



Speech by John Ashton

Climate Change and Politics: Surviving the Collision

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35 years ago, almost exactly, at breakfast one morning in a basement flat a stone's throw from Parker's Piece, I opened a letter from a Mr G R Lawes. I can see in my mind's eye the ridiculously large coat of arms on the thick blue envelope, the lion and the unicorn rampant, wishing evil by the divine right of the sovereign upon him who evil thinks.

Mr Lawes was writing on behalf of the Personnel Policy Department of the Foreign and Commonwealth Office to offer me a job as a British diplomat.

At the time I was working on maximum entropy methods of image processing in the Radio Astronomy Group at the New Cavendish Laboratory in Cambridge where Tony Hewish and Martin Ryle (who still led the Group) and Jocelyn Bell had discovered pulsars not long before. At the age of 21 I was on a frontier of science in one of the most celebrated scientific teams in the world. I had drifted there in that serendipitous Cambridge way following my graduation the previous year, after spending the summer serving cocktails behind the bar of the Garden House Hotel.

I had quickly become gripped. I remember long evenings punching Fortran instructions onto cards - I can see a few of you nodding nostalgically - to feed the IBM 370/165 behemoth that was the pride and joy of the Cambridge University Computing Service. Even that mind-numbing experience had failed to dim my enthusiasm. On the contrary, I had been thrilled to be offered the chance, just before destiny dropped Mr Lawes' letter onto my doormat, to turn what had begun as a casual job into a PhD.

I chose diplomacy not physics. It was the hardest choice I have ever had to make. "Footfalls echo in the memory / down the passage which we did not take", T S Eliot wrote after his reverie in a Cotswold rose garden. On the whole it's best not to look back.

Since then I have been blessed more than I deserve with opportunity and fulfilment. And I hope my scientific education, cut short as it was, at least made me a better diplomat.

It gave me profound respect for the scientific endeavour and the values that drive it. It gave me an intellectual foundation - including in particular a certain orientation towards reality, a sensibility concerning the difference between discovery and invention - that I could not have acquired in any other way. Above all it made me determined to do all I could, from wherever I might find myself in the Whitehall corridors, to ensure that policy choices were as well informed as possible by a scientific understanding of the world.

Now, 35 years on, I hope a long professional life still lies ahead of me. I have never felt a greater hunger for it. But if an autopsy ever has to be conducted, it will find that 1 year as a professional scientist shaped me - heart as well as head - more than 24 years as a generalist diplomat, or the subsequent 10 exploring the diplomacy and politics of climate change.

I say you don't look back. But in the rear view mirror I could not help noticing as, within months of my departure, my maximum entropy colleagues got lucrative offers from companies that had spotted commercial value in our algorithms. Easy come, easy go....

In any case I still feel at home among scientists, particularly at the Met Office.

I shall never forget my first visit to the Hadley Centre, in its Bracknell days, in 1995, armed with a characteristically kind introduction from Sir Crispin Tickell. I was looking for a new direction and intrigued by the diplomatic possibilities in climate change, about which I nevertheless knew next to nothing.

Geoff Jenkins opened every door. John Mitchell gave up half a day to show me under the bonnet of the HadCM3 climate model. Many other colleagues that day and around that time - some like John here this morning - were equally generous with their time and patient in responding to my rudimentary questions. I was hooked - but I can never give enough thanks to the scientists - John Houghton was another - who helped and encouraged me.

The Met Office is a jewel in the crown, of British science and global science. As a nation we should be more aware of that, and proud of it, than we are. It was no surprise to learn just now that President Obama, as he prepared for hurricane Sandy, was taking decisions based on your forecasts of the storm's trajectory, acknowledged even by your US counterparts to be more reliable than theirs. Your excellence is an asset for British diplomacy, enhancing our soft power leverage on climate change all over the world.

It is much more than just a welcome escape from the capital to be here today. Thank you, Julia and colleagues, for making me so welcome.

When it comes to climate change, I wonder if the full accomplishment of climate science, your accomplishment, has yet sunk in.

You don't go into science if you want to influence politics. If that's what you want to do, you go into politics.

And yet, your work and that of your peers around the world has put before society as profound a challenge as any it has ever had to confront. It forced the issue of climate change

onto the front pages of newspapers, into the deliberations of Cabinets, and onto the agenda of world leaders, including the 115 heads of government who gathered in Copenhagen in December 2009.

And of course, it was at that moment, in a wintry Danish capital, that the collision happened. It is very important to understand the significance of that event.

You had painted a picture of how human activity was influencing the climate, how that influence was likely to develop, how Nature might respond in harmful ways. It was on display at the conference here on dangerous climate change in 2005 - I was on the Scientific Steering Committee - during the UK's last G8 Presidency. There remain uncertainties in the picture that has emerged from climate science, some fuzzy lines, but the broad shape even then was clear.

Viewed as a whole, the message encoded by that picture was: here is a challenge that is Promethean. We have stolen the secret of fire for our own use, unleashing punitive forces inherent in the system of which we are ourselves part. Dealing with this is imperative, because if we don't the consequences could soon become unmanageable, perhaps even jeopardizing the system conditions within which civilization itself can flourish.

And as we look more deeply into the picture, it urges us to summon a response that is transformational, because the entire modern economy is organized around the energy system. Making that system carbon neutral will reconfigure the economy, and the power relations embedded within it. Furthermore we must accomplish this urgently, in little more than a generation, while building resilience to the climate insecurity we can no longer avoid.

Promethean, imperative, transformational, urgent. Faced with this, the world's leaders at Copenhagen could have said: "OK, let's get cracking".

Actually, as you know, their response was more like that of Lampedusa's character in *The Leopard*. Reflecting on the threat posed by the belated arrival of modernity in the Mezzogiorno to Sicily's ossified aristocracy, Tancredi famously remarked: "things are going to have to change around here if we want them to stay the same".

In other words, hold the front page, politicians wanted to have their cake and eat it. They did what politicians usually do when they find themselves in a spot. They did their best. They improvised. They hoped that, if they couldn't quite do all that was needed immediately, something might turn up.

Of course, that's not how the protagonists would have put it nor, in most cases, felt it. Many of them, including both Ed and David Miliband and Gordon Brown, did real heavy lifting on climate change in that period. They deserve credit for that.

But collectively the leaders of the major economies, whose path will in the end determine success or failure, looked at what was being asked, and it seemed to them like too big a risk to take: with jobs, with growth, with competitiveness, and ultimately with their own political

survival. The threat of climate insecurity, though intellectually acknowledged, did not feel enough of a clear and present danger to justify taking such a risk.

And by the way, though there were forces pressing for greater ambition, there were powerful if sometimes darker ones pushing back. Just ask Phil Jones.

The point is, Copenhagen was as far as we could get this project on the basis of science. The engine that will carry it forward now will run on politics not science.

We have to make the prospect of moving rapidly to a low carbon growth model feel like an opportunity not a risk. It is a way out of the current economic crisis not a distraction from dealing with it or worse, an additional burden on an already overburdened economy: the view that still prevails among many economic policy establishments. We must make climate insecurity feel as pressing as it is in reality. We must build a political foundation for the transformation required.

Unless we do that, your community will remain as it is, if you will forgive me, wandering dazed at the side of the road, blinking in frustration, bewilderment and despair at the wreckage from that collision three and a half years ago, a collision between what you know we need to do and what the elites who lead us think is the limit of what we can do; the limit, as they see it, of the possible.

Just because this is now about politics not science does not mean for a moment that the voice of science is less important than it was before Copenhagen. How science uses its voice in the next phase will be critical.

We shall only find the will to expand the limit of the possible if the politics of what climate change means are connected to the science of what climate change is. We need a politics rooted in reality, and we won't get that without you. Not political reality, which is always up for grabs, but scientific reality, forged under the implacable scrutiny of Nature interrogated tirelessly by experiment.

Now is the moment. It is a moment of peril. Those who want to deal with climate change remain in disarray. Those who want to lock in business as usual are gathering for what if unopposed will be a decisive assault.

In Britain we have made real progress. We are seen to be walking our talk - which even more than our first class science gives our climate diplomacy clout around the world.

Our low carbon economy grows at around 4% while the economy as a whole flatlines. The proportion of our electricity generated by renewables is set to rise from under 5% to over 30% in the 20 years to 2020.

This is not all we need, but it is significant. It has been underpinned by a law, the Climate Change Act, with legally binding carbon budgets designed to drive the low carbon investment that will give us a carbon neutral energy system by mid century.

A campaign is under way to undermine the Climate Change Act. It brings together a strange coterie of protagonists.

Some on the political right see it as socialism by the back door. They have spotted, rightly, that the market by itself will not deliver a low carbon economy. For others it is simply a mark of tribal identity to stand against action on climate change.

Then there are newspaper proprietors and editors with populist agendas playing cynically into understandable public concerns about utility bills. And less visible but more potent is a powerful priesthood of economic advisers for whom the idea of low carbon growth smacks of heresy.

The assault is already damaging our economy as well as our response to climate change. Planned investments in renewable energy have been put on hold, at the cost of thousands of jobs in parts of our country that most need them, because investors are not sure that the policy framework currently under construction will withstand the assault.

One battle will be over the so-called fourth carbon budget, the carbon budget for the period 2023-7. When it was set in 2011, those who wanted to weaken the UK's ambition insisted it be reviewed next year. The prospect of that review is damaging domestic and international confidence in Britain's intent.

The review is unnecessary. It should be abandoned now and in any event cannot be allowed to lead to a relaxation of the carbon budget. That would cripple the UK's credibility on climate, darken the cloud of uncertainty over our energy policy, and further chill investment in modernizing our energy system.

What happens in the UK matters because the UK is a global power on climate change. But even if we do not falter ourselves, a wider peril looms.

If you listen carefully you can hear a voice and it is getting louder. It says: "Let's be realistic. Plan A, with its legally binding targets and timetables embedded in a one size fits all global regime was always doomed. You cannot deal with this top down. That effort flopped with the Kyoto Protocol and crashed for good at Copenhagen. It's time to face up to this failure and try something else."

"But that's good news not bad", the voice continues, somewhat in the tone of one of those TV advertisements in the US offering you washing board abs without hours in the gym. "Plan A may have failed, but Plan B is available and it was better all along."

Plan B celebrates progress on the ground. "Look at what we are learning about how to cut emissions cheaply" the voice declaims. "Focus on the journey not the destination, the new technologies coming through, the policies and initiatives springing up on every continent. We just need build on them with flexible coalitions that will accelerate their spread and go with the grain of what governments and businesses are ready to do.

The voice loves low hanging fruit - it just can't get enough of them. It likes talking about incremental cuts in emissions not about transforming the energy system within a generation. While not exactly ducking carbon dioxide, it talks enthusiastically about methane and other radiative forcers into which inroads can be made without reconfiguring the entire energy system. It likes R&D, but is shy about how to leverage investment at scale into infrastructure.

On legally binding targets the voice says, without irony, that if people do not have to be legally accountable they will promise more and do more, as if removing the speed limit would slow down the traffic. With an audible shrug, if pressed, it sees no chance of staying within 2°C. "Of course governments say that's their aim, but grown ups know that these are just words. Anyway, humans have the gift of ingenuity. We adapt to new circumstances, as we will to a changing climate." Pressed further, on the possibility that we might not be able to adapt, the voice hints at geoengineering to come.

It says, soothingly, "isn't this how human beings have always solved problems? We try one thing and if it doesn't work we try another."

The choice between bottom up and top down is a false choice. Bottom up activity is taking place all the time and will continue. The real choice is between bundling together what we would do anyway and pretending it will solve the problem, or imposing in addition an action forcing mechanism, in the form of legally binding targets as in our Climate Change Act, to ensure that the pace on the ground matches the ambition we need. We need top down as well as bottom up, not instead of it.

The voice is a siren voice, drawing us towards rocks. If we heed it we will be choosing what we think we can easily do not what we must do. We will be giving up.

The moment of choice is coming. And it is coming surprisingly soon - perhaps too soon - because of two recent events.

Last December, the UN Secretary General announced his intention to convene a climate summit next year. It will probably be in September, in New York. Meanwhile, since winning re-election, President Obama has made clear that he sees climate change as unfinished business, a top priority in his second term.

In itself that is of course to be welcomed. But President Obama, reenergized on climate, could hardly stay away from a summit on home ground. If he goes, so will many other leaders. The world will look at New York and ask what has changed. "Are they still stuck? Or have they now found the will, in Obama's own phrase, to „bend the arc of history“?"

Remember, there is Plan A, or there is Plan A. It would be a binary choice, except that Plan B is not a plan. And in 2011 at the UN climate meeting in Durban, we chose Plan A.

That gives the US a problem. The Administration will want to say, “We are back in this game”. But the situation in the Congress has not changed. It still looks implausible that the Senate could ratify a legally binding agreement that includes a US target.

And there’s the peril. If the Congress won’t support a Plan A agreement, many people, with the best of intentions, will urge the Administration to soup up US climate diplomacy around a souped up version of plan B, in an attempt to build what my friend and colleague Tom Burke calls a new Washington Consensus.

I sincerely hope that if they get this advice, President Obama and Secretary Kerry, both of whom have a vocational commitment to this issue, will reject it. An attempt, in New York next year or Paris at the key UN meeting in 2015, to build a new consensus on this basis is bound to fail. The issues haven’t changed fundamentally since Copenhagen and nor would the outcome.

The US does indeed have a special problem and we all have an interest in a solution being found. A US truly back in the game could ensure that we win the game. But a failed pursuit of Plan B won’t do that. Another solution to the US problem is needed.

This project has survived one collision, just. Another would kill it, and not just the UN negotiation. What is at stake is the possibility of summoning the will, soon enough for it to be useful, to do what we need to do.

That’s where you come in.

I recently had a discussion with some undergraduates at a well-known English university. One got my attention by declaring vehemently that 2°C was gone.

I asked why he thought that. It turned out that some of the group had recently attended a lecture by an experienced figure in climate science, who had expressed this opinion. He seemed to know what he was talking about, they said.

This prompted an interesting debate. My contribution was to point out that there is a difference between what engineering, technology and ultimately the laws of thermodynamics will allow, if you like the technical limits of the possible, and what is politically possible. The former is a fixed limit; the latter the product of politics. Subject to the former the political limit is whatever society decides it should be.

This story illustrates a risk for scientists in the public debate on climate change. As scientists, depending on your background and discipline, you have authority on the technical limits of the possible. As members of society quite legitimately expressing a view about what is politically possible, you have no special authority. If you appear to claim it, you undermine the platform that science gives you and your peers; and you degrade the public debate.

I am not saying that you should not express such views; only that in doing so you should acknowledge that your scientific credentials give no extra weight to your political judgement.

Everyone is entitled to a view about 2°C or any other aspect of the debate. But the message from analysis is that there is no technology reason why we should not give ourselves a fighting chance of keeping within 2°C.

My view, which also has no special authority, is that we can do it if we can find the will to embark on Plan A, to treat this problem as Promethean, Imperative, Transformational and Urgent. We must do the politics, not just observe the politics.

Here are a few suggestions about how you can contribute to reality-based politics on climate, without straying into crude advocacy or otherwise sacrificing your values.

First, as I said, distinguish between where you have professional authority and where you do not. Never cloak a political judgement in the mantle of a scientific one.

Second, always put scientific integrity first. Never say anything that you could not substantiate, not just in a newspaper but among your peers. Simplify as far as possible but never oversimplify. What you say should be compelling, not necessarily simple. Life is complicated and people know that.

Never of course exaggerate. This dossier does not need sexing up. But integrity also means calling things as you see them. Never tone down a statement that has a scientific basis for fear that it will be too shocking.

That just helps those who want plan B and in the end undermines your authority.

Third, always speak with clarity. Use language that reaches people. Make it easy for them to place what you say in narratives that resonate with them, to derive meaning from the information you give them.

Fourth, show transparency in the conduct and presentation of scientific findings. You have nothing to hide - so don't allow anyone to claim that you are hiding something.

Fifth, speak with confidence. Don't let your opponents make you sound defensive, as some try constantly to do, because it serves their "disputed science" narrative. The stronger the appearance of dispute, the weaker the impulse to act.

Authority, integrity, clarity, transparency, confidence.

All five qualities must be audible in your voice. But there are deeper preconditions for making sure that they are. Here are three.

First, get on the front foot sometimes. Don't be imprisoned on ground where it helps your opponents to conduct the debate.

Is the apparent "hiatus" in the rise of global mean temperature a sign that your theory might be wrong? Or should it make us even more concerned about climate change? Wouldn't we have more reason to hesitate if the temperature curve just kept rising smoothly? Episodes of

this kind are a feature of your models, and this one is surely signalling that the theory is strong not weak. Moreover, the consequences of climate change could still be catastrophic if the climate sensitivity were zero, as the global mean smooths out local departures.

The Office for Budgetary Responsibility often has to explain why growth in the latest cycle turned out to be slower than it had forecast. It does so with admirable nonchalance. The theory and the modelling it draws on are less rigorous than yours, but no newspapers call for a rethink. It seems to me you could - you should - an powerful intellectual challenge to that community, drawing on what you know about complex systems and how to model them.

Second, be aware that what you say will be heard and responded to not scientifically but politically. You are after all reaching across the interface between science and politics, between the world of knowledge and the world of choice.

So if you want to have the impact you intend, make an effort to map the landscape on the other side of the interface. Don't just say "that's politics". Don't call for policy responses that may seem sensible to you without first trying to understand what impact your calling for them might make on the politics of climate change.

Otherwise your intervention could be counterproductive.

Politics has different rules from science - it's a different realm of discourse - but these are not mysterious. Sometimes the same word, "uncertainty" for example, means different things on either side of the interface. There are different criteria of truth, and different values. It is not understood in the world of politics that scepticism is a core value for you, that if you are not the sharpest critic of your own conjectures you are not a good scientist.

Of course, your opponents know that in public debate you have to play by certain rules as scientists - rules they do not have to observe. Some try to make you so frustrated that you break your own rules. Never satisfy them.

Third, most important, attend to what climate change means for your foundation, the social contract on which the scientific endeavour is based.

I went into science, as you did, because I was curious. Still today for me there is nothing like that moment of sudden comprehension when the veil lifts to reveal why we see what we see, what gives the clouds grandeur and the winds power in Aristotle's words.

Science will always be about curiosity and wonder. But at the same time, climate change is one of many challenges we now face to which society cannot respond wisely unless the response is informed by science. Science must listen and speak to society, not only about how things are, as it has always done, but now also about what this means for the choices we confront.

So if you don't make the responsibility to contribute to wise choices a big part of your contract with society, not only will society make bad choices, but eventually the base of support for curiosity driven science will itself crumble.

This is not a new problem. The bomb, the ability to manipulate life at the genetic level and other Promethean issues have put it repeatedly on the table.

But it has not been fully resolved. Climate change, part of the wider problem of our disruptive impact upon the Earth system, now makes this urgent.

Science needs to invest more in its ability to listen and speak across the interface. Career incentives that reward cooperation across disciplines, within the natural sciences and between the natural and social sciences. More training and more highly valued jobs in building conversations beyond science. More effort to promote not only the public understanding of science but also, if you like, the understanding that science has of the public.

Transformation works both ways. If you want society to draw transformational conclusions from your findings, you have to be willing to transform yourselves. I hear a lot of grumbling about the skewed incentives and other obstacles. Don't grumble. Remove the obstacles. You will not only be listened to more on climate. You will be renewing the endeavour that you love and the trust the public has in that endeavour. It should be a warning that public trust in science is lower now than it has been for a long time.

All this is of course challenging. But it is essential, and on climate change it is far from hopeless. Indeed the time is ripe to break through.

A lot that has in fact changed since Copenhagen.

Climatic extremes are driving up public awareness, and the public appetite for action, which is now greater than many elites have realized. There are new opportunities for those who will lose from failure or gain from success to push up the collective level of ambition: young people, climate-exposed business sectors, cities, low carbon industries. The low carbon economy is becoming real in some places and it works.

Friends and colleagues, politics is the conversation we have with each other about who we are and how to shape the kind of country, the kind of world we want to live in. That conversation now needs to focus again on climate change, to draw the conclusions about it that it did not quite draw at Copenhagen, and to reflect those conclusions in the form of choices that can be put before publics.

If your voice is not strong in the conversation, none of that will happen, and we will soon find ourselves living in a place we do not recognize, a place we do not like, while politics clings in futility like Tancredi to Plan B, not only on climate but on everything.

You can already begin to see, as Yeats did a century ago, what happens in consequence. Spaces open up for demagogues, populists and pied pipers peddling the illusion of simplicity in a complex world. And what rough beast, its hour come round at last, slouches towards Bethlehem to be born?

You have a voice. Please use it.

John Ashton

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From 2006-12, John Ashton was the Special Representative for Climate Change for three successive UK Foreign Secretaries. He is a cofounder of E3G, a Fellow of the European Climate Foundation, a Distinguished Policy Fellow at Imperial College, London and a visiting professor at the London University School of Oriental and African Studies. He is a Trustee of the UK Youth Climate Coalition, and of Tipping Point.