This is the transcript of the debate on Using Deliberative Conversation Methods to Bridge Divides and the panel on Building Bridges with Algorithms – Standards for a Strong and Equitable Digital Democracy, presenting German and European experiences and perspectives. For an overview of the American participants’ contributions and the work of NCEI in general, please refer to the relevant publications. We thank Rhianna C. Rogers, Director of RAND Center to Advance Racial Equity Policy, for organizing and German Consul General Stefan Schneider for hosting the event.

Using Deliberative Conversation Methods to Bridge Divides

A conversation between Michael Mäs and Andreas Nitsche

Consul General Stefan Schneider introduces Michael Mäs and Andreas Nitsche.

Andreas Nitsche: Thank you very much, Honorable Consul General. Good morning to all. Deliberation has the potential to bridge political divides but at the same time deliberation has essentially remained a prerogative of small groups. So how can we leverage the power of deliberation for large groups or even society as a whole? In search of an answer, I co-founded a long-term research project, called LiquidFeedback. It provides a framework for deliberation and collective decision-making implemented as an open source software under the same name. On LiquidFeedback, registered participants debate a set of issues and collectively develop and elaborate alternative initiatives. After this deliberation phase, users vote by ranking their favorite options to determine the collectively most preferred solutions.

Michael Mäs: You already link to a heated scholarly and public debate. Deliberation is a central part of democratic decision making. However, online social networks demonstrate that digital
discussion does not necessarily promote democracy and can even foster discrimination, hate speech, and the spread of disinformation. When designing digital deliberation, it is essential to exclude such negative effects, and to ensure an equitable process.

Andreas Nitsche: Absolutely, building trust requires fairness and credibility. The LiquidFeedback process, for instance, was designed to encourage constructive debates between different camps: liberals and conservatives, the wings of a given political movement, or interest groups in your local community. When you ask about the challenges of designing digital deliberation platforms, transparency strikes a chord. You want to understand the social processes unfolding in a digital debate, as opposed to most online social networks, which are black boxes because their algorithms are not shared with the public and because they generate highly complex social dynamics such as opinion polarization. Ideally, you also want to avoid moderators, people with special rights to influence the debate. In fact, you want to treat every participant equally. You also want to provide means to uncover and unmask political populism. And the wishlist goes on: You want to protect against the dominance of vocal groups, curb hate speech and so-called trolling, and ensure that minorities are given the opportunity to adequately express their position. We have designed the process with scalability in mind. LiquidFeedback has been deployed in scenarios with around 10,000 deliberators and we believe it can be scaled up even further. However, this is where you keep cautioning us that scaling up by one or two dimensions, i.e. going to 100,000 or one million participants, may create new effects.

Michael Mäs: Indeed, being a sociologist and a complexity researcher, I know that more is different. Large collectives often behave in very different ways than groups. This is because the dynamics in a population do not only depend on the individuals but also on how they influence each other. When one person influences another and this person another one and so on, chains of reaction can cause complex and highly unexpected phenomena. Including more individuals in a public debate, does not only increase the number of involved persons. The rise in social influence can be much more important. To be sure, I do not argue that scaling up deliberation and decision making is problematic. I just warn that processes that work fine in relatively small populations, such as 10,000 participants, may not work as intended when applied in larger contexts. Accordingly, scaling up deliberation requires great care and scientific methods, in order to avoid undesired effects such as opinion polarization, fake news spreading, and discrimination of marginalized groups. What are your approaches to foster, for instance, equity?

Andreas Nitsche: The LiquidFeedback project wholeheartedly supports equity. To give some perspective: We originally designed LiquidFeedback with equality in mind, as a bottom-up, peer-driven process. However, participants will always have different backgrounds, interests, strengths and weaknesses. That is why LiquidFeedback already offers different levels of engagement that are freely selectable by participants, allowing them to choose their preferred level and methods of participation. However, equity goes beyond this, as Rhianna Rogers, Director of the RAND Center to Advance Racial Equity Policy, stresses very much. Often there are people in a community from (historically) marginalized groups who wouldn’t even consider civic engagement, or who come from cultural backgrounds with very different
approaches to participation. Without these people, democracy is incomplete; we miss out on important insights and creative potential; and in the long run, we jeopardize social cohesion.

Michael Mäs: Let us switch to another recent debate. Tools like ChatGPT and Midjourney have demonstrated how powerful AI has become. On the one hand, this makes it a great tool to support complex deliberation and decision-making processes, for instance, by providing users with insights needed to make informed decisions. On the other hand, it is hardly understood why advanced AI generates its outcomes. I feel that in the context of democratic debate and decision-making, it is too early to apply AI. Democracy requires clear, transparent, and predefined rules. Black-boxes like AI will not build trust in the outcomes of digital democracy. I am curious what you think about AI and digital democracy.

Andreas Nitsche: I mostly agree. Another problem that could arise from the use of AI is black box-like behavior that undermines verifiability. Why do I think so? To ensure that LiquidFeedback provides a credible and reproducible process, we selected only deterministic algorithms. Even for tie breaking in a decision, we avoided the use of random methods. Consequently, the use of AI has to be well considered because AI will change its behavior by deep learning. The worst application areas I can think of would be the selection of important ideas or moderation. Not only can this render a participation irreproducible, it would also introduce an intransparent equity bias. When AI is trained on data that contains patterns of discrimination, that bias can be learned and reproduced by the AI. AI-induced discrimination has been well documented by studies in various fields.

Michael Mäs: But would you say that AI should be banned from democratic processes?

Andreas Nitsche: On the contrary, I can think of many applications of AI that neither compromise credibility nor increase bias. One example would be the translation of user-generated content by an AI. In a multilingual deliberation, it is important to ensure that translations are accurate and that readers from different language backgrounds are provided with the same information when they read translated content. Human translation can come with various unintended biases. What is more, a person trying to mislead citizens may adapt translated text in order to please participants with different backgrounds. AI has the potential to reduce such intended and unintended bias. Nevertheless, I agree that AI should be deployed with great care.

Michael Mäs: What was your original intended use of LiquidFeedback?

Andreas Nitsche: We had – and still have – full democratic self-organization of large scale groups such as organizations or cooperatives in mind – location independent, asynchronous, and scaling-up to a potentially unlimited number of participants. A bottom-up process in which participants have the opportunity to weigh the pros and cons of a proposal, including unintended consequences. We also encourage participants to consider alternatives, as the ability to determine the voting options is often as important as the ability to cast a vote. In a nutshell, deliberation before collective preference determination enables participants to identify viable options and make informed decisions.

Michael Mäs: This means, when you started, civic engagement was not even on your agenda.

Andreas Nitsche: In fact, we were very hesitant about this, because we believe that civic engagement requires that the input of citizens is translated into a measurable output. That is,
citizens need to see the impact of their efforts. Whenever public administrations consulted us about a potential use of LiquidFeedback, we insisted that an inconsequential participation simulation ultimately leads to disappointment. It basically comes down to this: Lawmakers should make a real promise of empowerment but be clear on limitations right from the beginning, manage expectations accordingly, and live up to what they promise. To be clear, I don’t say we need binding decisions, but we need to properly feed the outcome into the representative process.

Michael Mäs: Can you give an example?

Andreas Nitsche: One solution first implemented by the German County of Friesland is the legal foundation on petition law combined with an all partisan commitment to deal with every winning citizen initiative in a committee session. Elected representatives remain in charge but the citizens are part of the agenda setting. This served as a model for further citizen participation in other German cities and counties. In addition, in EU funded projects LiquidFeedback was also used for participatory action in Athens, London, Paris, Turin, and San Donà di Piave in the Metropolitan City of Venice.

Michael Mäs: We should also talk about liquid democracy, which, I believe, is one of the most intriguing concepts in the literature. Liquid democracy allows participants to freely choose between direct and representative democracy. Its core ingredient is delegation. That is, every participant of a democratic process is given one vote in a given decision, just like in a referendum. However, persons can also decide to delegate their vote to another person, like in a representative democracy. Next, persons can further delegate the delegations they received, generating a tree of delegations. What I find most intriguing is that delegations can also be revoked when persons feel that the person they delegated their vote to, may have been a bad choice. This includes a new form of control, since persons who have received many delegations will always consider the interests of the persons who delegated. You also apply liquid democracy in LiquidFeedback, right?

Andreas Nitsche: Oh yes, that's actually where part of our name comes from. To be clear, we do not see liquid democracy as an alternative to a republic, but rather as a way to balance direct democratic and representative elements in the governance of organizations. When you give members of an organization more direct influence, some critical questions arise: Does everyone want to be involved in every issue? What if people are interested in different areas? It's clear that people will have different choices about which issues to have a direct say or representation on. Fortunately, liquid democracy offers a dynamic solution to this dilemma. Basically, you participate in what you are interested in, but for other areas, you give your vote to someone who will act in your interest. In addition, liquid democracy supports the self-
organization of all factions and subgroups, whether defined by gender, ethnic identity, or even values. Ultimately, liquid democracy allows everyone to participate directly whenever they see fit, without placing too much burden on the participants. For our American audience, I should note that the idea of liquid democracy was largely developed in the United States beginning in 1967. Some of the important names are Gordon Tullock, James C. Miller, Rob Lanphier, and James Green-Armytage.

Originally, the focus of liquid democracy was on voting. In designing the LiquidFeedback process, we realized that transitive proxies (or liquid democracy) could be used for both deliberation and voting. Consequently, LiquidFeedback uses transitive proxies for participant empowerment during structured deliberation, collective moderation, identification of viable voting options, and final preferential voting.

Michael Mäs: You just mentioned the concept of collective moderation. Depending on who you ask, LiquidFeedback is considered unmoderated or as collectively moderated. Can you clarify?

Andreas Nitsche: An interesting question. In fact, the LiquidFeedback process does not require a moderator with special rights. Rather, the process is designed to encourage constructive behavior. In this context, the actions of all participants are instrumental and can be construed as collective moderation. This works as long as there is a majority in favor of constructive opinion formation. This majority does not have to be on the same page. For a fruitful debate we don’t need a consensus on political grounds, but we need common ground on the rules of procedure, a commitment to truth and facts, and democratic sentiment.

Michael Mäs: This brings me back to my own research on opinion polarization and the spreading of falsehoods. There is growing evidence that digital communication fosters the dissemination of fake news. What is your response to this challenge?

Andreas Nitsche: This is indeed a huge challenge. Even more worryingly is the diminishing trust in science. I believe the public needs a more complex understanding of the nature of science. People need to understand that truth and facts actually exist. Science is not just an opinion, but the process of approaching the truth. The defining characteristic of real scientists is that they always question their beliefs and critically examine their findings. A conspiracy theorist would never do that but would try to align any new observations into their theory rather than challenging it. New findings that change theories or expand models advance science, not cast doubt on the scientific method. In fact, science derives its credibility from the principle of falsifiability. Without this understanding, people are vulnerable to populist tendencies to ridicule science as mere opinion. Therefore, I believe, it would be counter-productive to communicate science as if it were dogma or to present scientific findings in an oversimplified manner by omitting assumptions, conditions, and uncertainties. This is hard to communicate, but it is honest and transparent. It builds trust and makes a debate robust to populism and false balancing.

Michael Mäs: Thank you for this interesting discussion, and on behalf of both of us, thank you to our audience. We look forward to continuing this discussion with all of you throughout the day and, of course, beyond this summit.
Building Bridges with Algorithms – Standards for a Strong and Equitable Digital Democracy

A panel with Ulrike Hahn and Michael Mäs, moderated by Andreas Nitsche

Ulrike Hahn
Professor at the Department of Psychological Sciences, Birkbeck College and Ludwig Maximilian University of Munich, Member of the German National Academy of Sciences Leopoldina

Michael Mäs
Professor at the Department of Sociology and Computational Social Science, Institute of Technology Futures, Karlsruhe Institute of Technology

Andreas Nitsche
Computer Scientist, Interaktive Demokratie and Project LiquidFeedback, 2022 Fellow at Thomas Mann House Los Angeles

Andreas Nitsche: It is my great pleasure to welcome Ulrike Hahn and Michael Mäs. Democracy “should put aside the habit of taking itself for granted, … It should … renew and rejuvenate itself by again becoming aware of itself,” said German novelist Thomas Mann. The time has come for its renewal in thought and feeling. Is technology part of the problem or part of the solution? We see many problems in global social networks. But there are also platforms specifically intended for deliberation and decision making that do not show these negative effects. However, they are much smaller in scale. Therefore we need to ask, what happens to such platforms when we scale them up? How can we make sure they help and don’t harm democracy? How can we ensure overall fairness? How can we design them to allow communication across political fault lines, build bridges, and ensure equity?

This morning, we would like to highlight two important European events for our American audience: the Conference on the Future of Europe and the Lorentz workshop “Algorithmic Technology for Democracy.” One of the most ambitious events in recent years was the Conference on the Future of Europe, intended as a citizen-led series of debates and discussions. A digital platform was used to gather ideas, whereas, what might be characterized as deliberation took place in moderated, face-to-face citizen panels. For what it’s worth, the conference illustrated that stakeholders appreciate the opportunity for digital participation but this emphasizes the need to answer the open questions. Inspired by this and other events, scientists from Europe, the United States, and Israel gathered at the Lorentz Center in Leiden for a week-long workshop on “Algorithmic Technology for Democracy.” The goal was to develop a long-term scientific vision for the development of digital democracy technology.
Michael, what are your takes on the Conference on the Future of Europe and what are the lessons learned?

**Michael Mäs:** On the one hand, I am a great fan of this initiative. It documented a high demand for citizen involvement on the side of stakeholders. Plus, one of its main outcomes was a similar demand on the side of the citizens. On the other hand, there has also been important criticism showing that designing large-scale participation is a huge challenge. First, it has been criticized for not being impactful. That is, the report that was published at the end of the conference did not translate into measurable political decisions. Citizens experience this as highly demotivating. Second, the conference has been criticized for having had too many filters. Citizens were providing input in various ways during public debates, in an online petition system, and various councils. How that input was aggregated into the final report, how some aspects were included and others dropped is unknown. People want transparency and deserve to know the democratic process already before it actually starts.

**Andreas Nitsche:** Ulrike, what are the dimensions which require attention to make large scale digital democracy a reality?

**Ulrike Hahn:** A key premise of the Lorentz workshop you just mentioned was that when it comes to democracy, we cannot proceed on the principle of trial and error. Democracy is too precious for that. This means we need an evidence base, drawn from science on questions such as: how can we enable effective online deliberation; how best should we elicit the preferences of citizens on relevant issues; how should votes or responses best be tallied, and how do different rules for this interact with user behavior including strategic behavior; how can we best let citizens manage their digital identities?

**Andreas Nitsche:** That is an impressive list. Deliberation appears to be one of the biggest challenges, considering experiences with online social networks. Michael, many feel that public debate on these systems can backfire, generating outrage, hate speech, disinformation, and conspiracy theory.

**Michael Mäs:** Indeed. But there are examples of designs that work. On LiquidFeedback, for instance, citizens can propose initiatives. Others can either support an initiative or condition their support on adjustments. As a consequence, the author of an initiative can consider to elaborate the initiative and gain more support. If a person is not happy with a given initiative, they can develop an alternative initiative and elaborate it in the same way. This avoids unproductive fights between the supporters of alternative approaches and allows them to enhance their ideas. But, there are many open questions: how to balance separation and contact between alternative initiatives. How to generate equity? How to tailor systems to context aspects, like the size of the population, the issues being debated, and the cultural backgrounds of participants.

**Andreas Nitsche:** Ulrike, what are desirable and necessary properties of algorithms, what are the trade-offs we face with conflicting objectives? And the second part of my question is about perception. We must stand in the court of public opinion because it’s ultimately the citizens who determine the credibility of a democratic process.

**Ulrike Hahn:** There are many potential trade-offs and goal conflicts here: algorithms that might promote consensus may impede the accuracy of our beliefs, because diversity matters; the
absence of restriction on what people can say may create environments from which some groups actually withdraw effectively silencing them, and so on. There's much to study here, and we will need to be able to examine this at scale - small groups may be very different from large groups. But one non-negotiable property of any algorithm in this space is that it has to be open source, and transparently available for study and inspection. That's a fundamental precondition that flows not just from democratic principles including who gets to decide on these algorithms but citizen's legitimate questions about trust.

Andreas Nitsche: Thank you, Ulrike. My next question is for Michael. Can we challenge views without contributing to polarization?

Michael Mäs: Whether bringing-in-contact people with opposite views fosters or fights polarization depends on how users adjust their views during interaction. There are two important models of opinion polarization. According to the first, opinion polarization arises when individuals who disagree too much seek to further increase differences. In this model, contact between opposing groups fosters polarization. According to the second model, opinions polarize when individuals with similar opinions reinforce each others’ views during interaction. This generates polarization when similars meet. The problem is that there is evidence supporting both models and it is unknown which of the two is stronger or weaker in digital settings and how the design of platforms can influence this. We need to study opinion dynamics and explore design features that influence individual reactions.

Andreas Nitsche: One final consideration that will be important to our audience: equity.

Ulrike Hahn: Yes, equity matters fundamentally, and it plays a central role at every stage of the process. We need to ensure: equitable access, equitable participation, equitable decision processes, so we can hopefully reach equitable outcomes. All of these pose challenges for democracy in general and all of these pose specific challenges for digital democracy as well. And, crucially, what we need to do here is very much build systems in such a way that they allow effective participation. That means more than just an in principle right to access or voting. Effective participation means putting people in a position so they can actually make good on those participation rights and play an active, full role. In the same way as the German constitution stipulates for the economic activity of German citizens: it's not enough there, constitutionally speaking, that there is a market, the citizens also have to be in a practical position to take part in it.

Andreas Nitsche: Thank you both for this great conversation, which I'm sure will continue with our audience here today and with our colleagues on both sides of the Atlantic.