Democratic participation reconsidered



Towards science-informed policy deliberation in sustainability governance¹

Um ungute Machtdynamiken in der Klima- oder generelleren Nachhaltigkeitspolitik zu verändern, ist Bürgerbeteiligung ein vielversprechender Ansatz, auch angesichts des schwindenden Vertrauens in die Demokratie. Allerdings müssen solche Prozesse die wissenschaftliche Komplexität von Nachhaltigkeitsproblemen und die damit verbundenen unterschiedlichen ethischen Werte besser berücksichtigen. Dieser Artikel stellt einen innovativen Ansatz einer wissenschaftsinformierten, partizipativen Deliberation (Beratschlagung durch Austausch von Gründen) über Politikoptionen vor. Aufbauend auf der pragmatistischen Philosophie von John Dewey fordert der Ansatz eine gemeinschaftliche, wissenschaftlich fundierte, iterative Erkundung politischer Handlungsalternativen im Licht ihrer verschiedenen praktischen Implikationen, wobei verschiedene ethische Werte systematisch integriert werden sollen. Als zentrales Beispiels dieses Artikels dient das kommunale Waldmanagement im Projekt "WaldBrandenburg".

Introduction: deliberative participation as response to a dual crisis

Self-serving power politics, poorly designed and communicated top-down decisions, and populist propaganda are among the factors that create discourses of delay (Lamb et al. 2020) – hindering key nations from urgently protecting the living beings who suffer and will suffer from unabated climate change and other human-made global environmental threats.

And yet, there is often no obvious, clear-cut solution to climate policy issues that arise at the national or international level. Instead, climate change mitigation remains a particularly *wicked* policy problem (Norton 2015, ch. 2.3), i.e.: a global and intergenerational common pool resource problem characterized by (1) highest complexity, (2) deep uncertainty, and (3) disputed, essential political stakes – also due to severe trade-offs climate policymaking is facing between, e.g., economic, environmental, socio-cultural, and political as-

pects. These normative dimensions go far beyond conflicting (material) interests: tensions between more fundamental 'ethical values' in society are involved, i. e.

"(a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance" (Schwartz & Bilsky 1987, p. 551).

Similar characteristics of wicked problems also apply more broadly to sustainability governance and the related societal transformation.



Martin Kowarsch

In response to the dual crisis of wicked sustainability problems and eroding trust in democratic institutions and processes, some European countries, for instance, have been making increasing efforts in recent years to involve citizens more directly in policymaking. Public participation has been realized through various means, such as public consultation, Citizens' Jury, or Citizens' Council. Deliberation - understood as open, learning-oriented exchange of reasons under fair conditions - is a particularly promising method in this context (Curato et al. 2017). However, the outcomes of such democratic initiatives in sustainability governance vary (Zakhour 2020), and often their more precise purposes remain unclear - including functionalist-deliberative, instrumental, emanci-

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patory, and coercive goals (Bidwell & Schweizer 2021).

In order to improve such approaches, this article addresses the "how" of deliberative-democratic justification discourses in policymaking - beyond the prevalent, important focus of public participation debates on altering



? Public participation is a promising method in response to the dual crisis of wicked sustainability and eroding trust in democratic institutions and processes

power dynamics inherent in the decision-making process by democratically amending the composition of those involved. The additional focus on deliberation methodology is crucial for developing not only democratically legitimate but also scientifically robust and ethically appropriate solution options to wicked sustainability problems from a societal perspective - not least because scientific facts and ethical values are highly entangled there (Kowarsch 2016, ch. 5).

This article presents the procedural design as well as envisaged and actual outcomes of an innovative approach to deliberative participation. It simultaneously aims to make power dynamics in wicked sustainability governance democratically more legitimate, scientifically better informed and ethically better reflected. This transdisciplinary participation approach has already been put into practice at both the national and local governance levels since 20202 most elaborately in the "WaldBrandenburg" project in Germany on municipal forest management (March 2021 to March 2022), which therefore serves as key underlying example in this article. I will also briefly discuss the potential and limitations of this novel deliberative approach to addressing the dual crisis.

- tion and learning processes facilitating an iterative feedback loop between goals, means (i.e., policies) and practical implications, including risks.
- Ethical values assuming a fact/ value conflation - must be critically tested in light of their diverse, context-specific practical implications, i.e. when translating them into alternative future policy pathways and evaluation criteria.
- Involve the people who are affected. Include appropriate and diverse kinds of expertise.
- Given the wicked sustainability problems, policy options must be discussed and designed in terms of more complex future policy pathways, i.e., sequences of envisaged policy actions including various feedbacks and flexible adjustments over time, co-evolving with changing conditions. This requires integrated assessments.

The following PEM-based deliberation procedure is suitable for use at different levels of government. To illustrate, my focus is on the local level - using the WaldBrandenburg case as an example. Figure 1 provides an overview of the procedure. To provide some background information on the Wald-Brandenburg project (see footnote 2), the city council of Biesenthal, a town in Brandenburg near Berlin, had unanimously mandated the process in March 2021. The process was centered on the contested future use and management of the expansive municipal forest in the context of climate change, economic challenges, and the presence of numerous conflicting interests, following decades of a near-exclusive focus on pine tree monoculture.

A pragmatist participation procedure for deliberative policy assessments

The participation approach presented here builds on multidisciplinary research about learning-oriented deliberation (Kowarsch et al. 2016, Curato et al. 2017, Farrell et al. 2019) and integrated assessments (e.g., Kowarsch et al. 2017), i. e. large-scale, transdisciplinary processes which distil and synthesize scientific and other knowledge to inform policymaking. In particular, the approach further develops and specifies, but builds on the more general "pragmatic-enlightened model" (PEM) for the science-policy interface (Edenhofer & Kowarsch 2015, Kowarsch 2016). The PEM was initially developed with the intention of guiding international integrated assessment processes (e.g., the Intergovernmental Panel on Climate Change, IPCC). As Kowarsch (2016) explains in detail, the PEM has its roots in John Dewey's pragmatist philosophy of science and of epistemic-deliberative democracy. Key PEM assumptions include:

In order to make sound judgments about policy options, i.e. possible courses of action for a government, it is crucial to assess their diverse and often surprising practical implications. This is because the ends do not justify the means: If the best available set of means has serious undesirable (potential or actual) side effects, the original set of objectives must be reassessed. More precisely, after an initial period of careful problem framing, this necessitates deliberative co-produc-

² See project websites (accessed 20 May 2024): https://ariadneprojekt.de/en/citizen-deliberation/ for the Ariadne project on German energy transition (2020-23); www.civilog. de/waldbrandenburg for extensive information on the participation process, materials and background for WaldBrandenburg (in German); and furthermore www.allerland-programm. de/foerderkarte/ (Brandenburg region) for the "Land.Nutzen" project (2024-25), employing a condensed version of the deliberative participation approach.

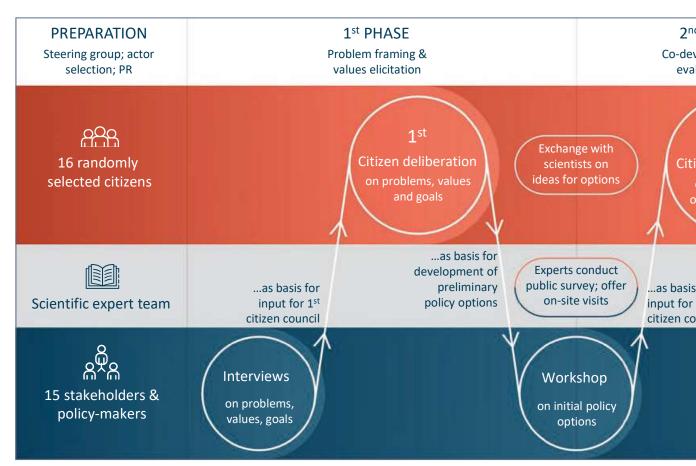


Figure 1 (adapted from www.civilog.de/waldbrandenburg): A novel iterative and science-informed, participatory deliberation procedure about policy

Framework and participants

Ideally, the local parliament mandates such a process officially to ensure support and buy-in. Representatives of the local government and parliament, administration, science team and process organizers should establish a steering group early on. It convenes on a regular basis to collaboratively develop procedural details and to address potential conflicts and reservations that may arise during the course of a process.

There should be two major strands of the process involving different kinds of participants, see red and blue strands in fig. 1: One strand involves about 16 ordinary citizens – i.e., not too many people (alternatively: set up several groups) in order to ensure deliberation efficiency. They are randomly selected in a two-stage process according to

the state-of-the-art of creating deliberative mini-publics (e.g., Buergerrat 2024) and should be as representative of the affected population as practically possible. Basic demographic criteria such as age, gender and education should be used.

The other strand is made up of selected policy-makers, administrators and diverse stakeholders, because of their valuable practical expertise and their affectedness. For the Wald-Brandenburg process, only 15 members were selected in order to symbolically emphasize the priority of the citizens' deliberative mini-public as the heart of the process. While the two strands need to communicate closely and iteratively with each other at various stages, a safe and therefore separated deliberation space for the citizen group is necessary at the beginning. This is

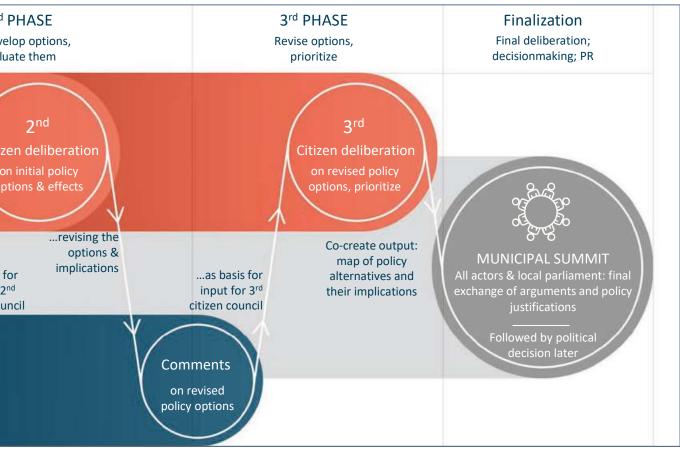
due to the asymmetric power relations and frequent mistrust towards political or societal elites, but also given the intimate exchange on personal values and views.

Moreover, a multi-disciplinary team of scientific experts is involved to iteratively contribute and revise their expertise as specified below – always in close collaboration with the professional process coordinators and moderators.

Iterative feedback loop between goals, policies and their implications

The two interconnected groups are essentially to explore policy pathways in a serious, iterative "back and forth" between ethical values and norms, policy





alternatives (here: local level).

goals, policy pathways and their various socially relevant practical implications. This presupposes at least three – ideally even more – rounds of deliberative exchange within the total time span of roughly 12–18 months (as compromise between enough time to deliberate and possible impatience):

The *first* stage consists of a joint, open problem framing in both strands. This ensures that scientific assumptions, policy pathways, etc. are co-produced from the outset. It requires values elicitation (see Kenter et al. 2016, sect. 5, for methods), but also the consideration of initial social norms, policy beliefs and scientific insights. In the first round of the WaldBrandenburg process, ethical values were elicited through guiding questions such as: "What is problematic or desirable or important for you concerning this

policy context? *Why* does it matter to you?"

As an intermediate step, preliminary alternative policy goals and pathways as well as initial evaluation criteria must be developed - strongly based on the diverse ethical values elicited, as preliminary ends-in-view -, and related implications must be initially explored. Given their particular expertise, scientists are primarily tasked to do this (in iterative co-production with the participants, e.g. via additional workshops). However, this can take the scientists beyond standard assumptions and economic evaluation criteria. The scientific experts can add further aspects to include as many relevant viewpoints and policy implications as possible.

During their *second* core meetings, the two deliberation groups consult in

depth about pros and cons of these preliminary policy pathways, supported by the scientific experts. They can also propose revised sets of pathways, or revise underlying goals and values. After this, the scientific experts amend and revise the visualization of the initial pathways etc. accordingly, again in co-production with the process participants.

Participants then evaluate and compare the refined policy alternatives in the *third* deliberation round. This intensive, iterative deliberation is a core element to allow a much deeper understanding and further revisions in the face of wicked policy problems. For a final exchange of arguments between the process participants and the entire city council, a community summit ("municipal summit") should be organized.



Integrated scientific assessment and the visualization of policy pathways

Repeated direct dialogue between experts and process participants is helpful and can build trust. In addition, however, the sheer volume and breadth of existing multidisciplinary and interdisciplinary scientific expertise (including different methodologies and communities, and the need for meta-studies) concerning sustainability necessitates a more large-scale and systematic scientific exploration of policy pathways to appropriately inform the deliberation process - to the extent possible and along with other (local, indigenous, etc.) expertise. This requires embedding the deliberation process in an extensive, iterative integrated assessment process that is set up according to the state-of-the-art: various design features and best practices are outlined in the existing research on large-scale assessment-making (see, e.g., Kowarsch 2016, Kowarsch et al. 2017). In order to effectively facilitate science communication on such highly complex policy issues when collaborating with lay people, visualization of the policy pathways and their implications is key. However, depending on the resources available to the experts and the priorities of the participants, usually only a few policy pathways can be jointly developed and explored in depth.

Within the WaldBrandenburg project, a team of multi-disciplinary scientific experts led by Prof. Martin Guericke conducted such a (locally specific) integrated assessment and had many direct interactions with process participants. They iteratively co-produced knowledge with the deliberation groups at eye level, in an exceptionally dedicated, open-minded, and trustworthy manner, as the participants confirmed. Inter alia, they developed a virtual forest tour and an interactive tablet app to visualize the complex policy issues and pathways (see again project website, footnote 2). Furthermore, the team organized valuable, learning-oriented on-site visits (forest walks) for all actors involved, as well as a midterm public online survey that further informed the deliberation process.

Facilitating deliberative, mutual learning

To effectively facilitate deliberation and social learning processes, the literature provides helpful practical guidance concerning appropriate settings, professional moderation and various other practical design features (e.g. Kenter et al. 2016; Farrell et al. 2019). In principle, the learning process (1) should be creative and imaginary (e.g., linking ethical values creatively with possible futures, policies and effects), open and critical – neither policy goals, nor policy pathways, nor evaluation criteria are given; (2) should also involve, as process inputs, some oppor-

tunities for non-cognitive (i. e., emotional, artistic, and other) expressions of what matters to people, which can furthermore help include (older) children or illiterate people; and (3) can be quite notable for participants, since it may involve (far-reaching) transformation of one's own policy views and perhaps even ethical values.

For example, in the first round of the WaldBrandenburg process, the citizens were encouraged to express their initial views on values and problems also in a non-cognitive way by selecting symbolic pictures provided to them.

Envisaged outcomes – and some real-world effects for illustration

As the main intended output, the PEM-based deliberation procedure ideally results in a transdisciplinary map of detailed, alternative future policy pathways – including their diverse relevant, desirable and undesirable, certain and uncertain implications for society and the environment. In response to the dual crisis, and based on the PEM philosophy (Kowarsch 2016), there are three major envisaged outcomes of the transdisciplinary deliberation process:

- The first one is higher democratic legitimacy of sustainability governance, in public perception. Related further outcomes may include higher trust in each other and in democracy, higher common-good orientation, and bringing marginalized societal views into the policy debate all of which can strengthen democracy. Political participation is also valuable in itself.
- Secondly, the procedure envisages a learning process among all actors involved – including the scientific experts, and thus going beyond hierarchical, linear learning – about policy options for wicked problems, about their implications and about their linkage with diverse ethical values. This may also lead to a better understanding of each other's perspectives.
- The third envisaged outcome is better, i.e. more reflected policy knowledge in terms of an enhanced and scientifically well-informed cartography of the viable policy solution space as epistemic basis for decision-making including ideally some policy convergence resulting from the social learning process.

Let us have a brief look at some of the actual effects from the WaldBrandenburg case. This article cannot offer a real scientific analysis or evaluation of this case, its contexts and conditions. Hence, the following examples only serve illustrative and exploratory purposes. As the major process output, a 40-page final report (see project website), co-produced with some of the citizens involved, was presented to the municipal summit in March 2022.

Many process participants stated that they were quite satisfied with the process legitimacy, and learning (e.g., enhanced forest expertise while connecting it to their lifeworld and values; better mutual understanding; and policy belief changes) had actually taken place among diverse actors.3 A particularly exciting outcome, however, was the clearly observable, far-reaching convergence of policy preferences among the process participants of both deliberation strands. Participants in the process had divergent views at the outset and continued to disagree on minor issues. But in the end, as their core policy insight, almost all of the diverse participants pleaded for a newly codeveloped, highly integrative long-term policy pathway towards a mixed deciduous forest (as documented in the final report). This pathway includes concrete measures to substantially enhance nature conservation and resilience (climate change, etc.) efforts, protect the regional water cycles and increase overall economic gains from forestry. To be clear, the moderator did not ask for any consensus, compromise or majority decisions concerning policy recommendations, but instead facilitated an open social learning process about policy alternatives. This seemed to be encouraging belief

Based on this, an outstanding political impact of the process is the official decision of the city council in July 2023. The council unanimously and fully adopted the process results, i.e. the ecologically rather ambitious policy idea above, for their new guideline for forest management - despite entrenched political conflicts in this town over forest management in previous decades. Additionally, the municipality implemented a new formal and permanent parliamentary committee on forest management, deliberately involving also some of the citizens from the mini-public.

The PEM-based deliberation procedure ideally results in a transdisciplinary map of detailed, alternative future policy pathways

As final example, related to the first envisaged outcome, our project team observed another highly interesting outcome: the empowerment of participating citizens as agents in an epistemic-deliberative, representative democracy - with regard to their:

- ... capabilities: Towards the end, some citizens reported (and the project team observed) enhanced capabilities and higher self-confidence as agents in political discourses, e.g., concerning direct discussions with politicians, and co-production of knowledge with scientists. Some proudly referred to acquired forest expertise and enhanced personalprocedural skills, e.g. regarding group discussions. Respectful treatment of their views and questions seems to have helped here in my interpretation, along with their insight that deliberation is not only about "facts" but also very much about their values and viewpoints.
- ... self-efficacy: At the beginning (May 2021), some had complained about the lack of direct decisionmaking power of their deliberative mini-public, as they showed the municipal government some mis-

- trust. In contrast, in early 2022, the group explicitly understood and appreciated the more indirect, but still significant influence on policymaking potentially exerted by their engagement in this deliberative process intended to inform policymaking - perhaps also because a lot of communication had helped to reduce the rather old mistrust between the citizens and the municipality by that time. Perhaps related to this perceived self-efficacy, there was an apparent increase of the citizens' (motivation for) political engagement. After the process, e.g., some of them successfully founded an informal, inclusive group for all citizens interested in Biesenthal's forest in order to organize educational, political, and practical activities. They were eager to somehow continue the spirit of the deliberative mini-public through this grassroot initiative. Additionally, many of the citizen volunteered to co-produce the final report in extra meetings, and to present the process results at the municipal summit and later public events.
- ... legitimacy: Some citizens, explicitly and plausibly emboldened by their newly acquired deliberative self-confidence and political self-efficacy, delivered impassioned speeches during the final feedback round (Feb. 2022), advocating for a deliberative and representative democracy. This impressive reflection was also facilitated, as some explicitly stated, by their learning about the immense complexity of wicked policy problems, which discourages the pursuit of simplistic solutions in a referendum, for instance. While many of the citizens demonstrated a sense of humility regarding their own political preferences as well, they expressed a conviction

³ See preliminary findings from M. Blum's accompanying social-science research at the project website (project reports). She had conducted surveys, interviews, participatory observation, etc., supported by colleagues.



that decision-makers should invest more time in learning and deliberation. Moreover, they exhibited a greater understanding and sympathy for the politicians and bureaucrats, recognizing the challenges and emotional conflicts they face. Consequently, some citizens proposed to facilitate more of these PEM-based deliberation processes in the region, and one participant expressed interest in starting courses to learn facilitation skills for such deliberative processes.

Discussion and conclusion

Given the high effort needed to realize a full-fledged PEM-based deliberation process, priority should be given to *wicked* policy problems, for which this procedure is optimized. However, to what extent can it help address the dual crisis?

First, regarding the epistemic dimension of sustainability governance, the procedure actually facilitates valuable learning among all actors involved about the complexities of the policy solution space. In contrast to many other participation approaches, it deliberately "keeps it complex," supported by extensive knowledge visualization for citizens. This is necessary to adequately co-create robust and viable, longer-term policy options with high

problem-solving capacity, given the complexity of wicked sustainability problems. The PEM-based deliberation procedure is thus quite unique in that it essentially combines the democratically promising idea of deliberative minipublics with the epistemic strength of large-scale integrated scientific assessment processes (Kowarsch et al. 2016), while also systematically integrating deeper ethical values in the learning process. However, although this was not the case in the WaldBrandenburg process, a practical challenge for these processes can be limited motivation of some scientific experts to leave their respective academic comfort zones and engage in open, non-hierarchical, valueladen learning processes.

Second, concerning power dynamics in democratic policy-making, the proposed participation approach may provide promising new perspectives:

The democratic empowerment of citizens involved in the WaldBrandenburg process may serve as inspiring *exploratory* observation for future systematic analyses of this astonishing and important effect – given that many people in European, *democratic* countries feel powerless which promotes mistrust towards democratic institutions. Given the severe political divide regarding climate and sustainability issues, the same holds for the remarkable (though presumably not always occurring) policy convergence observed.

Moreover, the proposed process – when applied more widely in society – may also help counter populist power plays by involving citizens more directly in policymaking, by challenging poorly reflected political views in the social learning process, and by taking everyone's values seriously into account. Since deliberation can facilitate learning processes and promote common good orientation (Kenter et al. 2016), the proposed approach could

LITERATURE

Bidwell, David/Schweizer, Pia-Johanna (2021): Public values and goals for public participation. Env Pol Gov 31: 257–269.

Buergerrat (2024): Häufige Fragen. Online: https://www.buerger-rat.de/haeufige-fragen/.

Curato, Nicole/Dryzek, John S./Ercan, Selen A./Hendriks, Carolyn M./Niemeyer, Simon (2017): Twelve Key Findings in Deliberative Democracy Research. Daedalus 146(3): 28–38.

Edenhofer, Ottmar/Kowarsch, Martin (2015): Cartography of pathways: A new model for environmental policy assessments. Env Sci Pol 51: 56–64.

Farrell, David/Curato, Nicole/Dryzek, John S./ et al. (2019): Deliberative Mini-Publics: Core Design Features. The Centre for Deliberative Democracy & Global Governance, Univ. of Canberra. Online: http://urn.fi/URN:NBN:fi-fe2020100883278.

Lamb, William F./Mattioli, Giulio/Levi, Sebastian/ et al. (2020): Discourses of Climate Delay. Global Sustainability 3.

Kenter, Jasper O./Reed, Marc S./Fazey, Ioan (2016): The Deliberative Value Formation model. Ecosystem Services 21: 194–207.

Kowarsch, Martin (2016): A Pragmatist Orientation for the Social Sciences in Climate Policy. How to Make Integrated Economic Assessments Serve Society. Springer International Publishing.

Kowarsch, Martin/Jabbour, Jason/Flachsland, Christian/ et al. (2017): A road map for global environmental assessments. Nature Climate Change 7(6): 379–382.

Kowarsch, Martin/Garard, Jennifer/Riousset, Pauline/ et al. (2016): Scientific assessments to facilitate deliberative policy learning. PalComms 2: 16092.

Norton, Bryan G. (2015): Sustainable Values, Sustainable Change. Univ of Chicago Press.

Riousset, Pauline/Flachsland, Christian/Kowarsch, Martin (2017): Global environmental assessments: Impact mechanisms. Env Sci Pol 77: 260–267.

Schwartz, Shalom H./Bilsky, Wolfgang (1987): Toward a universal psychological structure of human values. J Pers Soc Psychol 53(3): 550–562.

Zakhour, Sherif (2020): The democratic legitimacy of public participation in planning: Contrasting optimistic, critical, and agnostic understandings. Planning Theory 19(4): 349–370.

also help overcome the egocentric attitudes and fears to some extent that often underlie the motivation to follow populists.

However, can the presentation of policy alternatives have significant impact on policy-making - beyond the successful WaldBrandenburg case? Instead, many advocate for clear policy recommendations as output of participation processes to more directly influence policymaking. Often, however, this is misleading and short-sighted: policy-makers could easily play off such recommendations against competing recommendations from other groups. Moreover, forcing citizens to reach a consensus or compromise creates high pressure and expectations and hinders open-minded social learning. In contrast, the presentation of differentiated, well-reasoned pros and cons of policy alternatives can have a significant impact on political discourses (Riousset et al. 2017), while adhering to representative democracy, i.e. still leaving the decision-making power to democratically elected parliaments. When mandating a PEM-based participation process, the policy-makers promise to respond publicly and comprehensively to the specific, wellinformed final arguments presented on the pros and cons of policy alternatives. This can prevent the classic "there is no alternative" rhetoric in politics, and the comparison of policy alternatives can publicly reveal biased lobby proposals - which helps reduce democratically problematic power plays.

A widespread criticism of deliberative mini-publics is their potentially limited legitimacy from the perspective of those not involved (despite having a formal chance to be selected). Indeed, representation in mini-publics is a disputable concept and hard to realize anyways, given that some societal groups show little motivation to volunteer. However, apart from the longer-

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term practical vision of a massive upscaling of implementing such processes to involve large parts of the society at different levels of governance across Europe and possibly at the EU level itself as well, the proposed approach does not promise perfect legitimacy in whatever sense. It only envisages a *relative* practical improvement. Fair deliberation along the lines presented above



Fair deliberation may significantly limit typical power plays of dominant political actors in discourses by strengthening well-justified arguments from a societal-ethical perspective

may significantly limit typical power plays of dominant political actors in discourses by strengthening well-justified arguments from a societal-ethical perspective. PEM-based deliberation thereby encourages open, though not relativistic, discussion of valueladen issues in pluralistic democracies, making diverse legitimate (and well-reflected) value perspectives visible in the process output. This pragmatism-based approach is thus very different from technocratic or morally dogmatic perspectives that seek social acceptance of predetermined options, but also from

radical (ethical) constructivism (Kowarsch 2016, ch. 6).

In summary, the PEM-based deliberation procedure focuses on the practical implications of policy options and thereby differs from many other participation approaches in a number of key respects: (1) the iterative feedback loop between policy goals, means and implications; (2) ethical values seriously integrated; (3) the combination with an integrated, transdisciplinary scientific assessment, using knowledge visualization; (4) offering two parallel, but iteratively connected deliberation strands: one for citizens in a deliberative mini-public, and one for stakeholders and policy-makers; (5) the open deliberative learning process resulting in a map of policy alternatives (instead of clear-cut, forced policy recommendations and consensus).

Upgrading existing participating approaches, the PEM-based deliberation approach may thus help to address our collective dual crisis in an epistemically sound and responsible manner that is still democratically (relatively) legitimate and inclusive and that integrates diverse ethical values. Whether or not one accepts the underlying pragmatist philosophy, in practice the approach may help counter populism and strengthen trust in democracy, science and fellow citizens.