

Dear Editors,

Thank you for provisionally agreeing to publish our Analysis article. We would like to thank you again for your thoughtful suggestions and critical feedback. In this cover letter we describe how we have revised the essay to address each of your recommendations.

**:: We felt that the title could better represent the article content, e.g. ‘Policymaking during crises: encouraging scientific disagreement among experts can de-politicize decision making’**

We would prefer, if possible, to keep the original title. We are keen to avoid the language of ‘de-politicization’ because to us it implies that there could — in a policy-making context of uncertainty, complexity, and multiple competing values and priorities — be an un- or non-political science, which we doubt. We thus prefer to talk of organising or managing the politics of expertise such as to limit the most damaging ways in which it can be misused by political leaders.

We also want the title to foreground diversity and make explicit the connection we see between diversity and disagreement. That is, we do not want to give the impression that we encourage scientific disagreement for its own sake, but rather we want to promote conditions in which a diversity of disciplines and perspectives are brought together and in which resulting disagreements and the reasoning behind them can be organised and made public.

**:: Can you clarify what is meant by ‘open disagreement’ in the standfirst? Do you mean transparency about disagreement? Or to promote disagreement by inclusion of diverse views that should be open for all to see?**

We have changed the wording in the Standfirst from ‘open disagreement’ to ‘openness about disagreement’. We did not want to use the word ‘transparency’ because we distinguish in the body of the essay between our call for making public carefully crafted statements of the reasons for expert disagreement and measures (which often go under the banner of ‘transparency’) such as publishing committee deliberations or minutes. We have clarified this further in a revised version of the last part of the Standfirst, which now reads as follows: ‘... and that we should reform expert advisory institutions so as to make public the reasons and rationales behind such disagreement.’

**:: Editors thought that the Donald Trump quote could be removed. We didn’t think it was a good example of the type of disagreement you go on to discuss.**

We have removed the quote, and added a few words clarifying the point that we hoped the Trump quote would illustrate. The sentence now reads: ‘At one extreme, when they give unwelcome advice they risk being dismissed on the grounds that they must be taking sides.’

**:: In the second principle you state: ‘Second, the inclusion of diverse disciplinary perspectives can help legitimize political decisions and support compliance’. Would it be possible to clarify what is meant here - compliance by whom and with what?**

We mean compliance by the public with policy measures decided by political authorities, and we have amended the sentence to clarify this point. The sentence now reads: ‘Second, the inclusion of diverse disciplinary perspectives can help legitimize political decisions and encourage public compliance with rules and regulations.’

**:: Currently, the example given is of face masks, which is essentially a policy decision. Editors thought it would be a useful addition to also mention the need for open disagreement among experts on the assumptions that drive these decisions, like the case fatality rate (or infection fatality rate). This is a key parameter, but remains widely debated, with significant implications for modelling and policymaking.**

We agree. We have added some clarification and amended this example, which now reads as follows: ‘Political leaders considering, say, whether to mandate the wearing of face masks, will find it harder to use experts as a shield for unpopular decisions when the rationales and justifications

behind expert disagreements — about, for instance, the assumptions used in modelling the effects of face masks on rates of transmission — are made public.’

**:: Where you refer to SAGE membership as being kept secret ‘until recently’, we wondered if you might consider updating this to ‘initially’ to reflect the passage of time.**

We agree. We have changed the wording to ‘initially’.

**:: ‘During the COVID-19 pandemic, political leaders in the United States and the United Kingdom have relied on advice primarily from medical experts (physicians, virologists, and epidemiologists), which is, of course, appropriate during a health crisis.’ Editors wondered if stating ‘of course... appropriate’ could be perceived as undermining your argument. You may wish to consider ‘understandable’ instead of ‘appropriate’ here.**

This is a good point, and your reading is closer to what we meant. We have replaced ‘appropriate’ with ‘understandable’.

**:: The second key message refers to ‘epistemic quality of expert advice’. Readers may not be familiar with this term and what it means, so we would suggest replacing it.**

We realise that this language reflects the jargon in our discipline, and we have thus removed the word ‘epistemic’, so the second key message now reads as follows: ‘We show that protecting and promoting open disagreement among diverse sets of expert advisers can both improve the quality of expert advice and make it harder for political leaders to blur the lines between expert advice and political judgments.’

**:: The last key message isn’t really a key message, more an outline of the article content. Please consider removing this or replacing it with something more akin to a take-home snippet**

This is a good point. We have decided against removing it, since we think the design of institutions is an important issue that is not given enough attention in the current debates around the role of experts within political decision-making procedures. An important take-away from our paper is that institutions matter, and that there is value in trying to think more creatively about how to design them.

We have thus decided to replace the line with the following: ‘We highlight the importance of institutional design in managing the politics of expert advice.’