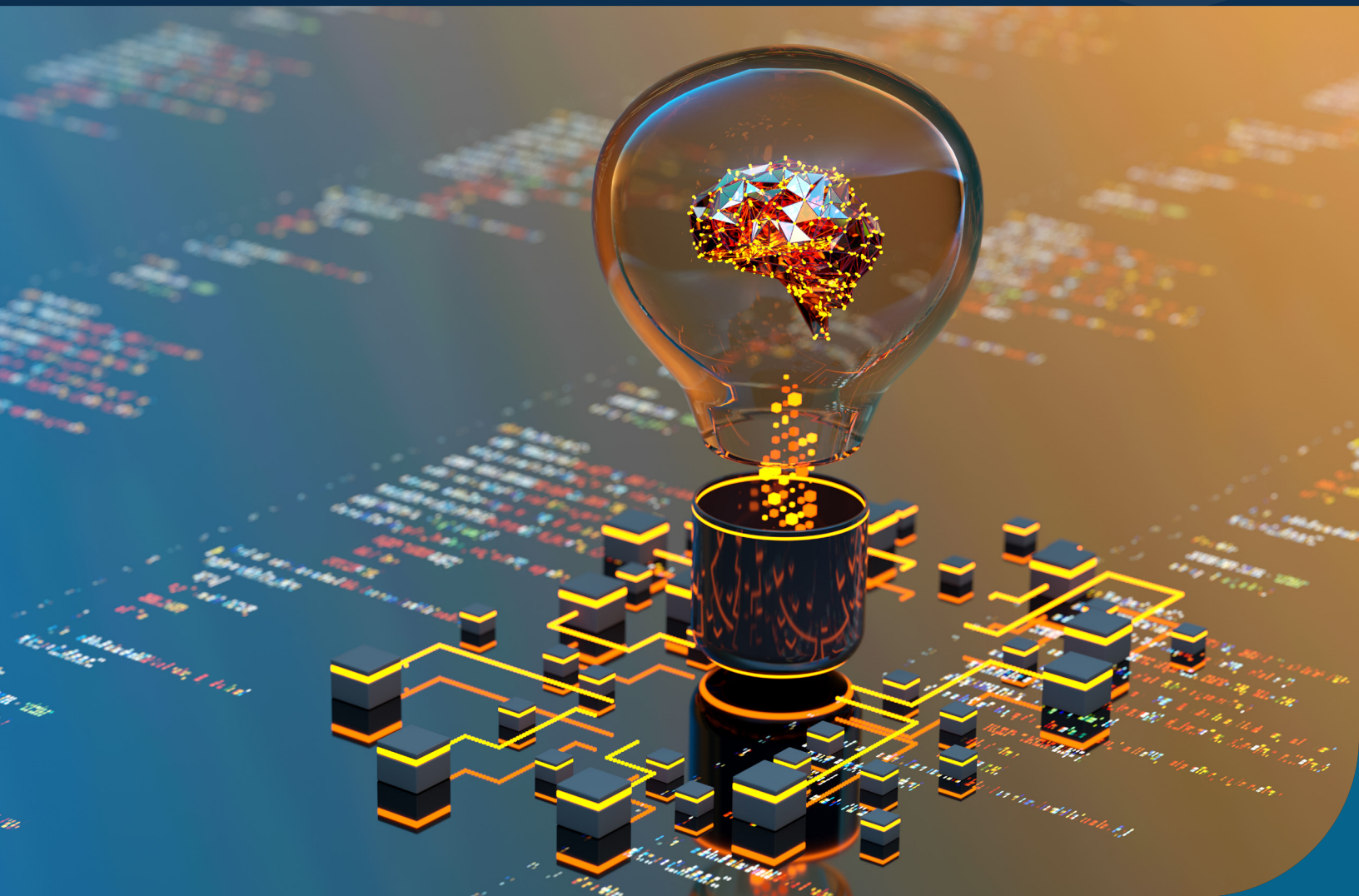


# LEVERAGING AI FOR DEMOCRACY

CIVIC INNOVATION ON THE  
NEW DIGITAL PLAYING FIELD

// BETH KERLEY / CARL MILLER / FERNANDA CAMPAGNUCCI



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# RECLAIMING TECHNOLOGY FOR DEMOCRACY

// CARL MILLER

As the Internet first came into being, some of its earliest inventors saw it as a technology that would be synonymous with democracy. In 1979, J.C.R. Licklider wrote, “computers would allow [decisions] in the ‘public interest’ but also in the interest of giving the public itself the means to enter into the decision-making process that will shape their future.” A more connected society, in this view, would also become a more democratic one.

Yet if the earliest decades of the Internet Age were suffused with glowing optimism, then the most recent has ushered in gloom. For roughly ten years, a succession of commentary has made the case that, rather than serving as a portal for participation, connection, and public-interest decision making, networked computers have torn us further apart.

The culprit most point to is commercial social media. The “organizing incentive of all social media,” Max Fisher explains in his book *Chaos Machines*, “is attention.”<sup>1</sup> **Profit-seeking social media platforms have designed information spaces with a single priority: to keep their users on the platform.** That, Fisher argues, has had a series of ruinous consequences—including polarization, radicalization, and alienation.

So what will the next decade hold? As we mark what Freedom House has deemed the eighteenth consecutive year of global democratic decline,<sup>2</sup> the stakes have become exceedingly high. Autocracies are only becoming more geopolitically boisterous and ambitious, and a series of democracies from Turkey and Hungary to India are backsliding. Of course, the Internet is not the only author of democracy's decline, but it is part of the story.

A series of increasingly urgent efforts are therefore underway to build new information spaces that buttress rather than undercut democracy. These efforts take numerous forms, from changing the existing commercial platforms to building alternatives, among other strategies. **One key subset is new deliberative technologies:**<sup>3</sup> systems designed to enable people to discuss, consider, and ultimately decide at scale and over distance, producing outcomes that feed into democratic processes of one kind or another.

## AI ADVANCES AND TECH-ENABLED DELIBERATION

Some of the warmest enthusiasm has been for **the creation of new deliberative processes using the latest generation of large language models (LLMs)**. In 2023, OpenAI, one of the leading developers of this class of technology, funded ten projects around the world that would use generative AI to do everything from **facilitating deliberative video calls** to **generating representative summaries of opinions from a large group**.<sup>4</sup> Anthropic, another developer, has also supported attempts to create deliberative spaces.<sup>5</sup> One such project involves the use of LLMs to summarize discussions hosted on an older online deliberative platform called Polis (which itself uses “bridging algorithms” to map out discussants on the basis of their expressed opinions, then begins to surface ideas that gain traction across the different factions that have formed).

Outside the tech governance space, systems of this kind have already been deployed to bring new deliberative processes to places without established democratic institutions. In Libya, the United Nations (UN) partnered with a platform called Remesh to create what they call “Large Scale Digital Dialogues.”<sup>6</sup> This collaboration allowed the UN to engage a sample of hard-to-reach populations in this conflict zone digitally, providing an opportunity to express their opinions and respond to those of others. AI algorithms then processed these inputs to identify the themes most important within and across different groups, informing the process through which Libya formed a Government of National Unity in 2021. While the sample of participants was not fully representative, reflecting wider disparities in online participation, this approach made it possible to broaden the peace process beyond what would otherwise have been possible.

AI-enabled deliberative processes are not completely new. Polis, for instance, was famously used by civic hackers in the wake of Taiwan's 2014 Sunflower Revolution to address a crisis of legitimacy by creating a digital democratic process, called vTaiwan, that would help to shape new laws and regulations.<sup>7</sup>

Yet recent advances in AI models—especially around their ability to make sense of natural human language—are giving a boost to these explorations by opening up new technical possibilities. One critical change has been the growing capacity of AI tools to “read” conversations and summarize their meaning in much shorter form. This capability has already been trialed by Remesh and Polis (as well as my own project for OpenAI,<sup>8</sup> where we used large language models to create a higher-level semantic mapping of the key points of consensus that had emerged from an online deliberation about AI governance). Text summarization might be used to create a synopsis of outcomes from a specialized discussion that can, in turn, serve as the input for another, more general one, much in the same way that a specialized committee debates and delivers snappy bullet-points to be debated in turn by the full legislature.

Here, one key technical impact is simply to make the whole process cheaper and easier. As Colin Megill, the co-founder of Polis, writes, “a high quality process involving a Polis conversation costs on the order of \$100k to run.”<sup>9</sup> For him, **technologies like text summarization that leverage AI language processing to make sense of large numbers of disparate inputs, could reduce this cost radically by automating much of the reporting and write-up.** This shift opens up possibilities to conduct deliberations on a much larger scale, widening the element of public participation. It also makes organizing discussions of this kind a more practical option for civil society, resource-strapped local governments, and other groups with limited resources.

## FROM TECHNOLOGICAL TO POLITICAL INNOVATION

As AI advances help to make digital deliberation more dynamic and accessible, where else might these technologies fit into civic life and democratic practice? In the future, we must not simply think about technology in the abstract. Rather, the democratic community must bundle technological and political innovation together.

Globally, tech-enabled deliberative processes could help multilateral or multistakeholder institutions to connect directly with publics—and connect publics with one another—in ways that go well beyond the current applications in peacebuilding. There are very few opportunities for populaces to discuss global issues across cultural and linguistic boundaries directly, and this space is shrinking further as geopolitical tensions rise.

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**Machine translation can allow deliberations to be run across dozens—even hundreds—of languages simultaneously.** Mistranslations will occur, of course, and the imperfections of AI language processing mean that cultural subtleties will be lost, but the potential of continuous, cross-cultural conversation is still extremely exciting. As rapid technological advances place a nonstop series of new questions on the global governance agenda, it might be that cross-border digital deliberation can create some discursive webbing between countries to fill some of the gaps we will inevitably see in formal international law.

Within national democratic systems, local governments have tended to be the most experimental in trialing AI-facilitated deliberation. Newham, a local Borough of London, for instance, conducted a Commission (of which I was part) that explored the potential to use digital democracy to involve citizens in decision making.<sup>10</sup> Here, AI might add the most value by doing the opposite of summarization. **LLMs could identify small groups with shared concerns or points of view expressed in larger deliberations, and target these individuals to bring into follow-on, narrower discussions.** Alternatively, LLMs could draw on the enormous troves of civic data that local governments hold to arrange hyper-local, personalized deliberations. For example, bringing service users with specific types of medical vulnerabilities into one deliberation about service redesign, and everyone who parks their car on a given road into another about planning permission. Participant knowledge and consent would be crucial in any such applications, since identifying these narrower groups—especially based on public-sector data—has implications for privacy and autonomy.

**The most widely promising applications of AI deliberation may be outside of formal politics and instead in the domain of membership organizations:** unions, clubs, associations, trusts, societies, and political parties, as well as more casual, less formally constituted social movements and collectives. Efficient, scaled deliberation, for these latter groups, might represent an entirely new way to represent their memberships' views or even to identify the members' values and priorities, while still retaining horizontal, bottom-up structures. Leaderless protest movements,<sup>11</sup> which from Egypt and Spain to Hong Kong have organized on social media, might leverage deliberative technologies to agree on demands, identify priorities, and set an agenda, overcoming obstacles to coordination and sustained collective action. The tapestry of groups will take different forms in different countries, but finding ways of connecting organizations more collaboratively with their members and stakeholders will strengthen civil society.

One final proposal is the most technological, and possibly the most controversial: to connect AI deliberation with a new sort of vehicle for decision making, digital autonomous organizations (DAOs). DAOs are self-executing “smart” contracts sat on a blockchain—effectively, structures of decision making baked into code. Originally conceived as investment vehicles, these were structures into which people placed money in exchange for tokens which gave

Efficient, scaled deliberation could help civil society groups connect more collaboratively with their members and stakeholders.



them a right to vote on how the money should be spent. Their use has begun to widen slowly, with DAOs set up to raise money for Ukraine<sup>12</sup> or facilitate transactions and promote sustainability among farmers.<sup>13</sup>

DAOs are innovations in decision making, but there has been far less innovation in how deliberation happens in the communities formed within them. The internal discussion is generally angry and fractious, often taking the form of long Discord posts dominated by a few individuals. Thus, it would be fruitful to connect digital deliberation with decentralized decision making. Recently, the Mina Foundation, which governs the Mina Protocol ZK blockchain project, put this idea to the test by partnering with the LLM-based collective decision-making platform Talk to the City (TtC) to help members evaluate proposals for improving the organization's governance.<sup>14</sup> If we can separate the technology itself from the shallowly materialistic, toxic culture often present around crypto, connecting DAOs with deliberative processes might present an entirely new kind of vehicle for making decisions, especially around finances—exactly how to support Ukraine for instance, or whether a specific land acquisition deal should be pursued—and then acting on them.

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## MEETING THE DEMOCRATIC CHALLENGE

There are many genuine concerns with these new forms of deliberation and decision making. We are living in an age where digital discussion spaces are often targeted, gamed, and hacked by the antagonists of democracy. Thus, the idea of linking such spaces to more decisions might strike many as risky. The use of latest-generation AI to synthesize or moderate also raises concerns, given that outputs can be biased, hallucinatory, or, at the very least, difficult for humans to explain. Others also worry that an exclusive focus on consensus is itself a problem, with the potential to sideline minority voices and quash the dissent and disagreement that are fundamental to democratic practice.

Perhaps the trickiest problem is that **deliberative processes do not easily slot into our ideas of representative democracy**. What gives any single group democratic legitimacy over others? In Taiwan since 2014, the vTaiwan digital democratic process has sometimes sat uncomfortably alongside the elected legislature. “Those digital democracy platforms don’t have any kind of real authority,” Taiwanese parliamentarian Karen Yu told me several years ago.<sup>15</sup> Ultimately, it is still Parliament that passes the law, and it is unclear what impact a platform such as vTaiwan can have when its output and the opinions of the legislative body collide.

In reality, bolstering democratic practice meaningfully using any of the processes outlined above is difficult, as is democracy itself. The answer will inevitably lie not just in new deliberative technologies, but also in the changed

ways of practicing democracy that can make best use of them—not just in building new information spaces, but also finding ways of making them matter.

If the last decade has shown us anything, however, it is that **finding ways of making the technology we use everyday support the democratic systems that we want is not an optional extra. It is essential.** It will come down to the next generation of innovators, designers, politicians to find out how this critical objective can be achieved.

## Reclaiming Technology for Democracy

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