The IPCC and key tensions in global climate politics

While the Intergovernmental Panel on Climate Change (IPCC) portrays itself as a neutral, scientific body, presenting the conclusions of thousands of climate researchers to policy-makers, its reports are at the same time routinely contested. In this short article we show that this is because those who seek to either criticise the IPCC, and/or shape the summaries of its key reports (summaries that governments can directly approve), recognise the IPCC’s power in shaping the global response to climate change. We explore some key conflicts that have endured since the IPCC’s establishment in 1988, notably over: how scientists seek to demarcate the boundary between science and politics within the organisation; the underrepresentation of expertise from the global South in IPCC processes, and; attempts to undermine the authority of the IPCC by attacking the authors, the assessment practice, and the knowledge produced.

Introduction: The struggle over the 1.5°C report

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released its special report on Global Warming of 1.5°C (IPCC 2018). The framing, content, and reception, of this report, are indicative of the complex politics of the IPCC. Superficially, this body can be identified as a knowledge provider – an intergovernmental body mandated to provide the global community with the latest knowledge on climate change and how to address it. But once its location and role in global climate politics, alongside its practice for producing assessments are given closer scrutiny, the social and political forces that characterise all aspects of its work become apparent. Thus, far from the politics of the 1.5°C report being novel, in fact they reflect long standing dynamics that we seek to unpack in this article, and to identify their potential mark on the IPCC’s future.

The IPCC 1.5°C report was presented at the 24th Conference of the Parties (COP24) to the UN Framework Convention on Climate Change (UNFCCC) in Katowice, Poland in December 2018. It is convention at UNFCCC COPs for the IPCC Chair to present the key findings. There was particular spotlight on this event, however, because governments requested the IPCC to provide an assessment of the impacts and pathways to limit global temperature rise to 1.5°C in the Paris Agreement (UNFCCC 2015). However, during negotiations, views quickly diverged on whether Parties would ‘welcome’ the report or simply ‘note’ it (ENB 2018, 28-9). The US administration under Trump teamed up with old allies in Saudi Arabia, Kuwait and Russia to oppose ‘welcoming’ the report, out of concern that it would convey support for a 1.5°C
target and increased ambition (see McGrath 2018a). Although other countries strenuously protested this refusal, the consensus rules in the UNFCCC process meant their interventions were unsuccessful, and the COP merely ‘noted’ the IPCC report (ENB 2018: 25).

Why does it matter whether an IPCC report is welcomed or noted by global climate negotiators? And what does it tell us about the role of the IPCC and the relationship between science and politics in climate change? The rhetoric of some of the NGOs and negotiators criticising the US is revealing in this regard. At the intersessional UNFCCC meeting in Bonn in June 2019, a regular refrain by NGOs and states such as Mexico and Switzerland was that ‘climate science is not negotiable’ (ENB 2019; McGrath 2019). At COP24 itself, Camilla Born of E3G (an environmental thinktank) asserted that ‘climate science is not a political football’ (as quoted in McGrath 2018b). Ambassador Lois Young from Belize, as chair of the Alliance of Small Island States, went further, arguing that ‘Disregarding or qualifying the best available science is tantamount to climate denialism,’ (as quoted in McGrath 2019). These attempts to ‘depoliticise’ climate science however, are themselves political – stating that climate science is not a ‘political football’ is precisely to kick it around as if it is.

This struggle highlights how the political implications of climate knowledge affects the reception of climate science within the IPCC and more broadly. We can see this in how the 1.5°C report’s key messages generated triggers for particular actors. The enhanced urgency (‘12 years to save the world’) and the depth of emission reductions the report identified as necessary, re-ignited longstanding resistance to climate action by the world’s major oil exporting states, particularly Saudi Arabia, which has shaped IPCC reporting since the beginning (Leggett 1999). In the US, Trump’s election has reinvigorated historical cycles of scepticism towards the IPCC (see Leggett 1999; Schneider 2009), and empowered politicians, notably Mitch McConnell, that have made the revival of the fossil fuel industry central to their political strategy.

The struggle over the 1.5°C report also tells us something about the status and role of the IPCC in global climate politics – its symbolic power (Hughes 2015). It demonstrates governments’ awareness that IPCC helps shape the global response to climate change: IPCC reports structure how many actors address climate change, often in highly subtle but important ways. Saudi and US delegates recognise that the IPCC’s messages need to be tightly controlled, and that the influence of the IPCC over the UNFCCC needs to be carefully guarded.

Consequently, the contestation of IPCC knowledge does not start at its arrival at the UNFCCC or even during the intergovernmental approval of the report’s key findings, which is where it most often publicly appears (see for example Smith 2019; Stavins 2014). These struggles begin at the start of each assessment cycle and can be traced from the ‘scoping’ of the report, through
the government review, to the intergovernmental approval of the Summary for Policymakers (SPM). Although rarely acknowledged by IPCC actors or well-evidenced in the literature, the intertwining between the IPCC and the UNFCCC or the science of climate change with the political response is readily observable once you become more familiar with this intergovernmental scientific body.

The impact and intertwining of climate change politics on IPCC knowledge production requires careful observation and analysis. The political implications of IPCC knowledge production processes are apparent from some of the most well-studied themes in IPCC scholarship. These include: 1) how IPCC actors seek to demarcate the science from the politics within the organisation; 2) the underrepresentation of expertise from the global South in the authorship of the reports, and; 3) attempts to undermine the authority of the IPCC by attacking the authors, assessment practice and the knowledge produced. This article provides a brief history of the IPCC before focusing on these three debates.

**The history and role of the IPCC**

The IPCC was established in 1988 under the auspices of the World Meteorological Organization and the UN Environment Programme. From the start, it was an intergovernmental scientific body, meaning that member governments oversee the assessment process and approve the key messages in the SPM document. The context of the IPCC’s creation is worth revisiting to highlight the political forces shaping the organisation’s work from the outset.

The IPCC was established in late 1988, after climate change emerged in public view and on the political agenda through a combination of: extreme weather events; evidence given to the US Congress by climate scientist James Hansen, as well as those organising the ‘Toronto Conference’, which focused media attention on climate change; and relatedly, the development of an epistemic community that provided a ‘scientific consensus’ on climate change (Paterson 1996: ch.2). These dynamics generated pressure that led some governments to push for more direct political intervention (e.g. Thatcher 1989). The decision to create an intergovernmental scientific panel in 1988 instead of initiating multilateral negotiations however, was regarded by some as a holding strategy (Boehmer-Christiansen 1994), and an attempt to put the science on a ‘tight leash’ (Haas 2005, 396).

The IPCC was established to provide up-to-date knowledge of the climate change issue through the production of assessment reports. There have been 5 reports to date, from 1990 to 2014, with a sixth due for publication in 2020. The production of the reports is divided into three working groups, focused on the scientific basis (WG I), impacts and adaptation (WG II), and mitigation options (WG III).
Demarcating science and politics

The pathway for producing an IPCC report begins with the panel’s (member governments) decision to repeat the assessment cycle and the election of co-chairs – the scientific leadership – to oversee it (IPCC n.d.). Once elected, the co-chairs and rest of the WG bureau identify the core topics through a scoping process that includes authors from the last assessment and other identified experts, alongside the WG bureaux and some IPCC member governments. The outline, which dictates chapter titles and the specific topics to be covered, is then subject to panel approval. Panel members involved in this are diplomats from each UN member country, many of whom are also UNFCCC negotiators.

Next, the Co-Chairs and the Technical Support Unit (TSU) for each working group coordinate the selection of authors for each chapter. This occurs through a combination of self-nomination, government and International Organisation nominations, and TSU attempts to fill specific gaps or regional representation. The bureau for each working group selects authors from the nominated researchers, guided both by scientific measures of authority and IPCC rules and procedures that state the need to include “a range of views, expertise and geographical representation” (IPCC 2008). More recently, consideration has also been given to gender balance.

The chapters develop over the course of four lead author meetings, guided by the approved outline. Each draft of the report is subject to review, with later versions subject to both external expert and government review processes. At the same time, the SPM is developed to identify the key messages of each chapter and the report as a whole. The SPM is subject to government approval, and receives the most attention and scrutiny of all IPCC outputs. The 4-day process for member governments to approve the final wording of this SPM has become the most keenly observed component of the IPCC process. The long drawn out negotiations over every word and figure has led some authors to complain that this is a document written by governments rather than for them (Pidcock 2014; Stavins 2014).

This brief description highlights how political and scientific processes are closely intertwined in producing IPCC reports. The IPCC attempts to keep science and politics demarcated through rhetorical strategies, including through the organisation’s official role in providing ‘policy relevant’ not policy prescriptive formulations of the climate change problem. This demarcation is keenly observed and commented on in IPCC scholarship (Sundqvist et al 2018). While some consider the separation between science and politics necessary for generating authoritative and legitimate knowledge (Haas 2004), others regard intertwinement inevitable and necessary for the political relevance of the knowledge produced (Lidskog and Sundqvist 2015). Both positions are true, outwardly the practice of demarcating science from politics is important to the authority of IPCC assessments. Yet, as our description of the assessment practice and opening story of the 1.5°C report demonstrate,
science and politics are intertwined and however presented, knowledge of climate change is deeply political.

**Global inequalities in knowledge production**

One of the most recurrent themes on the IPCC agenda and in IPCC scholarship is the inequalities between global North and global South knowledge production and participation (Agrawala 1998; Hughes and Paterson 2017; Ho-lem et al. 2011; Kandlikar & Sagar 1997; Yamineva 2017). IPCC author teams are typically dominated by researchers from North America and Europe. For example, in the second, third and fourth reports, between 80 and 82% of authors came from OECD countries (Hulme and Mahony 2010: 709). Although by the fifth report (AR5), China, India and Brazil had emerged as important contributors, the dominance of the US and UK remained evident (Corbera et al 2016; Hughes and Paterson 2017). The IPCC recognised this issue early on, establishing a Special Committee to enhance developing country participation and a fund to support developing country attendance at IPCC meetings (IPCC 1990). The fact that these disparities persist, can in part be explained by the differences in experience for global South participants, notably differential access to the latest published research, the dominance of English within IPCC processes, and scientific culture that perceives and measures participants according to institutional affiliation and publication record (Gay-Antaki and Liverman 2018; Hughes and Paterson 2017; Ho-Lem et al 2011).

One response is to argue that the IPCC should only be concerned with including the best climate science, and that global representation is irrelevant. Many IPCC authors have echoed this sentiment, regarding scientists from the global South as less qualified and political appointees (IAC 2010). But all climate knowledge is political: serving better some courses of action and actors than others. As the 1.5°C Report example highlights, governments are perhaps more aware of this than the scientists. The IPCC’s legitimacy has thus always rested upon global participation and the global coverage of its assessments (Schneider 1991). If knowledge inequalities leave country-specific vulnerabilities unidentified (Karlsson et al. 2007), IPCC reports are less relevant to the countries that need them most. Conversely, as national participation in IPCC assessment activities increase, so too does developing country governments’ investment in and support for the organisation.

**Contesting the IPCC**

The IPCC’s centrality to global climate politics has made it a target and an important site for contesting the science of climate change. Exploring this contestation again highlights how global power relations shape climate knowledge.

Environmental groups and climate scientists have regularly targeted the IPCC arguing that its reports are too conservative. However, the majority of attacks on the organisation come from those with interests in denying the scientific
reality of climate change and thus the need to transition away from fossil fuelled economies. The ‘end of fossil fuels’ has become a more explicit IPCC message since the AR5’s focus on ‘net zero emissions’ (IPCC 2014), but the threat to fossil fuel interests from climate science has always been clear.

Through organisations like the Global Climate Coalition (GCC), fossil fuel interests mobilised around the IPCC early on, as part of their general mobilisation against action on climate change (Newell 2000; Oreskes and Conway 2011). In the approval of the IPCC’s Second Assessment Report, the head of the GCC, Don Pearlman, was observed handing the Saudi delegation repeated objections that delayed the approval of the text (Leggett 1999, 224-30). After the publication of this report, whose key finding was the detection of a ‘discernible human influence on global climate’, one of the drafting authors of this text, Ben Santer, was publicly accused of altering text after official government approval, in breach of IPCC rules (IPCC 1995; Lahsen 1999). Shortly after, lobby groups used scientific uncertainties and allegations of IPCC malpractice as part of their opposition to the Kyoto Protocol in the US.

Similar attacks targeted IPCC authors in the run-up to the UNFCCC COP in Copenhagen in 2009. This time, emails between scientists at the University of East Anglia were unofficially released (Maibach 2012; Pearce 2010a). The contents of informal conversations between colleagues were used by various sceptic groups to attack the credibility of climate scientists by accusing them of falsifying data and excluding certain authors and journals from the ‘peer reviewed’ literature assessed in IPCC reports (Maibach 20112).

This demonstrates the impossibility of insulating the IPCC from the political struggle its products generate. The IPCC has provided a number of important but often indirect ways of thinking about climate change that have shaped the political responses. Those that attack the IPCC recognise these political implications and seek to undermine their effect by attacking the science that underpins them at key moments in the global political process.

Two examples illustrate the IPCC’s significant structuring effect. One is that the entirety of climate governance is predicated on commensurating different greenhouse gases with each other. This is referred to as the Global Warming Potential, and was developed in the process of producing the first IPCC report in 1990, as a way of working out the relative contributions of each gas to climate change. The device of the GWP itself, and the specific numbers relating different GHGs to each other, have proven powerful in shaping responses to climate change, providing the infrastructure for national GHG inventories, the design of carbon markets, and more (Paterson and Stripple 2012).

The second is a figure in the Fourth Assessment Report from 2007 that has become known as the ‘Bali box’ (Lahn and Sundkvist 2017). This started life in a chapter on policy responses in the WG III report. The figure provided a representation of how emissions might evolve for industrialised and developing countries, given various assumptions about the trajectory of emissions,
their climate impacts, and equity principles for distributing the burden between rich and poor. The design of the box, and some of the specific numbers included, became deeply entrenched in the debates within the UNFCCC over the design of an agreement to replace the Kyoto Protocol when it expired in 2012. Of particular importance was how the take-up of its framing of 'significant departure from business as usual' regarding the emissions levels of developing countries. Many developing countries themselves used the framing, which represented a shift in position away from insisting that only industrialised countries had obligations to reduce their emissions.

Conclusion

Our aim has been to explore the complexity of the IPCC’s position in the science and politics of climate change, and through the process place the struggle over the IPCC 1.5°C report in a historic context. This reveals that far from contestation over whether to note or welcome the report being a novel event, many of the actors involved have a long history of undermining or at least seeking to control the implications that the IPCC and its reports have on global climate action. Thus, despite attempts to place the organisation and its reports on the side of science and separate from politics, this contestation makes apparent that the IPCC does and has shaped the societal response to climate change in important ways.

Our description of the IPCC’s establishment as an intergovernmental scientific body and the role of member governments in approving the report outline and final key messages highlight the intertwinement between science and politics in practice. In fact, even those ‘purely’ scientific activities, such as scientific measures of contribution to knowledge through publication record are proven to have political effects when developing country scientists and governments feel excluded from the process and thereby suspicious of the IPCC’s core findings and their implications on negotiating processes. And as the Bali Box example illustrated, this is not without good reason, all climate knowledge serves some actors better than others, although rarely in every instance.

These dynamics and struggles are not just relevant to the IPCC’s past – they also help us to understand and explore the position the IPCC finds itself at present and its future role in global climate politics. The demands on the IPCC made by governments through the Paris Agreement in relation to the 1.5 report, future assessments and in approving methodologies for national reporting secure the organisation’s continued relevance to negotiating climate action. As the stakes in this response continue to increase, so too will the contestation and struggle that the IPCC is placed within. This is likely to make navigating the line between science and politics and its mark on knowledge products one of the most important issues for the IPCC going forward.
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