Governance of the Deployment of Solar Geoengineering

How might we best define a research agenda for the governance of SG deployment?

David Keith and Jesse Reynolds
September 22, 2018
A research agenda for governing SG deployment

1. Who ought to and/or will specify criteria for SG deployment, and who ought to and/or is likely to decide when the criteria are satisfied?
2. What will or should these criteria be?
3. How should/will decisions about deployment be made; what decision-making process should/will be utilized?
4. What institutions, either existing or new, are appropriate as decision-making venues? What will or should be the legal framework of such institutions?
5. How might SG complement and/or undermine national, regional, and multilateral institutions and policy to mitigate or adapt to climate change – and, more broadly, to manage climate risks?
6. SG is both a hedge against uncertain but potentially catastrophic risks of (or, alternatively, damages from) climate change – and has its own associated risks, known and unknown. How can we better understand these uncertainties and incorporate them into useful decision-making processes?
Some (non?) research questions [1/2]

- How to balance the risks of both too much / too soon and too little / too late?
- Are certain “troubling” scenarios probable and problematic enough to warrant particular considerations?
- Should e.g. the UNSC and UNFCCC play roles?
- It is useful to separate considerations of governing SG deployment and that of research?
- How to balance perceived legitimacy to expected effectiveness?
- Should SG decision making be linked to other issues, and if so, how?
- How relevant is intentionality? And errors of commission versus those of omission?
- How can we proceed under such uncertainty?
Some (non?) research questions [2/2]

• Is SG genuinely novel? Are there useful analogies from which we can draw?
• If it useful to separate, in both discussions and in proposed governance mechanisms, the questions of whether to use and of how much to use?
• What is the role now, and in the future, of public(s) and their perception? And of elites?
• Why is there presently so little interest in SG? Might this change suddenly?
• Is the reduction of mitigation a genuine risk? Is the discourse still at a pre-“adaptation moment”?
• Do informal, non-legal norms have potential for governance?
• Who speaks for whom? Who governs whom? Who are we?
Some research questions?

- Historical analysis that examine dynamics relevant to SG potentially reducing mitigation
- Exploring the novelty or lack thereof via historical analogs
- Determinants of public and elite perception
- Mandate and actual practice of existing institutions, e.g. UNFCC
- Probing the "slippery slope" a.k.a. socio-technical lock in, using historical analogs that examine the links between research and deployment (or lack thereof)