

Copenhagen Climate Congress, 10 March 2009

Keynote Speech by John Ashton

Politics and Gaia: Surviving the Collision

1. Your Royal Highness, Minister Hedegaard, Ladies and Gentlemen. We need to do this better.
2. To stand any chance of keeping climate change on the right side of the last acceptable threshold, there has to be much better communication than we have now between the world of science and the world of politics.
3. I was once one of you, a young researcher at the Cavendish Laboratory in Cambridge, very briefly at the start of my career. I carried, as I carry to this day, the values of the scientific enterprise as I made the journey between two very different realms of discourse, from knowledge to political action.
4. Two people, two friends, who are here today have given me particular guidance on that journey: Wally Broecker and John Mitchell. I thank them for the patience and trust they have given me over the years and above all for keeping me honest.
5. In my work now, I try to raise the level of ambition and urgency that underpins the way governments and societies, including my own, respond to the existential challenge of climate change. That is an uphill task. As Al Gore puts it, it is not about doing what we think is currently within our reach, it is about expanding the limits of the possible.
6. But the hill would be less steep if scientists and politicians could understand each other better.
7. In science, the truth is out there. The task is to discover it. In politics, all too often, the truth is whatever is expedient to support the goals of this or that political project. Climate scepticism thrives on one part of the political spectrum because of the fear that strong climate policies will require, as they will, a larger presence by the state in the market: a new compact between taxpayers, consumers, and shareholders, and one that

directs the market more strongly than some ideologies would like.

8. In science, uncertainty is often about the delta on the signal: with how much confidence do we know the amplitude of a signal that is there? In politics, uncertainty is usually taken to indicate that there may not be a signal at all. The political reaction then is to do nothing, and to say, “come back to us when you know there’s a problem”. And there are plenty of people who for reasons of ignorance or mischief are ready to confuse one kind of uncertainty with the other.
9. I learned in my twenties that a good scientist is more sceptical about his or her own conclusions than any one else. In politics, where scientists are scarce, it is often assumed that science is just another lobby, and that opinions based on scientific evidence have no firmer foundation than other kinds of opinion.
10. If politicians and policymakers do not try to deal with the world to which science is the only reliable guide, if they cannot understand or do not want to understand the messages that your community is trying to send them, they will take bad decisions, and in the case of climate change catastrophic decisions.
11. So what is to be done?
12. There is a lot that politicians and their advisers can do to better understand the messages. But I want to say something at this very timely event about what you as scientists can do to make your messages easier to understand, and therefore more effective in driving action.
13. Take the issue of 2°C.
14. I completely understand the frustration of people who say: “it is already too late to have a reasonable chance of staying within 2°.”
15. But here’s my take on that. If you want political leaders to give you a 6° world, a good way to start is to say that 2° is already gone. A 2° response, or even a 3° one, requires more political effort – much more – than is currently being applied in

any of the major economies. It requires a mobilisation of effort that normally is only achieved in wartime. And that effort won't be made if those who have the best idea of what a 2° world might look like sound as if they are saying "take your foot off the pedal". Even if that's not how they want to be heard.

16. Actually, we know that there are still available pathways that would give us a fighting chance of 2°C. The International Energy Agency and others have mapped them out. We have the technologies and even at this time the capital to get onto those pathways. The issue is: are they *politically* within reach?
17. What is politically possible is a judgement for society as a whole. Any scientist is perfectly entitled to express an opinion about it. But it cannot be a purely scientific opinion. The question of how much effort we can summon lies outside the realm in which a scientist has particular authority and that needs to be understood on both sides.
18. Few economists a year ago would have recognised the possibility of some of the interventions we are now making to stabilise the financial system and drive recovery.
19. Again, I understand the impatience that leads some people to say: "we are not going to solve this through a global negotiation, through another climate treaty".
20. In a sense they are right. We won't be celebrating success in this conference hall eight months from now if we approach this simply as another negotiation to allocate what each participant sees predominantly as a set of burdens. The politics of international burdensharing are just too slow – look at the trade negotiations.
21. The major economies will only transform themselves if they have established a domestic consensus that it is necessary and feasible for the security and prosperity of their citizens to build very low carbon economies very quickly. The gathering in this city in December won't by itself create that consensus. It needs to come as much if not more from national politics.
22. But that does not mean we should give up on the negotiations. If we can build domestic consensus, we can reach

an agreement that will enable us all to go faster. And the Copenhagen deadline really is an essential spur to drive up the level of domestic ambition, and to build confidence that to do this globally we need to say “follow me” not “after you”.

23. The gulf between what we know – what you know – we need to do, and what we are actually doing or are ready to do, is enormous and getting wider. But for those of us on the political side of that gulf, we need overwhelming pressure for 2°, overwhelming pressure for a Copenhagen agreement in December; and to make that possible overwhelming pressure for the recovery that all the major economies are pursuing to be a low carbon recovery. A recovery that gives us economic security, energy security, and climate security together, reflecting the reality that these are now indivisible.
24. The truth behind all of this – a truth that is not yet fully embedded in either the scientific or the public imagination - is that both science and politics are part of Gaia too. Our clumsy, imperfect, culturally diverse and complex decision-making processes are themselves part of the Earth system.
25. What you say, from the realm of science, has a political impact. That impact contributes to the decisions that will shape our response to climate change, and thus the climates we experience, and in turn the trajectory taken by the biosphere and the Earth system as a whole. And vice versa.
26. We cannot escape from those feedback loops. Do we want to use them restore stability – or to amplify the instability for which we are already responsible: to give Wally’s angry climate beast that lurks up there in Palisades, New York an even bigger poke that we have given it so far.
27. My conclusion is not that you should be inhibited from saying what you think. On the contrary, there are too many people who tone down their conclusions on what we need to do about climate change because they don’t want to risk being marginalised for making seemingly impossible demands.
28. But do try to say what you think in a way that will have the effect you intend, given the political realities, the complex web of power relations, you are trying to reshape. Those realities

may look confusing. But it is usually the people who make the effort to understand them who get to determine the outcomes.

29. To bring this to a conclusion, let's look at what is really at stake here. If we can get global emissions to peak and start falling in the next 10 years or so, we will have a fighting chance of avoiding catastrophic climate change. Furthermore we shall ourselves in doing so have crossed a different kind of threshold – a threshold arguably of greater significance than any we have crossed in the 200,000 years that homo sapiens has been around. We will for the first time be showing signs of collective self-awareness as a species.
30. We are now so interdependent that we would need to do this even without the challenge of climate change. To define ourselves by what we have in common, by the common interests that bind us rather than by what makes us different from each other.
31. For me, that is the ultimate Enlightenment project. It is the project at the heart of the climate conference that will take place here in December, and of this gathering too. And it is a project that will only succeed if we build into that collective self-awareness an equal awareness of the two way relationship between the choices we make and the responses of the Earth system. Only politics can act on that awareness. But only science, communicated by you to animate political choice, can provide it in the first place.
32. In the science of the Earth system, including the human systems that are part of it, the curiosity that led me to begin a career in theoretical physics can no longer be the only driver; repute among peers within a single discipline can no longer be the only source of status and reward. In the new social contract that scientists need to reach with those who pay for their product, especially with taxpayers, the responsibility to communicate, to bear witness in that ancient phrase, is now as important as the urge to discover what has hitherto been hidden from our gaze.