# The Peril and Promise of AI for Journalism

by **Nishtha Gupta**, **Jenina Ibañez**, and **Chris Tenove**

THE UNIVERSITY OF BRITISH COLUMBIA
School of Public Policy and Global Affairs
Centre for the Study of Democratic Institutions

@ubcdemocracy
democracy.ubc.ca

# Report credits


**Report authors**

**Nishtha Gupta** is a research assistant at the Centre for the Study of Democratic Institutions (CSDI), and a Master of Public Policy and Global Affairs student at the University of British Columbia (UBC). She previously worked as a journalist with one of India's leading newsrooms and has since contributed her research skills to global think tanks, exploring critical issues surrounding disinformation, technology, and democracy.

**Jenina Ibañez** is a research assistant at CSDI and a Master of Public Policy and Global Affairs student at UBC. She previously worked as a journalist covering fiscal policy, international trade, and technology in the Philippines and Southeast Asia.

**Chris Tenove**, PhD, is Interim Director at CSDI and a Research Associate and Instructor at UBC's School of Public Policy and Global Affairs. His academic research and policy reports address online threats to democracy, journalism, and human rights. He previously worked as an award-winning journalist.



**Additional assistance**

Andrew Munroe, Global Reporting Centre: Report design and copy-editing

Emma Arkell and Michelle Meiklejohn, Global Reporting Centre: Communications support

Netheena Matthews (CSDI): Copy-editing

---

Special thanks to all workshop participants, and in particular to workshop co-organizers Kshitij Sharan (CSDI) and associate professor Kathryn Gretsinger (School of Journalism, Writing, and Media). We gratefully acknowledge support from the Consulate General of Germany in Vancouver, and from the University of British Columbia's Centre for Computational Social Science.

---

**Citation:** Gupta, Nishtha, Jenina Ibañez, and Chris Tenove. (2024). *The Peril and Promise of AI for Journalism*: Vancouver: Centre for the Study of Democratic Institutions, University of British Columbia.

# Introduction

Journalists around the world are responding to the dramatic rise of artificial intelligence (AI), and particularly generative AI. Many newsrooms are experimenting with these tools and identifying new opportunities. At the same time, many journalists and commentators see AI as the biggest threat to journalism in decades.

One central concern is that AI will be used to make disinformation campaigns faster, more targeted, and more persuasive — whether it's a faked video of the Eiffel Tower on fire or fake robocalls made to sound like U.S. President Biden. Journalists themselves are increasingly targeted with sophisticated disinformation campaigns that put their own reputations and personal safety at risk.

At the same time, journalists' abilities to counter disinformation are jeopardized by risks that AI poses to their newsrooms and their industry. Many are seeing their organizations adopt new forms of automation and content generation, and contemplating a future in which AI alters job descriptions and further depletes newsrooms.

In response, journalists are developing investigative practices to expose disinformation campaigns, experimenting with AI tools to make their own work more efficient, and developing ethical guidelines and labour protections to defend professional journalism.

Likewise, the news industry, policymakers, and platforms are considering responses that range from workforce training to newsroom innovation to new professional guidelines to AI regulation. For instance, U.S. newsrooms worked with The Associated Press to develop AI tools that assist local journalists, and Reporters Without Borders convened an international commission of prominent journalism organizations to publish a charter to guide journalists' ethical use of AI (for more on that charter, see *Key Issue #2*).

To reflect on these major developments and their implications, the Centre for the Study of Democratic Institutions (CSDI) convened a workshop on Journalism, Disinformation, and AI at the University of British Columbia on November 21, 2023. Support and assistance were provided by the Consulate General of Germany in Vancouver, UBC's School of Journalism, Writing, and Media, and the Centre for Computational Social Science. This report draws on insights from the scholars, researchers, and journalists who attended that workshop, along

---

About the background text on the cover, back page, and margins: Report co-author Chris Tenove trimmed the report down to about 750 words, cutting all proper nouns and emphasizing more active and concrete language... He then prompted GPT4 with "Create 10 statements of 10 to 15 words that summarize the following short essay. Place those 10 statements in order from the most positive to the most negative." He then added the prompt, "Make the statements shorter and more sensational."

with recent academic and journalistic publishing. The goal is to synthesize the key issues at stake, and spur further research and discussion.

This report will discuss the risks and opportunities that AI technologies pose, and recommend paths forward for journalism and its roles in democracy. ***"I don't like the doom and gloom phase that we have at the moment,"*** said workshop panelist Thorsten Quandt of the University of Münster. ***"We're still kind of overwhelmed with these issues, but I'm pretty sure democracies will adapt… [and] in journalism, we will see more options, not just dangers."***

Through this report, CSDI hopes to contribute to important public conversations about the impact of new technologies on journalism and our information environments. Ultimately, the

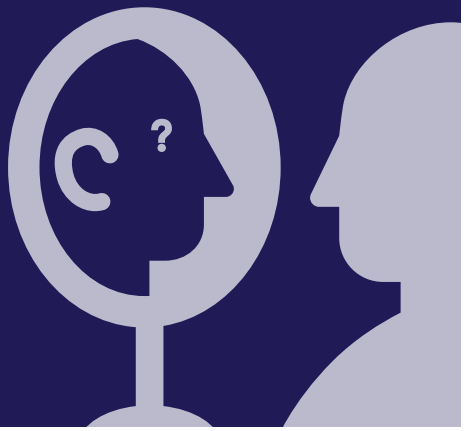
SPOTLIGHT

## Fake news from 'Doppelgänger' sites

The Doppelgänger network, a pro-Kremlin group, has disseminated disinformation by posing as legitimate news outlets on social media, sometimes using AI-generated content. This operation has specifically targeted European and American audiences, muddying the waters between genuine journalism and inauthentic content, with a particular focus on the Russia-Ukraine conflict.

In response to the Doppelgänger network's disinformation campaign, the German Foreign Ministry employed digital forensic experts to investigate the issue. Using specialized monitoring software, these experts traced over one million German-language posts from approximately 50,000 fake accounts, all aimed at undermining Berlin's support for Ukraine.

In September 2022, Meta released a report on the network, calling it, "the largest and most complex Russian-origin operation that we've disrupted since the beginning of the war in Ukraine." In its November 2023 Adversarial Threat Report, Meta also acknowledged that a new cluster of websites linked to Doppelgänger had been fuelling disinformation surrounding the Israel-Palestine conflict by spoofing mainstream American news sites.




Following the unearthing of the Doppelgänger operation in 2023, the European Union imposed sanctions against two Russian IT firms, Structura National Technologies and Social Design Agency, which were shown to have participated in the disinformation campaign.

responses developed by journalists, policymakers, technologists, and citizens will shape our efforts to understand the world and act as democratic citizens.

## Key Issue #1: How Does AI "Supercharge" Disinformation?

Disinformation is a longstanding problem that has had profound effects on journalists even before the surge of AI use. Many journalists around the world face disinformation campaigns intended to discredit or dehumanize them, according to panelist and CSDI Interim Director Chris Tenove. His research with the Global Reporting Centre found that such efforts can expose journalists to violence, undermine their mental health, and contribute to other personal and professional harms.

The uptake of AI has worsened the situation. ***"Generative AI tech has lowered the barrier to entry to the disinformation market,"*** said Freedom House Middle East and North Africa analyst Cathryn Grothe, ***"while automated systems have enabled governments to conduct really precise forms of censorship and surveillance."*** State-aligned actors can also swiftly generate and propagate misleading information, in efforts to influence public opinion and international relations.

The 2023 Freedom on the Net report by Freedom House similarly revealed how AI "supercharges" the spread of disinformation. The report found cases in which AI-generated text, audio, and images were spread through networks of social media influencers and public relations firms to distort the political messaging. The report showed how AI-generated content known as deepfakes can boost political narratives and malign opponents. For example, an AI-manipulated audio clip of an opposition presidential candidate in last year's Nigerian elections insinuated that he planned to rig the vote in his favor. Such clips can stoke both partisan hostility and doubts about the integrity of elections, according to the report.

AI tools can also be used to enhance disinformation micro-targeting. Machine learning can enable the identification of online users' characteristics, which can then be used to target them with highly personalized content. Automatically generated content uses a combination of personalized targeting and AI that mimics natural language to spread disinformation to influence these users. These techniques can also be used to make phishing campaigns more effective and increase cybersecurity risks, according to a report from UBC's School of Public Policy and Global Affairs.

Disinformation could be spread by social bots, or partially automated users on social media platforms that aim to manipulate online discourse. A recent "alarmingly good" ChatGPT campaign targeting pro-Ukraine Americans on Twitter/X, for example, showed the ability of such tools to mimic authentic human language and their potential for further sophistication.

The ability to make disinformation seem convincing can aggravate polarization and fuel violence against individuals or groups of people. As many as 16 countries in the past year have used generative AI as part of disinformation campaigns to "sow doubt, smear opponents, and influence public debate," said Cathryn Grothe.

AI-driven disinformation could also contribute to people losing trust in information from legitimate news sources. For example, Russian state-backed disinformation campaigns have posed as independent news and fact-checking projects, said Julia Smirnova, an analyst who monitors online conspiracy and disinformation communities at the Institute for Strategic Dialogue (ISD). ***"They use the same language [as fact-checking and news organizations] to discredit established media,"*** she said. (See the "Doppelgänger" box, previous page, for more.)

ISD also revealed online campaigns suggesting that Russia-perpetrated killings in the Ukrainian city of Bucha were faked by Western governments and news media. As Smirnova explained, the accounts claimed ***"that fact-based reporting about a massacre was, in fact, staged."***

In response to campaigns to discredit them, media organizations have to be vigilant about the risk of publishing deceptive images created or modified through AI tools, which could ***"call into question everything we publish from then on,"*** said Matt Frehner, the Head of Visual Journalism for *The Globe and Mail*.

Journalists are increasingly contending with these twin issues of having to fact-check with more scrutiny amid disinformation that mimics authentic content and upholding their reputations as malicious actors try to delegitimize them. Frehner discussed The Globe and Mail's independent verification of photographs, which involves a process that includes checking metadata and forensically assessing the image — the buildings in the background, the lighting, and the location. ***"We don't publish anything that we can't verify ourselves,"*** he said.

SPOTLIGHT

## Using AI to illustrate people's experiences of war

How might journalists use visuals to help share people's experiences of war when there are no cameras present? The US-based news organization Semafor's "Witness" series features a story that covers a firsthand account of someone directly affected by the Russia-Ukraine war. This account was paired with animated images generated by the AI engine Stable Diffusion. By leveraging AI, Semafor overcame a traditional limitation in conflict reporting — in this case the difficulty of capturing video — while making people's experiences more accessible and relatable to audiences.

In another example, journalists with Rest of World investigated an Indian politician's allegations that audio clips of him were fake. The clips, in which he criticized his own party, were sent for forensic analysis. The analysts concluded that one of the clips was authentic, while the other was of too poor quality to tell. Experts have called this the "liar's dividend," in which politicians, business leaders, and other prominent individuals claim that real audio or video is faked in order to avoid accountability.

These processes can be complex and time-consuming. Such assessments require expertise and tools that many newsrooms lack. According to Sam Gregory, an expert on deepfakes and executive director of the human rights organization WITNESS, more action is needed to address the "detection equity gap that exists in the world."

At the same time, journalists are having to defend their work from actors intending to delegitimize reliable news sources. These acts of delegitimization can also escalate to violence. Some groups consider journalists to be part of an establishment they are fighting against, and they ***"are really ready to use violence,"*** said Thorsten Quandt.

To detect AI-generated content and help readers combat disinformation, media organizations are taking a variety of approaches. U.S. broadcast network CBS will produce TV segments based on the findings of its newly launched fact-checking unit that assesses AI-generated misinformation. *The Globe and Mail* has published a generative AI quiz that tests readers on their ability to identify fake media and text.

## Key Issue #2: Can journalists responsibly use new AI tools?

The impact of AI on journalism goes beyond its uses for disinformation campaigns. Many journalists and media organizations are exploring the opportunities AI could offer the profession and assessing the risks of doing so. The Associated Press (AP), in partnership with university tech development teams, worked with local newsrooms to develop AI tools for transcription and weather updates to speed up news alerts and free up journalists' time.

Through a survey of almost 200 newsrooms, AP also identified key areas where AI could be useful:

- **Newsgathering** - transcription, automated alerts when government documents are published or updated online, social media monitoring
- **Production** - scheduling of posts, page layouts, photo suggestions
- **Distribution** - audience analytics, content moderation
- **Business** - tools to increase subscriptions

For the most part, these AI tools can be used to assist with time-consuming tasks, but would not replace crucial writing and investigative work. However, other news organizations are using generative AI to write entire articles. News Corp in Australia produces 3,000 AI stories a week on weather, fuel prices, and traffic reports. In the case of tech site CNET, the use of AI led to published errors and pushback from its unionized staff.

At least 85% of over 100 newsrooms in a global study conducted by the London School of Economics last year said they have experimented with generative AI to varying levels. This includes using it on more creative tasks like rephrasing sentences, summarizing articles for social media, suggesting headlines, and generating unique images.

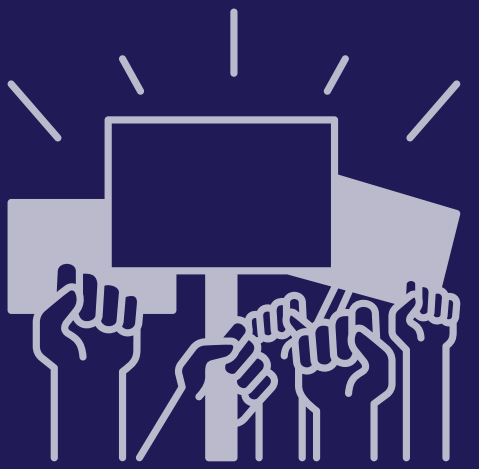
This expansion of journalists' AI use inevitably brings up ethical concerns. One is the threat to journalists' commitment to accuracy if they begin to rely on potentially error-prone AI sys-

SPOTLIGHT

## Shift to AI leads to errors, and new efforts to unionize

After joining the ranks of organizations that publish AI-generated stories, tech media outlet CNET has faced backlash in response to dozens of errors and plagiarism among its automated articles. This shift to AI has also added to its editorial staff's list of grievances as they unionize to fight for better job protections. Among the union's concerns is automated technology, and how it "threatens our jobs and reputations." If it is successful, the CNET Media Workers Union could be one of the first to force a news organization to define the limits of the use of generative AI and improve transparency on data used to train AI tools.

As media organizations ranging from *Sports Illustrated* to Buzzfeed publish AI-generated articles (Buzzfeed shut down its news division in 2023, and Sports Illustrated announced mass layoffs in January 2024), a CNET union representative advocates for industry-wide ethical standards via collective bargaining agreements, emphasizing that "AI-produced content should never replace real writers."



The risk of media job cuts due to AI is also increasing in Europe: German tabloid Bild in June 2023 announced plans to lay off editorial staff as its publisher ramps up AI use. The German Journalists' Association denounced the plan, branding it "antisocial towards the employees" and "economically extremely stupid" while warning that a decline in regional reporting could lead to a loss of readership.

tems (see the *Shift to AI* box on the previous page). Another is the fact that most AI systems are trained on content without permission from their original creators.

There are also concerns about AI tools replicating real-world biases. *Toronto Star*'s automation of crime stories using police data has invited questions and criticism. Some editors expressed concern that automated stories on break-and-enter cases, without the context offered by human reporters, could stigmatize "less wealthy and less white" communities, according to *Toronto Star* product manager for content Cody Gault. (Though in this particular case, the reported data showed that break-and-enter cases are actually dispersed fairly evenly across the city).

There is extensive research on the existence of stereotypes and biases in AI models, from inaccurate race-based health claims to undue associations between Muslims and violence. Biases can become ingrained in AI systems in complex ways, making it difficult to address them.

Stephen Marche, a journalist and novelist, also encountered biases built into generative AI models when he used them to create the novel *The Death of an Author*. Structures of power are ***"essentially unremovable"*** from language, he said, so journalists need to be alert to those risks and self-reflective when using AI tools.

Matt Frehner notes that news organizations can investigate and expose AI systems' biases. Journalists can help ***"readers and consumers and users of AI, who think that the technology is objective,"*** he said, ***"by proving that it is not."***

Members of the public not only worry that AI will be discriminatory or distort the truth, but that journalists themselves will use AI tools in problematic ways. For instance, a poll commissioned by the Canadian Journalism Foundation found that 85% of Canadians are concerned about how the use of AI in journalism could spread misinformation, with the majority agreeing that a governing body should have strict oversight over journalists' use of the technology.

Journalists in Canada and globally have been seriously contemplating the impacts and ethics of the technology on the profession. A global commission convened by the NGO Reporters Without Borders (RSF) produced the *Paris Charter on AI and Journalism*, which calls for human oversight of AI use, emphasizing editorial accountability and transparency. The guidelines call for newsrooms to ensure that AI systems are "designed and used in such a way as to guarantee high-quality, pluralistic and trustworthy information."

Various newsrooms have already been creating their own guidelines for AI use. These cover issues such as which AI tools or uses are permitted or banned, who has to review and sign off on content created by AI systems, and whether labels or other transparency measures will be used to inform audiences when AI tools have been used to create content.

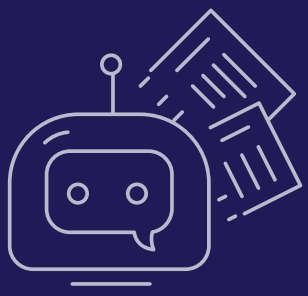
***"All these tools are becoming available, and journalists being the inquisitive minds that they are, want to go and play around with them and figure out what they can do and how they can use them for their work,"*** Matt Frehner said. ***"But we had to think through pretty quickly what the guidelines for that would be."***

*The Globe and Mail*'s memo to its newsroom clearly states that generative AI should not be used to summarize or write articles for publication at all. ChatGPT cannot be used to edit stories, and AI-generated headline ideas should have human oversight.

The idea of publishing articles or images without human oversight, ***"that's just too problematic for us,"*** said Frehner.

## Key Issue #3: Does AI threaten the viability of journalism?

In an era where the media industry is at a crossroads, grappling with dwindling revenues and evolving business models, the advent of AI has added a new dimension. Poynter describes a media industry in upheaval: over 20,000 layoffs in the U.S. in 2023 alone, the most significant since 2020, and a particularly hard-hit news sector with 2,681 job losses. Amidst this backdrop, the future of human journalism faces a seemingly existential threat, as AI's role in the industry deepens, reshaping the very fabric of news reporting and content creation.



SPOTLIGHT

### Evening news brought to you by AI

In 2018, China's state-run news agency Xinhua unveiled the world's first AI news anchor. A digital replica of a real journalist, the "anchor" was designed to deliver news around the clock in a realistic human voice and with realistic facial expressions. AI anchors have since seen adoption in India, Indonesia, Taiwan, Kuwait, and Malaysia. In India, Aaj Tak news channel's AI-powered anchor Sana, capable of presenting in French, was launched in alignment with Prime Minister Narendra Modi's visit to France.

Research from Northwestern University outlines three key areas where AI is revolutionizing journalism. Firstly, AI helps journalists sift through large data sets for investigative journalism. Secondly, AI enables personalized news content, adapting to readers' interests and comprehension levels. Lastly, AI can be used to modify stories so they work for different platforms and audiences.

Generative AI, the latest development in this evolution, extends beyond simple automation. It offers the potential to create narrative content, yet its current limitations in originality and depth have raised questions about its impact on quality journalism. While generative AI offers potential applications in journalism that go beyond basic reports and data analysis, it lacks the nuanced understanding and critical thinking inherent in human journalism. AI's democratizing potential is real, but journalists must not let it overshadow the enduring value of human-centric reporting, community trust, integrity, empathy, and ethical considerations.

While AI promises efficiencies and automation, it is crucial to navigate the hype surrounding it. AI companies and enthusiasts promote its potential, but it is vital to maintain a critical perspective. Stephen Marche's observation reflects this: ***"There is no replacement for seeing things and getting a perspective on them. If your writing can be replaced by ChatGPT, you shouldn't be writing."***

Media scholars Mike Ananny and Jake Karr go further and argue that reliance on generative AI to create content may jeopardize the essence of journalism's public service role, "Namely, its capacity and obligation to artfully, eloquently, and intentionally use language to create and debate the ground truths that anchor shared social realities."

Amid these discussions, a key legal case underscores the tense relationship between AI companies and journalism. In a landmark legal case, *The New York Times* has filed a lawsuit against Microsoft and OpenAI, focusing on the unauthorized use of the newspaper's content to train AI models. The case is one of many examples of the contest between advancing AI technology and protecting the rights and roles of content creators.

As the media industry continues to grapple with these emerging challenges, educational institutions are responding, by developing curricula that balance technical skills with critical thinking and ethical considerations, preparing students for both the opportunities and challenges posed by AI in journalism. UNESCO's handbook for reporting on AI suggests that journalism educators should offer opportunities for students to practice AI journalism skills through assignments and real-world reporting experiences, fostering ongoing learning and professional development in this rapidly evolving field. There's also a growing emphasis on creating new journalistic products using AI, requiring journalists not only to be adept at using AI tools but also to think strategically about how to serve and expand their audiences in an AI-mediated news landscape.

While there are concerns about AI potentially replacing journalists and leading to even smaller newsrooms, there is also a growing recognition that AI technologies are here to stay and can be useful. Journalists must adapt, balancing the beneficial aspects of AI with the need to maintain the critical, empathetic, and professional commitments that contribute to impactful storytelling and ethical journalism.

## Recommendations

AI's role in journalism brings both efficiencies and challenges. As the technology continues to evolve, ensuring that journalism continues to fulfill its vital role in society will require journalists, policymakers, and other stakeholders to confront these existential issues head-on. We therefore recommend:

1. Journalists and newsrooms should experiment with using AI tools, not only for basic reporting but also for investigative journalism, multimedia storytelling, and data analysis. Ultimately, even if AI tools are used to automate more rote tasks, journalists' value will lie in activities that require human witnessing, judgment, and creativity.

2. Journalists have a key role in contributing to a more informed public through fact-checking and investigating disinformation campaigns. Journalists can also help their audiences develop digital literacy skills, including regarding potential biases and risks of AI systems. Efforts to help educate audiences can include creating interactive guides and offering behind-the-scenes insights into the fact-checking process.

3. Journalism organizations should ensure that AI-generated content is used in ways that will build audience trust. This could include transparency mechanisms such as clear, consistent labels, and publicly available organizational policies for how AI is used.

4. Closer collaboration between journalists and technologists is essential. This partnership can lead to innovative storytelling techniques and new journalistic formats that harness AI's capabilities.

5. Journalists should not only engage actively with AI ethics in their profession, but they should also support public discussions about guidelines and regulations for AI companies, and include their insights in these debates.

6. Journalists should unite to ensure that AI technologies respect the principles of a free press. This includes advocating for fair compensation when AI companies use journalistic content for training their models, and ensuring that AI does not usurp journalists' role of using their insight and creativity to inform public dialogue on critical issues. Journalists' collective voice is vital in ensuring that AI advances rather than undermines the public service role of journalism.

The future of journalism in the AI era is not necessarily bleak; it can be an opportunity for transformation, innovation, and continued relevance. Journalists and policymakers have critical roles in shaping the AI-influenced information landscape, particularly as AI-driven disinformation increasingly threatens public understanding and democratic processes. Through informed policy-making, professional and ethical guidelines, and effective strategies to combat mis- and disinformation, journalists and policymakers can help ensure that AI tools contribute to public discourse and democratic engagement.

## Resources

For journalists looking to better use or detect AI, here are five valuable resources:

- **JournalismAI Starter Pack**: This resource is designed to help news organizations explore potential uses of AI in different phases of news production. It comes from JournalismAI, a project of Polis, the journalism think-tank at the London School of Economics and Political Science.

- **Local AI initiative - Self-paced curriculum (AP)**: The Associated Press' Local AI Initiative offers a self-paced curriculum designed for local news journalists and managers, focusing on integrating AI into newsroom operations, including news-gathering, production, and distribution. It features guest speakers, technology demonstrations, and instructional videos.

- **SPJ Toolbox**: This resource from the Society of Professional Journalists shares useful AI tools for reporting, writing, text editing, image creation and editing, as well as for productivity.

- **A Practical Newsroom Guide to Artificial Intelligence (ONA)**: This guide from the Online News Association offers practical advice on using AI in newsrooms, including tips on selecting images, monitoring misinformation, and developing AI policies. It also includes AP's case studies of AI use in various newsrooms.

- **How Journalists Can Detect Altered Images and AI-Generated Content (AFPC)**: This article from the Association of Foreign Press Correspondents suggests best practices for detecting altered images and AI-generated content. It covers techniques like examining metadata, using forensic tools, and analyzing visual anomalies.

THE UNIVERSITY OF BRITISH COLUMBIA

**School of Public Policy and Global Affairs**
Centre for the Study of Democratic Institutions

@ubcdemocracy
democracy.ubc.ca