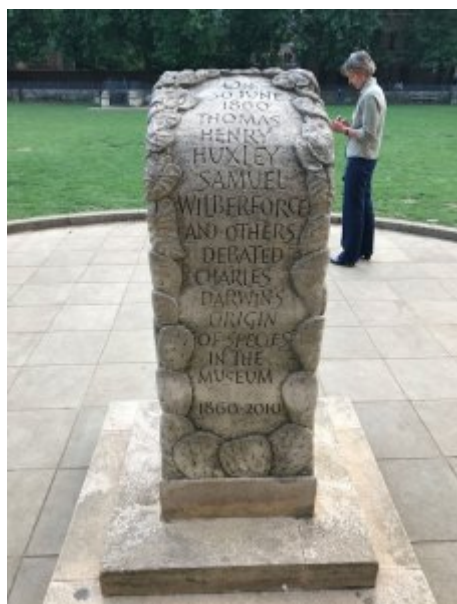
Welcome. Professor Paul Smith, Oxford University Museum of Natural History

What can faith-based communities do? The Rt. Revd. Dr. Steven Croft, Bishop of Oxford

What can scientists do? Professor Sir Brian Hoskins, Grantham Institute for Climate Change, Imperial College, London

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The Oxford Evolution Debate.



The Oxford evolution debate took place at the Oxford University Museum, now the Museum of Natural History on 30 June 1860, seven months after the publication of Charles Darwin's *On the Origin of Species*. Several prominent British scientists and philosophers participated, including Thomas Henry Huxley, Bishop Samuel Wilberforce, Benjamin Brodie, Joseph Dalton Hooker and Robert FitzRoy.

The debate is best remembered today for a heated exchange in which Wilberforce supposedly asked Huxley whether it was through his grandfather or his grandmother that he claimed his descent from a monkey. Huxley is said to have replied that he would not be ashamed to have a monkey for his ancestor, but he would be ashamed to be connected with a man who used his great gifts to obscure the truth. The encounter is often known as Huxley-Wilberforce debate, although this description is somewhat misleading. Rather than being a formal debate between the two, it was actually an animated discussion that occurred after the presentation of a paper by John William Draper of New York University, on the intellectual development of Europe with relation to Darwin's theory (one of a number of scientific papers presented during the week as part of the British Association's annual meeting). Although Huxley and Wilberforce were not the only participants in the discussion, they were reported to be the two dominant parties.

Welcome.

Professor Paul Smith,
Oxford University Museum of Natural History



The Museum of Natural History opened its doors to the public in 1860 with the 'Great Debate'. From that neophyte institution it has grown into a museum that now cares for 7 million scientific specimens and welcomes over 750,000 visitors each year. Since reopening in 2014 after a major refurbishment, the museum has returned to its roots as a space that actively encourages public debate about contemporary science issues. None could be more contemporary or pertinent than tonight's discussion about ways that communities can work to alleviate the effects of climate change.

This is a subject dear to my heart as my own geological research has focussed on the sublime landscapes of North and North-East Greenland. This is region that has changed before my own eyes during a single research lifetime. Even in northernmost Greenland, the land surface has transformed from bare and ice covered to grassy plains, and the large fjords of the north coast now melt each summer, for the first time since the Holocene Climatic Optimum, 8,000 years ago.

It is my pleasure to introduce tonight's speakers

What can faith-based communities do?

The Rt. Revd. Dr. Steven Croft¹
Bishop of Oxford



Here are five compelling reasons why you should engage with faith communities in your role as senior climate change negotiators.

First and foremost because faith communities make up the majority of the global population. Ten years ago, long before the historic Paris agreement, the UK's environment agency asked 25 leading environmentalists what needed to happen.

There were 50 suggestions. Second on the list, behind improving energy efficiency was that religious leaders should make the environment a priority

for their followers because of the enormous potential influence for change.

Out of a global population of 7.1 billion just 1.1 billion people are secular, non-religious, agnostic or atheist. The remainder belong in some way to one of the great world faiths. 31% of the global population is Christian. 22% belong to Islam.

Within Europe Union 72% of the population still claim some sort of adherence to Christianity. Just 20% would claim to be atheist or secular though there is considerable variation across the continent. What the churches and faiths teach on this subject matters.

Second faith shapes values and lives in powerful ways. The Christian faith helps people aspire to virtue, to living as God intends and often against personal self-interest and for the sake of others. That is exactly the attitude the world needs to combat climate change.

The most powerful line in the Lord's Prayer is "Give us this day our daily bread". It is often misunderstood as a hook on which to hang our petitions: the things we ask from God. Actually, it is a prayer which points back to the worshipper: help us to be content with exactly what we need this day: "Help us to be thankful just for what we need to stay alive". The Lord's Prayer is the most powerful antidote to greed and consumerism the world has ever known.

¹ This transcript was taken from a blog entitled "[Faith Communities and Climate change](#)"

Third the faith communities are global communities. We are conscious in the Christian Church of our sisters and brothers across the world.

I am looking forward to visiting South Africa in September with our link Diocese of Kimberley and Kuruman. Many local churches and dioceses have these international relationships. In one of our sessions we will be studying climate change. When we listen to the news about the disproportionate effect of climate change on the poorest in the world, these are our sisters and brothers.

Fourth, our feet are dancing to a different song (or they should be). There is a close connection between the global economic system and climate change. The planet cannot sustain continuous expansion in energy consumption.

Increasingly the world of politics and economics dances to a single tune: continuous economic growth and expansion. We need alternative ideologies to support a more sustainable world. The faith communities have an alternative ideology – a different authority: in the case of Christians, the Scriptures and the person of Jesus Christ.

That ideology understands the connection between our inner and outer life. Pope Francis is one of the few contemporary figures able to write a letter to the entire world – his great encyclical *Laudato' Si*. One of the most telling quotations in his letter is from Benedict his predecessor: “The external deserts in the world are growing because the internal deserts are so vast”. Our external ecology is connected to our internal ecology. Faith communities nurture that inner life and offer a different song and strength to resist.

And fifth, faith communities know how to take action for change. Christians are called to be disciples: always learning. We understand the world is imperfect. We are committed to making a difference. We know or we can learn how to mobilise others to achieve common goals.

I am the patron of a small campaigning organisation, Hope for the Future. Hope was founded in 2013 by a small group of churches in Yorkshire and specialises in equipping local churches and other faith groups to lobby their MP's on climate change issues. Last year Hope for the Future trained over 1,000 people in our lobbying approach.

Through our training and one to one support, we have impacted over 100 climate conversations between MPs and their constituents this year. We know from feedback from local churches and from MP's that Hope makes a difference. The anthropologist Margaret Mead said this. “Never doubt that a small group of thoughtful committed citizens can change the world. Indeed, it is the only thing that ever has”. I suspect that most of us will know that quotation more from the West Wing than from Mead herself.

Faith communities are places where those small groups of thoughtful and committed citizens are found. We are not perfect. We are not uniform. But we are communities of hope whose values lead us to work for change, not against the findings of science but in tandem to bring about a more sustainable world.

What can scientists do?

Professor Sir Brian Hoskins,
Grantham Institute for Climate Change, Imperial College, London



Well, thank you very much, indeed. It is a great pleasure to be here and thank you for all coming to the UK for this event.

I'm not going to stand here, following the Huxley Wilberforce debate, and trade insults with the Bishop! Far from it: as I heard him speak, I think we converge very much in what we're saying, and I think things have moved on in that way.

It's been an interesting week to be a scientist! Hurricane Harvey has meant that we've been up

there in the media, with people asking us: Is this because of climate change? And others saying it's nothing to do with climate change. And there's the scientists somewhere in the middle of all this, trying to stay true to their scientific observational evidence, theory and their projections for the future, and saying, "Well, neither of you are quite right", but giving a more nuanced message, and that's what we have to do, and that's what we have to keep to.

So I was asked here 'What can scientists do?' and maybe it's going to sound a bit dull, really, but the first thing that scientists can do is actually perform their science, and that's the thing on which all that you're dealing with here is built. And we have to not try to live in the headlines, but actually do the hard work of observing the climate system, getting evidence of how it's behaving, and then trying to understand what is happening, understand how it works, build models, build theories of how it works, and then use those to project into the future, or predict, depending on how you view it, and then say 'This is what we think will happen', but depending on what human beings actually do in the future.

So that's our job as scientists. We then should publish our results, and that's an extremely important part of what we do, where we have peer review of our academic publications, and we put those in the literature, and those are then available for others to build on, or else to destroy. But it is in a transparent manner that we do this. This is the way science goes forward.

And then beyond that, we have a responsibility to tell the wider public; it may be governments, it may be politicians, or it may be the wider public in general. And we have that responsibility because of the funding of what we do. If it is funded by the taxpayer, by the ordinary citizen, then we certainly have a responsibility. But we also think that, because of the interest in what we do, there's a responsibility to tell those who may be interested in the results of our science, what our results are actually saying, and also stimulating that interest further, perhaps leading to future generations of scientists to carry this on further.

And the third thing, then, which is very much true in the climate change area, is the implications of our science. What is it saying about the direction that our planet is going, given what we are doing to it?

I was a mathematician – that's my training in Cambridge years ago, before I moved to one of these upstart institutions which were described before, so I've been at the University of Reading for more than forty years, and also Imperial College as well, as has been mentioned – so various upstart institutions. I actually worked on the formation of fronts in the atmosphere as a mathematical problem, and then moved to thinking more widely in terms of how weather systems work.

So I wasn't working in climate change per se, but increasingly it became clear to me that this was hugely important in its implications. I gave my first public talk on climate change some three decades ago to the Clean Air Society in the UK. It was a meeting in Scarborough, which is a seaside resort somewhere on the east coast, and my title was 'Climate Change: Will We Freeze Or Fry?' At that time there were concerns that we might be going into the next ice age, as well as that what we were doing to the planet, the greenhouse gases we were emitting, were the most important for future climate. I came out very much at that time that it was the 'Frying' that we had to worry about, and I think I took the right line back then.

So, as scientists, then, we have to go out and we have to say, 'This is what the science is'. But I think there's a point at which we have to take our scientific expert hats off, and say 'Well, think about the implications' and then when we're talking about this we are citizens like anyone else. Then we have to recognise that, like our audience, we come with certain influences on what we think about the implications of this, and those influences come from our values and our beliefs, and this is very much joining with the Bishop, and recognising the influence of our own ideas and those of our audience.

We may have some who feel very strongly in terms of the stewardship of our planet Earth - this planet is something we should be looking after – maybe a God gave it to us, or however we view it - and that there are responsibilities to look after this for future generations. There are others who maybe come from a religious point of view as well, and think planet Earth is ours to exploit all its goodies – all the oil, all the coal: it's there to exploit. And there will be some in our audiences who take that view.

Coming here, thinking about this evolution debate, the survival of the fittest: that doesn't necessarily prepare us for the world we are in at present, where in terms of

climate change, we're really being asked to do something now for future generations, perhaps in other places in the world, whereas the survival of the fittest was rather a more selfish thing of actually dealing with the here and now. Maybe our species is in trouble because of this, and maybe we need to exploit the faith views in order to get beyond this. Although I find with audiences, if you actually start talking about their children and grandchildren, then there is some touch point. But there's no doubt that altruism and a sense of equity lie underneath actually taking action on climate change.

Some in the audiences I deal with, as a climate change person who goes into public debate, have a background of vested interests, maybe they own an oil well or something. Others may have a strong belief akin to a different god, perhaps in deregulated markets. Such people have the tendency to argue backwards. They don't want certain policies, and therefore they don't want the science that actually influences those policies, and they will, therefore, try to undermine that science.

This happened in the tobacco-health "debate" and it's happening in climate change where, I think, alternative facts or 'truths' are presented, not really because such people believe they're truths, but because they are convenient. And things are tossed off in debate that turn out to be untrue, and the scientist is actually in difficulty in such a debate, because we are always trying to argue, I hope, on the basis of what we think the evidence and theories really say and the projections for the future. Those projections for the future are often called 'scaremongering' by those who don't like them. They are based on our best understanding of how the system works, but if you don't like the results, then you can refer to them as 'scaremongering'. And it is a difficult debate to have with someone who is not constrained by the usual way that we would carry out an ordinary scientific debate.

So, I come back to the role of scientists. The number one role of scientists is to keep performing their science as they should: keeping that evidence base, improving the theories and models, and improving and refining those projections for the future - the usual scientific process.

This provides the basis on which we go out and tell people, and that's the next thing we must go and do. We must keep telling governments, but also the people, because, in the end, the people need to be the ones who decide this is what we want to happen.

We mustn't exaggerate - I do see this sometimes in those, I think, with the best of intentions, who will go out and say 'The Arctic sea ice is going to disappear next year'. Well, it doesn't disappear the next year, and that does their case no good whatsoever. Maybe what we say won't make the headline, but, even so, we have to keep to saying that we can really be confident in.

However, we shouldn't hide the possible implications of what we are saying, as well. We should not underplay what the projections, which I find pretty frightening, are. We don't need to exaggerate what we can project with some confidence. It's pretty nasty, and we certainly don't need to exaggerate.

And the last thing we have to do is stand up to those debates, and stand up to those who aim is to subvert the message and to do it in any way possible. I can't say it's comfortable. I've been involved in some of those debates and the people involved are usually much better trained than I am in terms of debating in public. My training is in mathematics, and understanding the climate system; theirs might be in a very different political sphere. However, we have to do it, however uncomfortable it is.

Thank you.

What can philosophers do?

Professor Benito Müller

Faculty of Philosophy, University of Oxford



Just under a year ago, Chris Patten, the Chancellor of the University, gave the opening talk at the 50th Anniversary celebration of my College, Wolfson. In that talk, he told an anecdote recalled by Harold Macmillan, one of his predecessors, in a 1975 newspaper article entitled 'Oxford remembered':

In 1914, John Alexander Smith, Waynflete Professor of Moral and Metaphysical Philosophy, opened his lecture course telling the students that, apart from the few who would become teachers or dons, 'nothing that you will learn in the course of your studies will

be of the slightest use to you in after life – save only this – that if you work hard and intelligently you should be able to detect when a man is talking rot'. I was completely struck by this, because over the last couple of years, I have been increasingly confounded by what people, and particularly politicians, get away with these days: 'fake news', 'post-truth', 'alternative facts'!

Oxford Dictionaries made 'post truth' the word of the year 2016, defining it as pertaining to situations where "objective facts are less influential in shaping public opinion than appeals to emotion and personal belief".

But let us just have a quick look at 'alternative facts' which actually take 'post-truth' to a completely new level. At his first press conference, on the 21st of January 2017, then White House Press Secretary Sean Spicer accused the media of deliberately underestimating the size of the crowd for President Trump's inaugural ceremony, and claimed that 420,000 people rode the DC Metro on inauguration day 2017. The day

after, when confronted with the figure of 317'000 issued by the Washington Metropolitan Area Transit Authority during a Meet the Press interview, Kellyanne Conway, Counselor to the President, stated that Spicer was giving "alternative facts".

Logically speaking, the situation here is as follows:

The phrase "the number of people riding the DC Metro", sufficiently well-defined, refers to a particular number, and to that number alone. If that number is 317,000, as claimed by the Transit Authority, then the statement that it is 417'000, is simply not true (and *vice versa*). To claim then that it nonetheless describes an 'alternative fact' is tantamount to saying that it is both true and false. Yet this would violate the law of non-contradiction, one of the three traditional laws of thought that can be traced back to Aristotle's *Metaphysics* [Book IV, Part 4], a law which Bertrand Russell paraphrased as: 'nothing can both be and not be.' [Russell, *The Problems of Philosophy* 1912:72, 1997 ed].

'Alternative facts' therefore only work if one removes objective truth from what we mean by 'fact'. The London-based philosopher Anthony Grayling, in a BBC interview, describes the 'post truth phenomenon' as being about "'My opinion is worth more than the facts.'" However, the 'alternative facts' phenomenon takes things one step further: it essentially removes objective truth from the picture and leaves everything in the realm of mere subjective opinion. Grayling characterizes post-truth as "everything is relative. Stories are being made up all the time - there is no such thing as the truth."

Yet, " $2+2 = 5$ " is not an 'alternative fact' of mathematics. It is simply wrong, and anyone claiming the contrary is, in the former Waynflete Professor's idiom, 'talking rot'. And the same applies to climate science, where assertions are objectively true or false, and not mere subjective opinions without objectively veri- or falsifiable content. To reply 'this is your opinion' when challenged about a statement in this context, and to leave it at that, is simply not good enough.

Stressing this unequivocally is one thing philosophers can do to support the fight against global warming in the current climate!

Thank you.

The Participants



European Capacity Building Initiative
Seminar 2017

The Speakers

Professor Paul Smith is director of the Oxford University Museum of Natural History. Prior to that he was head of the School of Geography, Earth & Environmental Sciences at the University of Birmingham but has worked in university museums for most of his career. He is a geologist and palaeontologist with wide-ranging research interests in the evolutionary origin of animals and the geology of Arctic areas, and has thirty years of expedition and field research experience in Greenland and Svalbard. He was awarded the Polar Medal for contributions to Arctic research in 2017.

The Rt. Revd. Dr. Steven Croft became Bishop of Oxford in 2016. He was previously the Bishop of Sheffield. He has been a member of the House of Lords since 2013 and is currently a member of the Lords Select Committee on Artificial Intelligence. He is patron of a small environmental campaigning charity, Hope for the Future, which equips

members of local churches to lobby their MP's on environmental issue and is a member of the Advisory Board for the Oxford Environmental Change Institute. His latest book is *The Gift of Leadership* (Canterbury Press, 2016). His blog can be found at <https://blogs.oxford.anglican.org>

Professor Sir Brian Hoskins was the first Director of the Grantham Institute for Climate Change at Imperial College London from 2008 until 2014, and now shares his time between Imperial, where he is Chair of the Institute, and Reading University, where he is Professor of Meteorology. For the 10 years up to September 2010, he held a Royal Society Research Professorship. His research is in weather and climate, in particular the understanding of atmospheric motion from frontal to planetary scales. He is currently a member of the UK Committee on Climate Change and was knighted in 2007 for his services to the environment.

Professor Benito Müller is Managing Director at Oxford Climate Policy, and Director of the European Capacity Building Initiative (ecbi). At the University of Oxford, he serves as Convener International Climate Policy Research at the Environmental Change Institute. He is Visiting Professor at the Social Sciences Division, a member of the Philosophy Faculty, and Fellow of Wolfson College, Oxford. He received his doctorate (D.Phil.) in Philosophy from the University of Oxford and has a Diploma in Mathematics from the Eidgenössische Technische Hochschule (ETH) in Zürich, Switzerland.