

What is 'analysis'?

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In my 6 minutes I want to skirt the rather tricky question of 'what is analysis?' to consider why it might be important to even ask the question. In doing so, I might be accused of moving the conversation from an *analytical* mode into a *political* one. However one advantage of approaching the question in this way is that it short-circuits the risk of getting endlessly entangled in reflexive loops about how to analyse analysis analytically.

So, what I am really concerned with is not what analysis *is*, but what does analysis make possible? I am also interested in the related question - what does analysis *not make possible*? This is not just an academic question but one that exercises anyone who is concerned with trying to stabilise truth claims about the world through analytical methods and who finds those claims being challenged. It seems particularly pertinent to ask these questions at a time when expertise is being undermined, the line between truth and falsity is being blurred, and moral and ethical positions are being pitched against rationality and analysis as criteria that should underpin action. In order to explore these tensions, I turn my attention to the climate science community – a group of people for whom the status of analysis has been put under strain by the very knowledge it has succeeded in producing.

Climate scientists are a particularly interesting group of people when it comes to thinking about what analysis does and does not make possible. The work of climate scientists is clearly analytical. It entails the collation of traces of atmospheric

conditions through monitoring and measurement devices; the organisation and structuring of data; the work of finding patterns in the data through the use of statistical tools; the deployment of this data to construct hypothetical models of global climate futures; and then the validation and testing of those models against new forms data. Through this work of building patterns and testing models, climate scientists are able to produce provisional and probabilistic facts about the way the world is and the way it might be in the future (Oreskes 1994, Edwards 2010). Analysis in climate science makes possible a vision of a whole earth system undergoing a process of unprecedented transformation. It also produces the capacity to pose questions about the causes and implications of the transformations observed.

But the analytic work of climate scientists produces much more than this. The effects of the analysis of climate systems, both intentionally and unintentionally overflow the laboratories and the computers within which they are produced and the journals through which they are communicated. Data spreads out into policy statements, political arguments and media battles. Analysis itself also leaks beyond the infrastructures of scientific knowledge production, becoming deployed as that which legitimises descriptions and counter-descriptions. It is analysis that enables the ‘royal science’ of university research institutes to be pitted against the ‘minor science’ of climate sceptics. Indeed even the term sceptic has been wrested from those who speak *for* the evidence of human-induced climate change, and appropriated by those who speak against the existing scientific consensus.

So what about that which analysis does not make possible? There is much discussion among climate scientists regarding what to do about a perceived failure to

communicate their analysis effectively. Analysis in this framing stops before public communication starts, reinforcing a divide between the act of knowing and the act of instructing. This creates profound concerns for many climate scientists about the implications of being asked to take on the role of public science communicator.

Should they, as analysts really be expected to become responsible for what happens to their findings after they leave the laboratory? Wouldn't doing so 'dilute' the science by mixing analysis and politics? Climate change has become for many a proxy for a particular set of liberal beliefs most clearly embodied in the figure of Al Gore – the perfect instantiation of neutral science gone ideological. Returning to the strictures of analysis provides a protection for climate scientists, from the charge of political bias. Analysis here works by excluding politics, even as it creates the material out of which new political configurations are constructed.

For some climate scientists however, an awareness of the *inherent* politics of their findings has led to a reconsideration of the remit of scientific expertise and an expansion of the fields upon which analysis should be conducted. Some climate scientists have embraced the challenge of being better communicators and even more vociferous activists. This has required that analysis itself is extended – to include not only the analysis of atmospheric systems but also the analysis of media ecologies, of public opinion, and of the psychology of human reactions to threat, danger and opportunity.

I began by suggesting that my approach was perhaps more political than analytical. But I want to end by asking what the separation of the analytical and the political itself might tell us about what analysis is, and has been in anthropology. As

anthropologists grapple with on-going challenges to their knowledge that are not dissimilar to those confronting climate scientists, how do anthropological approaches to analysis make possible particular forms of response, and how might the forging of this response act back on the practice of analysis itself?

References

Edwards, Paul. 2010. *A Vast Machine: Computer Models, Climate Data and the Politics of Global Warming*. Cambridge, MA: MIT Press.

Oreskes, Naomi, Kristin Shrader-Frechette, and Kenneth Belitz. 1994. 'Verification, validation, and confirmation of numerical models in the earth', *Science*, 263 (5147): 641-46.