26

Communications

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Overview

This chapter analyses the development of the policy of the Intergovernmental Panel on Climate Change (IPCC) for the communication of its reports, the content and style of its communication, and how its knowledge becomes reappropriated for alternative, often political, purposes. In doing so, we review IPCC policy documents, key literature on the IPCC and climate science communication, as well as providing a case study of a recent controversy in IPCC communication: the reappropriation of a paragraph from the IPCC Special Report on Global Warming of 1.5 °C (SR15) to headline a political campaign that there were only 12 years to prevent dangerous climate change. This controversy highlights the huge transformations in the political and media landscapes since the IPCC's formation in 1988 and opens up the question of whether its communication approach remains fit for purpose. We highlight how the IPCC's communication dilemma stems from the historic decision to design it to be an authoritative voice rather than a deliberative space.

26.1 Introduction

The importance of communicating authoritative scientific knowledge to multiple audiences was integral to the IPCC from its establishment in 1988. In his history of the IPCC, Bert Bolin, its first chairman, argued that 'forthcoming reports must be written by renowned scientists and in such a manner that ... would be read far outside the scientific community' and that 'there would be a need to reach out to the public, stake-holders, decision-makers and politicians' (Bolin, 2007: 48). Bolin's successor as IPCC chairman, Robert Watson, similarly described outreach and communication as one of the characteristics necessary to make scientific assessments useful (Watson, 2005: 473). With particular regard to public

https://doi.org/10.1017/9781009082099.032 Published online by Cambridge University Press

communication of climate science, Bolin identifies how a stringent assessment of the science could help to resolve disagreement between scientists and prevent a 'chaotic' debate with citizens (Bolin, 2007: 49). He further noted that 'the scientific community does not yet fully appreciate the way politicians make use of and the general public interprets the information that scientists provide' (Bolin, 2007: 199).

The imagined model here is one where different strands of the climate science literature are transformed by IPCC processes into a coherent and consensual knowledge product (see **Chapter 19**), which is then communicated to different groups outside climate science communities. However, this model could be more accurately referred to as 'science distribution' than science communication, with a view to persuading these groups as to the robustness and importance of the knowledge (Trench, 2008). While this model of science communication has been prevalent far beyond climate change, it was particularly embedded into the IPCC from the organisation's inception (see **Chapter 2**). Clark Miller identifies how, although the IPCC has an ostensibly global orientation in its framing of the climate system, a single political culture – that of the United States – has had a disproportionate influence on the organisation's design. This has established the IPCC as a means of projecting scientific authority, rather than as a space for deliberation around competing framings and meanings of climate change (Miller, 2009: 158–159). This quest for authority over and above the political fray has led the IPCC to prize global framings, scientific disinterestedness and consensus over local issues, policy relevance and plurality (Pearce et al., 2018). These trade-offs have implications for the IPCC's communication model, and while its 'just the facts' approach has established scientific authority, recent developments have reinforced the model's structural weakness in a world where media technology has transformed and methods for validating public facts are rapidly evolving (Marres, 2018).

This chapter takes these issues in turn. First, we review recent developments in the IPCC's communications strategy, which reinforce the importance of objectivity and authority. Second, we highlight key issues in the social science literature on IPCC communication and how these relate to the organisation's structural issues. Third, we focus on the recent '12 years' controversy as an example of how both epistemic authority and climate politics have changed in the last three decades, and the dilemmas this opens up for the IPCC in its communications strategy.

26.2 IPCC Communication Strategy: Authoritative Objectivity with Multiple Audiences

Notwithstanding the IPCC's involvement in outreach activities since the release of the Third Assessment Report (2001) (AR3), and despite controversies and

https://doi.org/10.1017/9781009082099.032 Published online by Cambridge University Press

increasing pressures from outside under the chairmanship of Rajendra Pachauri, it was not until 2012 that the organisation first adopted an official communications strategy (IPCC, 2021e; De Pryck, 2021b). This strategy was last revised in March 2021 and is guided principally by two policy documents produced by the IPCC Secretariat in consultation with the IPCC's Communications Action Team. These documents are, one, a review of the IPCC's Communications Strategy (IPCC, 2021e) and, two, the subsequently updated IPCC Communications Strategy of 2021 (IPCC, 2021f). In these documents, the IPCC adopts two central goals for its strategic communication efforts: to communicate the issue of climate change and to communicate its own organisational processes and structures. Phrased differently, it aims to communicate the scientific knowledge it produces and also how this knowledge is produced. The former centres on providing 'clear and balanced information on climate change' (IPCC, 2021f: 1), and the latter on underpinning this information with the IPCC's 'reputation as a credible, transparent, balanced and authoritative scientific body' (IPCC, 2021f: 1). Together, these goals construct the principal aim 'to establish the IPCC as the key science/policy interface organisation for climate change' (IPCC, 2021f: 2).

In its communications strategy, the IPCC defines for itself two 'primary target audiences' (IPCC, 2021f: 3), namely the United Nations and its intergovernmental processes – in particular the UN Framework Convention on Climate Change (UNFCCC) – on the one hand, and 'governments and policymakers at all levels' on the other (IPCC, 2021f: 3). Next to these two primary targets the IPCC lists a wide range of secondary audiences including the scientific, education, business and non-governmental organisation (NGO) sectors, and names various strategic communication goals, such as to build relationships with the media and to produce context specific 'tailor-made outreach activities' (IPCC, 2021f: 3). While their communications strategy points to third parties as intermediary communicators of IPCC assessments, it makes unmistakably clear that such third-party communication products must not be considered 'in any way products of the IPCC' (IPCC, 2021f: 3).

The IPCC's concern for authoritative objectivity is made explicit in its discussion of the selection and training of spokespeople, who are expected to 'focus on communicating a factual, objective presentation of information from the approved IPCC reports and refrain from public statements that could be interpreted as advocacy and compromise the IPCC's reputation for neutrality' (IPCC, 2021f: 5). In the review of its 2019 communications strategy (IPCC, 2021e), the IPCC positions this choice of audience as the central decision of any communication strategy. In particular, it posits a tension between targeting a specific core audience on the one hand and, on the other, reaching 'as many people as possible' (IPCC, 2021e: 9). The importance of the former is expressed as

concerning climate policy relevance, while the latter 'matters for overall impact and visibility' (IPCC, 2021e: 9). It is this distinction that underlies the demarcation between primary and secondary target audiences mentioned earlier. Interestingly, the IPCC does not position its attempts to reach a wider audience as a response to an impetus emerging from within the organisation itself. Rather, it is a response to the 'widespread and growing interest of the non-specialist public in our work' (IPCC, 2021e: 9). Notably, the IPCC expresses a need to 'understand advances in climate communications specifically, such as behavioural science' (IPCC, 2021e: 4) in order to pursue these objectives.

In addition to the review and strategy documents, in September 2020 the IPCC published a guidance note for authors of its Sixth Assessment Report (AR6) specifically on communicating climate change-related risks and risk management options. The note is in many ways similar to its much earlier guidance note on communicating uncertainties for the authors of its Fifth Assessment Report (AR5) (see Chapter 17). The issue of uncertainty, in fact, is one of the central points of discussion in its guidance concerning risk, with attempts to harmonise uncertainty communication across the IPCC's three Working Groups (WGs) proving challenging (Janzwood, 2020; see also Chapter 25).

26.3 Issues in IPCC Communication

The IPCC's approach to communication has been subject to wide-ranging criticisms in the social scientific literature. The majority of this literature assumes a linear model of communication by which the IPCC's efforts produce varyingly inadequate or insufficient outcomes among the so envisioned audiences. A long-standing and central element of this critique is the IPCC's communication of risk and uncertainty, an issue the IPCC is itself concerned about as seen in its author guidance documents. The issues discussed by the literature on the IPCC's approach to risk and uncertainty have included the following four: ambiguity in wording and subsequent invitation of interpretive biases by different readerships (Patt & Dessai, 2005); inconsistencies in communicating the distinctions between the different sources of uncertainty such as climate system response and future emissions (Ekwurzel et al., 2011); a too narrow communication of risks as statistical expectations detached from the strength of the knowledge supporting them (Aven, 2020); and a lack of concrete representations and efficacy information to motivate action (Poortvliet et al., 2020). In recent years the academic literature has raised a wider array of concerns regarding the IPCC approach to climate change communication. These concerns include the persistent reliance on a consensus policy in communication (Hoppe & Rödder, 2019), an unhelpful use of complex language and its subsequent misinterpretation (Bruine de Bruin et al., 2021) and,

https://doi.org/10.1017/9781009082099.032 Published online by Cambridge University Press

most radically, the prominence of an economic growth framing that some see as hindering a transition towards carbon-neutral societies (Kanerva & Krizsán, 2021).

Many of these critiques relate to the reception of IPCC communications by different audiences. Yet as Beck (2012) pointed out a decade ago, the relationship between the IPCC and wider publics cannot be reduced to whether or not communication is effective when the linear model of expertise that the IPCC operates under itself conditions transparency, accountability and public trust. Dudman and de Wit (2021) have recently pushed further in this more fundamental rethinking of forms of scientific appraisal and models of expertise and communication. These authors argue for the IPCC to adopt a reciprocal rather than a unidirectional approach in its communication efforts. Instead of focusing on further strengthening the voice of the IPCC, they propose a new approach to communicative thinking built around both speaking and listening that 'makes space for social complexity within the machinery of the institution' (Dudman and de Wit, 2021: 8). Nightingale et al. (2020) similarly argue that what guides current responses to climate change is a techno-scientific apparatus represented by organisations such as the IPCC. This apparatus insufficiently addresses how climate change acquires meaning and value – how it is known and experienced – while simultaneously disempowering people. In contrast, they argue that climate change needs to be addressed 'with contested politics and the everyday foundations of action, rather than just data' (Nightingale et al., 2020: 348). Many of the debates reviewed in this section map onto trends in the wider science communication literature; in particular, the shift from a deficit model of communication to greater dialogue between scientists and their audiences (Smallman, 2016). Next, we look at an emerging focus of science communication studies that is more specific to the IPCC: appropriation.

26.4 The Appropriation of IPCC Communication

Whether distributing knowledge or starting to engage in a more dialogic process, the IPCC remains a key actor in the communication of its knowledge. However, as climate change becomes ever more political, the likelihood increases that the IPCC's scientific knowledge will be appropriated by other actors without prior consultation. For example, Sanford et al. (2021) draw parallels between the responses to the 2019 IPCC Special Report on Climate Change and Land and the 2018 SR15 report, in particular the '12-year deadline' narrative emerging from the latter report that was appropriated by activists (see Box 26.1). It is in this context that the authors charge the IPCC to 'respond more effectively to distortions of the content of its reports' (Sanford et al., 2021: 21). Boykoff and Pearman (2019: 285) similarly identify the '12-year "deadline" trope' in the appropriation of SR15 and

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Box 26.1
The IPCC's communication dilemma over '12 years'

The recent '12 years' communication controversy demonstrates both the persistence of challenges identified in the early days of the IPCC, as well as the changing social context that the organisation finds itself in regarding climate change knowledge politics. SR15 was an important report, focusing on the global temperature target contained in the Paris Agreement and the first time that all three WGs collaborated on a single report (Bounegru et al., 2020). In Bert Bolin's terms, it provided a new iteration in the IPCC's efforts to resolve scientific disagreement and bring order to climate change knowledge. However, this impressive achievement did not have the effect Bolin envisaged of preventing a chaotic public debate. Rather, a new scientific and political controversy was sparked when an article in the UK national newspaper, *The Guardian,* interpreted two statements in the report as a warning that there were only '12 years to limit climate change catastrophe' (Asayama et al., 2019).

The '12 years' claim was taken up by newly prominent climate activists such as Extinction Rebellion and Sunrise Movement (Asayama et al., 2019), as well as becoming widespread in more establishment organisations such as the World Economic Forum and the UN Environment Programme (UNEP). The easy mobility of this claim arguably marked one of the greatest political impacts of any IPCC report. However, it provided both the IPCC and the wider scientific community with a dilemma: should they attempt to retake control of the narrative by pointing out the wider context for the statements underpinning '12 years', or accept – as Wimsatt and Beardsley argued 75 years ago – that the report is 'detached from the author at birth, and goes about the world beyond his [sic] power to intend about it or control it' (Wimsatt & Beardsley, 1946: 470). As it turned out, the IPCC did not issue any official clarification regarding the accuracy of the 12 years claim, although some prominent climate scientists did provide strong criticism of the idea that there was any 'cliff edge' in climate change related to 12 years (Freedman, 2019). This was a resolution of sorts to the dilemma. But it highlighted a new problem for the IPCC: having spent years crafting an authoritative, consensual voice of climate science as a bulwark against climate sceptics, accusations of misinterpretation were now being levelled at those wanting an acceleration in climate action.

its potentially obstructionist effects. The effect, they claim, induces fear and disengagement and points to a 'critical need for more creative, co-produced, and innovative ways to meet everyday people where they are on the existential collective-action problem of climate change' (Boykoff & Pearman, 2019: 287).

Similarly to the discussions summarised earlier, some scholars argue for a more fundamental shift away from concerns about the communication of knowledge to concerns about how the IPCC's knowledge is produced and applied. Drawing on

surveys and interviews with, among others, policy-makers – and using the IPCC's AR5 report – Tàbara et al. (2017) argue that it is not the adequacy or inadequacy of assumptions about knowledge that stand to be critiqued and transformed. Rather, it is the assumptions of the IPCC's knowledge systems, their interactions and normative positions. What climate policy requires, they conclude, are 'new knowledge integration spaces in which meaningful dialogues leading to solutions and new forms of communication strategies can be jointly elaborated' (Tàbara et al., 2017: 36), rather than further attempts to fill knowledge gaps and deficits (Hulme, 2018).

It is also noteworthy that much literature on the IPCC's communication efforts is concerned almost exclusively with a universalisation of climate change and its communication. The literature on the appropriation of IPCC's knowledge, however, shows more concern for particularities, especially in local appropriations. Studies illustrating this critique would include analysis of the coverage of IPCC reports in Japanese mass media, domesticating the global to the national and blurring lines between science and politics (Asayama & Ishii, 2014), or the particularised perceptions and representations of climate change as a social phenomenon emerging out of political and media contexts in Spain (Teso-Alonso et al., 2021).

26.5 Achievements and Challenges

The IPCC has unquestionably transformed the production and communication of climate change knowledge, and there is now widespread awareness and acceptance of some basic facts about climate science, even in the traditionally sceptical USA (Pearce et al., 2017b). By projecting its authority as a novel organisation at the interface of climate science and policy, the IPCC has established a widely accepted baseline of climate knowledge, with reports prompting discussions of climate science across mainstream and social media, and frequently referred to by a broad range of actors. The IPCC has attempted to learn from previous missteps, developing a more comprehensive communications strategy in response to criticisms from the InterAcademy Council regarding uncertainty communication and the acknowledgement of errors (Beck, 2012). The IPCC is also starting to demonstrate increased reflexivity on the context for its science communication, with a section in Chapter 1 of the AR6 WG1 report (IPCC, 2021a) explicitly addressing the new media context for its work.

However, despite these advances, the IPCC remains faced with structural challenges to communication. As the IPCC has helped broaden awareness of scientific knowledge about the physical processes of climate change, so the focus of opposition has shifted to the efficacy and impacts of 'policy options and

solutions' (Bounegru et al., 2020). For example, in 2021 the Global Warming Policy Foundation – a UK body renowned for its climate scepticism – transmogrified into Net Zero Watch. In its previous incarnation, the Foundation gave prominence to a flatlining global temperature graph. Now it focuses on the economic impacts of net zero, where values are likely to play a prominent role in choosing, for example, how future damage from climate change should be valued in the present (Jasanoff, 2010b). The IPCC has less leverage in these areas, as the institution remains explicitly *not* 'policy-prescriptive' and does not engage in controversies about their reports.

Looking forward, the IPCC could, in theory, adopt a radically different deliberative model closer to that envisaged by Clark Miller (see **Chapter 27**), more attuned to the shift in attention to political climate change issues where values are more prominent. This 'cosmopolitan' approach could enable a shift from knowledge distribution to more genuine dialogue (Raman & Pearce, 2020). For example, the IPCC could provide space for people to declare and discuss their hopes and fears about climate change, prompted by normative questions such as 'how shall we live?' (Corner & Groves, 2014). Such a move would require the re-structuring of IPCC reports, providing a means of directing the IPCC assessment agenda towards topics of public interest. Undoubtedly such a shift would bring risks for the IPCC and for its position as an epistemic authority in climate politics. Equally risky perhaps, would be for the IPCC to persist in its commitment to policy neutrality in a world where these climate politics are becoming ever more contested and urgent. Either way, the IPCC cannot afford to proceed without a meaningful reflection on the impacts and implications of its communication practices within a rapidly evolving political climate.

Three Key Readings

Asayama, S., Bellamy, R., Geden, O., Pearce, W. and Hulme, M. (2019). Why setting a climate deadline is dangerous. *Nature Climate Change*, 9(8): 570–572. http://doi.org/10.1038/s41558–019-0543-4

This paper focuses on the rise in 'deadline' rhetoric following the IPCC SR15, and the challenge of maintaining policy neutrality when its assessments are used for political purposes.

Hoppe, I. and Rödder, S. (2019). Speaking with one voice for climate science – Climate researchers' opinion on the consensus policy of the IPCC. *Journal of Science Communication*, 18(03): a04. http://doi.org/10.22323/2.18030204

This article shows how support for the IPCC's consensus model of communication varies according to researchers' disciplinary background, with greater support coming from climate scientists than from social scientists.

O'Neill, S. and Pidcock, R. (2021). Introducing the topical collection: 'Climate Change Communication and the IPCC'. *Climatic Change*, 169(3): 19. http://doi.org/10.1007/s10584–021-03253-3

This editorial introduces a topical collection of research on the IPCC and climate communication, and suggests that the IPCC could shift from a communication strategy to an engagement strategy, as well as 'road testing' more deliberative and dialogic approaches to communication.