

►► “LISTEN TO THE SCIENCE” WHAT GRETA OVERLOOKS

Greta Thunberg is one of the best things to happen to climate politics. It's probably too much to expect that her sharp exchange with US Congressman Garret Graves on the relative contributions of China, the United States and Sweden to global GHG emissions, in which she exposed the basic flaw in the *“we're not the problem so we don't have to act”* argument, will have been taken on board by Saskatchewan politicians, who have repeated the same fallacy many times¹.

But the much-shared video of her giving President Trump the evil eye at the UN was priceless. Anyone who had heard her previous speeches or read her collection *No One is Too Small to Make a Difference*² (a great short read and highly recommended), would have been familiar with her *“how dare you”* accusation that she repeated to the General Assembly. Nonetheless, the speech unleashed a familiar torrent of online abuse, touching on her age, her appearance, her gender, her nationality and her mental health, which, fairly predictably, released a counter-torrent of hatred and ridicule for her critics.

However, I want to pay her the compliment of stepping past who she is to engage with what she says, and here the picture is more complex and concerning than the caricatures would have us believe.

Take her rallying cry *“listen to the science”* (sometimes *“just listen to the science”*) which was the centrepiece of her Congressional testimony. One of the main reasons that we find ourselves with such a large gap between aspiration and outcomes in climate policy has been a basic mistake about the role of science and evidence in the policy process, a mistake that *“listen to the science”* repeats and entrenches.

Ever since the creation of the Intergovernmental Panel on Climate Change (IPCC), climate policy has been framed by the ‘the linear model’, the belief that knowledge leads to action; more certain knowledge leads to more definite actions; and more integrative knowledge leads to more coordinated action³. As a description of how policies are actually made and implemented, the model is so obviously wrong that its staying power is remarkable.

Knowledge doesn't necessarily lead to action at all; policy options remain open even in the face of the strongest scientific consensus. And efforts at integrating different kinds of knowledge in, for example, theories that try to connect social and natural systems have generally been disappointing.

One response has been to throw more science at the problem and to insist, ever more forcefully, that all would be well if only we listened to the scientists. Why is this response self-defeating? First, because what people hear when they listen to *the science* is different depending on their basic value commitment and cultural frames⁴.

It should come as no surprise that a 2017 Leger poll in Canada found 29 per cent of those surveyed regard scientific findings as a matter of opinion and, in a recent 3M poll, 30 per cent of respondents said that they only believed science that aligns with their personal beliefs, a phenomenon on display in anti-vaccine and anti-fluoridation campaigns that have enlisted some of Canada's most educated populations⁵.

Second, policy controversies are not generally problem-driven at all but the outcome of interests attempting to promote their favourite solutions. Thus, climate policy is seriously

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hampered by the various groups who have clambered onto the bandwagon because they are interested in climate change as a vehicle for pursuing animal rights, simple living, anti-globalization and so on rather than actually reducing emissions.

On the other side, those who have fought, with some success, to restrain the scope of government action are genuinely horrified by the potential of climate policy to reverse their achievements and will continue to fight against it whatever the science may say (the fact that members of this group should in theory support a revenue-neutral carbon price but so many do not is an interesting anomaly that will be the subject of a future post).

Finally, the intensely value-laden and hence political character that climate policy debates have now assumed, is reflected back on science itself, as partisans seek to exploit the uncertainties and doubts that inevitably accompany progress in scientific understanding. The response of some scientists has been to double down on the value of their conclusions, exposing themselves to further criticism when errors appear and predictions go wrong and fuelling a growing sense that science is part of an untouchable



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"establishment" from which the concerns of ordinary people have been excluded. The 3M poll reported that nearly half of Canadians now regard scientists as "elitists".

So we should ignore the science, then? Of course not. Science remains our best guide to understanding natural systems and will continue to play a role in developing and assessing the technologies that will be critical to reducing emissions. What science cannot do is frame the debate itself; it cannot take the place of climate politics which will ultimately engage with the priorities and trade-offs between climate action and other pressing problems, however much the inflated rhetoric about "extinction" tries to obscure the choices we have before us.

What we make of the scientists' message will depend very much on who we are and where we stand. In democratic societies, policies are generally better received if they have been developed by attending to these differences

rather than ignoring them. Listen to the science, by all means, but don't expect it to resolve anything about what is to be done.

References

¹ Wall's tweet of January 23, 2019.

² <https://www.penguinrandomhouse.ca/books/623668/no-one-is-too-small-to-make-a-difference-by-greta-thunberg/9780141991740>

³ Beck, 2011. https://www.researchgate.net/publication/226964549_Moving_beyond_the_linear_model_of_expertise_IPCC_and_the_test_of_adaptation.

⁴ Kahan, 2018. <https://blogs.scientificamerican.com/observations/why-smart-people-are-vulnerable-to-putting-tribe-before-truth/>

⁵ <https://www.cbc.ca/news/technology/science-survey-1.5291291>

