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Some reflections on (corona) truth wars¹

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Abstract

The current coronavirus pandemic has illustrated how challenging it can sometimes be to assess what information to trust, and which experts to follow. A recent paper has suggested that STS scholars are perfectly equipped to help us understand these *complex dynamics*, but also highlights that such scholars have been largely absent in the public and scientific debates. This response provides some reflections from a non-STS scholar who has an interest in such issues, and who has tried to engage with, and understand, the relevant STS literature. We present examples that suggest that STS may not be quite as perfectly equipped as claimed, and also reflects on why STS scholars may not be as prominent as might have been hoped. We also suggest that presenting ideas as to how STS scholars could better exploit the available tools may make up for their apparent absence in current public, and scientific, debates.

Keywords: post-truth; consensus messaging; science communication; The Honest Broker; assessing expertise

1. Introduction

The current coronavirus pandemic has illustrated how it can be difficult to assess expertise, and information, when a topic is both complex and where potential decisions have significant societal implications. In a recent paper Harambam (2020) suggests that Science and Technology Studies (STS) scholars are “*perfectly equipped with concepts, theories and methods to help us understand these complex dynamics, and guide us through the fog of uncertainty and manipulation*”, but also asks why they haven’t been more prominent.

Although I’m certainly not an STS scholar, I have spent a number of years engaged in public debates about climate change, another societally relevant topic where it can also sometimes be challenging to assess expertise and information. As such, I have tried to engage with, and understand, the relevant STS literature but have found it difficult to work out in what way it helps us to understand “*what information is reliable, which experts to follow and what (epistemic) authorities to trust*” (Harambam 2020).

This may, of course, be more my own failing than anything else, but I hope that some reflections from a non-STS scholar who has an interest in this general topic may be of interest to those STS scholars who do think that there is merit in trying to develop, and exploit, strategies that would help people to better understand what information, and which experts, to trust. I also appreciate that some of what is presented may seem slightly

¹ The use of wars in the title is largely to reflect that this was motivated by Harambam (2020)’s recent paper The Corona Truth Wars: Where Have All the STS’ers Gone When We Need Them Most?

provocative, but the intention is to provoke discussion rather than to be provocative simply for the sake of it.

2. Post-truth

Harambam (2020) comments that the current corona “infodemic” is the “*perfect post-truth crisis on which various STS’ers can shine their lights*”. However, it has been suggested (Fuller 2016) that STS should “*embrace its responsibility for the post-truth world*” and that it has let loose four common post-truth tropes (Fuller 2017). Similarly, Collins et al. (2017) suggests that even if STS did not have a causal influence on the emergence of post-truth, there is clearly a resonance and that STS contributions have the potential to give comfort to those associated with post-truth.

Sismondo (2017), on the other hand, suggest that STS is not to blame for post-truth since embracing “*epistemic democratization does not mean a wholesale cheapening of technoscientific knowledge*”. Lynch (2017) claims that there is no obvious relation between STS and post-truth and that it is the “*height of hubris to suggest that [STS] gave rise to, or is otherwise responsible for, the rhetorical means through which controversies have been ‘manufactured’*”.

I’m not highlighting this to try and adjudicate between these two positions. However, given that there is debate within the STS community about whether or not STS has played a role in the emergence of post-truth might suggest that STS scholars should be cautious about how they engage with a post-truth crisis. It may also explain why there is some reluctance to turn to STS when thinking of how we might address such a crisis.

3. The Honest Broker

Harambam (2020) cites The Honest Broker (Pielke 2007) as an example of insightful work that describes the various ways in which scientists may provide policy advice. Although this work highlights a number of ways in which scientists may provide advice, it seems to suggest that the preferred role is that of the *Honest Broker of policy alternatives*. In this role, scientists would avoid being *Issue Advocates* and, instead, would aim to provide information that expands the range of policy options.

However, Jasanoff (2008) points out that “*science does not always serve the public interest best by widening the scope of policy choice*”, while others have pointed out that rather than expanding options, a broker typically narrows them (Rabett 2010). Brown (2008) also points out that “[e]very definition of policy options involves the exercise of power, even those offered by Pielke’s *Honest Brokers*”. So, even this framework does not seem to be universally accepted, even within the STS community.

It was also surprising that Harambam (2021) suggested that “*STS’ers could take the role now of the ‘honest broker’*”. STS’ers could certainly provide advice about how to integrate science advice with policy, but since they don’t have epidemiological, or public health, expertise, it’s hard to see how STS’ers could become the ‘honest brokers’ in this context.

3.1 Stealth Issue Advocacy

As mentioned above, The Honest Broker (Pielke 2007) suggests that scientists should limit the politicisation of science by acting as *Honest Brokers of Policy Alternatives*, rather than as *Issue Advocates*. It also suggests that a particularly problematic way in which scientists might engage is when they act as *Stealth Issue Advocates*. This is when someone hides their policy advocacy behind a veneer of science, effectively politicising science without making this clear. According to The Honest Broker, an example of this was the various responses to Bjorn Lomborg's book, *The Skeptical Environmentalist* (Lomborg 2001). The claim is that many of the scientists who responded to *The Skeptical Environmentalist* were acting as *Stealth Issue Advocates*; their political preferences were influencing their responses, and they weren't being upfront about this.

However, there are clear arguments that the scholarship in *The Skeptical Environmentalist* was indeed problematic. Pimm & Harvey (2001) suggest that "*it is a mass of poorly digested material, deeply flawed in its selection of examples and analysis*". In a series of essays in *Scientific American* (Rennie et al. 2002) scientists described how Lomborg's work had misrepresented their fields. An analysis of the criticism and responses (van den Bergh 2010) concluded that "*The Skeptical Environmentalist is not a reliable source of information and certainly not a work of science*".

Again, my goal isn't to necessarily claim that the latter is the correct interpretation, but to suggest that the framing in *The Honest Broker* isn't necessarily consistent with the suggestion by Harambam (2020) that STS has the tools that can help us to determine which "*information is reliable, which experts to follow and what (epistemic) authorities to trust*".

The analysis presented in *The Honest Broker* would seem to suggest that attempts to highlight poor scholarship can be framed as *Stealth Issue Advocacy* if the critic is not open about their political views, and as *Issue Advocacy* if they are. In both cases, this can be interpreted as politicising science. Rather than helping to determine what information is reliable, and which experts should be followed, this would seem to be making it more challenging to do so.

3.2 An Addendum

Harambam (2020) also highlights that although STS has not played a big role in the corona crisis, the author of *The Honest Broker* is one who has received funding to evaluate how science advice has influenced the response to the pandemic. It should be noted that the author has been prominent in the climate debate for many years. His contribution, however, has led to them being included in a list of *individual climate deniers involved in the global warming denial industry* (DeSmog 2021) and in a list of people regarded as contributing to *Climate Misinformation* (SkepticalScience 2021).

I'm not highlighting this to claim that the inclusion in these lists is justified, but to suggest that it is difficult to reconcile this with suggestions that STS scholars are "*perfectly equipped with concepts, theories and methods to help us understand what information is reliable, which experts to follow and what (epistemic) authorities to trust*" (Harambam 2020).

4. Science communication

STS scholars have, on occasion, critiqued science communication. For example, Hollin & Pearce (2015) claimed that the information presented at the press conference for the publication of the IPCC's Fifth Assessment Report resulted in an “*incoherent message*” with respect to “*what counts as scientific evidence for [anthropogenic global warming] AGW*”.

However, rather than an incoherent message being presented, the issue was more that Hollin & Pearce (2015) misunderstood, and potentially mis-represented, what was presented at the press conference (Jacobs et al. 2015). This may imply that the communication could have been clearer, but that's not the same as it being incoherent.

It is, of course, perfectly reasonable to critique science communication. However, one might hope that STS scholars would be cautious when critiquing the press conference for the release of a major scientific report, especially if STS regards itself as being perfectly suited to helping people determine which information to trust, and which experts to follow.

4.1 Consensus messaging

One science communication strategy that comes under particular STS scrutiny is *consensus messaging*. Underpinned by various consensus studies (Cook et al. 2013, 2016, Skuce et al. 2016) it is argued that *consensus messaging* can help to close the consensus gap (Hamilton 2016) and can act as a *gateway belief* (van der Linden et al. 2015, van der Linden et al. 2019). The idea being that the acceptance of a scientific consensus on an issue can then lead to changes in people's attitudes and stronger support for public action.

Some STS scholars, however, argue that we should get *beyond counting climate consensus*² and should instead “*focus on genuinely controversial issues within climate policy debates where expertise might play a facilitating role*” (Pearce et al. 2017). Cook (2017), however, suggests that this is a *false dichotomy* and that a “*failure to address misconceptions about consensus enables the persistence of distractions that can delay substantive policy discussion*”, while Oreskes (2017) points out that in a “*political environment where contrarians have repeatedly mis-represented scientific consensus in a deliberate attempt to influence public policy, it is both reasonable and necessary for scholars to participate in attempting to clarify what scientists believe that they have established*”.

In a debate between Cook and Pearce (Hulme 2021), Pearce argues that the consensus is strong but narrow, and that we should instead focus on issues that matter most for informing societal responses (Cook & Pearce 2021). Examples given were debates about carbon budgets and discount rates. However, these are both intricately linked to the consensus; a carbon budget provides information as to how much we can emit if we want to limit *human-caused climate change*, and discount rates relate to the future damages due to *human-caused climate change*, discounted to today.

² In this context, *counting climate consensus* refers to attempts to quantify the level of agreement, either amongst experts or within the published literature, about a particular consensus position.

What critics of consensus messaging have failed to explain is how it is possible to have discussions about these other important issues if there isn't acceptance of the consensus that humans are causing climate change. My point here isn't to re-litigate the debate about consensus messaging, but to suggest that this is an example where STS scholars have been critical of attempts to illustrate which information, and which experts, to trust, without really providing an alternative that would achieve a similar goal. This doesn't seem consistent with the suggestion in Harambam (2020) that STS scholars are perfectly equipped with tools that will help us understand what information is reliable, and which experts to follow.

5. Conclusion

My motivation for writing this was not to revisit the science wars (Mermin 2008) or to even suggest that STS scholars do not have tools that would help us to assess what information to accept and which experts to trust. I'm well aware that even though I have an interest in this issue and have engaged with the STS literature for some time, I'm certainly not an expert and there are almost certainly aspects that I do not understand. I also agree with Harambam (2020) that this is important, that we should be thinking about how to address these issues, and that scholars who study the science/policy interface would seem to be ideally suited to providing suitable advice.

I also don't want to suggest that the examples provided above are representative of all of STS; I appreciate that it's a very diverse field with many different views. My intention was to provide examples that seem inconsistent with what is suggested in Harambam (2020) and that might illustrate why STS scholars may have been less prominent in the current debate than might have been hoped.

It's also the case that STS scholars have not been entirely absent from the current debate. For example, Parthasarathy (2021) has written about the vaccine crisis in Europe, Rayner and Sarewitz (2021) have written about *policy making in the post-truth world* and have included a discussion of the COVID-19 pandemic, and others have been prominent in the mainstream media. Even though not directly related to the coronavirus crisis, STS scholars have also recently been appointed to prominent positions in the new US administration (Storrow 2021).

I should also acknowledge that Harambam (2020) did indeed also highlight some of the potential issues with STS. For example, commenting that much STS work is inaccessible, making it difficult for the outside world to understand and implement. As I suspect many STS scholars would agree, it's difficult to convincingly argue that STS is perfectly equipped with tools for addressing societally complex issues if it's not possible to apply this in practice.

I don't want to end with any suggestions, as I don't think I'm really in a position to do so. I mostly wanted to provide reflections from someone who has an interest in this topic and that might be of interest to those who may be thinking about how to provide tools that can be used to assess what *information is reliable, which experts to follow and what (epistemic) authorities to trust*. Presenting ideas about how this might be achieved may also make up for the apparent absence of STS scholar voices in public and scientific debates.

6. References

- Brown, M.B. (2008) Review of Roger S. Pielke, Jr., *The Honest Broker: Making Sense of Science in Policy and Politics*. *Minerva* 46, 485-489.
- Collins, H., Evans, R. & Weinel, M. (2017) STS as science or politics? *Social Studies of Science* 47(4), 580–586.
- Cook, J. (2017) Response by Cook to “beyond counting climate consensus”. *Environmental Communication* 11(6), 733–735.
- Cook, J., Nuccitelli, D., Green, S. A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P. & Skuce, A. (2013), Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters* 8(2), 024024.
- Cook, J., Oreskes, N., Doran, P. T., Anderegg, W. R. L., Verheggen, B., Maibach, E. W., Carlton, J. S., Lewandowsky, S., Skuce, A. G., Green, S. A., Nuccitelli, D., Jacobs, P., Richardson, M., Winkler, B., Painting, R. & Rice, K. (2016) Consensus on consensus: a synthesis of consensus estimates on human-caused global warming. *Environmental Research Letters* 11(4), 048002.
- Cook, J. & Pearce, W. (2021) Is emphasising consensus in climate science helpful for policymaking? In: Hulme M. (ed) *Contemporary Climate Change Debates: A Student Primer*. London: Routledge, pp. 127-145
- Global Warming Disinformation Database, In: DeSmog blog. Available at <https://www.desmogblog.com/global-warming-denier-database> (<https://archive.is/Ybaqy>) (accessed 22.2.2021)
- Fuller, S. (2016), Embrace the inner fox: Post-truth as the STS symmetry principle universalized. *Social Epistemology Review Reply Collective*. Available at: <https://social-epistemology.com/2016/12/25/embrace-the-inner-fox-post-truth-as-the-sts-symmetry-principle-universalized-steve-fuller/comments> (accessed 22.2.2021)
- Fuller, S. (2017) Is STS all talk and no walk? *Social Epistemology Review Reply Collective*. Available at: <https://social-epistemology.com/2017/04/26/is-sts-all-talk-and-no-walk-steve-fuller/> (accessed 22.2.2021)
- Hamilton, L. C. (2016) Public awareness of the scientific consensus on climate. *SAGE Open* 6(4), 2158244016676296.
- Harambam, J. (2020) The corona truth wars: Where have all the STS’ers gone when we need them most? *Science & Technology Studies* 33(4), 60–67.
- Hollin, G. J. S. & Pearce, W. (2015) Tension between scientific certainty and meaning complicates communication of IPCC reports. *Nature Climate Change* 5(8), 753–756.
- Hulme, M. (2021), *Contemporary Climate Change Debates: A Student Primer*. London: Routledge.

- Jacobs, P., Cutting, H., Lewandowsky, S., O'Brien, M., Rice, K. & Verheggen, B. (2015) Clarity of meaning in IPCC press conference. *Nature Climate Change* 5(11), 961–962.
- Jasanoff, S. (2008) Speaking honestly to power. *American Scientist* . Available at: <https://www.americanscientist.org/article/speaking-honestly-to-power>
- Lomborg, B. (2001) *The Skeptical Environmentalist: Measuring the Real State of the World*. Cambridge University Press.
- Lynch, M. (2017) STS symmetry and post-truth. *Social Studies of Science* 47(4), 593–599.
- Mermin, N. D. (2008) Science wars revisited. *Nature* 454(7202), 276–277.
- Oreskes, N. (2017) Response by Oreskes to “beyond counting climate consensus”. *Environmental Communication* 11(6), 731–732.
- Parthasarathy, S. (2021), The AstraZeneca Vaccine Crisis in Europe Isn't About Science at All. *Slate*. Available at: <https://slate.com/technology/2021/03/oxford-astrazeneca-vaccine-blood-clots-europe-trust.html>
- Pearce, W., Grundmann, R., Hulme, M., Raman, S., Kershaw, E. H. & Tsouvalis, J. (2017) Beyond counting climate consensus. *Environmental Communication* 11(6), 723–730.
- Pielke, Jr, R. A. (2007), *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge: Cambridge University Press.
- Pimm, S. & Harvey, J. (2001) No need to worry about the future. *Nature* 414(6860), 149–150.
- Rabett, E. (2010). The Honest Joker. In: *Rabett Run blog*, 23 January. Available at: <http://rabett.blogspot.com/2010/01/honest-joker.html> (accessed 22.2.2021)
- Rayner, S., Sarewitz, D. (2021) Policy Making in the Post-Truth World, *Breakthrough Journal* 13. Available at: <https://thebreakthrough.org/journal/no-13-winter-2021/policy-making-in-the-post-truth-world>
- Rennie, J., Schneider, S., Holdren, J. P., Bongaarts, J. & Lovejoy, T. (2002) Misleading math about the earth. *Scientific American* 286(1), 61–71.
- Sismondo, S. (2017) Post-truth? *Social Studies of Science* 47(1), 3–6.
- SkepticalScience (2021). URL: <https://skepticalscience.com/misinformers.php> (<https://archive.is/nz7F5>)
- Skuce, A. G., Cook, J., Richardson, M., Winkler, B., Rice, K., Green, S. A., Jacobs, P. & Nuccitelli, D. (2016) Does it matter if the consensus on anthropogenic global warming is 97% or 99.99%? *Bulletin of Science, Technology & Society* 36(3), 150–156.

- Storrow, B. (2021) Surprise: Societal Scholars Could Drive Climate Policy, *Scientific American*. Available at: <https://www.scientificamerican.com/article/surprise-societal-scholars-could-drive-climate-policy/>
- van den Bergh, J. C. (2010) An assessment of Lomborg's *The Skeptical Environmentalist* and the ensuing debate. *Journal of Integrative Environmental Sciences* 7(1), 23–52.
- van der Linden, S. L., Leiserowitz, A. A., Feinberg, G. D. & Maibach, E. W. (2015) The scientific consensus on climate change as a gateway belief: Experimental evidence. *PLOS ONE* 10(2), 1–8.
- van der Linden, S., Leiserowitz, A. & Maibach, E. (2019) The gateway belief model: A large-scale replication. *Journal of Environmental Psychology* 62, 49–58.