Expertise needs transparency not blind trust: a deliberative approach to integrating science and social participation

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Good things come in threes, so they say. In this paper Collins, Weinel and Evans (CWE) call for a ‘Third Wave’ of science studies where ‘scientific values should be central to society and that the advice of “those who know what they are talking about” should be given greater weight than those who do not’ (195). Their aim is to avoid the weakening of scientific authority they claim follows extending public participation in politics and science.

As an academic working in the field of environment and development policy, I can empathize with CWE’s desire to ‘make policy in the face of growing uncertainty about scientific findings’ (185). But in the spirit of positive criticism, their arguments about how to manage expertise within politics simply won’t do. Rather than advancing science studies to a new, Third Wave, CWE want us to waive debates about participation to go back to old-fashioned trust in facts, experts and politics.

In keeping with the theme of the paper, I shall advance three reasons why CWE’s ‘Third Wave’ might reduce political debate – and suggest three different ways to engage with expertise.

Trust in facts. Much debate within science studies for years has highlighted the problematic relationship of facts and values. CWE start from this premise, writing ‘there is no clear fact-value distinction’ and that ‘technical experts cannot be expected to deliver the truth of the matter’ (188). Yet, the Third Wave argument seems to lose track with this tenet by protecting the role of experts to inform policymakers. Moreover, CWE state ‘we must know where the wisdom of ordinary folk stops as well as where it starts’ (196).

This seems a curious transition. How can we admit that scientific fact gathering is influenced by values, yet still rely on scientific expertise to tell us who has legitimate knowledge? CWE explain this by saying ‘it is possible to distinguish between the unavoidable “intrinsic” politics of science and the “extrinsic” politics that are an explicit part of the political process’ (188). By this, they mean that science will always reflect values, but the use of expertise need not. I shall return to CWE’s proposed use of expertise under my third point. But my first criticism is that CWE seem to sidestep debates about how social participation can shape (or reshape) facts, and instead just want to emphasize that experts are people who can tell us what are facts.

Experience has shown researchers that blindly trusting expert facts is a dangerous game. Much research in environmental science, for example, has indicated a variety of means in which ‘received wisdom’ about environmental problems such as deforestation and desertification have undergone changes according to how experts have changed their minds. Widening participation has been a crucial part of these changes. Participation can enhance how we understand environmental processes. But perhaps more importantly, it helps reframe empirical research to develop explanations and solutions to problems as locally experienced.
The problem is that CWE underpoliticize the production of facts. Participation sometimes makes facts more relevant, useful and accurate. Fighting participation might reify old facts based on old framings.

**Trust in experts:** The second problem is that the Third Wave places remarkable trust in the intentions, integrity and neutrality of experts. CWE write: ‘the only demand under the Third Wave is that scientists and technologists should try to insulate their work from the political and cultural environment’ (188).

These are noble ideals. Are they achievable? I am not suggesting we should stereotype experts and scientists as unethical (although perhaps there are examples). Rather, academic debates have argued for some time that expertise frequently forms parts of wider systems of governance and control, and that individual agency frequently cannot change that. Moreover, ‘science’ does not simply generate knowledge in instantly trusted ways: it requires validation, recognition and placements within paradigms of normality and recognized institutions. Does simply asking experts to act cognitively to ‘insulate their work from the political and cultural environment’ achieve neutrality?

My view is not. There is also a long-standing debate about the problems of achieving neutrality of expert knowledge that CWE don’t refer to. For example, are epistemic communities (or scientific networks) separate from normative values? Discussions of governmentality in international development have argued that expertise (or at least officially sanctioned expertise) has reflected and enforced colonial or neo-liberal systems of control. Defining ‘expertise’ excludes public debate. Certainly, CWE voice a well-known frustration that linking expertise to politics might be too disabling for decision making. But my question is whether this dilemma can be fixed by urging experts to insulate themselves from their political environment as though this is possible or indeed likely?

CWE add a further point. They say: ‘under elective modernism the use of quasi-religious/populist symbolic arguments can make no contribution’ (190) (where elective modernism is the choice to use expertise rationally). The problem here is in deciding what is quasi-religious or symbolic. Again, in environmental literature, much deep-green environmental writing has an overtly spiritual element, and sometimes appeals to a vision of ‘nature’ that supports humanity. These writings carry great sway in various environmental debates. It is probably more important to ask why, and for whose interests, certain knowledge is authoritative, — and how far using descriptions such as ‘quasi-religious’ are deemed acceptable or not. But CWE refer to ‘quasi-religious’ sentiments as though these are easy to see and universally defined — which is optimistic at least.

**Trust in politics:** The third challenge is that CWE wish us to trust public debate and policy processes to separate ‘technical’ aspects of expertise from its ‘political’ use. CWE write: ‘under elective modernism what matters is not that “science,” or scientific practice or scientific knowledge is chosen as the central element of our culture but that “scientific values” are seen as being part of a democratic society’ (189).

There are specters of Popper’s Open Society here, or Habermasian principles of ideal speech within accessible public spheres. Indeed, CWE write: ‘democracy, like Habermas’ (1972) vision of science, aspires to the ideal speech situation irrespective of whether it can be achieved’ (192).

Those last words are important: ‘whether it can be achieved.’ What if it isn’t achieved? What if the current public arenas of expertise and discussion about important policy issues are more
commonly not this ideal situation but instead manipulated and opaque? If this latter situation is more accurate, does it help to keep trusting in an ideal outcome? CWE apparently believe so. But many other researchers have long since left searching for the Holy Grail and instead have spent time analyzing ‘speech’ as it actually exists. Indeed, believing in ideal speech as a background to politics might even reduce the political analysis of how speech is controlled or manipulated. Expertise can form part of this de-politicization if it implies some themes are not to be discussed. Extending public participation in politics is partly to empower people to challenge this kind of expertise.

Rethinking the Third Wave. The Third Wave argument seeks to clarify decision making by proposing ways to avoid alleged technological populism brought by wider participation. Yet, the price of the Third Wave is to place trust in facts as they stand (rather than reshaping facts through participation); put trust in the cognitive depoliticization of experts (rather than address the non-cognitive processes); and trusting political debate and rationality to separate the technical aspects of expertise from political manipulations. I believe these proposals overlook the epistemological links of social participation and knowledge. They neglect the contested role of experts as de facto agents of social progress. They simplify how political debate really occurs.

But rather than leaving it there, I propose three themes implicit in the Third Wave need further attention. To be clear, CWE’s ambitions to inform policymaking in the face of uncertainty are worthy. The question is how to get there.

Combine Expertise with Truth Claims. There is a curious lack of attention to philosophy of science in the Third Wave. CWE acknowledge that ‘intrinsic politics cannot be avoided’ (188) meaning that there is no clear fact-value distinction — and they acknowledge that ‘technical experts cannot be expected to deliver the truth of the matter, especially in the short term’ (188). But they then propose it should be clear that experts are ‘those who know what they are talking about’ (195).

As discussed above, these statements seem contradictory. But more generally, they refer implicitly to debates within philosophy of science about the nature and validation of truth claims. CWE shy away from discussing these. Similarly, CWE discuss ‘technological populism’ but never once say ‘relativism.’ Again, philosophy of science is avoided.

It seems the cause of this mismatch is because CWE refer to science as a culture rather than a method. In their words, ‘science is a distinct “form-of-life” distinguished by the key “formative intentions” of the actors’ (187). Expertise is also defined in terms of experience: ‘expertise is real and turns on possession of tacit knowledge gained through participation in social communities’ (188). The problem of these statements is that they perceive expertise and science to be questions of chosen behavior, rather than an engagement with truth claims and proposed explanations.

But science is not simply passive: it is also a means of gathering information and searching for explanations. Science and experts can use their work to reshape understandings of the world. CWE state ‘The Third Wave argues that the political phase should always have priority’ (188), by which they mean that technical knowledge and post-hoc political discussion can be separated. This is a very end-of-pipe approach to scientific knowledge and political debate.

Instead, there is a different approach that sees scientific research itself as guided by political discussion preceding empirical research. Steve Fuller (2000) — for one — calls this a ‘politically-oriented social epistemology.’ In international development, this research has been most
illustrated by using participation of local actors to frame research, rather than pose as an alternative and equal form of expertise.

There is a need to question how far debates about ‘expertise’ also need to overlap with epistemological questions about the generation of facts. CWE’s Third Wave, however, does not engage at all with science as a method, or how social participation can reshape facts.

Avoid Narrow Definitions of Expertise. CWE’s periodic table of expertises is an interesting approach to defining socially located domains of tacit knowledge. Yet, it is also somewhat rigid and stereotypical. The biggest problem is that empowering ‘those who know what they are talking about’ also implies a political decision to silence voices. Whose say is this?

CWE themselves know there are tensions in this position. They write: ‘the Third Wave may have been treated as heretical in the heartlands of science and technology studies’ (196). But they also say ‘the Third Wave paper has developed into a new approach to the social nature of science together with full scale program of research’ (186). Something is awry here.

Similarly, CWE equate ‘technological populism’ with ‘participation’ in ways that seem stereotypical and unfair. It is easy to poke holes at extremely relativist research that reduces truth claims to social solidarities alone, or which claims local citizens are as much an expert as trained professionals. But are these positions urban myths? I know no analyst who reduces expert claims to an infinite level of relativism. Rather, there are numerous crucial questions that might relate to some level of relativism; or the role of ‘symmetry’ in scientific explanation; and the extent to which increasing social participation undermines visions of scientific certainty. None of these debates simply equate one person’s knowledge with another’s. Indeed, this kind of analysis can assist the governance of expertise in ways that the Third Wave cannot.

There is still much work to be done to disentangle the word ‘expertise’ to indicate what really lies beneath. Truth claims and expertise is one theme. But more generally, researchers need to clarify whether ‘expertise’ means talking on behalf of other people; talking for oneself; or engaging with dialogue to reach more useful and appropriate outcomes. In the field of environment and development, many ‘scientific’ mistakes have occurred when experts apply explanations and solutions out of context to physical conditions or social behaviors. Different forms of research based on wider participation have been successful in making expert recommendations more useful.

Expertise is More Than Technocracy. CWE frame their debate in somewhat old-fashioned terms. The key concern, they say, is ‘the solution to the problem of technocracy and scientism’ (186). They then go on to cite Habermas in terms of the ideal speech they would like to see. Indeed, their own proposed solution is that ‘good societies have scientific values at their heart because scientific values are democratic values’ (193).

It is not surprising, then, that CWE’s treatment of expertise is couched in terms of how it is used rather than how it is produced. The key concern is scientism as a form of political oppression arising from scientific technocracy. But putting trust in democracy and scientific values will not reduce the barriers to public participation. Nor will it help us govern the role of expert knowledge in certain examples of political control. In other words, the debate has moved on from the worries about technocracy voiced by Habermas.

As a way to illustrate this point, I shall end with a very abridged example concerning climate change policy. Climate change is clearly a concern of immense importance yet also scientific
uncertainty. Implementing climate change policy requires numerous applications of trust in scientific assessments, or in philosophies of risk such as the precautionary principle. It also spans diverse actors from climate modelers to citizens driving cars, and farmers in poorer countries. Few (if any?) people argue that these different actors have equal and equivalent expert knowledge.

Yet the role of expertise is both contested and highly changing. The main epistemic community of the Intergovernmental Panel on Climate Change (IPCC) has changed in its composition from largely meteorologists in 1990 to a variety of physical and social scientists in the 2000s. Despite this, its authority is also challenged repeatedly. Climate change policy has also changed focus from – almost entirely – reducing greenhouse gas concentrations (or mitigation) (under the Kyoto Protocol) to a variety of actions aimed at mitigation, capacity building, and adaptation to climate change (under the Copenhagen and Cancun agreements). Moreover, approaches to so-called climate change adaptation is changing from physical interventions (such as building sea walls) to more developmental strategies that might reduce climate risks by increasing local resilience or livelihood options. ‘Adaptation’ here might include ‘community-based adaptation,’ which is a way of addressing international development assistance for those risks largely defined by vulnerable people.

Expertise and expert networks have therefore changed over time. The older notions of seeing climate change policy as mitigation alone are being replaced because of a more complex view of what climate change risks pose. No one suggests local people in poorer countries can produce information similar to the climate change modelers. But an increasing number of experts are consulting, and indeed allowing vulnerable people to frame policies aiming to reduce risks.

This is a current example of science and technology decision making in action. It is hard to see the Third Wave operating on this example. The nature of ‘facts’ relating to climate change risk have changed over time, and with different levels of participation. Climate change deniers and cassinhas have portrayed themselves as authoritative using various tactics and claims that are very different from the cognitively dispassionate engagement CWE call for. The resulting political debate is still opaque to many participants and open to manipulation and misrepresentation. It is hard to see the Third Wave operating here now or idealistically in the future. Indeed, reducing public participation in climate change policy would more likely undermine the applicability of climate change science, and weaken public support for policies.

Instead of the Third Wave, science studies should continue what it does, but try to do it better. Labeling expertise in terms of ‘who knows what they are talking about’ is well intentioned but almost culpably clumsy in terms of what this means for authoritative knowledge, political control, and public debate. Expertise is fluid in content, membership, and in terms of public legitimacy. Making the content, membership and legitimacy of expertise more transparent – rather than in trusting in current classifications – is the way ahead.