Moving beyond the linear model in climate change science and decision making: a review of theory and practice

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This will be Part 2 of an earlier presentation I did at the Forum in late August. Since that time I have become a serious Sheila Jasanoff fan and have discovered a parallel universe to my own self-styled science and technology studies musings. I have been formally exploring social constructivism, primarily in the form of co-production, and working on ways to present what I see as its great attributes to those who might come to this area differently.

I make this statement as a starting point.

In the arena of climate change Demeritt (2006) notes that many fear that viewpoints from the science studies and social constructivism work to bolster claims by sceptics and other politically powerful interests. He quotes Latour who laments that the same arguments of social construction are being used to undermine “hard won evidence that could save our lives” (Latour 2004, cited in Demeritt 2006).

I want to explore this in relation to a review/analysis I have just submitted on the recent public climate change debate in Australia (see abstract below). I also want to discuss what might be appropriate fieldwork methods to evidence relationships between customarily distinguished facts and values in both the production of scientific knowledge as well as in decision-making.

Abstract

This paper proposes that social constructivist approaches to climate change and decision making has much to offer toward moving beyond the present polarization of debates about the truth or falsity of human induced climate change. As distinct from typical calls from scientists to simply reinforce the verity of evidence as a means of resolution, I review work that contends that this persistence with the “linear model” is both unsatisfactory and unproductive. These challenges do not have to rest on the assumption that science cannot be objective or that science doesn’t represent a vital means of understanding the world. Rather they call for a more nuanced understanding of beliefs and values that underpin the production of scientific knowledge and in the use of science for decision making. I elaborate on “co-production” as one area that I see as offering some valuable insights into unraveling these relationships. I offer several observations in relation to the current situation in Australia. I finish with an overview of some alternative science policy models that aspire to illuminate underlying values and value conflict, and that encourage democratic openness, deliberation and transparency.