"Bizarre, Absurd!"

Complaint about the programme, "What's the point of... the Met Office" (Wednesday 5th August 2015, Radio 4)

On Wednesday 5th August, the BBC broadcast a programme entitled "What's the point of..." about the Met Office on Radio 4, much of which focussed on the Office's work on climate change. The programme was arranged and conducted by Quentin Letts, the parliamentary sketch writer and theatre critic (yes, really) for that bastion of scientific competence and rigour, the Daily Mail. ©

This makes as much sense as having an HIV-denialist to monitor the value of STD clinics; a tobacco lobbyist to review the public provision of advice on health; or a member of the Jehovah's Witnesses to assess the work of the Blood Transfusion Service! I'm reminded of the response by Mr Justice Burton, when he was asked to rule that a climate sceptical video should be sent to schools to 'balance' the influence of Al Gore's film, 'An Inconvenient Truth'. The learned judge stated that this would be like giving equal weight to a position that the moon is made of "green cheese" (his very words) on one hand, to the current scientific position on the other! Bizarre? Absurd? Yes indeed, both!

There were the inevitable references (I counted three) to the 'Barbecue Summer'. And we were also introduced to amateurs who rely on pieces of dead seaweed (yes, I am joking!) for their weather forecasting.

After that, it was an opportunity for three well-known climate sceptics, not one of whom has any standing in the scientific community, to denounce and repudiate the current scientific understanding of climate change. [No reputable, independent scientist featured in the programme.] None of them were challenged. Piers Corbyn said the Office had used its position to "promote the man-made climate change theory... which is fiction" — a 'fiction' which just happens to have been endorsed by the national academies of science of 80 countries!

The cost of developing renewable energy was pilloried by Graham Stringer MP, with no mention of the extraordinary way that cost has been tumbling in recent years, nor the vast subsidies enjoyed by fossil fuels - they total \$5.3 trillion, equal to \$1,000 for each person living in the G20 countries, according to this year's study by the IMF. The continued provision of these subsidies has also been castigated by Jim Yong Kim, the President of the World Bank.

Many of the comments of Peter Lilley MP amounted to little more than vulgar abuse, accompanied by the presenter's hilarity. The Met Office asks for expensive computers, so "they can be even more precisely wrong..."; "they are committed to a pseudo-scientific doctrine..." How passing strange then, that the Manifesto issued by the St James's Palace Nobel Laureate Symposium (26-28th May, 2009), involving around 60 leading scientists from various disciplines, among them 20 Nobel Prize winners (our finest scientific minds), stated that "political leaders cannot possibly ask for a more robust, evidence-based call for action"!

Mr Lilley stated that, in contrast to the forecast for global warming by the Met Office for the decade 2004-2014, the rise in temperature had been "zilch". If he'd done his homework, he'd have known that "due to natural variability, trends based on short records... do not in general reflect long-term trends" (IPCC, Summary for Policy Holders, 2013). So during some periods, the rate of warming may be less than the trend rate, on account of short-term fluctuations, whereas in others it may exceed the trend. In any case, according to Michel Jarraud, Secretary General of the World Meteorological Organisation (WMO), "there is no standstill in global warming". Similarly, "during 2014, the majority of climate indicators continued to reflect a warming planet, with several setting new records" ("State of the Climate in 2014", published by the American Meteorological Society, July 2015). 2014 was probably the warmest year on record (or, if not, it tied-to-warmest with 2010) and 14 of the warmest 15 years on record have all occurred since 2000 (WMO). 'Zilch' indeed!

[P.S. 2015 was the warmest year on record, beating even 2014, and 2016 was even warmer than 2015.]

One of Quentin Letts' main criticisms was that the Met Office is "alarmist... terrible doom and gloom... getting almost biblical" and, regrettably, he succeeded in bullying Helen Chivers, the Met Office's spokeswoman, into half-agreeing with him. What she should have said was, "We're by no means 'alarmist'! Nevertheless, we do consider it our responsibility to draw attention to the truly alarming prospects for humanity and the rest of creation should we fail to respond to this challenge with vigour and urgency. However, I actually think our statements are quite mild compared with those of many leading scientists!"

- "We know what needs to be done. We cannot wait until it is too late. We cannot wait until what we value most is lost" (Nobel Laureates' Symposium).
- "The carbon dioxide just accumulates in the atmosphere and there's no end point, it just gets hotter and hotter, and so at some point [the earth] becomes unliveable [i.e., uninhabitable]" (Professor John Marburger, President G.W. Bush's chief science advisor and the former Director of the [US] Office of Science and Technology Policy).
- "Never before have we faced such a global threat. The longer we procrastinate, the more difficult the task becomes" (Lord Robert May, speaking as President of the Royal Society).
- "We are getting almost to the point of irreversible meltdown, and will pass it soon if we are not careful" (Sir John Houghton, formerly chairman or co-chairman of Scientific Assessment for the IPCC).
- "The Earth today stands in imminent peril.....and nothing short of a planetary rescue will save it from the environmental cataclysm" (Prof James Hansen, formerly NASA's Chief Climate Scientist).
- "On our current trajectory, going to 4 degrees [C of warming] has... potentially catastrophic effects for human health and human survival" (Professor Anthony Costello, Director of UCL Institute of Global Health, June 2015).

"Are the statements above 'alarmist' enough for you, Mr Letts?"

Mr Letts also asserted that the Met Office's position on climate change is "said by some fellow scientists to be plain wrong", but failed to make it clear that the overwhelming majority (more than 95%) of active climate scientists, and all the leading ones, accept the theory of man-made climate change, Indeed, the contrarian "fellow scientists" to whom he refers are rapidly becoming an endangered species! Furthermore, all the world's reputable scientific institutions, including 80 national academies of science, have endorsed this position. [Of course, they may all be wrong, but I wouldn't put any money on it myself!]

Just last month, the Royal Society, the UK's national academy of science, drew attention to the fact that 24 "leading institutions [including the Society itself] say government must act now if serious climate risks are to be averted". The Joint Communique stated that "The scientific evidence is now overwhelming … we must transition to a zero-carbon world by early in the second half of the century."

Ironically, given the fact that Peter Lilley clearly prides himself on having studied Physics at university, one of the institutions involved is the Institute for Physics! The Institute's President, Frances Saunders, said: "The scientific evidence that climate change is real, and that it's caused by human action, is compelling. If we're to limit its effects then we have to act sooner rather than later". It is also noteworthy that, when 61 Nobel laureates endorsed Barack Obama's bid for the Presidency in 2008, citing his recognition of the reality of man-made climate change, they including 20 physicists – the 'hard men' and women of Science.

Climate sceptics of the sort featured in this programme clearly have no conception whatever of the astonishing amount of work which has gone into the development of climate science! The 5th Assessment Report of the Intergovernmental Panel on Climate Change consisted of three parts. Part 1, published in 2013, included approximately 2,500 pages of text and drew on millions of observations; over 9,200 scientific publications were cited, more than three quarters of which had been published since the previous Report in 2007; it was produced by 259 authors and review editors, who received the help of 600 contributing authors and received comments from hundreds of expert reviewers. The Report was signed off by all the world's governments.

The 3rd Assessment Report in 2001 stated that it was *"likely"* (at least 60% probable) that the warming observed since the mid-20th century is mainly due to greenhouse gas emissions; the 4th Report in 2007 considered this was *"very likely"* (at least 90%); but with the 5th Report, this issue is now considered as being 'beyond reasonable doubt' - *"extremely likely"* (at least 95% probable).

In contrast, "many recent assaults on climate science... by climate change deniers are typically driven by special interests or dogma, not by an honest effort to provide an alternative theory that credibly satisfies the evidence" (statement by 255 members of the National Academy of Sciences USA, all with relevant scientific expertise, including 11 Nobel laureates, 2010). Just so!

The study of climate change must surely rank as the greatest collaborative endeavour in the history of science – it really does deserve better from the BBC than the treatment it received in this case!

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