ADVANCED REVIEW



Check for updates

Deliberative democracy and the climate crisis

Rebecca Willis¹ | Nicole Curato² | Graham Smith³

¹Lancaster Environment Centre, Lancaster, UK

²Centre for Deliberative Democracy and Global Governance, University of Canberra, Canberra, Australian Capital Territory, Australia

³Centre for the Study of Democracy, University of Westminster, London, UK

Correspondence

Rebecca Willis, Lancaster Environment Centre, Lancaster LA1 4YW, UK. Email: r.willis@lancaster.ac.uk

Edited by: Stuart Capstick, Domain Editor and Mike Hulme, Editor-in-Chief

ABSTRACT

No democratic state has yet implemented a climate plan strong enough to meet the goals of the Paris Agreement. This has led some to argue that democracy cannot cope with a challenge of this magnitude. In this article, we take stock of the claim that a more deliberative democratic system can strengthen our ability to respond effectively to the climate crisis. The most visible development in this direction is the recent citizens' assemblies on climate change in Ireland, France, and the UK. We begin our analysis of the promise of deliberative democracy with a recognition of the difficulties that democracies face in tackling climate change, including short-termism; the ways in which scientific and expert evidence are used; the influence of powerful political interests; and the relationship between people and the politicians that represent them. We then introduce the theoretical tradition of deliberative democracy and examine how it might ameliorate the challenges democracies face in responding to the climate crisis. We evaluate the contribution of deliberative mini-publics, such as citizens' assemblies and juries, and look beyond these formal processes to examine how deliberation can be embedded in political and social systems around the world. We conclude that deliberation-based reforms to democratic systems, including but not limited to deliberative mini-publics, are a necessary and potentially transformative ingredient in climate action.

This article is categorized under:

- Perceptions, Behavior, and Communication of Climate Change > Communication
- Policy and Governance > Governing Climate Change in Communities, Cities, and Regions

KEYWORDS

citizens' assemblies, climate change, deliberative democracy, deliberative mini-publics, democracy

1 | INTRODUCTION

If democratic states are to respond adequately to the climate crisis, they must find ways to steer far-reaching programs of action through democratic governance systems. Although all major democracies are signed up to the Paris

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Authors. WIREs Climate Change published by Wiley Periodicals LLC.

Agreement, none yet has a national climate plan compatible with this goal (Climate Action Tracker, 2020). In this article, we ask how deliberative democracy, both as a theoretical orientation and as a practical project, could provide a way of addressing the difficulties that democratic systems face in responding to the climate crisis. What accounts for the increasing popularity of deliberative democracy? How viable is a deliberative approach to politics in contexts of sharp inequalities and entrenched political interests? What are the precise ways in which deliberative politics can be embedded in different political contexts? This review article provides an overview of the answers to these questions.

We begin this article, in Section 2, with a discussion of the challenges that democracies face in acting on climate change, including barriers to long-term thinking; problems with the way in which technical and scientific advice is used in the political process; the influence of powerful interests; and the extent to which democracies encompass and represent the range of people's views and values. In Section 3, we outline the theory and practice of deliberative democracy. We consider how deliberative democratic approaches might help to overcome the problems identified. In Section 4, we take a more detailed look at deliberative mini-publics, such as Climate Assembly UK and the French Convention Citoyenne pour le Climat, and assess the extent to which these can be seen as deliberative democracy in action. In Section 5, we discuss their limitations, including the extent to which their findings are considered and adopted by political decision-makers. We go on to assess other expressions of deliberative democracy, in Section 6, such as informal citizens' councils established in the wake of extreme weather events in the global south. In conclusion, we look more broadly at the prospects for creating more deliberative democratic systems to tackle the climate crisis.

2 | CAN DEMOCRACIES HANDLE CLIMATE CHANGE?

The scientific case for swift and radical action on climate change is compelling and is accepted by nearly all national governments, as shown by participation in UN negotiations, and signatories to the Paris Climate Agreement (Intergovernmental Panel on Climate Change, 2018). Concern about the climate crisis is high, and increasing, across the world (Fang & Huang, 2020). Numerous modeling studies have demonstrated that proven technologies and strategies, if implemented, would allow the agreed stabilization targets to be reached. Yet no major countries, democratic or otherwise, currently have a national climate plan compatible with their Paris pledges. Current tracking of climate pledges suggests that the world is on course for 2–3 degrees of warming, not the stabilization at "well below 2 degrees" that scientists and political leaders committed to at Paris (Climate Action Tracker, 2020).

In such circumstances, it seems justifiable to conclude that current democratic systems and practices are failing to respond adequately to the climate crisis. (We discuss the record of nondemocratic regimes in Section 3.2.) Many explanations have been put forward for this failure. They can be grouped as follows, though there are many interlinkages. First, issues of temporality, or the ability of democratic decision-making to consider the medium to long term and the needs, views, and values of future peoples (Krznaric, 2020, 2021; MacKenzie, 2018; Smith, 2021). Second, the way in which technical, scientific, and expert advice is used in the political process (Demeritt, 2001; McNeil, 2013; Wynne, 2010). Third, questions of power, and the influence of entrenched interests on political decisions (Brulle, 2019; Lamb et al., 2020; Oreskes & Conway, 2012). And fourth, the responsiveness of representative democracy, or the extent to which citizens' views and values are considered in democratic decision making (Offe & Preuss, 1991; Saward, 2010; Smith, 2009). These issues are not, of course, specific to climate. Similar questions are raised around, for example, complex future technologies such as genome editing or polarizing political debates such as Brexit.

Despite these obvious problems, the question of how to develop effective political strategies for climate—how to steer climate action through democratic systems—has been neglected, in both research and practice. A 2013 review of published climate strategies noted that "the strategies did not go into great detail about how to address social equity or governance aspects," and that there is little attention paid to "mobilizing the required level of political leadership and public support for rapid transitions. This remains the most significant gap in post-carbon economy transition strategies" (Wiseman et al., 2013, p. 91). A 2019 study of UK social science research on climate found that, while questions of technical governance and policy design have been well studied, there has been less attention paid to the crucial question of how such solutions might be implemented, and by whom (Fankhauser et al., 2019).

To the extent that the democratic system has been discussed, a minority, though influential, view states that democracy is fundamentally incapable of an adequate response to climate, and the answer must lie in some form of eco-authoritarianism, or at the very least a greater role for experts in steering climate governance (Beeson, 2010; Hickman, 2010; Shearman & Smith, 2007). We discuss these arguments in Section 3.2. For many, however, the answer

lies not in abandoning democracy, but in improving the functioning of democratic systems in such a way that they respond better to the climate crisis. Deliberative democracy is a field of scholarship and practice that champions this agenda. Its advocates argue, in essence, that greater democratic engagement is a crucial ingredient in climate action—that, simply put, there is a need for "more democracy, not less" (Willis, 2020a, 2020b, p. 82; see also Smith, 2021).

In recent years, these ideas have been increasingly influential, resulting in a number of institutions known as "deliberative mini-publics" (DMPs; Curato et al., 2021; Grönlund et al., 2015; Smith & Setälä, 2018) being established on climate change. Ireland's Citizens' Assembly ran from 2016 to 2018 and spent time considering Irish climate policy in 2017. Dedicated national climate assemblies have followed in France, the UK, and other European nations, and a new network has been established to link these initiatives and support further assemblies (KNOCA, 2021). Similar processes of deliberation have taken place at the local level, such as citizens' juries in the UK cities of Leeds and Lancaster and citizens' assemblies in Camden, Oxford, and other localities (Bryant & Stone, 2020). An initiative aimed at convening a global Climate Assembly is also under way (Global Assembly, 2020).

In Section 3, we first examine the theoretical underpinnings of deliberative democracy, before considering its application to climate change. In Section 4, we go on to examine the rise of DMPs on climate issues.

3 | DELIBERATIVE DEMOCRACY

3.1 | What is deliberative democracy?

Deliberative democracy is a diverse set of ideas within political theory and practice that focuses on the conditions under which citizens' preferences are formed, and collective judgments made. Simply put, deliberative democracy places reasoned discussion at the heart of democracy. It "is grounded in an ideal in which people come together, based on the equal status and mutual respect, to discuss the political issues they face, and based on those discussions, decide on policies that will affect their lives" (Bächtiger et al., 2018, p. 2).

Deliberative democracy can be contrasted with more realist conceptualizations that view democracy in a minimal sense as "a competitive struggle for the people's vote" (Schumpeter, 1972, p. 269; see also Przeworski, 2010). Democratic realists understand democracy primarily as electoral competition between political parties vying for power. In such a view, the electoral process is the central mechanism for establishing legitimacy, with citizen input achieved through the aggregation of individual voter preferences. Often this is tied to a perception that citizens are too ignorant and disinterested in politics to form coherent policy preferences (Achen & Bartels, 2017; Brennan, 2016). Although this view has been, and still is, influential, it is clear that it is too thin a conception of democracy. There are many ways in which citizens engage in democracies, in addition to voting, including direct contact with politicians, via the media, civil society action, and so on; and many variables which can be used to judge the health of a democracy. For example, the Varieties of Democracy (V-Dem) project uses a suite of indicators to assess different regimes, including press freedom, women's participation, an independent judiciary, and educational outcomes. (V-Dem, 2021a).

Deliberative democrats argue for a broader conception of democracy. They focus in particular on the conditions under which people's preferences are formed, and how they come to collective judgments about the common good (Gutmann & Thompson, 2004; Manin, 1987). They challenge the view that citizens are too ignorant, or too disinterested in politics, often pointing toward the contextual factors that shape citizens' perspectives. As James Bohman argues, "Deliberative democracy, broadly defined, is... any one of a family of views according to which the public deliberation of free and equal citizens is the core of legitimate political decision making and self-government" (Bohman, 1998, p. 401).

What might a deliberative democracy look like in practice? This can be answered with reference to democratic principles, processes, and institutions. In terms of principles, deliberative democrats argue that we should strive to create political interactions that are "egalitarian, uncoerced, competent, and free from delusion, deception, power, and strategy" (Dryzek, 1990, p. 202). These are ideals, of course, but the crucial point is that democracies should strive to create these conditions.

In terms of decision-making processes, deliberative democrats stress the importance of considered judgment, based on good evidence and free and fair collective discussion (Steiner et al., 2004). In terms of institutions, deliberative democrats have assessed the extent to which established institutions, such as national parliaments and courts, match up to the ideals of deliberation (Gutmann & Thompson, 2006; Steiner et al., 2004). Beyond formal institutions, the extent to which deliberative democracy thrives in activist movements (della Porta & Doerr, 2018), in schools

(Nishiyama, 2019), and even in the intimate sphere of family and friendship groups have been the object of analysis (Tamura, 2014).

The area where most active academic and practical work on deliberative democracy is taking place is arguably on democratic innovations—institutions designed specifically to increase and deepen participation in political decision making (Fung, 2003; Smith, 2009; Warren, 2009). Prominent among these designs are "deliberative mini-publics" such as citizens' juries and citizens' assemblies which bring together randomly selected citizens (Curato et al., 2021; Grönlund et al., 2015; Smith & Setälä, 2018). The application of such mini-publics to climate change will be discussed in Section 4.

Recent scholarship on deliberative democracy has been critical of the tendency to focus on particular institutions, making the case for a more systemic understanding of how deliberation is fostered in political systems (Owen & Smith, 2015; Parkinson & Mansbridge, 2012). The way in which citizens are linked to decision-makers (Hendriks, 2016) and the broader ethos and culture (Hammond, 2020b), are critical to enabling deliberation. As we argue in Section 6, it is important to recognize the variety of efforts to embed deliberative ideals in contemporary politics and not be fixated with one particular institutional design (Curato et al., 2019).

Wider criticisms of deliberative democracy ask questions about the extent to which citizens can or should make complex decisions (e.g., Lupia & McCubbins, 1998); the difficulties of linking individual DMPs or instances of deliberation with the wider political system (e.g., Goodin, 2012); the privileging of certain types of communication (e.g., Sanders, 1997); and whether deliberation and consensus-seeking is a desirable or achievable goal of politics (e.g., Mouffe, 2000). Curato et al. (2017) summarize these critiques of deliberative democracy; in Section 5, we consider how they apply to deliberative processes on climate change.

3.2 | Deliberative democracy and climate change

In Section 2, we highlighted the difficulties that democracies have in facing up to climate change, including their incapacity to act in the face of longer-term threats; the way in which scientific or technical information is used in decision-making; the influence of vested interests; and the inadequate attention to citizens' considered views. Given these difficulties, some scholars have argued that democracy should be abandoned, or its scope restricted, by autocratic or technocratic decision-making. The veteran earth scientist James Lovelock once stated that "it may be necessary to put democracy on hold for a while" (Hickman, 2010; see also Rees, 2014). Other scientific groupings stop short of advocating an alternative to democracy, but propose a system of "earth system governance" (Biermann, 2014), in which scientists decide the biophysical limits within which governments and societies must operate. Yet these proposals beg their own questions. Hajer et al. (2015) coined the phrase "cockpitism" to describe the assumption that experts can steer the planet like pilots steer a plane, amassing evidence, assessing options, and then setting the correct flight path. While not explicitly anti-democracy, such visions gloss over the complex realities of political and social change (Willis, 2020a, 2020b).

Some go further and explicitly argue for authoritarian alternatives. China, in particular, is seen by some as an alternative model for climate policy—what is commonly termed "eco-authoritarianism" (Shahar, 2015; Li & Shapiro, 2020). Aside from questions about the morality or desirability of authoritarianism, it is not at all clear that such regimes deliver better climate outcomes, and neither do they outperform actually existing democracies in their capacity to consider the long term (Krznaric, 2020, 2021; V-Dem, 2021b). In contrast, deliberative democrats argue that rather than abandoning democratic principles and strategies, democracies can, and must, build more effective democratic mechanisms and practices to rise to the challenge of climate change and other systemic, long-term issues (MacKenzie, 2018; Smith, 2021).

In Section 1, we suggested four features in democratic practice that limit its capacity to deal effectively with climate change. Deliberative democracy provides different answers to how these weaknesses might be ameliorated. First, with regard to the endemic short-termism that seems to plague democracies, deliberative democrats highlight characteristics of deliberation that are likely to orientate politics to the long-term. In psychological terms, deliberation activates our System 2 or slow thinking (Kahneman, 2012; MacKenzie, 2018). Deliberation provides the space within which participants are able to move from more automatic, reactive, and fast System 1 thinking that is shaped by our immediate environment, to more considered and reflective forms of judgment. This is why deliberative democrats are attracted to institutions like deliberative mini-publics (Section 4) that are designed in such a way that participants can learn and scrutinize evidence and witness testimonies, listening and reflecting on others' arguments,

instead of being rushed or baited to form an opinion, as is too often the case in the digital public sphere, for example. The way that deliberation orientates participants toward the common good opens up the space for consideration of the interests of future generations as well as nonhuman others (Smith, 2003) and identifying shared goals and objectives (MacKenzie, 2018). Thus, a deliberative approach allows consideration of climate change as an ongoing crisis with significance in the short, medium, and long term, counterbalancing the tendency in politics to focus on the immediate.

Second, deliberation offers a systematic account of how technical and scientific expert advice should be drawn on in the policy process. Of course, scientific and technical input is an essential ingredient in any response to climate change. We cannot understand climate change without techniques of scientific observation, synthesis, modeling, and forecasting. Responses to the climate crisis, too, require understanding of different technical and technological options, such as the potential for uptake of renewable energy, or the feasibility of capturing and storing carbon dioxide. However, as has long been argued by scholars of science and technology studies, it is not simply a case of "translating" such evidence into action. Reactions to scientific evidence are complex and situated, influenced by social and institutional norms, cultures, and values (Demeritt, 2001; McNeil, 2013; Wynne, 2010). In short, scientific and technical evidence can describe the problem, and offer options on how to respond, but it cannot make decisions on behalf of society.

Thus, a deliberative approach recognizes the vital input of scientific and technical information into the decision-making process. Deliberative democracy is fact-regarding—it requires the consideration of the evidence. However, it recognizes that political decisions cannot be reduced to technical considerations. Deliberative democracy recognizes the variety of sources and forms of evidence. It makes explicit the consideration of moral and ethical positions, and recognizes the value of knowledge of differently situated actors, particularly those most vulnerable to the impacts of climate change (Hammond et al., 2020).

Third, turning to questions of power and influence, there is strong evidence that high-carbon interests, including the oil, gas, and coal industries, states which rely on fossil fuel exports, and high-carbon industries like airlines and car manufacturers, dedicate considerable resources to influencing political decisions, in order to obstruct or delay climate action (Brulle, 2019; Lamb et al., 2020; Oreskes & Conway, 2012). Deliberative democracy aims to counter the expression of power and interests for their own sakes. Deliberative democrats place emphasis on the power of the better argument, and on mutual justification between free and equal participants. Under such conditions, it is harder for vested interests to publicly defend their own short-term, self-serving preferences. This desire to create or protect spaces from the strategic influence of vested interests is why so many deliberative democrats have turned their attention to questions of institutional design.

Fourth, deliberative democracy understands the relationship between citizens and their political representatives as an ongoing process, one that is based on informed dialogue, in contrast to a focus on elections and voting intention. Contemporary democracy exacerbates the social difference and distance between the subjectivity, motives, and intentions of citizens and their political representatives who make decisions in their name (Offe & Preuss, 1991). As a result, politicians consistently underestimate and misunderstand public willingness to act on climate change, and the perceived lack of support from the electorate is a considerable barrier to political progress on the issue (Willis, 2018). More generally, the distance between citizens and their politicians is one of the causes of the widely documented decline in trust of government (Foster & Frieden, 2017). This poses obvious problems for climate action, given the vital role of government in steering economies and societies away from dependence on greenhouse gas emissions.

A deliberative approach aims to strengthen the relationship between citizens and their political representatives through continual communication or what Mansbridge (2019) has termed "recursive representation." In practical terms, this means that politicians and citizens interact not just through the ballot box or polling and focus groups, but through two-way discussions taking place in civil society, through the media, through deliberative processes such as those described in Section 4, and through direct interaction between politicians and citizens (Neblo, 2015). This allows politicians to move beyond strategic vote-seeking toward a richer engagement, learning from the knowledge, views, and values of citizens.

In summary, a deliberative approach can contribute to overcoming the problems that democracies face in dealing with the complex and long-term nature of the climate challenge; the need for careful use of scientific and technical evidence; the disproportionate influence of powerful political interests; and the distance between politicians and the citizens they represent. Deliberative democrats can offer no guarantee that deliberative democracy will "solve" the climate crisis, but the approach promises the creation of political spaces and systems within which the epistemological, moral and political challenges of the climate crisis are given fair treatment and considered judgments and collective actions can emerge.

4 | THE RISE OF CLIMATE ASSEMBLIES: A MANIFESTATION OF DELIBERATIVE DEMOCRACY?

The advent of citizens' assemblies on climate change, particularly the recent assemblies in France and the UK, has garnered attention and raised the profile of deliberative democracy among climate specialists. These assemblies are examples of deliberative mini-publics (DMPs): randomly selected bodies in which participants learn, deliberate and come to decisions on a matter of public interest (Curato et al., 2021; Grönlund et al., 2015; Smith & Setälä, 2018).

The evolution of DMPs predates theories of deliberative democracy: citizens' juries and planning cells were first instigated in the US (by Ned Crosby) and Germany (by Peter Dienel) respectively in the 1970s. Crosby and Dienel invented these processes independently and only became aware of each other's work at a later date. As the field of deliberative democracy developed, DMPs were advocated as a way of implementing deliberative democratic principles into a formal process. Since then, we have seen the emergence of many other DMP designs, including deliberative polls, consensus conferences, and citizens' assemblies (Gastil, 2005; Smith & Setälä, 2018).

Although there are many different forms of DMP, it is generally accepted that they have four broad characteristics (Fournier, 2011; Ryan & Smith, 2015; Smith, 2009). First, they aim to be as descriptively representative of the broader population as possible. This is typically achieved through *random sampling* to enable the inclusion of a broad range of perspectives and experiences and to ensure that no social group within a population is systematically excluded. In other words, DMPs are different from other fora such as town hall meetings, where a meeting is advertised and anyone can attend. Meetings like this tend to attract people who are already interested and engaged, reinforcing differentials in participation. To ensure a representative group, Climate Assembly UK used a "civic lottery" which is a two-stage approach. In the first instance, thousands of invitation letters were sent to households across the country. From those people who responded positively, a stratified random sample of 108 participants was selected that matched the characteristics of the UK population as a whole, in terms of age, gender, educational qualification, ethnicity, geographical location, and attitudes to climate change. The French Convention used random phone number generation to draw its sample using similar socio-demographic criteria.

Second, DMPs involve a *learning phase*, allowing participants to consider evidence and hear from witnesses or experts to develop their understanding of the issue in question. An independent advisory group typically oversees the selection of evidence and witnesses to ensure balance, with some processes giving participants themselves a say in which witnesses they wish to hear from.

The third feature is *deliberation*—structured discussion, typically led by trained facilitators. Discussion between participants and with experts and witnesses enables participants to consolidate their knowledge, develop their views and collaborate in generating ideas for action. The final feature is the *production of conclusions or recommendations*, which may be reached through consensus building, voting, or a combination of both.

It is through this combination of characteristics that DMPs embody the principles of deliberative democracy. Random selection ensures a high degree of political equality (no social group is structurally excluded), the input of witnesses ensures technical and experiential learning and the opportunity for participants to scrutinize evidence. Facilitation ensures free and fair communication between participants in the development of recommendations.

Reflecting on five decades of practice, the OECD (2020) suggests we are experiencing a "deliberative wave"—a noticeable increase in the use of DMPs across the world, commissioned to work on a variety of areas of public policy embodying varying degrees of controversy and complexity.

DMPs have been organized on aspects of climate policy for some years. Citizens' juries have been organized in Australia, Canada, and the United States, as well as the cross-national World Wide Views (Center for New Democratic Processes, 2016; Hanson, 2018; Hobson & Niemeyer, 2013; Rask et al., 2012). However, it is the recent emergence of climate assemblies that has captured attention. While the French Citizens' Convention on Climate and the Climate Assembly UK are the two most high-profile examples, further national climate assemblies are underway or under consideration, sub-national assemblies are burgeoning, particularly in the UK, and the world's first global assembly on the climate emergency is under way (Global Assembly, 2020).

The promise of climate assemblies is that the recommendations of citizens will break through the current political impasse on climate change that we described in Section 2. Citizens in a DMP are not constrained by party-electoral motivations or the influence of vested interests and are in a position to consider their own and others' futures (Smith, 2021). Through evidence and testimonials, citizens learn directly from scientists and other witnesses. They formulate their views through dialogue with each other and with witnesses, providing a route to understanding the complexity of climate science and policy, which contrasts markedly to opinion poll data, focus groups, or voting, which politicians often rely on as a proxy of citizens' views.

The national climate assemblies have developed positions which are more ambitious, and a more comprehensive response to the climate crisis, than national governments. For example, in Climate Assembly UK, there was strong support for the proposition that economic policies aimed at Covid recovery should align with climate ambitions (Climate Assembly UK, 2020). As one participant said, echoing a widely-held view, "I don't think oil or gas companies should be given bailouts, you're wanting to stop them anyway, so why support them—support the people who work for them but not the companies" (Climate Assembly UK, 2020, p. 488). The Assembly also backed aviation levies, similar to a "frequent flyer levy," which many politicians regard as politically problematic. Similarly, in France, members of the assembly voted in favor of a new law on "ecocide," which would make polluting companies and countries liable for their actions.

For politicians, the recommendations of DMPs can provide the necessary cover for action and indicate the willingness of citizens to accept potentially controversial policy interventions (Willis, 2020b). This happened in the Irish Citizens' Assembly on the constitutional status of abortion, long seen as a problematic issue for politicians. The recommendations from the Citizens' Assembly 2016–2018 provided a starting point for a more productive and less divisive political debate on the issue that eventually led to constitutional referendum (Devaney et al., 2020). For the wider population, the knowledge that policies have been proposed by people like themselves, having gone through an intense process of learning and deliberation, may well increase trust and confidence in recommendations (Warren & Gastil, 2015). A recent empirical study from Northern Ireland demonstrated that people who had not been directly involved in a DMP on constitutional issues trusted its recommendations because they had been developed by people "like me" (Pow et al., 2020).

5 | THE LIMITATIONS OF CLIMATE ASSEMBLIES AND OTHER DELIBERATIVE MINI-PUBLICS

There is a range of criticisms made about climate assemblies and DMPs: first, that citizens cannot cope with the complexities of climate science and policy, so the findings of DMPs cannot be relied upon; second, that DMPs have a limited effect on political decision-making; and third, that DMPs undermine the authority of politicians, by providing an alternative source of democratic legitimacy—an objection that is to some extent at odds with the second criticism. We consider these objections in turn.

Critics of the French Convention and Climate Assembly UK, largely from campaign groups such as Extinction Rebellion (2020), contend that their recommendations are not strong enough; that they do not amount to the radical transition that is necessary. This is not a criticism of the capacity of participants to consider such a transition, but rather of the task that the assemblies were set. In both cases, this was to propose policies to achieve specific reductions in carbon emissions: at least 40% reduction by 2030 in France and net-zero by 2050 in the UK. And, in both cases, these tasks were set by the commissioning authorities—President Macron, and the UK Parliamentary Committees, respectively. What this suggests is that the framing of any DMP is critical, but typically outside of the control of participants. Within the tasks they are set, then, are DMPs a suitable context within which to develop recommendations? Do they live up to their deliberative ideals?

For some (echoing the position of democratic realists), everyday people do not have the capacity to consider the complexity of climate change. They certainly do not become technical experts overnight. But then again, neither do most politicians who are making policy decisions. The question is whether they are in a position to make sound judgments and whether the diverse nature of the body is the basis for more inclusive and long-term decision making. Evidence from the last few decades of DMPs suggests that everyday citizens are willing and able to learn, deliberate, and make difficult decisions on often complex and controversial policy issues. A number of studies indicate the extent to which participation in a DMP increases efficacy, knowledge, and social learning (Boulianne, 2018; Fournier, 2011; Himmelroos & Christensen, 2014) and that DMPs are willing to make difficult decisions where politicians have failed to act. For example, in Climate Assembly UK, members voiced concern over technologies that promise to remove carbon from the atmosphere, like carbon capture and storage, worrying that such approaches might provide an excuse for inaction elsewhere. All these findings point to the ability of citizens to make sophisticated judgments, not just about the merits of particular technologies or approaches, but about the politics and power relations that lie behind them. However, this does require time and some DMPs have been rightly criticized for asking participants to cover too much ground with limited time (Bryant & Stone, 2020).

Even with trained facilitation, questions remain about the extent to which DMPs are able to overcome established differentials in participation. Facilitation ensures a more inclusive environment, but emerging evidence from different DMPs suggests that women's arguments are less likely to be taken up (Beauvais, 2021) and those with lower income contribute less often and may have less capacity to engage in deliberations (Gerber et al., 2018; Han et al., 2015). Evidence from other participatory processes suggests that broader racial dynamics can shape deliberation (Mendelberg & Oleske, 2000). These differentials have particular resonance if we expect DMPs to consider challenges of climate justice. Kahane (2018) develops these concerns when he asks whether DMPs are the right institutional model to deal effectively with the degree of change to economic and social systems that climate justice may demand. These are empirical questions that require more application and analysis of DMPs. It remains the case, however, that DMPs are more inclusive in their internal practices than most established political processes such as policy consultations, which have been shown to favor established interest groups (Lockwood et al., 2020). DMPs provide a way to hear from a more socially and cognitively diverse group of citizens, whereas policy consultations, which are generally are open to all, tend to favor those with the knowledge, resources, and motivation to respond.

The second area where DMPs are critiqued is their material impact on the policy process. We cannot know the long-term impact of these recent processes on climate policy, but the short-term response is indicative. In France, Macron announced before the Convention that recommendations would be considered "with no filter": proposals for referendums, legislation, and regulations would be considered by the relevant bodies without modification. While evidence suggests that the Convention and its recommendations enjoy extensive support from across the population, monitoring by Les 150 (L'association des Citoyens de la Convention Climat), a social enterprise established by the members of the Convention, indicates significant cherry-picking of proposals and a general reluctance of many in the political class to act on the recommendations (see Cherry et al., 2021). When he formally received its recommendations, Macron immediately dismissed three, including lowering speed limits on motorways, and amending the constitution to include the crime of "ecocide," on grounds that they were politically unacceptable. Equally, parliament has been highly selective in the incorporation of recommendations in the climate and resilience law that has been drafted in the wake of the Convention. The French case illustrates the danger of raising expectations about the direct impact of citizen deliberation in determining policies, and the extent to which a climate assembly can capture public and media attention in ways that are likely to continue to shape debates about climate action.

In the UK, the increase in the number of UK local authorities establishing climate assemblies raises some concern that their popularity may lead to their establishment without clear understanding of their implications. Under pressure from Extinction Rebellion and the Student Climate Strikes, many local authorities have declared climate emergencies. The creation of a climate assembly is for many the accepted next step. However, the quality of some of these initiatives and, again, how prepared local authorities are to receive and respond to the recommendations has been questioned (Bryant & Stone, 2020). The danger is that poor practice may undermine the potential of DMPs and may give these initiatives a reputation for serving as smokescreens for politics as usual.

This relationship between climate assemblies and the decision-making process of public administrations remains an area of contention. Most advocates of DMPs see them as advisory bodies. The expectation is that public bodies will treat their recommendations seriously. However, it is hard to judge the extent to which public administrations are fully prepared to receive and respond or are simply going through the motions (Fuji Johnson, 2015). Both politicians and public administrators can be resistant. Just as politicians often see their political discretion challenged, so too public officials who can see DMPs as a challenge to their professional expertise (Niessen, 2019). It is thus not surprising to find that decision makers are often only willing to embrace DMPs and other forms of citizen engagement when their recommendations are congruent with elite interests and preferences (Font et al., 2018; Fuji Johnson, 2015). In Poland, mayors have agreed to implement any proposal that achieves near consensus (above 80%) support: an innovation that introduces a degree of binding decision making to DMPs (Gerwin et al., 2018). It has been argued that the flood defenses in Gdansk are stronger because the mayor agreed to this binding clause. The practice of empowering DMPs in this way remains limited and somewhat controversial. The debate about the extent to which DMPs should be given meaningful political power continues to rage among theorists and practitioners, although the simplistic dichotomy of consultative versus empowered does not do justice to the different ways that DMPs can be integrated into political processes and policy systems. At the heart of these debates are issues of legitimacy about the role of a randomly selected group of ordinary citizens in democratic decision-making (Hammond, 2020a; Lafont, 2015; Smith, 2021).

We should not be surprised that DMPs generally fail to shift the dominant power relations of their political settings. This is arguably too much to ask of any single institution—especially one that is so novel. What is clear however is that DMPs are not passive institutions that fail to raise questions about existing dynamics of power and the way in which

vested interests shape political outcomes on climate policy. For example, one recommendation developed by Climate Assembly UK members that received 95% support from the participants, was "We need much more transparency in the relationship between big energy companies and the government, due to concerns over lobbying and influence" (Climate Assembly UK, 2020). Similarly, at the Leeds Citizens' Jury, participants developed a recommendation that opposed the expansion of the local airport, and their discussions revealed that they knew this was in contradiction to the aims of the airport, local politicians, and many business interests (Shared Future, 2019). These examples show that DMPs can provide a challenge to the status quo, and ask the "difficult questions" that might not be raised in the course of traditional policymaking dialogues and processes.

What these limitations in the practice of DMPs suggest is that we need to take the systemic approach to deliberative democracy seriously. We should not only be concerned with the internal workings of DMPs: Can they deal with the complexities of climate policy? Are they fully inclusive? Are they able to deal with systemic climate injustices? Arguably, the greater challenge is in relation to their integration into the political system: Can we be sure that they are framed in ways that allow for consideration of more fundamental issues, such as the compatibility of the capitalist growth model with climate action? Are public authorities and other institutions willing and able to act on their recommendations?

6 | MOVING BEYOND DELIBERATIVE MINI-PUBLICS

While DMPs have a high profile, we should be careful not to label them as the "gold standard" of deliberative democracy. Deliberative mini-publics are just one of many ways of institutionalizing mechanisms for the principles of deliberative democracy to flourish. There are many other participatory practices that can and do play a role in democratizing collective decision-making. Other institutions and initiatives practice inclusive deliberation to coordinate action among state and non-state actors holding divergent if not conflicting views. These processes do not use the logic of random selection to ensure representativeness, neither do they craft spaces for deliberation designed to generate recommendations. In many of these processes, deliberations unfold in multiple sites connected to each other over a broad span of time and space (Hayward, 2008; Young, 2006). Deliberative democracy takes place in dynamic and diverse ways around the world, promoted by different political actors with different levels of power and influence. This is not to say that all participatory activities are deliberative in character—they may be confrontational or campaigning for example. Rather, much deliberation happens across different spaces, whether or not it is labeled as such.

In this section, we highlight other occurrences of deliberative democracy emerging from global and national frameworks on climate change adaptation. The Philippines, for example, is often commended for institutionalizing a comprehensive climate reform agenda, as one of the most vulnerable countries to extreme weather events and sea level rise (The World Bank, 2013). The Climate Change Act of 2009 reflects UNCFCCC's National Adaptation Programme of Action (NAPAs) which requires developing countries to give prominence to community participation. The Climate Change Act formalizes the state's responsibility to "enjoin the participation" of "local communities and the public" by creating "an enabling environment" that promotes multi-stakeholder participation to prevent and mitigate the adverse impacts of climate change.

The extent to which this framework serves as an anchor for deliberative action in the Philippines varies. In some cases, grassroots, spontaneous, and extra-parliamentary deliberations among vulnerable communities are inclusive, authentic, and consequential. In the aftermath of Typhoon Haiyan—one of the world's strongest storms—people living in a coastal community, in collaboration with an urban poor movement, organized a citizen council to deliberate on their shared future after a storm surge cost the lives of more than 8000 people (Curato, 2019). Members of low-income households including fishermen, market vendors, cleaners, and housewives took part in a series of deliberations discussing a range of issues, from identifying the site of their relocation, the resources needed to build climate-resilient homes and sustainable livelihood, the kind of state support they need (e.g., building roads and laying pipes), down to the street names in their new housing complex. This example, among others, demonstrates the vibrancy of grassroots deliberative action in climate adaptation. These groups may not use formal labels of deliberative democracy, but they nevertheless uphold deliberative principles in practice.

Contrast this to formal, multi-stakeholder processes (often given the title of "deliberation") on post-disaster city planning convened by local officials (Curato, 2019). Often, these planning workshops take place in air-conditioned hotel ballrooms, where only local government officials, urban planners, humanitarian organizations, and consultants were invited to take part in making decisions about where urban poor communities living in hazard-prone areas will

be relocated. These are examples of horizontal deliberations that take place among professional peers, excluding or marginalizing deliberation with affected communities.

The uneven experience of deliberation is not unique to the Philippines. Similar cases were documented in coastal communities in Bangladesh, where NAPAs were useful in generating community deliberation around risk and vulnerability, although there were fewer opportunities to identify and challenge the underlying factors that create these vulnerabilities (Ayers et al., 2011). One reason for this is that frameworks for deliberation can sometimes limit rather than expand boundaries of knowledge and justification. In the case of Bangladesh, UNFCCC's NAPAs are designed to focus the community's attention to collectively deliberate on the risks of climate impacts, while political questions of why some are more vulnerable than others are left outside the scope of deliberations. This reflects one of the most pertinent critiques against the practice of deliberation: its tendency to frame issues that can be subject to deliberation in narrow terms, with broader issues of social justice and political accountability considered too broad for discussion. A recent study of participation in energy systems in the UK (Pallett et al., 2019) came to a similar conclusion, that there is a tendency to privilege formal, bounded deliberative processes addressing relatively narrowly defined issues, and to dismiss more informally constituted forms of participation, which may involve wider or deeper critiques.

Deliberative democracy can also unfold by contesting the frameworks that govern global and national deliberations on climate change. As the Bangladesh example illustrates, marginalized political actors need to be able to problematize and contest the assumptions of the global institutions that constrain the circulation of alternative discourses necessary to enrich deliberations. Social movements play a key part in performing this role. The Bolivian Platform against Climate Change, for example, seeks to influence global deliberations by challenging Eurocentric values and emphasizing non-materialist relationships with nature (Hicks & Fabricant, 2016). They do so by creating alternative public spheres, as in the case of the World People's Conference on Climate Change and Rights of the Mother Earth in Cochabamba, where activists, labor organizers, and NGOs deliberated together to create an alternative legal framework in response to the failed climate talks in Copenhagen. Some may view these alternative sites of deliberation as futile, but one could argue that these sites create pressure for climate change negotiators to take their claims seriously. The French Citizens' Assembly's recommendation to make ecocide a crime, for example, was built on the discourses of activists in the global south that called for the Universal Declaration of the Rights of Mother Earth. This example, among others, emphasizes the decentred character of public deliberation that unfolds in various sites, across time, organized by different sets of actors.

7 | CONCLUSIONS

Global agreement exists on the urgent need to tackle climate change, yet democratic governments have struggled to translate ambitions into strategies commensurate with the scale of the challenge. We have argued that these deficiencies in democratic systems cannot be addressed by attempts to bypass democracy and impose control by experts—a strategy which is as much impractical as it is immoral. We argue instead that democratic systems must be reformed and strengthened, and that deliberative democracy, both as a set of ideals and as a set of practical propositions, can provide a better foundation. Rather than seeing democracy as a competition between elites to capture voters' preferences, deliberative democracy focuses on creating the right conditions for considered debate about how societies can respond to the climate crisis.

Despite talk of a "deliberative wave" (OECD, 2020), this approach to politics is not at all mainstream. The high-profile climate assemblies in the UK and France, as well as the many other DMPs on climate, take place within democratic systems that are far from embodying the deliberative ideal as we described earlier. These DMPs have been useful in highlighting the importance of considering people's views and values, and as a counter to the technocratic culture of climate policymaking. They provide a vital space for discussion and trial of different approaches, strategies, and policies, which may help to strengthen politicians' confidence to act. They offer a voice that is different from the usual policy influencers, such as business groupings and NGOs, and as such might help to counter problems of power and vested interests. However, DMPs cannot be expected to compensate for the wider deficiencies of political systems. There is a need to consider, and reform, the broader system within which they operate. There is also a need to acknowledge and encourage more informal deliberation, such as in the Philippines example described in Section 6.

In our discussion, we point to the need to foster a more "deliberative system," which creates the political conditions for deliberation, not just within the confines of DMPs but across the political system as a whole. What would this look like, in practical terms? Changes to institutional structures could prompt better consideration of, and debate about,

future generations. The Future Generations Act, introduced in Wales in 2015, which included the creation of a "Future Generations Commissioner" may provide one model (Davidson, 2020; Smith, 2021). Other possibilities include a parliamentary body, such as a second chamber, consisting of citizens selected by sortition (Gastil & Wright, 2018; MacKenzie, 2016). Greater transparency about, and regulation of, lobbying access and political funding could help. This is especially the case for climate action, where incumbent companies, who profit from the system as it is and so tend to oppose reforms (Brulle, 2019; Lamb et al., 2020; Oreskes & Conway, 2012). The process by which governments develop policy, such as statutory consultations, could be reformed to allow greater access for citizen voices. More widely still, a healthy and independent media helps democracies function better.

As countries grapple with increasingly severe climate impacts and far-reaching cuts in greenhouse gas emissions, the climate crisis will come to dominate political thinking and action. Strengthening and enhancing democracy is an essential ingredient in rising to this challenge.

CONFLICT OF INTEREST

The authors have declared no conflicts of interest for this article.

AUTHOR CONTRIBUTIONS

Rebecca Willis: Conceptualization (lead); writing – original draft (lead); writing – review and editing (equal). **Nicole Curato:** Conceptualization (supporting); formal analysis (supporting); writing – original draft (equal); writing – review and editing (equal). **Graham Smith:** Conceptualization (supporting); writing – original draft (supporting); writing – review and editing (equal).

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ORCID

Rebecca Willis https://orcid.org/0000-0001-9551-7608

ENDNOTE

¹ In this article, we use the term "citizen," but recognize that this can be an exclusionary category. Non-citizens like migrant workers and refugees are not covered. They may not have voting rights, but this should not mean they do not have rights to participate and deliberate. Citizens' assemblies and citizens' juries are misnomers in the sense that participants do not have to be citizens in the formal sense.

RELATED WIRES ARTICLES

Public engagement with large-scale renewable energy technologies: Breaking the cycle of NIMBYism

Public engagement with climate change: The role of human values

Public engagement with offshore renewable energy: A critical review

Public engagement with climate imagery in a changing digital landscape

Public participation, engagement, and climate change adaptation: A review of the research literature

Climate activism and its effects

REFERENCES

Achen, C., & Bartels, L. (2017). Democracy for realists. Princeton University Press.

Ayers, J., Kaur, N., & Anderson, S. (2011). Negotiating climate resilience in Nepal. IDS Bulletin, 42(3), 70–79. https://doi.org/10.1111/j.1759-5436.2011.00224.x

Bächtiger, A., Dryzek, J. S., Mansbridge, J., & Warren, M. (2018). *The Oxford handbook of deliberative democracy*. Oxford University Press. Beauvais, E. (2021). Discursive inequity and the internal exclusion of women speakers. *Political Research Quarterly*, 74(1), 103–116. https://doi.org/10.1177/1065912919870605

Beeson, M. (2010). The coming of environmental authoritarianism. *Environmental Politics*, 19(2), 276–294. https://doi.org/10.1080/09644010903576918

Biermann, F. (2014). Earth system governance: World politics in the Anthropocene. MIT Press. Retrieved from. http://www.jstor.org.ezproxy.lancs.ac.uk/stable/j.ctt1287hkh

- Bohman, J. (1998). Survey article: The coming of age of deliberative democracy. *Journal of Political Philosophy*, 6(4), 400–425. https://doi.org/10.1111/1467-9760.00061
- Boulianne, S. (2018). Mini-publics and public opinion: Two survey-based experiments. *Political Studies*, 66(1), 119–136. https://doi.org/10. 1177/0032321717723507
- Brennan, J. (2016). Against democracy. Princeton University Press.
- Brulle, R. J. (2019). Networks of opposition: A structural analysis of U.S. Climate change countermovement coalitions 1989–2015. *Sociological Inquiry*, 91, 603–624. https://doi.org/10.1111/soin.12333
- Bryant, P., & Stone, L. (2020). Climate assemblies and juries: A people-powered response to the climate emergency. Shared Future/PCAN. Retrieved from. https://sharedfuturecic.org.uk/wp-content/uploads/2020/08/Shared-Future-PCAN-Climate-Assemblies-and-Juries-web.pdf Center for New Democratic Processes. (2016). Rural Climate Dialogues. Retrieved from https://www.cndp.us/rural-climate-dialogues/.
- Cherry, C. E., Capstick, S., Demski, C., Mellier, C., Stone, L., & Verfuerth, C. (2021). *Citizens' climate assemblies: Understanding public deliberation for climate policy.* The Centre for Climate Change and Social Transformations. Retrieved from. https://cast.ac.uk/wp-content/uploads/2021/07/CITIZENS-CLIMATE-ASSEMBLIES-CAST-July-2021.pdf
- Climate Action Tracker. (2020). Paris Agreement Turning Point, December. Retrieved from https://climateactiontracker.org/documents/829/CAT_2020-12-01_Briefing_GlobalUpdate_Paris5Years_Dec2020.pdf.
- Climate Assembly UK. (2020). The path to net zero: Climate Assembly UK Full report. September.
- Curato, N. (2019). Democracy in a time of misery: From spectacular tragedy to deliberative action (1st ed.). Oxford University Press.
- Curato, N., Dryzek, J. S., Ercan, S. A., Hendriks, C. M., & Niemeyer, S. (2017). Twelve key findings in deliberative democracy research. *Daedalus*, 146(3), 28–38.
- Curato, N., Farrell, D., Geissel, B., Grönlund, K., Mockler, P., Pilet, J. B., Rose, J., Setälä, M., & Suiter, J. (2021). *Deliberative mini-publics:* Core design features. Policy Press.
- Curato, N., Hammond, M., & Min, J. B. (2019). Power in deliberative democracy: Norms, forums, systems. Political Philosophy and Public Purpose (1st ed.). Springer International Publishing/Imprint/Palgrave Macmillan. https://doi.org/10.1007/978-3-319-95534-6
- Davidson, J. (2020). #FutureGen: Lessons from a small country. Chelsea Green Publishing.
- della Porta, D., & Doerr, N. (2018). Deliberation in protests and social movements. In A. Bächtiger, J. S. Dryzek, J. Mansbridge, & M. Warren (Eds.), *The Oxford handbook of deliberative democracy*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198747369.013.29
- Demeritt, D. (2001). The construction of global warming and the politics of science. *Annals of the Association of American Geographers*, 91(2), 307–337. https://doi.org/10.1111/0004-5608.00245
- Devaney, L., Torney, D., Brereton, P., & Coleman, M. (2020). Ireland's Citizens' Assembly on Climate change: Lessons for deliberative public engagement and communication. *Environmental Communication*, 14(2), 141–146. https://doi.org/10.1080/17524032.2019.1708429
- Dryzek, J. S. (1990). Discursive democracy: Politics, policy, and political science. Cambridge University Press. https://doi.org/10.1017/9781139173810
- Extinction Rebellion. (2020). Extinction Rebellion welcomes Climate Assembly UK, but mourns its lack of urgency and agency. Press Release, January 22. Retrieved from https://extinctionrebellion.uk/2020/01/22/extinction-rebellion-welcomes-climate-assembly-uk-but-mourns-its-lack-of-urgency-and-agency/
- Fang, M., & Huang, C. (2020). Many globally are as concerned about climate change as about the spread of infectious diseases. October. Pew Center. Retrieved from. https://www.pewresearch.org/fact-tank/2020/10/16/many-globally-are-as-concerned-about-climate-change-as-about-the-spread-of-infectious-diseases/
- Fankhauser, S., de Menezes, A., & Opacic, N. (2019). UKresearch on the social science of climate change: A synthesis of ESRC and related investments. Place-Based Climate Action Network, London School of Economics and Political Science.
- Font, J., Smith, G., Galais, C., et al. (2018). Cherry-picking participation: Explaining the fate of proposals from participatory processes. European Journal of Political Research, 57(3), 615–636. https://doi.org/10.1111/1475-6765.12248
- Foster, C., & Frieden, J. (2017). Crisis of trust: Socio-economic determinants of Europeans' confidence in government. *European Union Politics*, 18(4), 511–535. https://doi.org/10.1177/1465116517723499
- Fournier, P. (Ed.). (2011). When citizens decide: Lessons from citizen assemblies on electoral reform. Oxford University Press.
- Fuji Johnson, G. (2015). Democratic illusion: Deliberative democracy in Canadian public policy. University of Toronto Press.
- Fung, A. (2003). Survey article: Recipes for public spheres: Eight institutional design choices and their consequences. *Journal of Political Philosophy*, 11(3), 338–367. https://doi.org/10.1111/1467-9760.00181
- Gastil, J. (Ed.). (2005). The deliberative democracy handbook: Strategies for effective civic engagement in the twenty-first century (1st ed.). Jossey-Bass
- Gastil, J., & Wright, E. O. (2018). Legislature by lot: Envisioning sortition within a bicameral system. *Politics and Society*, 46(3), 303–330. https://doi.org/10.1177/0032329218789886
- Gerber, M., Bächtiger, A., Shikano, S., Reber, S., & Rohr, S. (2018). Deliberative abilities and influence in a transnational deliberative poll (EuroPolis). *British Journal of Political Science*, 48(4), 1093–1118. https://doi.org/10.1017/S0007123416000144
- Gerwin, M., Waluk-Jaguszewska, E., & Fundacja Otwarty Plan. (2018). Citizens' assemblies: Guide to democracy that works. Otwarty Plan.
- Global Assembly. (2020). Address the climate and ecological emergency. Retrieved from https://globalassembly.org/.
- Goodin, R. (2012). How can deliberative democracy get a grip? The Political Quarterly, 83(4), 806-811.
- Grönlund, K., Bächtiger, A., & Setälä, M. (2015). Deliberative mini-publics: Involving citizens in the democratic process. ECPR Press.
- Gutmann, A., & Thompson, D. (2004). Why deliberative democracy?. Princeton University Press.

- Gutmann, A., & Thompson, D. (2006). Democracy and disagreement. The Belknap Press of Hrvard University Press.
- Hajer, M., Nilsson, M., Raworth, K., Bakker, P., Berkhout, F., de Boer, Y., Rockström, J., Ludwig, K., & Kok, M. (2015). Beyond cockpitism: Four insights to enhance the transformative potential of the sustainable development goals. Sustainability, 7(2), 1651–1660. https://doi.org/10.3390/su7021651
- Hammond, M. (2020a). Democratic innovations after the post-democratic turn: Between activation and empowerment. *Critical Policy Studies*, 1–18, 174–191. https://doi.org/10.1080/19460171.2020.1733629
- Hammond, M. (2020b). Sustainability as a cultural transformation: The role of deliberative democracy. *Environmental Politics*, 29(1), 173–192. https://doi.org/10.1080/09644016.2019.1684731
- Hammond, M., Dryzek, J., & Pickering, J. (2020). Democracy in the Anthropocene. Contemporary Political Theory, 19(1), 127–141. https://doi.org/10.1057/s41296-019-00364-6
- Han, S. H., Schenck-Hamlin, W., & Schenck-Hamlin, D. (2015). Inclusion, equality, and discourse quality in citizen deliberations on broadband. *Journal of Public Deliberation*, 11(1), Article 3.
- Hanson, L. L. (Ed.). (2018). Public deliberation on Climate change: Lessons from Alberta Climate dialogue. AU Press.
- Hayward, B. (2008). Let's talk about the weather: Decentering democratic debate about Climate change. *Hypatia*, 23(3), 79–98. https://doi.org/10.1111/j.1527-2001.2008.tb01206.x
- Hendriks, C. M. (2016). Coupling citizens and elites in deliberative systems: The role of institutional design. *European Journal of Political Research*, 55(1), 43–60. https://doi.org/10.1111/1475-6765.12123
- Hickman, L. (2010). James Lovelock: Humans are too stupid to prevent climate change. Retrieved from http://www.theguardian.com/science/2010/mar/29/james-lovelock-climate-change.
- Hicks, K., & Fabricant, N. (2016). The Bolivian Climate justice movement: Mobilizing indigeneity in climate change negotiations. *Latin American Perspectives*, 43(4), 87–104. https://doi.org/10.1177/0094582X16630308
- Himmelroos, S., & Christensen, H. S. (2014). Deliberation and opinion change: Evidence from a deliberative mini-public in Finland. *Scandinavian Political Studies*, 37(1), 41–60. https://doi.org/10.1111/1467-9477.12013
- Hobson, K., & Niemeyer, S. (2013). "What sceptics believe": The effects of information and deliberation on climate change scepticism. *Public Understanding of Science*, 22(4), 396–412. https://doi.org/10.1177/0963662511430459
- Intergovernmental Panel on Climate Change. (2018). Global Warming of 1.5°C. Retrieved from http://www.ipcc.ch/report/sr15/.
- Kahane, D. (2018). Climate change, social change, and systems change: Lessons from Alberta Climate dialogue. In L. L. Hanson (Ed.), *Public deliberation on Climate change: Lessons from Alberta Climate dialogue*. Athabasca University Press.
- Kahneman, D. (2012). Thinking, fast and slow. Penguin Books.
- KNOCA. (2021). Knowledge network on climate assemblies. Retrieved from https://knoca.eu/.
- Krznaric, R. (2020). The good ancestor: How to think long term in a short term world. Ebury Publishing.
- Krznaric, R. (2021). The good ancestor: How to think long term in a short-term world. W H Allen.
- Lafont, C. (2015). Deliberation, participation, and democratic legitimacy: Should deliberative mini-publics shape public policy?: Deliberation, participation & democratic legitimacy. *Journal of Political Philosophy*, 23(1), 40–63. https://doi.org/10.1111/jopp.12031
- Lamb, W. F., Mattioli, G., Levi, S., Roberts, J. T., Capstick, S., Creutzig, F., Minx, J. C., Müller-Hansen, F., Culhane, T., & Steinberger, J. K. (2020). Discourses of climate delay. *Global Sustainability*, *3*, E17. https://doi.org/10.1017/sus.2020.13
- Li, Y., & Shapiro, L. (2020). China goes green: Coercive environmentalism for a troubled planet. Polity Press.
- Lockwood, M., Mitchell, C., & Hoggett, R. (2020). Incumbent lobbying as a barrier to forward-looking regulation: The case of demand-side response in the GB capacity market for electricity. *Energy Policy*, 140, 111426.
- Lupia, A., & McCubbins, M. (1998). The democratic dilemma: Can citizens learn what they need to know?. Cambridge University Press.
- MacKenzie, M. K. (2016). A general-purpose, randomly selected chamber. In *Institutions for Future generations* (pp. 282–298). Oxford University Press.
- MacKenzie, M. K. (2018). Deliberation and long-term decisions. In A. Bächtiger, J. S. Dryzek, J. Mansbridge, & M. Warren (Eds.), *The Oxford handbook of deliberative democracy*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198747369.013.7
- Manin, B. (1987). On legitimacy and political deliberation. Political Theory, 15(3), 338-368. https://doi.org/10.1177/0090591787015003005
- Mansbridge, J. (2019). Recursive representation. In D. Castiglione & J. Pollak (Eds.), *Creating political presence: The new politics of democratic representation* (pp. 298–338). The University of Chicago Press.
- McNeil, M. (2013). Between a rock and a hard place: The deficit model, the diffusion model and publics in STS. *Science as Culture*, 22(4), 589–608. https://doi.org/10.1080/14636778.2013.764068
- Mendelberg, T., & Oleske, J. (2000). Race and public deliberation. *Political Communication*, 17(2), 169–191. https://doi.org/10.1080/105846000198468
- Mouffe, C. (2000). The democratic paradox. Verso.
- Neblo, M. A. (2015). Deliberative Democracy between Theory and Practice. Cambridge University Press.
- Niessen, C. (2019). When citizen deliberation enters real politics: How politicians and stakeholders envision the place of a deliberative minipublic in political decision-making. *Policy Sciences*, 52(3), 481–503.
- Nishiyama, K. (2019). Enabling children's deliberation in deliberative systems: Schools as a mediating space. *Journal of Youth Studies*, 22(4), 473–488.
- OECD. (2020). Innovative citizen participation and new democratic institutions: Catching the deliberative wave. OECD. https://doi.org/10.1787/339306da-en
- Offe, C., & Preuss, U. K. (1991). Democratic institutions and moral resources. In D. Held (Ed.), *Political theory today*. Stanford University Press.

- Oreskes, N., & Conway, E. M. (2012). Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming. Bloomsbury.
- Owen, D., & Smith, G. (2015). Survey article: Deliberation, democracy, and the systemic turn. *Journal of Political Philosophy*, 23(2), 213–234. https://doi.org/10.1111/jopp.12054
- Pallett, H., Chilvers, J., & Hargreaves, T. (2019). Mapping participation: A systematic analysis of diverse public participation in the UKenergy system. *Environment and Planning E: Nature and Space*, 2, 590–616. https://doi.org/10.1177/2514848619845595
- Parkinson, J., & Mansbridge, J. J. (Eds.). (2012). Deliberative systems: Deliberative democracy at the large scale. Theories of institutional design. Cambridge University Press.
- Pow, J., van Dijk, L., & Marien, S. (2020). It's not just the taking part that counts: 'Like me' perceptions connect the wider public to Minipublics. *Journal of Deliberative Democracy*, 16(2), 2. https://doi.org/10.16997/jdd.368
- Przeworski, A. (2010). Democracy and the limits of self-government. Cambridge University Press.
- Rask, M., Worthington, R., & Lammi, M. (Eds.). (2012). Citizen participation in global environmental governance. Earthscan.
- Rees, M. (2014, 21 August). If I ruled the world. Prospect Magazine.
- Ryan, M., & Smith, G. (2015). Defining mini-publics. In K. Grönlund, A. Bächtiger, & M. Setälä (Eds.), *Deliberative mini-publics: Involving citizens in the democratic process* (pp. 9–26). ECPR Press.
- Sanders, L. M. (1997). Against deliberation. Political Theory, 25(3), 349-376.
- Saward, M. (2010). The representative claim. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199579389.001.0001
- Schumpeter, J. A. (1972). Capitalism, socialism and democracy. HarperPerennial.
- Shahar, D. C. (2015). Rejecting eco-authoritarianism, again. *Environmental Values*, 24(3), 345–366. https://doi.org/10.3197/096327114X13947900181996
- Shared Future. (2019). The Leeds Climate Change Citizens Jury. Full report. Retrieved from https://www.leedsclimate.org.uk/sites/default/files/REPORT%20V1.1%20FINAL_0.pdf.
- Shearman, D. J. C., & Smith, J. W. (2007). The Climate change challenge and the failure of democracy. Politics and the environment. Praeger Publishers.
- Smith, G. (2003). Deliberative democracy and the environment. Environmental politics. Routledge.
- Smith, G. (2009). Democratic innovations: Designing institutions for citizen participation. Cambridge University Press.
- Smith, G. (2021). Can democracy safeguard the Future? Democratic futures. Polity Press.
- Smith, G., & Setälä, M. (2018). Mini-publics and deliberative democracy. In A. Bächtiger, J. S. Dryzek, J. Mansbridge, & M. Warren (Eds.), The Oxford handbook of deliberative democracy (pp. 299–314). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198747369. 013.27
- Steiner, J., Bächtiger, A., & Steenbergen, M. R. (2004). Deliberative politics in action: Analyzing parliamentary discourse. Cambridge University
- Tamura, T. (2014). Rethinking grassroots participation in nested deliberative systems. *Japanese Political Science Review*, 2, 63–87. https://doi.org/10.15545/2.63
- The World Bank. (2013). *Getting a grip on Climate change in The Philippines. Executive report.* The World Bank. Retrieved from. https://openknowledge.worldbank.org/handle/10986/16525
- V-Dem. (2021a). Varieties of Democracy: Global Standards, Local Knowledge. Retrieved from https://www.v-dem.net/en/
- V-Dem. (2021b). The Case for Democracy: Do democracies perform better tackling climate change? Policy Brief no. 31. Retrieved from https://www.v-dem.net/media/filer_public/5a/19/5a19e622-990f-4cc3-a91a-2d51445afcbd/pb_31.pdf.
- Warren, M. E. (2009). Governance-driven democratization. Critical Policy Studies, 3(1), 3-13. https://doi.org/10.1080/19460170903158040
- Warren, M. E., & Gastil, J. (2015). Can deliberative minipublics address the cognitive challenges of democratic citizenship? *Journal of Politics*, 77(2), 562–574. https://doi.org/10.1086/680078
- Willis, R. (2018). How members of parliament understand and respond to climate change. *The Sociological Review*, 66(3), 475–491. https://doi.org/10.1177/0038026117731658
- Willis, R. (2020a). The role of national politicians in global climate governance. *Environment and Planning E: Nature and Space*, *3*(3), 885–903. https://doi.org/10.1177/2514848619887464
- Willis, R. (2020b). Too hot to handle? The democratic challenge of climate change. Bristol University Press.
- Wiseman, J., Edwards, T., & Luckins, K. (2013). Post carbon pathways: A meta-analysis of 18 large-scale post carbon economy transition strategies. *Environmental Innovation and Societal Transitions*, 8, 76–93. https://doi.org/10.1016/j.eist.2013.04.001
- Wynne, B. (2010). Strange weather, again Climate science as political art. *Theory, Culture and Society*, 27(2–3), 289–305. https://doi.org/10.1177/0263276410361499
- Young, I. (2006). Decentering deliberative democracy. Kettering Review, 24(3), 43-60.

How to cite this article: Willis, R., Curato, N., & Smith, G. (2022). Deliberative democracy and the climate crisis. *Wiley Interdisciplinary Reviews: Climate Change*, e759. https://doi.org/10.1002/wcc.759